

**State Board of Health
Nominating Committee
Agenda
June 6, 2019 – 8:30 a.m.
Perimeter Center – Hearing Room 3**

Welcome and Introductions	Patricia Kinser, PhD, Chair
Discussion	Nominating Committee Members
Adjourn	

**State of Board of Health
Agenda
June 6, 2019 – 9:00 a.m.
Perimeter Center – Boardroom 2**

Call to Order and Welcome	Faye Prichard, Chair
Pledge of Allegiance	Linda Hines
Introductions	Ms. Prichard
Review of Agenda	Joseph Hilbert Deputy Commissioner for Governmental and Regulatory Affairs
Approval of March 7, 2019 Minutes	Ms. Prichard
Commissioner’s Report	Norman Oliver, MD, MA State Health Commissioner
Regulatory Action Update	Mr. Hilbert
Public Comment	

Action Item

Designation of Regional Emergency Medical Services Councils	Gary Brown, Director Office of Emergency Medical Services
---	--

Break

Regulatory Action Item

Private Well Regulations 12VAC5-630 (Proposed Amendments)	Allen Knapp, Director Office of Environmental Health Services
---	--

Authorized Onsite Soil Evaluator Regulations
12VAC5-615
(Final Repeal)

Mr. Knapp

Report of Nominating Committee

Dr. Kinser

Election of Officers and Executive
Committee Members

Ms. Prichard

Working Lunch
Overview of Current Issues in Immunization

Christy Gray, Director
VDH Division of Immunization

Member Reports

Other Business

Adjourn



COMMONWEALTH of VIRGINIA

Department of Health

P O BOX 2448
RICHMOND, VA 23218

TTY 7-1-1 OR
1-800-828-1120

M. Norman Oliver, MD, MA
State Health Commissioner

May 7, 2019

The Honorable Faye O. Pritchard, Chair
Virginia State Board of Health
109 Governor Street
Richmond, VA 23219

Dear Chair Pritchard:

The Virginia Department of Health (VDH) Office of Emergency Medical Services (OEMS) is providing the Board of Health with information and recommendations for entities who have applied for re-designation as a Regional EMS Council in Virginia. In accordance with Section 32.1-111.11 of the Code of Virginia below, as well as 12VAC 5-31-2340 (Section N) of the Virginia Emergency Medical Services Regulations governing Regional EMS Councils:

“The Board shall designate regional emergency medical services councils which shall be authorized to receive and disburse public funds. Each council shall be charged with the development and implementation of an efficient and effective regional emergency medical services delivery system. The Board shall review those agencies that were the designated regional emergency medical services councils. The Board shall, in accordance with the standards established in its regulations, review and may renew or deny applications for such designations every three years. In its discretion, the Board may establish conditions for renewal of such designations or may solicit applications for designation as a regional emergency medical services council.”

OEMS received applications from regional EMS councils in October 2018 with the exception of the Central Shenandoah EMS (CSEMS) Council, which is now a regional OEMS office. In 2018, VDH OEMS was approached by the Board of Directors of the CSEMS Council to take over the contract-funded duties of the Council. OEMS entered into a Memorandum of Understanding with the CSEMS Council to create the first regional OEMS office.

Upon verifying completion of the application packages, OEMS forwarded them to Regional EMS Council designation site reviewers. The site reviewers provided an objective evaluation of the applications and conducted a review of the physical location of the applicant, as

The Honorable Faye O. Pritchard, Chair
Virginia State Board of Health
May 7, 2019
Page 2

well as interviews of the applicant organization's staff, officers, and other system stakeholders, between April 3 and May 1, 2019. The site review team consisted of the following individuals:

R. Jason Ferguson
Associate Professor
Public Safety Programs Head
Central Virginia Community College
Member, State EMS Advisory Board
Board Member, Blue Ridge EMS Council

Larry A. Oliver
Deputy Chief
Frederick County Fire and Rescue Department
Past Member, State EMS Advisory Board
Vice President, Lord Fairfax EMS Council

Brian Hricik
EMS Battalion Chief
Alexandria Fire Department
Past Member, State EMS Advisory Board
Past President, No. Virginia EMS Council

Christina J. Skinner
EMS Coord., Mary Washington Healthcare
Past Exec Dir, Rappahannock EMS Council

A map outlining the recommended service areas is included with this letter. OEMS recommends a designation term of no less than three (3) years, commencing on July 1, 2019, for all Councils with the exception of Old Dominion EMS Alliance (ODEMSA), which is conditional for one (1) year, or until the organization provides OEMS with proof of a new permanent office location.

Based on the applications received, as well as the designation site reviewer reports, OEMS recommends continued designation of the following Regional EMS Councils and in the specified service areas as follows:

Blue Ridge EMS Council – Service area including the counties of Amherst, Appomattox, Bedford and Campbell, and the cities of Bedford and Lynchburg.

Lord Fairfax EMS Council – Service area including the counties of Clarke, Frederick, Page, Shenandoah, Warren, and the city of Winchester.

Northern Virginia EMS Council – Service area including the counties of Arlington, Fairfax, Loudoun, and Prince William; and the cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park.

Old Dominion EMS Alliance (ODEMSA) – Service area including the counties of Amelia, Brunswick, Buckingham, Charles City, Charlotte, Chesterfield, Cumberland, Dinwiddie, Halifax, Hanover, Henrico, Goochland, Greensville, Lunenburg, Mecklenburg, New Kent, Nottoway, Powhatan, Prince Edward, Prince George, Surry, Sussex; the cities of Colonial Heights, Emporia, Hopewell, Petersburg, and Richmond; and the towns of Ashland, Farmville,

The Honorable Faye O. Pritchard, Chair
Virginia State Board of Health
May 7, 2019
Page 3

South Boston, and South Hill. As noted previously, the ODEMSA designation is conditional for one (1) year, or until the organization provides OEMS with proof of a new permanent office location.

Peninsulas EMS Council – Service area including the counties of Essex, Gloucester, James City, King and Queen, King William, Lancaster; Mathews, Middlesex, Northumberland, Richmond, Westmoreland, York, and the cities of Poquoson, Hampton, Newport News and Williamsburg.

Rappahannock EMS Council – Service area including the counties of Caroline, Culpeper, Fauquier, King George, Orange, Rappahannock, Spotsylvania, and Stafford; the town of Colonial Beach and the city of Fredericksburg.

Southwest Virginia EMS Council – Service area including the counties of Bland, Buchanan, Carroll, Dickenson, Grayson, Lee, Russell, Scott, Smyth, Tazewell, Washington, Wise and Wythe and the cities of Bristol, Galax, and Norton.

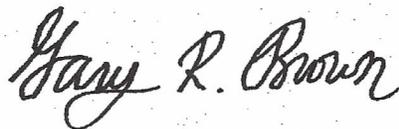
Thomas Jefferson EMS Council – Service area including the counties of Albemarle, Fluvanna, Greene, Louisa, Madison, Nelson, and the city of Charlottesville.

Tidewater EMS Council – Service area including the counties of Accomack, Isle of Wight, Northampton, and Southampton, and the cities of Chesapeake, Franklin, Norfolk, Portsmouth, Suffolk, and Virginia Beach.

Western Virginia EMS Council – Service area including the counties of Alleghany, Craig, Botetourt, Floyd, Franklin, Giles, Henry, Montgomery, Roanoke, Patrick, Pittsylvania, and Pulaski; and the cities of Covington, Danville, Martinsville, Radford, Roanoke, and Salem.

OEMS staff is prepared to answer any questions of the Board related to Regional EMS Council designation and anticipates Board approval of the recommendation as specified above.

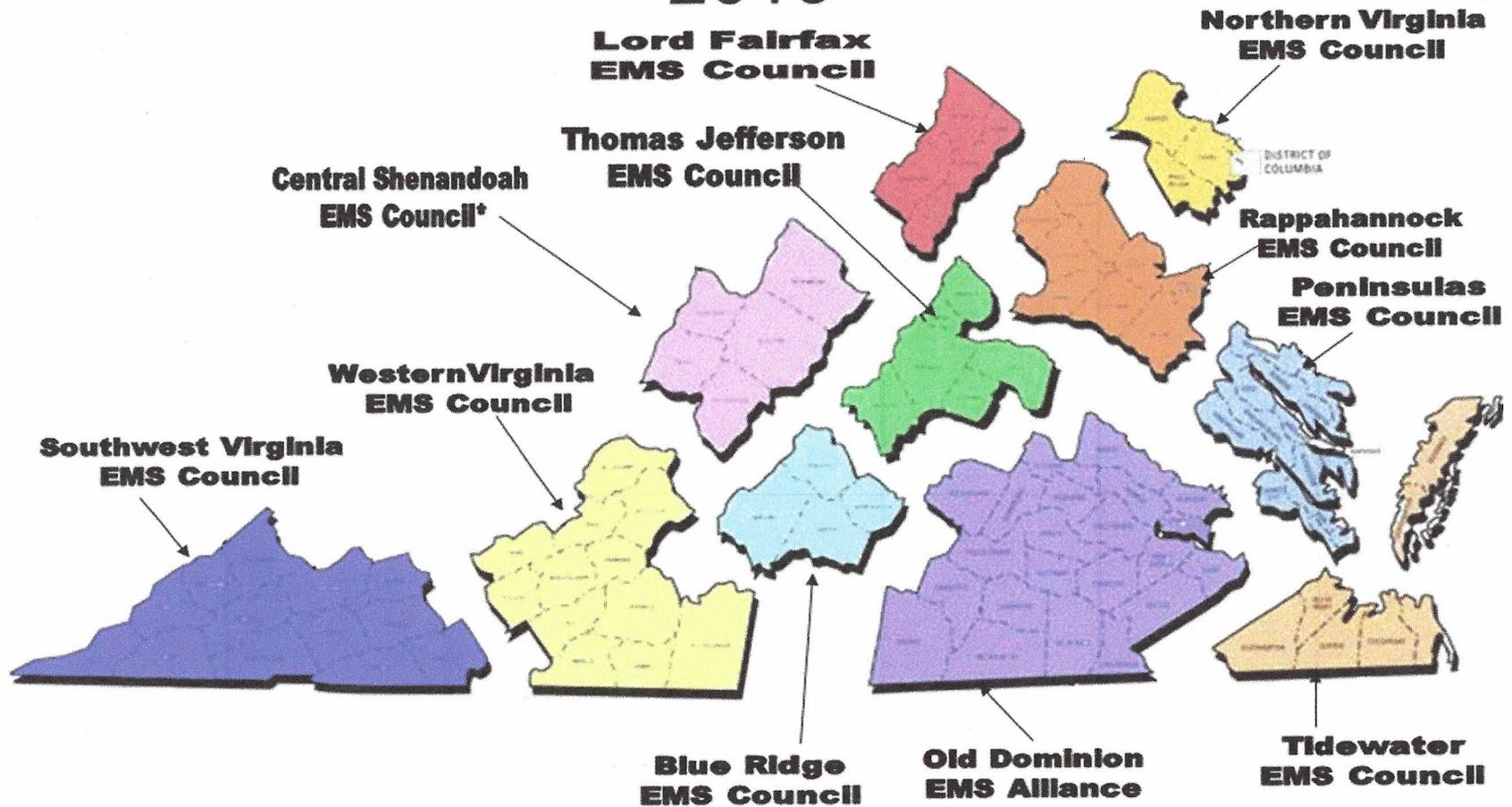
Respectfully submitted,



Gary R. Brown, Director
Office of Emergency Medical Services

Enclosure

Designated Regional EMS Council Map 2019



*In 2018, VDH OEMS was approached by the Board of Directors of the Central Shenandoah EMS (CSEMS) Council to take over the contract-funded duties of the Council. OEMS has entered into a Memorandum of Understanding with CSEMS to create the first regional OEMS office in Virginia.



COMMONWEALTH of VIRGINIA

Department of Health

P O BOX 2448

RICHMOND, VA 23218

M. NORMAN OLIVER, MD, MA
STATE HEALTH COMMISSIONER

TTY 7-1-1 OR
1-800-828-1120

MEMORANDUM

DATE: May 14, 2019

TO: Virginia State Board of Health

FROM: Allen Knapp, Office of Environmental Health Services

SUBJECT: Revision of the Private Well Regulations 12VAC5-630

The Private Well Regulations (Regulations) establish the minimum location and construction requirements for private wells installed in the Commonwealth. The Board of Health (the Board) has not made significant revisions to the Regulations since their adoption in 1990. On August 17, 2016, the Virginia Department of Health (the Department) began a periodic review of the Regulations. The Department also formed a Private Well Regulations Workgroup in August 2016. The purpose of the workgroup was to assist the Department in the development of proposed revisions to the Regulations. Volume 35 Issue 3 of the Virginia Register of Regulations, published October 1, 2018, included a Notice of Intended Regulatory Action (NOIRA).

The intent of this planned regulatory action is to make amendments to the Regulations based on current industry standards, comments received during the periodic review process, comments received from the Private Well Regulations Workgroup, and comments received in response to the NOIRA. The purpose is to ensure the Regulations (i) are protective of public health and the environment, (ii) address changes in current standards and practices, (iii) clarify regulatory language, (iv) provide private well owners greater flexibility in well locations, and (v) exhibit improved consistency with other regulations related to private wells and groundwater resources.

Upon approval by the Board of Health, the proposed draft regulations will be submitted for executive branch review and, upon approval by the Governor, will be published in the Virginia Register of Regulations with provision for a 60-day public comment period.



townhall.virginia.gov

Proposed Regulation Agency Background Document

Agency name	Virginia Department of Health
Virginia Administrative Code (VAC) citation(s)	12VAC5-630-10 et seq.
Regulation title(s)	Private Well Regulations
Action title	Amendments to the Private Well Regulations
Date this document prepared	May 14, 2019

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 (1 VAC7-10), and the *Virginia Register Form, Style, and Procedure Manual for Publication of Virginia Regulations*.

Brief Summary

Please provide a brief summary (preferably no more than 2 or 3 paragraphs) of this regulatory change (i.e., new regulation, amendments to an existing regulation, or repeal of an existing regulation). Alert the reader to all substantive matters. If applicable, generally describe the existing regulation.

The Board of Health (the Board) has not made significant revisions to the Private Well Regulations (the Regulations) since their adoption in 1990. The Regulations establish the minimum location and construction requirements for private wells installed in the Commonwealth. On August 17, 2016, the Virginia Department of Health (the Department) began a periodic review of the Regulations. The Department also formed a Private Well Regulations Workgroup in August 2016. The purpose of the workgroup was to assist the Department in the development of proposed revisions to the Regulations. Volume 35 Issue 3 of the Virginia Register of Regulations, published October 1, 2018, included a Notice of Intended Regulatory Action (NOIRA). The intent of this planned regulatory action is to explore amendments to the Regulations based on current industry standards, comments received during the periodic review process, comments received from the Private Well Regulations Workgroup, and comments received in response to the NOIRA. The purpose is to ensure the Regulations (i) are protective of public health and the environment, (ii) address changes in current standards and practices, (iii) clarify regulatory language, and (iv) exhibit improved consistency with other regulations related to private wells and groundwater resources.

Acronyms and Definitions

Please define all acronyms used in the Agency Background Document. Also, please define any technical terms that are used in the document that are not also defined in the “Definition” section of the regulations.

ASTM – American Society of Testing and Materials
 AWWA – American Waterworks Association
 DHCD – Department of Housing and Community Development
 DEQ – Department of Environmental Quality
 DPOR – Department of Professional and Occupational Regulation
 NGWA – National Groundwater Association
 NSF – National Sanitation Foundation
 ODW – Office of Drinking Water
 SHDR – Sewage Handling and Disposal Regulations
 VDH – Virginia Department of Health
 USGS – United States Geological Survey
 VWWA – Virginia Water Well Association
 WWSP – Water Well Systems Provider

Mandate and Impetus

Please 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, board decision, etc.). 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.”

In accordance with Virginia Code §2.2-4017 and Executive Order 14 (2018) (amended), the Virginia Department of Health (VDH) conducted a periodic review of the Regulations. In a January 27, 2017, memorandum to the Commissioner of VDH, Grant Kronenberg, Assistant Attorney General offered opinion that certain exemptions from regulatory requirements provided to dewatering wells in the existing regulations are not supported under the statutory authority given in the Code of Virginia §§ 32.1-176.4(A) and 32.1-176.5(A). The Assistant Attorney General therefore recommended that VDH amend the Regulation so that statutory requirements with respect to construction permits apply to private dewatering wells. This opinion, along with the periodic review of the Regulations, provided impetus to update the Regulations such that they (i) are protective of public health and the environment, (ii) address changes in current standards and practices, (iii) clarify regulatory language, and (iv) exhibit improved consistency with other regulations related to private wells and groundwater resources.

Legal Basis

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

(1) Virginia Department of Health

- (2) Title 32.1 of the Code of Virginia, and specifically §§ 32.1-12 and 32.1-176.4, provide that the State Board of Health has the duty to protect the public health and to ensure that ground water resources are not adversely affected by the construction and location of private wells. Virginia Code § 2.2-4017 of the Administrative Process Act, and Executive Order 14, require agencies conduct a periodic review of their regulations every four years to determine whether they should be continued without change or be amended or repealed, consistent with the stated objectives of applicable law, to minimize the economic impact on small businesses in a manner consistent with the stated objectives of applicable law.

Purpose

Please explain the need for the regulatory change, including a description of: (1) the rationale or justification, (2) the specific reasons the regulatory change is essential to protect the health, safety or welfare of citizens, and (3) the goals of the regulatory change and the problems it's intended to solve.

The private well industry has experienced significant advancements since promulgation of the Regulations in 1990, including improvements in the materials and equipment used to construct private wells, changes in the regulatory oversight of Water Well Systems Providers (WWSP), and changes in other regulations having nexus with the Private Well Regulations. New information and research has improved understanding of risk to public health and groundwater resources with regard to the location and construction of private wells. Examples include advancements in alternative onsite sewage treatment system design, promulgation of standards related to reclaimed water, federal guidelines related to emerging contaminants, regulation of groundwater withdrawal by the Department of Environmental Quality (DEQ), and activities such as hydraulic fracturing and underground injection of treated effluent. Stakeholders have also identified inconsistencies between the Regulations and other regulations related to private wells and groundwater resources, including references to repealed sections of the Code of Virginia, and the need for the Regulations to correlate to other regulatory requirements for wells constructed in designated Groundwater Management Areas. The amendments to the Regulations will propose updated private well location and construction criteria recognizing current industry standards, improve consistency with other regulations, and improve protection of public health and groundwater resources. The regulatory change is essential to public health and safety because some of the current regulations are based on outdated location and construction standards. The regulatory change is essential to protect public health and safety because without the proposed amendments, Virginians will not benefit from more current and up-to-date research and industry practices in the Regulations. Additionally, inconsistencies between the Regulations and other regulation related to private wells and groundwater resources will persist.

Substance

Please briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both. A more detailed discussion is provided in the "Detail of Changes" section below.

The following substantive changes to existing sections, and new substantive provisions, are proposed to the existing regulatory language:

- Revisions of definitions, and additional definitions, as necessary for consistency with the Code of Virginia, other regulations related to private wells and groundwater resources, and current industry standards.
- Revision of administrative processes to reflect current law and to improve consistency with other Department regulations.
- Clarification of grout materials and procedures approved for well abandonment.

- Improvement of standards regarding well abandonment protocols.
- Revision of the separation distance requirements between sources of contamination and wells abandoned in accordance with the Regulations.
- Improvement of consistency between the Regulations and other regulations, such as the Sewage Handling and Disposal Regulations (12VAC5-610), which establish minimum separation distance from private wells.
- Improvement of consistency between private well construction reporting requirements in the Regulations and well construction and reporting requirements in the Groundwater Withdrawal Regulations (9VAC25-610).
- Removal or revision of references to obsolete or repealed regulations and laws.
- Revision of current construction standard exemptions for Class IIIC and Class IV wells.
- Clarification of disinfection procedures.
- Clarification of standards for yield and storage requirements.
- Revision of Private Well Classification System so that Class IV well construction standards mirror Class III wells.
- Establishment of a standard procedure for converting existing Class IV wells to Class III wells.
- Identification of reasonable exemptions from the Regulations (e.g., dewatering wells).
- Clarification of regulatory authority relative to observation wells.
- Establishment of minimum private well construction criteria based on geologic conditions, such as requiring a mechanical seal at the termination of well casing into bedrock.
- Requirement that all private well components meet national lead-free standards.
- Establishment of criteria to acknowledge nationally recognized standards and certifications (e.g., National Sanitation Foundation) for approval of private well components (including, but not limited to, standard methods, materials, products, analytical, and permeability standards).
- Establishment of a minimum separation distance from utilities, property lines, permanently abandoned onsite sewage systems, reuse water lines, and possible other sources of contamination.
- Establishment of quality standards for water used during well construction.

Issues

Please identify the issues associated with the regulatory change, including: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, include a specific statement to that effect.

Primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions

Advantages include clarity in requirements for well location and construction, which benefit both WWSP and well owners, and enhanced protection of public health and groundwater quality by means of improved setback distance requirements. Disadvantages are not apparent in the proposed revisions.

Primary advantages and disadvantages to the agency or Commonwealth

The revisions will assist the agency in making improvements to the permitting process by addressing inconsistencies in the existing regulation. The revisions will assist the Commonwealth by enhanced protection of public health and the environment. Disadvantages are not apparent in the proposed revisions.

Other pertinent matters to the regulated community, government officials, and the public

The revisions eliminate static references to well construction materials and procedures and replace them with reference to national standards and accreditations (e.g., ASTM, NSF). This provides WWSP the

ability to apply professional judgment rather than forced reliance on obsolete specifications and standards.

Requirements More Restrictive than Federal

Please identify and describe any requirement of the regulatory change which is more restrictive than applicable federal requirements. Include a specific citation for each applicable federal requirement, and a rationale for the need for the more restrictive requirements. If there are no applicable federal requirements, or no requirements that exceed applicable federal requirements, include a specific statement to that effect.

There are no federal requirements, other than non-enforceable general guidance, addressing the location and construction of private wells.

Agencies, Localities, and Other Entities Particularly Affected

Please identify any other state agencies, localities, or other entities particularly affected by the regulatory change. "Particularly affected" are those that are likely to bear any identified disproportionate material impact which would not be experienced by other agencies, localities, or entities. "Locality" can refer to either local governments or the locations in the Commonwealth where the activities relevant to the regulation or regulatory change are most likely to occur. If no agency, locality, or entity is particularly affected, include a specific statement to that effect.

Other State Agencies Particularly Affected

DEQ, DPOR, DHCD

Localities Particularly Affected

The regulations apply equally throughout the Commonwealth. Localities named in VA Code 32.1-176.4.A and 32.1-176.5.B and C and having authority to adopt ordinances establishing standards pertaining to private well location, testing of water, and well abandonment may need to modify ordinances to be consistent with the regulatory changes.

Other Entities Particularly Affected

WWSP, Homebuilders, Onsite Soil Evaluators, Commercial Laboratories.

Economic Impact

Pursuant to § 2.2-4007.04 of the Code of Virginia, please identify all specific economic impacts (costs and/or benefits), anticipated to result from the regulatory change. When describing a particular economic impact, specify which new requirement or change in requirement creates the anticipated economic impact. Please keep in mind that this is change versus the status quo.

Impact on State Agencies

<p><i>For your agency:</i> projected costs, savings, fees or revenues resulting from the regulatory change, including: a) fund source / fund detail; b) delineation of one-time versus on-going expenditures; and c) whether any costs or revenue loss can be absorbed within existing resources</p>	<p>Little to no additional cost for the Commonwealth to implement; location and construction of private wells is already regulated and inspected by VDH. Amendments will not affect time spent by VDH on processing applications for permits.</p>
<p><i>For other state agencies:</i> projected costs, savings, fees or revenues resulting from the regulatory change, including a delineation of one-time versus on-going expenditures.</p>	<p>There is no anticipated economic effect on other state agencies.</p>
<p><i>For all agencies:</i> Benefits the regulatory change is designed to produce.</p>	<p>The regulatory change is designed to facilitate well site selection, which is hoped to be of benefit to home builders and realtors.</p>

Impact on Localities

<p>Projected costs, savings, fees or revenues resulting from the regulatory change.</p>	<p>Those localities named in VA Code 32.1-176.4.A and 32.1-176.5.B and C – which have authority to adopt ordinances establishing standards pertaining to private well location, testing of water, and well abandonment – may incur administrative costs related to modifications of ordinances to be consistent with the regulatory changes.</p>
<p>Benefits the regulatory change is designed to produce.</p>	<p>There is no anticipated economic benefit to localities.</p>

Impact on Other Entities

<p>Description of the individuals, businesses, or other entities likely to be affected by the regulatory change. If no other entities will be affected, include a specific statement to that effect.</p>	<p>The regulatory change impacts homeowners using private wells as a source of drinking water, individuals and businesses using private wells for non-potable uses, businesses using wells for drinking water that do not meet the definition of a waterworks as defined in §32.1-167, and WWSP installing private wells.</p>
<p>Agency’s best estimate of the number of such entities that will be affected. Please include an estimate of the number of small businesses affected. Small business means a business entity, including its affiliates, that: a) is independently owned and operated and; b) employs fewer than 500 full-time employees or has gross annual sales of less than \$6 million.</p>	<p>VDH estimates there are approximately 700,000 homes in Virginia that rely on a private well as a source of drinking water. VDH issues approximately 500 to 600 permits per year for agricultural wells, irrigation wells, geothermal heat pump wells, and other non-potable uses. Thousands of small business are impacted; however, providing a more accurate estimate is difficult as many small business use private wells installed prior to the establishment of the Private Well Regulations. The regulatory changes would apply to any small business that installs a new well for applicable non-potable use (e.g. irrigation well for a farm) or that installs a new well that does not meet the definition of a waterworks.</p>

	There are approximately 500 WWSP providers working in Virginia.
All projected costs for affected individuals, businesses, or other entities resulting from the regulatory change. Please be specific and include all costs including, but not limited to: a) projected reporting, recordkeeping, and other administrative costs required for compliance by small businesses; b) specify any costs related to the development of real estate for commercial or residential purposes that are a consequence of the regulatory change; c) fees; d) purchases of equipment or services; and e) time required to comply with the requirements.	The regulatory changes are not anticipated to have significant effect for individuals and business. The regulatory changes do not change or increase administrative cost or fees required for compliance. The regulatory changes do require that drillers provide pure water for use in construction and development of wells; however, this was reported as a current industry practice. The regulatory changes incorporate current industry practice and standards with regard to equipment for service, and, therefore, are not anticipated to increase associated cost. Additionally, the regulatory changes do not alter the time required to comply with the requirements.
Benefits the regulatory change is designed to produce.	The regulation will facilitate well location and construction while protecting public health and groundwater resources using current industry practices and standards.

Alternatives

Please 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.

Code of Virginia §32.1-176.4 requires the Board to adopt regulations pertaining to the location and construction of private wells in the Commonwealth. The alternative to the proposed action is to maintain the Regulations as currently adopted; however, this is not viable. This regulatory action is necessary to recognize current industry standards, improve consistency with other regulations, and improve protection of public health and groundwater resources. Without the proposed amendments, Virginians will not benefit from more current and up-to-date research and industry practices. Additionally, inconsistencies between the Regulations and other regulations related to private wells and groundwater resources will persist. This proposed action is less intrusive to small businesses, primarily, but not limited to, WWSP as it provides an opportunity to incorporate current industry standards into the Regulations. The proposed action would also provide an opportunity to clarify areas of inconsistency and ambiguity, which currently lead to requests for approval from Division staff or variance requests to the State Health Commissioner, which can delay permitting actions.

Regulatory Flexibility Analysis

Pursuant to § 2.2-4007.1B of the Code of Virginia, please describe the agency’s analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) establishing less stringent compliance or reporting requirements; 2) establishing less stringent schedules or deadlines for compliance or reporting requirements; 3) consolidation or simplification of compliance or reporting requirements; 4) establishing

performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the regulatory change.

- 1) The proposed amendments will require modification to permitting process for private wells by minor revision of permit application forms and permit templates. The compliance requirements of the proposed regulation should not be reduced or simplified, as the agency believes they establish the minimum standards required to protect public health and groundwater resources.
- 2) The construction permit validity period has been revised from 54 months to 18 months with provision of one 18 month renewal. This provides for consistency with Onsite Sewage System permits, often issued in conjunction with private well permits, with minimal impact on the regulated community.
- 3) No other minimal reporting and deadline requirements change in the proposed amendments.
- 4) Design and operational requirements in the proposed amendments largely speak to the siting of private wells. The proposed amendments also allow for WWSP, engineers, and others in the groundwater industry to exercise professional judgment with respect to materials selection and construction methodology.
- 5) Small businesses can readily comply with the requirements of the proposed amendments. Elimination of the requirements of this regulation would compromise public health and groundwater protection in the state of Virginia, and have significant adverse effect on WWSP.

**Periodic Review and
Small Business Impact Review Report of Findings**

If you are using this form to report the result of a periodic review/small business impact review that is being conducted as part of this regulatory action, and was announced during the NOIRA stage, please indicate whether the regulatory change meets the criteria set out in Executive Order 14 (as amended, July 16, 2018), e.g., is necessary for the protection of public health, safety, and welfare; minimizes the economic impact on small businesses consistent with the stated objectives of applicable law; and is clearly written and easily understandable.

In addition, as required by § 2.2-4007.1 E and F of the Code of Virginia, include a discussion of the agency’s consideration of: (1) the continued need for the regulation; (2) the nature of complaints or comments received concerning the regulation from the public; (3) the complexity of the regulation; (4) the extent to which the regulation overlaps, duplicates, or conflicts with federal or state law or regulation; and (5) 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.

In a January 27, 2017, memorandum to the Commissioner of the Department, the OAG offered opinion that certain exemptions from regulatory requirements provided to dewatering wells in the existing regulations are not supported under the statutory authority given in the Code of Virginia § 32.1-176.4(A) and 32.1-176.5(A). The OAG therefore recommended that the Regulation be amended so that statutory requirements with respect to construction permits are applied to private dewatering wells. This is addressed in the revision of 12VAC5-630-30.

Agency Discussion

- (1) The continued need for the regulation is mandated by Va Code 32.1-176.1 et seq
- (2) VDH received few complaints or comments concerning the regulation from the public. Comments received have primarily come from WWSP regarding technical components of well construction. VDH regularly receives queries regarding testing requirements for private well water quality, typically as a

component of real estate transactions; however, private well water quality following construction is not regulated and therefore not a factor in this revision.

(3) With respect to complexity, VDH has endeavored in these amendments to eliminate inconsistencies within the regulations and between the regulations and other regulations; to integrate current industry standards; to address grammatical and spelling errors; and to ensure language is consistent with the Virginia Register of Regulations Form, Style, and Procedure Manual for Publication of Virginia Regulations.

(4) VDH has endeavored in these amendments to ensure the regulation does not overlap, duplicate, or conflict with federal or state law or regulation; and

(5) Given the length of time since promulgation of the regulation and the degree to which technology, economic conditions, or other factors have changed with respect to the location and construction of private wells, the necessity of the proposed amendments is clear.

Public Comment

Please summarize all comments received during the public comment period following the publication of the previous stage, and provide the agency response. Ensure to include all comments submitted: including those received on Town Hall, in a public hearing, or submitted directly to the agency or board. If no comment was received, enter a specific statement to that effect.

The NOIRA public comment period extended from October 1 to October 31. Comments during that period could be made through the Virginia Town Hall (website) and directly to the agency. The agency did not receive public comments during the NOIRA public comment period.

Public Participation

Please include a statement that in addition to any other comments on the regulatory change, the agency is seeking comments on the costs and benefits of the regulatory change and the impacts of the regulated community. Also, indicate whether a public hearing will be held to receive comments.

In addition to any other comments, the Virginia Department of Health is seeking comments on the costs and benefits of the proposal and the potential impacts of this regulatory proposal. Also, the agency is seeking information on impacts on small businesses as defined in § 2.2-4007.1 of the Code of Virginia. 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 written comments for the public comment file may do so through the Public Comment Forums feature of the Virginia Regulatory Town Hall web site at: <https://townhall.virginia.gov>. Written comments must include the name and address of the commenter. Comments may also be submitted by mail, email or fax to Anthony Creech, P.G., 109 Governor Street, 5th Floor, Richmond, Virginia 23219, (804) 864-7470 (phone), (804) 864-7475 (fax) or 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 this stage of this regulatory action.

Detail of Changes

Please list all regulatory changes and the consequences of the changes. Explain the new requirements and what they mean rather than merely quoting the text of the regulation.

If the regulatory change will be a new chapter, describe the intent of the language and the expected impact. Please describe the difference between existing regulation(s) and/or agency practice(s) and what is being proposed in this regulatory change. Delete inapplicable tables.

If the regulatory change is intended to replace an emergency regulation, please follow the instructions in the text following the three chart templates below. Please include citations to the specific section(s) of the regulation that are changing.

For changes to existing regulation(s), please use the following chart:

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
Throughout all sections		Conformance to the Virginia Register of Regulations Form, Style, and Procedure Manual for Publication of Virginia Regulations	<p>The following changes were made throughout the document:</p> <ul style="list-style-type: none"> • “any” deleted or replaced with “a”; • “all” deleted or replaced with “a”; • “such” deleted or replaced with “the”; • “ground water” replaced with “groundwater”; • “driller” replaced with “water well systems provider”; • “sanitarian” replaced with “environmental health specialist”; • Words not capitalized unless they are proper nouns (e.g., “department, board, commissioner”; and • Male pronouns deleted and replaced with gender neutral terms.
10		Definitions	<p>The following definitions were amended to provide clarity to the regulations, ensure consistency in relation to agency practices, or to be consistent with the definition of the same term in other regulations (ODW, DEQ, DPOR, DCHD) or industry standard (AWWA, NGWA, USGS): “abandoned well,” “Aquifer,” “Bedrock,” “Closed Loop ground-source heat pump well,” “Commissioner,” “Construction of wells,” “Disinfection,” “Division,” “Emergency Well Replacement,” “Gravel Pack,” “Groundwater,” “Observation Well or Monitoring Well,” “Sanitary Survey,” “Screen,” “Sewer,” “Water table,” and “water well.”</p> <p>The following definitions were added to provide clarity to the regulations and to be consistent with the same definition in other regulations (ODW, DEQ, DPOR, DCHD or industry standard (AWWA, NGWA, USGS):</p>

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			<p>“Agricultural operation,” “Beneficial use,” “Bioretention pond,” “Biosolids,” “Casing,” “Cathodic protection well,” “Clean fill,” “Coliform,” “Contaminated media,” “Controlled low strength material,” “Cuttings,” “Department,” “DEQ,” “Development or well development,” “Groundwater management area,” “Human consumption,” “Injection well,” “Lead free,” “Nonpublic water,” “Pollutant,” “Pure water,” “Reclaimed water,” “Remediation well,” “Tremie pipe,” “Water quality,” “Water well systems,” “Water well systems provider,” “Waterworks,” “Well area,” “Well bore,” “Well site,” and “Withdrawal system.”</p> <p>One definition, “Confined aquifer,” was deleted because it is no longer used in the regulations.</p>
30		Purpose and applicability of regulations	This Purpose is amended to include a reference to well abandonment. A new section (B.) is added to clarify exemptions from the regulations, which were previously found in Definitions, or were non-explicit. The justification for the exemptions is VA Code 32.1-12 and VA Code 64.1-44.83 et seq.
40		Relationship to Virginia Sewage Handling and Disposal Regulations	Repealed – no longer applicable.
50		Relationship to State Water Control Board	This section is amended to clarify reference to additional requirements applying to private wells in groundwater management areas under VA Code 62.1-258 and 9VAC25-610.
60		Relationship to DEQ	This section is amended to delete the obsolete reference to Waste Management Division of DEQ.
80		Relationship to DPOR	This section is amended for clarity.
90		Administration of regulations	This section is amended for clarity.
110		Compliance with APA	This section is amended to update the reference to the VA Code.
140		Emergency Order	This section is amended to clarify that a deputy commissioner may issue emergency orders.
170		Variances	Section B. Clarifies requirements of variance application for consistency with SHDR Section D. Adds language to clarify applicants’ rights under ADA Section E. Amended for clarity. These amendments are likely to improve consistency in administration of variance request processing.
210		Appeals	This section is amended for clarity.
220		Permits & Inspection Statements: General	This section is amended to remove exemption for dewatering wells, based on revision to Section 30.
230		Application for a Construction Permit	This section is amended to address requirements of VA Code 32.1-176.5:2. This

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			incorporates agency policy into regulations for improved consistency of implementation.
240		Issuance of Construction Permit	This section is amended to allow designation of well area or well site on permits. This will likely reduce the need for permit revisions or issuance of a second permit to address issues encountered during well construction.
250		Emergency procedures	This section is amended to recognize private sector may perform sanitary surveys, and to improve clarity.
290		Revocation of permits or inspection statements	This section is amended to extend authority to revoke construction permits and inspection statements to the deputy commissioner, and to add a reference to new section 331. This will improve timeliness of the agency to act when revocation is necessary.
300		Voidance of construction permits	This section is amended to clarify that the commissioner or deputy commissioner may declare permit documents null and void on the basis of changed conditions. As originally written, the section could be interpreted to state that permit documents would become null and void without action under the APA. The section is further amended to add a reference to new section 331.
310		Unified Water Well Completion Report	This section is amended to specify the deadline for submission of GW-2 form and clarify that it shall be signed.
330		Issuance of Inspection Statement	This section is amended for clarity.
NA	331	Enforcement, Notices, Informal Conferences.	This section provides language regarding the citation of regulatory violations, remediating such violations, the addition of language regarding informal fact finding conferences, and the Commissioner's authority to take action in cases of threats to public health as it pertains to private wells. Language reflects APA requirements and VDH enforcement policies and procedures. This language mirrors the comparable section in the recently updated Campground Regulations.
360		Classes of water wells	This section is amended to create Class IV well subclasses that mirror Class III well subclasses, and to provide method to convert a Class IV well to a Class III well. This will provide property owners greater flexibility with regard to the placement of Class IV wells on their property.
370	431	Water quality	Section 370 is repealed and replaced with Section 431 for the purpose of listing requirements related to the construction of private wells in the order in which they occur.
380		Well Location and Separation Distances	This section is amended to: <ul style="list-style-type: none"> • Clarify separation distance criteria; • Simplify Table 3.1 by removing footnotes and incorporating

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			<p>footnoted conditions in the table itself;</p> <ul style="list-style-type: none"> • Add additional separation distance criteria for: <ul style="list-style-type: none"> - Permanently abandoned onsite sewage disposal systems. - Reclaimed water distribution pipelines. - Biosolids application sites. - Bioretention ponds. • Improve consistency of separation criteria with similar criteria in the SHDR and various DEQ regulations and guidance documents; • Establish criteria for certification required by VA Code 32.1-176.5:2.; and • Eliminate the required separation distance from termite treated building foundation. <p>These amendments incorporate current agency policies, and provide greater protection of public health and groundwater resources. The amendment regarding termite treated foundations is based on a joint investigation conducted by the Office of Environmental Health Services and the Office of Epidemiology, and will provide owners with greater flexibility with regard to placement of private wells near building foundations.</p>
400		Well construction material specifications	<p>This section is amended to:</p> <ul style="list-style-type: none"> • Replace prescriptive standards with reference to nationally recognized standards such as ASTM and NSF; • Relocate “Joints” to section 410; • Relocate grout specifications from Section 410 to this section; • Add requirement that water used for well construction shall be pure water; and • Add requirement that compounds used in disinfection shall meet NSF environmental specifications. <p>These amendments reflect current industry standards and provide greater protection of public health and groundwater resources by requiring the use of pure water for well construction.</p>
410		Well construction	<p>This section is amended to:</p> <ul style="list-style-type: none"> • Provide requirement that WWSP notify the agency prior to initiation of well construction; • Relocate “Joints” from section 400 to this section;

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			<ul style="list-style-type: none"> • Add subsections addressing: <ul style="list-style-type: none"> - Well bore. - Filter pack. - Well development. - Well maintenance and repair. • Relocate grout specifications to Section 400; and • Delete prescriptive standards pertaining to well casing. <p>It is important to note the Waterworks Regulations reference AWWA A-100, a nationally recognized standard for construction of public water supply wells. The A-100 standard is too rigid for most private wells, and reference to that standard in the Private Well Regulations would place an undue technical and financial burden on private well owners and WWSP. In the absence of a similar nationally recognized well construction standard applicable to private wells, this section provides more details regarding finished well construction than do the sections pertaining to well construction included in the Waterworks Regulation.</p>
420		Observation wells	This section is amended to clarify that test and exploration wells are not observation or monitoring wells.
430		Disinfection	This section is amended to provide the option for an alternate method of well disinfection endorsed by the NGWA, providing greater flexibility for WWSP and property owners.
370	431	Water quality	Requirements for water quality testing originally presented in section 317 are provided here for the purpose of listing requirements related to the construction of private wells in the order in which they occur.
440		Uniform Water Well Completion Reports	This section is amended to delete information in subsection B which is addressed in section 50.
450		Well abandonment	<p>This section is amended to:</p> <ul style="list-style-type: none"> • Provide clarity; • Provide requirement that WWSP notify the agency prior to initiation of well abandonment; • Add subsection on materials prohibited from use in well abandonment; and • Provide additional method to abandon a bored well so that it is no longer a well with respect to separation distances. <p>These amendments provide owners with greater flexibility with regard to placement of</p>

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			onsite sewage systems near abandoned private wells, while maintaining necessary public health and groundwater resource protections.
460		Yield for residential wells	This section is amended to clarify sustained flow requirements.
480		Well casing specifications	This section is repealed because revision to section 400 eliminates the need for this section.

DEPARTMENT OF HEALTH
CH630 Private Well Regulations

Part I
General Framework for Regulations
Article 1
Definitions

12VAC5-630-10. Definitions.

The following words and terms, when used in this chapter, shall have the following meanings unless the context clearly indicates otherwise.

"Abandoned well" means a private well ~~whose~~ from which the pump has been disconnected for reasons other than repair or replacement, or whose the use of which has been discontinued or which has been pronounced abandoned by the owner. A temporarily abandoned well is a well that is intended to be returned to service as a source of water at some future time. A permanently abandoned well is a well that is not intended to be used ~~as a source of water at any future time.~~ Abandoned wells must meet the requirements of 12VAC5-630-450.

"Agent" means a legally authorized representative of the owner.

"Agricultural operation" means an operation devoted to the bona fide production of crops, or animals, or fowl, including the production of fruits and vegetables of all kinds; meat, dairy, and poultry products; nuts, tobacco, nursery and floral products; and the production and harvest of products from silviculture activity.

"Annular space" means the space between the well bore hole wall and the outside of a water well casing pipe, or between a casing pipe and a liner pipe.

"Aquifer" means a geologic formation, group of formations, or part of a formation, that ~~transmits water~~ has the capability to store and transmit water in sufficient quantity to constitute a usable supply source.

~~"Bedrock" means any solid rock underlying soil, sand, or clay~~ the solid, potentially fractured and fissured rock formations that occur beneath soils, underlying sediment deposits, or weathered material.

"Beneficial use" means use of water which includes, but is not limited to, domestic, agricultural, commercial, industrial, and investigative purposes.

"Bioretention Pond" means a best management practice structure engineered for the purpose of reducing the pollutant load in storm water runoff to surface water and groundwater systems.

"Biosolids" means solid, semisolid, or liquid materials removed from municipal sewage and treated to be suitable for recycling as fertilizer.

"Board" means the State Board of Health.

"Bored well" means a well that is excavated by means of a soil auger (hand or power) as distinguished from a well which is drilled, driven, dug, or jetted.

"Casing" means a hollow cylindrical device (typically steel, plastic, or concrete) that is installed in a well to maintain the well opening and to provide a seal.

"Cathodic protection well" means a well constructed to house devices which minimize electrolytic corrosion of metallic pipelines, tanks, and other facilities in contact with the ground.

"Clean fill" means any combination of undisturbed soil and natural earth material, commercially available quarried sand or gravel product, and cuttings from the well being constructed, provided that the materials do not contain contaminated media. In this context,

undisturbed soil and natural earth materials refers to unconsolidated mineral and organic material on the immediate surface of the Earth that developed naturally on the property on which it originates.

"Closed-loop ground-source heat pump well" means a well consisting of a sealed loop of plastic pipe buried vertically beneath the earth's surface to allow heat transfer between the fluid in the pipe and the earth. Horizontal closed-loop ground source heat pump pipe configurations installed in trenches, including those which may intercept shallow groundwater, are excluded.

"Coliform" means a broad group of naturally occurring bacteria species found in soils and rocks. Coliform bacteria are more prevalent in near surface soils, and their presence in well water may indicate the possible presence of more harmful pathogens.

"Collapsing material" means ~~any~~ soil or gravel material which collapses upon itself forming a seal with the casing and leaves no voids around the casing.

"Commercially dependent well" means a well that is the sole source of water for a commercial facility that requires the water from the well for continued operation. Examples include wells serving an ice plant, a car wash facility, irrigation for commercial nurseries, or agricultural wells that provide water for livestock or irrigation.

"Commissioner" means the State Health Commissioner, who is the chief executive officer of the board, a deputy commissioner, or his a subordinate who has been delegated powers in accordance with 12VAC5-630-90 B of this chapter.

~~"Confined aquifer" means an aquifer that is confined by an overlying impermeable formation~~

"Consolidated rock" means a formation consisting entirely of a natural rock formation that contains no soil and does not collapse against the well casing.

"Construction dewatering" means the process of draining an excavated area that is flooded with rain water or ground water before construction can start.

~~"Construction of wells" means acts necessary to locate and construct private wells. ,including the location of private wells, the boring, digging, drilling, or otherwise excavating of a well hole and the installation of casing with or without well screens, or well curbing.~~

"Contaminated media" means soil, sediment, dredged material, or debris that, as a result of a release or human use, has absorbed or adsorbed physical, chemical or radiological substances at concentrations above those consistent with nearby or undisturbed soil or natural earth materials.

"Controlled low strength material" or "flowable fill" means a slurry comprised of cement, water, and fine aggregate or filler (including coal ash, foundry sand, quarry fines, and baghouse dust in any combination).

"Cuttings" means the solid material, saturated or unsaturated, removed from a borehole drilled by rotary, percussion, or auger methods.

"Deep well ejector pump system" means a well that utilizes a casing adapter and a deep well ejector. These wells must maintain a constant vacuum to operate.

"Department" means the Virginia Department of Health.

"Deputy commissioner" means a person who serves as a deputy commissioner in accordance with § 32.1-22 of the Code of Virginia.

"DEQ" means the Virginia Department of Environmental Quality.

~~"Dewatering well" means a driven well constructed for the sole purpose of lowering the water table and kept in operation for a period of 60 days or less. Dewatering wells are used to allow construction in areas where a high water table hinders or prohibits construction and are always temporary in nature.~~

"Disinfection" means ~~the destruction of all~~ a process that inactivates or destroys pathogenic organisms in water by use of a disinfectant.

"Division" means the Division of On-Site Sewage and Water Services, Environmental Engineering, and Marina Programs within the department.

"District health department" means a consolidation of local health departments as authorized in § 32.1-31 C of the Code of Virginia.

"DPOR" means the Virginia Department of Professional and Occupational Regulation.

"Drilled shallow well suction pump system" means a drilled well two inches or less in diameter that utilizes an offset pump to draw water from the well through the casing. These wells must maintain a constant vacuum in order to operate.

"Drilled well" means a well that is excavated wholly or in part by means of a drill (either percussion or rotary) which operates by cutting or abrasion.

"Driven well" means a well that is constructed by driving a pipe, at the end of which there is a drive point and screen, without the use of ~~any~~ a drilling, boring or jetting device.

"Dug well" means a well that is excavated by means of picks, shovels, or other hand tools, or by means of a power shovel or other dredging or trenching machinery, as distinguished from a bored, drilled, driven, or jetted well.

"Emergency well replacement" means the replacement of an existing private drinking water well, heat pump well, or commercially dependent well that has failed to deliver the water needed for its intended use. ~~Such~~ The failure requires the drilling of a new well or extensive modifications to the existing well. The replacement of failed noncommercial irrigation wells, and other types of private wells are not considered emergencies.

"Gravel pack" means sand or gravel placed outside a well screen in a well to assist the flow of water into the well screen and to inhibit clogging of the screen.

~~"Ground water"~~ "Groundwater" means any water, except capillary moisture, beneath the land surface in the zone of saturation or beneath the bed of any a stream, lake, reservoir or other body of surface water within the boundaries of this Commonwealth, whatever may be the subsurface geologic structure in which such the water stands, flows, percolates, or otherwise occurs.

"Groundwater Management Area" means a geographically defined groundwater area in which the State Water Control Board has deemed the levels, supply or quality of groundwater to be adverse to public welfare, health, and safety (9VAC25-600-10 et seq).

"Grout" means ~~any~~ a stable, impervious bonding material, reasonably free of shrinkage, which is capable of providing a watertight seal in the annular spaces of a water well throughout the depth required, to protect against the intrusion of objectionable matter.

"Human consumption" means drinking, food preparation, dishwashing, bathing, showering, hand washing, teeth brushing, and maintaining oral hygiene.

"Injection well" means a well constructed for the purpose of injecting any material or substance which flows or moves, whether in semisolid, liquid, sludge, gas or any other form or state (excluding drilling mud and authorized well construction/abandonment fluids), into the ground.

"Jetted well" means a well that is excavated using water pumped under pressure through a special washing point to create a water jet which cuts, abrades, or erodes material to form the well.

"Lead free" means the following:

1. When used with respect to solders and flux, refers to solder and flux containing not more than 0.2% lead;

2. When used with respect to pipes, pipe fittings, plumbing fittings, and plumbing fixtures, refers to the weighted average of wetted surfaces of pipes, pipe fittings, plumbing fittings, and plumbing fixtures containing not more than 0.25% lead.

"Local health department" means the department established in each city and county in accordance with § 32.1-30 of the Code of Virginia.

"Noncollapsing material" means soil or gravel material which can maintain an open well bore ~~hole~~ long enough to grout the annular space between a well and the well bore ~~hole~~. For the purpose of this chapter, soil or gravel material which collapsed upon itself but created voids around the casing is considered noncollapsing material.

"Nonpublic water" means pure water that is not provided by a waterworks.

"Observation well" or "monitoring well" means a well constructed to measure hydrogeologic parameters, ~~such as the fluctuation of water levels,~~ or for scientific monitoring of the quality of ground water, or for both purposes.

"Owner" means ~~any person, who owns, leases,~~ the Commonwealth or any of its political subdivisions, including sanitary districts, sanitation district commissions and authorities, an individual, a group of individuals acting individually or as a group, a public or private institution, corporation, company, partnership, firm or association which owns or proposes to own or lease a private well.

"Person" means ~~any and all persons, including individuals, firms, partnerships, associations, public or private institutions, municipalities or political subdivisions, governmental agencies, or private or public corporations organized under the law of this Commonwealth or any other state or country~~ an individual, corporation, partnership, association, or any other legal entity.

"Pollutant" means substances including solid waste, sewage, effluent, radioactive materials, petroleum products, manufactured chemical products, and industrial byproducts which can detrimentally affect the quality of water.

"Private well" means ~~any~~ a water well constructed for a person on land which is owned or leased by that person and is usually intended for household, ground water source heat pump, agricultural use, industrial use, or other nonpublic water well.

"Pure water" means water of a quality suitable for human consumption that is (i) sanitary and normally free of minerals, organic substances, and toxic agents in excess of reasonable amounts and (ii) adequate in quantity and quality for the minimum health requirements of the persons served.

"Reclaimed water" means treated wastewater that can be used for beneficial purposes, determined by the degree of treatment achieved.

"Remediation well" means an observation or monitoring well in use for recovery or treatment of one or more pollutants.

"Replacement well" means a well being constructed to take the place of an existing well that is being taken out of service and is being abandoned.

"Sanitary survey" means an investigation of ~~any condition that may affect public health~~ obvious sources of potentially toxic or dangerous substances within 200 feet of a proposed private well.

"Screen" means the intake section of a well casing that obtains water from an unconsolidated aquifer providing for the water to flow freely and adding structural support to the bore hole. Screens are used to increase well yield or prevent the entry of sediment, or both.

"Sewage" means water carried and nonwater carried human excrement, kitchen, laundry, shower, bath, or lavatory wastes separately or together with ~~such~~ underground, surface, storm

and other water and liquid industrial wastes as may be present from residences, buildings, vehicles, industrial establishments or other places.

"Sewage disposal system" means a sewerage system or treatment works designed not to result in a point source discharge.

"Sewer" means any a pipe or conduit sanitary or combined sewer used to convey sewage or municipal or industrial wastes waste streams.

"Sewerage system" means pipelines or conduits, pumping stations and force mains and all other construction, devices and appliances appurtenant thereto, used for the collection and conveyance of sewage to a treatment works or point of ultimate disposal.

"Subsurface soil absorption" means a process which utilizes the soil to treat and dispose of sewage effluent.

"Treatment works" means any a device or system used in the storage, treatment, disposal or reclamation of sewage or combinations of sewage and industrial wastes, including but not limited to pumping, power and other equipment and appurtenances, septic tanks, and any works, including land, that are or will be (i) an integral part of the treatment process or (ii) used for the ultimate disposal of residues or effluents resulting from such the treatment.

"Tremie pipe" means a tube through which grout, filter media, or other flowing material is placed by gravity feed or pumping. The pipe is placed at the lowermost part of the well feature being treated (inner casing or annular space) and the bottom of the pipe remains submerged in the material being placed as the pipe is raised in order to prevent uneven distribution or bridging.

"Variance" means a conditional waiver of a specific regulation which is granted to a specific owner relating to a specific situation or facility and may be for a specified time period.

"Water quality" means the chemical, physical, bacteriological, and radiological characteristics of water with respect to its suitability for a particular purpose.

"Water table" means the uppermost surface of ground water groundwater saturation in an unconfined aquifer. The level in the saturated zone at which the pressure is equal to atmospheric pressure.

"Water well" or "well" means any an artificial opening or artificially altered natural opening, however made, by which ground water groundwater is sought or through which ground water groundwater flows under natural pressure or is intended to be artificially drawn; provided this definition shall not include wells drilled for the following purposes: (i) exploration or production of oil or gas, (ii) building foundation investigation and construction, (iii) elevator shafts, (iv) grounding of electrical apparatus, or (v) the modification or development of springs.

"Water well systems" means the water well to reach groundwater and the well pump and tank, including pipe and wire, up to and including the pint of connection to plumbing and electrical systems.

"Water well systems provider" means the person certified by DPOR to provide the drilling, installation, maintenance, or repair of a water wells or water well systems.

"Waterworks" means a system that serves piped water for human consumption to at least 15 service connections or 25 or more individuals for at least 60 days out of the year. "Waterworks" includes all structures, equipment, and appurtenances used in the storage, treatment and distribution of pure water except the piping and fixtures inside the building where the water is delivered.

"Well area" means an area designated on a construction permit as appropriate for the construction of a private well.

"Well bore" means a vertical hole advanced into the earth, however created, by a water well system provider, in which a well is constructed.

"Well site" means the location on the ground surface of a property designated on a construction permit for the construction of a private well.

"Withdrawal system" means (i) one or more wells or withdrawal points located on the same or contiguous properties under common ownership for which the withdrawal is applied to the same beneficial use or (ii) two or more connected wells or withdrawal points which are under common ownership but are not necessarily located on contiguous properties.

"Work days" or "working days" means days on which the department, the district health department, or the local health department, as applicable in context, is open for business, excluding holidays and closures."

"Yield" means the quantity of water, usually measured in volume of water per unit time, which may flow or which may be pumped, from a well or well field.

Article 2
General Provisions

12VAC5-630-20. Authority for regulations.

Title 32.1 of the Code of Virginia, and specifically §§ 32.1-12 and ~~32.1-176.4~~32.1-176.2, provide that the ~~State Board of Health~~ board has the duty to protect the public health and to ensure that ~~ground water~~ groundwater resources are not adversely affected by the construction and location of private wells. In order to discharge this duty, the board is empowered, pursuant to §§ 32.1-12 and 32.1-176.4 of the Code of Virginia, to ~~supervise and~~ regulate the construction and location of private wells within the Commonwealth.

12VAC5-630-30. Purpose and applicability of regulations.

A. Purpose. These regulations have been promulgated by the ~~State Board of Health~~ board to:

1. Ensure that all private wells are located, constructed and maintained in a manner which does not adversely affect ground water resources, or the public welfare, safety and health;
2. Guide the ~~State Health Commissioner~~ (commissioner) in his ~~determination of~~ determining whether a permit for construction of a private well should be issued or denied;
3. Guide the owner or his the owner's agent in the requirements necessary to secure a permit for construction of a private well; ~~and~~
4. Guide the owner or his the owner's agent in the requirements necessary to secure an inspection statement following construction; ~~and~~
5. Guide the owner or the owner's agent in the requirements necessary to abandon a private well (temporarily or permanently) when the well is not in use.

B. Applicability. These regulations apply to owners of a private well. The following wells are excluded from the requirements of this chapter:

1. Wells constructed as a groundwater source for a waterworks as regulated by 12VAC5-590.
2. Wells constructed for the purpose of building, roadway or other geotechnical foundation investigation, design or construction, provided that the well, including an unimproved well bore, is abandoned in such a manner as to prevent it from being a channel of vertical movement of surface water or a source of contamination into the ground.
3. Wells constructed for the purpose of an elevator shaft.
4. Wells constructed for the purpose of constructing an extensometer or similar scientific instrument.
5. Wells constructed for the purpose of grounding of electrical apparatus.
6. Wells constructed for the purpose of the modification or development of springs.

7. Wells constructed for the purpose of underground injection as regulated by 40 CFR Part 144.

8. Wells constructed for the purpose of the observation or monitoring of groundwater elevation or quality, except as governed by 12VAC5-630-420.B. and C.

9. Well bores, including direct push well bores and hand tool made well bores, advanced for the purpose of collecting soil or groundwater samples for analysis with or without temporary installation of casing or screen, provided that the well bore is abandoned after the sample is collected in such a manner as to prevent it from being a channel of vertical movement of surface water or a source of contamination into groundwater.

10. Wells constructed for the purpose of construction dewatering, provided that the well is abandoned within 60 days of construction by the removal of the well point, well casing, screening and other appurtenances associated with the construction and operation of the well and completion of abandonment in such a manner as to prevent it from being a channel of vertical movement of surface water or a source of contamination into groundwater.

11. Wells constructed to provide cathodic protection, provided that the well is abandoned after use in such a manner as to prevent it from being a channel of vertical movement of surface water or a source of contamination into groundwater.

12VAC5-630-40. Relationship to Virginia Sewage Handling and Disposal Regulations. (Repealed)

~~This chapter supersedes 12VAC5-610-1150 of the Virginia Sewage Handling and Disposal Regulations, and 12VAC5-610-1140 B and C of the Virginia Sewage Handling and Disposal Regulations which address private wells, and were adopted by the State Board of Health pursuant to Title 32.1 of the Code of Virginia.~~

12VAC5-630-50. Relationship to the State Water Control Board.

~~This chapter is independent of all regulations promulgated by the State Water Control Board. Ground water users located in a ground water management area may be required to obtain a permit from the State Water Control Board in addition to obtaining a permit from the Department of Health. In addition to the reporting requirements contained in this chapter, § 62.1-258 of the Code of Virginia requires that private wells constructed in a groundwater management area be registered by the water well systems provider with the State Water Control Board within 30 days of the completion of construction. Private wells constructed in groundwater management areas are subject to 9VAC25-610.~~

12VAC5-630-60. Relationship to the Department of Environmental Quality, Waste Management Division.

~~This chapter establishes minimum standards for the protection of public health and ground water groundwater resources. Observation wells, monitoring wells, and remediation wells constructed under the supervision of the Virginia Department of Environmental Quality, Waste Management Division, DEQ are governed by 12VAC5-630-420.~~

12VAC5-630-70. Relationship to the Uniform Statewide Building Code.

~~This chapter is independent of and in addition to the requirements of the Uniform Statewide Building Code. All persons Persons required to obtain a well permit by this chapter shall furnish a copy of the permit to the local building official, upon request, when making application for a building permit. Prior to obtaining an occupancy permit, an applicant shall furnish the local building official with a copy of the inspection statement demonstrating the water supply has been inspected, sampled and tested (when applicable), and approved by the district or local health department.~~

12VAC5-630-80. Relationship to the Department of Professional and Occupational Regulation.

Persons engaged in the construction, repair, or alteration of a private well shall be licensed and certified in accordance with §§ 54.1-1100, 54.1-1103 and 54.1-1129.1 of the Code of Virginia, any contractor constructing a water well to reach ground water shall possess, as a minimum, a valid Class B contractors license.

12VAC5-630-90. Administration of regulations.

This chapter is administered by the following:

A. ~~The State Board of Health, hereinafter referred to as the board,~~ board has the responsibility to promulgate, amend, and repeal regulations necessary to ensure the proper location, construction, repair, and abandonment and location of private wells.

B. ~~The State Health Commissioner, hereinafter referred to as the commissioner,~~ commissioner is the chief executive officer of the ~~State Department of Health,~~ department. The commissioner has the authority to act, within the scope of regulations promulgated by the board, and for the board when it is not in session. The commissioner may delegate his powers under this chapter in writing to any a subordinate, with the exception of; however, the (i) his power to (i) issue variances under § 32.1-12 of the Code of Virginia and 12VAC5-630-170, and (ii) his power to issue orders under § 32.1-26 of the Code of Virginia and 12VAC5-630-140 and 12VAC5-630-150 B, and (iii) the power to revoke permits or inspection statements under 12VAC5-630-290, which may only not be delegated pursuant to § 32.1-22 of the Code of Virginia.

The commissioner has final authority to adjudicate contested case decisions of subordinates delegated powers under this section prior to appeal of such case decisions to the circuit court.

C. ~~The State Department of Health hereinafter referred to as department~~ is designated as the primary agent of the commissioner for the purpose of administering this chapter.

D. The district or local health departments are responsible for implementing and enforcing the regulatory activities required by this chapter.

12VAC5-630-100. Right of entry and inspections.

In accordance with the provisions of ~~§§ § 32.1-25 and 32.1-12 and 32.1-176.6~~ of the Code of Virginia, the commissioner or ~~his~~ the commissioner's designee shall have the right to enter any property to ensure compliance with this chapter. In accordance with the provisions of § 32.1-176.6 of the Code of Virginia, the department has the authority to conduct such inspections as it may find reasonably necessary to ensure that the construction work conforms to applicable construction standards.

Part II
Procedural Regulations
Article 1
Procedures

12VAC5-630-110. Compliance with the Administrative Process Act.

The provisions of the Virginia Administrative Process Act (~~§ 9-6.14:4~~ 2.2-4000 et seq. of the Code of Virginia) shall govern the promulgation and administration of this chapter, including governing the procedures for rendering case decisions as defined in § 2.2-4001, and shall be applicable to the appeal of any a case decision based upon this chapter.

12VAC5-630-120. Powers and procedures of regulations not exclusive.

The commissioner may enforce this chapter through any means lawfully available.

12VAC5-630-130. [Reserved]

12VAC5-630-140. Emergency order.

If an emergency exists the commissioner may issue an emergency order as is necessary for preservation of public health, safety, and welfare or to protect ~~ground-water~~ groundwater resources. The emergency order shall state the reasons and precise factual basis upon which the emergency order is issued. The emergency order shall state the time period for which it is effective. Emergency orders will be publicized in a manner deemed appropriate by the commissioner. The provisions of 12VAC5-630-150 C and D shall not apply to emergency orders issued pursuant to this section.

12VAC5-630-150. Enforcement of regulations.

A. Notice. Subject to the exceptions below, whenever the commissioner or the district or local health department has reason to believe a violation of any of this chapter has occurred or is occurring, the alleged violator shall be notified. ~~Such~~ The notice shall be made in writing, shall be delivered personally or sent by certified mail, shall cite the regulation or regulations that are allegedly being violated, shall state the facts which form the basis for believing the violation has occurred or is occurring, shall include a request for a specific action by the recipient by a specified time and shall state the penalties associated with such violation. ~~When the~~ The commissioner ~~may deems deem~~ it necessary, ~~he may~~ to initiate criminal prosecution or seek civil relief through mandamus, ~~or injunction, or other appropriate remedy~~ prior to giving notice.

B. Orders. Pursuant to the authority granted in § 32.1-26 of the Code of Virginia, the commissioner may issue orders to require ~~any~~ an owner, or other person, to comply with the provisions of this chapter. The order shall be signed by the commissioner and may require:

1. The immediate cessation and correction of the violation;
2. Appropriate remedial action to ensure that the violation does not recur;
3. The submission to the commissioner for review and approval of a plan to prevent future violations to the commissioner for review and approval;
4. The submission of an application for a variance; or
5. ~~Any other~~ Other corrective action deemed necessary for proper compliance with the chapter.

C. Hearing before the issuance of an order. Before the issuance of an order described in 12VAC5-630-150, a hearing must be held, with at least 30 days notice by certified mail to the affected owner or other person of the time, place and purpose thereof, for the purpose of adjudicating the alleged violation or violations of this chapter. The procedures at the hearing shall be in accordance with 12VAC5-630-180 A or B of this chapter and the Virginia Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia), ~~with §§ 9-6.14:11 through 9-6.14:14 of the Code of Virginia.~~

D. Order; when effective. ~~All orders~~ Orders issued pursuant to 12VAC5-630-150 shall become effective not less than 15 days after mailing a copy thereof by certified mail to the last known address of the owner or person violating this chapter. ~~Violation of an order is a Class 1 misdemeanor. See § 32.1-27 of the Code of Virginia.~~

E. Compliance with effective orders. The commissioner may enforce ~~all~~ orders. Should any owner or other person fail to comply with any order, the commissioner may:

1. Apply to an appropriate court for an injunction or other legal process to prevent or stop any practice in violation of the order;
2. Commence administrative proceedings to suspend or revoke the construction permit;
3. Request the Attorney General to bring an action for civil penalty, injunction, or other appropriate remedy; or

4. Request the Commonwealth's Attorney to bring a criminal action.

F. Not exclusive means of enforcement. Nothing contained in 12VAC5-630-140 or 12VAC5-630-150 shall be interpreted to require the commissioner to issue an order prior to commencing administrative proceedings or seeking enforcement of any regulations or statute through an injunction, mandamus, other appropriate remedy, or criminal prosecution.

12VAC5-630-160. Suspension of regulations during disasters.

If in the case of a man-made or natural disaster, the commissioner finds that certain regulations cannot be complied with and that the public health is better served by not fully complying with this chapter, ~~he~~ the commissioner may authorize the suspension of the application of the chapter for specifically affected localities and institute a provisional regulatory plan until the disaster is abated.

12VAC5-630-170. Variances.

~~Only the~~ The commissioner or the deputy commissioners may grant a variance to this chapter. ~~(See §§ 32.1-12 and 32.1-22 of the Code of Virginia and 12VAC5-630-90 B.)~~ The commissioner or the deputy commissioners shall follow the appropriate procedures set forth in this subsection in granting a variance.

A. Requirements for a variance. The commissioner may grant a variance if a thorough investigation reveals that the hardship imposed by this chapter (may be economic) outweighs the benefits that may be received by the public. ~~Further, and that~~ the granting of such a variance shall not subject the public to unreasonable health risks or jeopardize ~~ground water~~ groundwater resources.

Exception: The commissioner shall not grant a variance for an improperly located Class IV well that was located pursuant to an express Class IV permit, as described under 12VAC5-630-260 and 12VAC5-630-270, if the improper location of the well is a result of the failure by the owner, ~~his~~ the owner's agent, or the ~~well driller~~ water well systems provider to provide complete or accurate information on the site plan submitted with the application or to install the well in accordance with the permit.

B. Application for a variance. Any owner who seeks a variance shall apply in writing within the time period specified in 12VAC5-630-210 B. The application shall be signed by the owner, addressed and sent to the commissioner, ~~at the State Department of Health in Richmond.~~ The application shall include:

1. A citation to the section from which a variance is requested;
2. The nature and duration of the variance requested;
3. Any relevant analytical results including results of relevant tests conducted pursuant to the requirements of this chapter;
4. The hardship imposed by the specific requirement of this chapter.
5. A statement of reasons why the public health and welfare would be better served if the variance were granted.
- ~~4.~~ 6. Statements or evidence why the public health and welfare as well as the ~~ground water~~ groundwater resources would not be degraded if the variance were granted;
- ~~5.~~ 7. Suggested conditions that might be imposed on the granting of a variance that would limit the detrimental impact on the public health and welfare or ~~ground water~~ groundwater resources;
- ~~6.~~ 8. Other information, if any, believed pertinent by the applicant; and
- ~~7.~~ 9. ~~Such other~~ Other information as that the district or local health department or commissioner may require.

C. Evaluation of a variance application.

1. The commissioner shall act on ~~any a~~ a variance request submitted pursuant to 12VAC5-630-170 B within 60 calendar days of receipt of the request.
2. In the evaluation of a variance application, the commissioner shall consider the following factors:
 - a. The effect that ~~such a the~~ the variance would have on the construction, location, or operation of the private well;
 - b. The cost and other economic considerations imposed by this requirement;
 - c. The effect that ~~such a the~~ the variance would have on protection of the public health;
 - d. The effect that ~~such a the~~ the variance would have on protection of ~~ground water~~ groundwater resources; ~~and~~
 - e. Relevant analytical results including results of tests conducted pursuant to the requirements of this chapter;
 - f. The hardship imposed by enforcing the specific requirements of this chapter;
 - g. Suggested conditions that might be imposed on the granting of a variance that would limit detrimental impact on the public health and welfare;
 - h. Other information, if any, believed pertinent by the applicant; and
 - e. i. ~~Such other~~ Other factors as the commissioner may deem appropriate.

D. Disposition of a variance request.

1. The commissioner may deny ~~any an~~ an application for a variance by sending a denial notice to the applicant by certified mail. The notice shall be in writing and shall state the reasons for the denial.
2. If the commissioner proposes to grant a variance request submitted pursuant to 12VAC5-630-170 B, the applicant shall be notified in writing of this decision. ~~Such The~~ The notice shall identify the variance, conditions to the variance, if any, private well covered, and shall specify the period of time for which the variance will be effective. The effective date of a variance shall be as stated in the variance.
3. No owner may challenge the terms or conditions set forth in the variance after 30 calendar days have elapsed from the effective date of the variance.

E. Posting of variances. ~~All variances~~ Variances granted to ~~any~~ private wells are transferable from owner to owner unless otherwise stated, but not transferable to another private well. ~~Each~~ The variance shall be attached to the permit to which it is granted. ~~Each The~~ The variance is revoked when the permit to which it is attached is revoked.

F. Hearings on disposition of variances. Subject to the time limitations specified in 12VAC5-630-210, hearings on denials of an application for a variance or on challenges to the terms and conditions of a granted variance may be held pursuant to 12VAC5-630-180 A or B, except that informal hearings under 12VAC5-630-180 A shall be held by the commissioner or his designee.

12VAC5-630-180. Hearing types.

Hearings before the commissioner or the commissioner's designees shall include any of the following forms depending on the nature of the controversy and the interests of the parties involved.

A. Informal hearings. An informal hearing is a meeting with a district or local health department with the district or local health director presiding and held in conformance with ~~§ 9-6.14:14~~ 2.2-4019 of the Code of Virginia. The district or local health department director shall consider all evidence presented at the meeting which is relevant to the issue in controversy. Presentation of evidence, however, is entirely voluntary. The district or local health department shall have no

subpoena power. No verbatim record need be taken at the informal hearing. The local or district health director shall review the facts presented and based on those facts render a decision. A written copy of the decision and the basis for the decision shall be sent to the appellant within 15 work days of the hearing, unless the parties mutually agree to a later date in order to allow the department to evaluate additional evidence. If the decision is adverse to the interests of the appellant, an aggrieved appellant may request an adjudicatory hearing pursuant to 12VAC5-630-180 B below.

B. Adjudicatory hearing. The adjudicatory hearing is a formal, public adjudicatory proceeding before the commissioner, or a designated hearing officer, and held in conformance with § ~~9-6.14:12~~ 2.2-4020 of the Code of Virginia. An adjudicatory hearing includes the following features:

1. Notice. Notice which states the time and place and the issues involved in the prospective hearing shall be sent to the owner or other person who is the subject of the hearing. Notice shall be sent by certified mail at least 15 calendar days before the hearing is to take place.
2. Record. A record of the hearing shall be made by a court reporter. A copy of the transcript of the hearing, if transcribed, will be provided within a reasonable time to any person upon written request and payment of the cost.
3. Evidence. ~~All interested~~ Interested parties may attend the hearing and submit oral and documentary evidence and rebuttal proofs, expert or otherwise, that are material and relevant to the issues in controversy. The admissibility of evidence shall be determined in accordance with § ~~9-6.14:12~~ 2.2-4022 of the Code of Virginia.
4. Counsel. ~~All parties~~ Parties may be accompanied by and represented by counsel and are entitled to conduct such cross examination as may elicit a full and fair disclosure of the facts.
5. Subpoena. Pursuant to § ~~9-6.14:13~~ 2.2-4022 of the Code of Virginia, the commissioner or hearing officer may issue subpoenas on behalf of himself or any person or owner for the attendance of witnesses and the production of books, papers or maps. Failure to appear or to testify or to produce documents without adequate excuse may be reported by the commissioner to the appropriate circuit court for enforcement.
6. Judgment and final order. The commissioner may designate a hearing officer or subordinate to conduct the hearing as provided in § ~~9-6.14:12~~ 2.2-4023 of the Code of Virginia, and to make written recommended findings of fact and conclusions of law to be submitted for review and final decision by the commissioner. The final decision of the commissioner shall be reduced to writing and will contain the explicit findings of fact upon which ~~his~~ the decision is based. Certified copies of the decision shall be delivered to the owner affected by it. Notice of a decision will be served upon the parties and become a part of the record. Service may be by personal service or certified mail return receipt requested.

12VAC5-630-190. Request for hearing.

A request for an informal hearing shall be made by sending the request in writing to the district or local health department. A request for an adjudicatory hearing shall be made in writing and directed to the commissioner ~~at the State Department of Health in Richmond~~. Requests for hearings shall cite the reason(s) for the hearing request and shall cite the section(s) of this chapter involved.

12VAC5-630-200. Hearing as a matter of right.

~~Any~~ An owner or other person whose rights, duties, or privileges have been, or may be affected by ~~any~~ a decision of the board or its subordinates in the administration of this chapter

shall have a right to both informal and adjudicatory hearings. The commissioner may require participation in an informal hearing before granting the request for a full adjudicatory hearing. Exception: No person other than an owner shall have the right to an adjudicatory hearing to challenge the issuance of either a construction permit or inspection statement unless the person can demonstrate at an informal hearing that the minimum standards contained in this chapter have not been applied and that ~~he~~ the person will be injured in some manner by the issuance of the permit or that ~~ground-water~~ groundwater resources will be damaged by the issuance of the permit.

12VAC5-630-210. Appeals.

~~Any~~ An appeal from a denial, revocation, or voidance of a construction permit, inspection statement, or request for variance for a private well must be made in writing and received by the department within ~~60~~ 30 days of the date of the denial, revocation or voidance.

~~A. Any request for hearing on the denial of an application for a variance pursuant to 12VAC5-630-170 D 1 must be made in writing and received within 60 days of receipt of the denial notice.~~

~~B. Any~~ A request for a variance must be made in writing and received by the department prior to the denial of the private well permit, or within 60 days after such denial.

~~C. In the event a person applies for a variance within the 60-day period provided by subsection B above, the date for appealing the denial of the permit, pursuant to subsection A above, shall commence from the date on which the department acts on the request for a variance.~~

~~D. Pursuant to the Administrative Process Act (§ 9-6.14:1 2.2-4000 et seq. of the Code of Virginia) an aggrieved~~ owner party may appeal a final decision of the commissioner to an appropriate circuit court.

12VAC5-630-220. Permits and inspection statement; general.

All private wells shall be constructed and located in compliance with the requirements as set forth in this chapter.

~~A. Except as provided in 12VAC5-630-220 B below, after~~ After the effective date of this chapter, no person shall construct, alter, ~~rehabilitate~~, abandon or ~~extend~~increase the depth of a private well, or allow the construction, alteration, ~~rehabilitation~~, abandonment or ~~extension~~activity to increase the depth of a private well, without a written construction permit from the commissioner. Conditions may be imposed on the issuance of ~~any~~ a permit and no private well shall be constructed or modified in violation of those conditions. The replacement of a well pump, ~~or~~ the replacement of a well seal or cap with an equivalent well seal or cap, or the vertical extension of the well casing above the ground surface shall not be considered a well ~~modification~~alteration.

~~B. No permit shall be required for the construction, operation, or abandonment of dewatering wells. Furthermore, dewatering wells are exempted from the construction requirements found in 12VAC5-630-410. All dewatering wells shall be abandoned within 60 days of construction. Abandonment in this case means the removal of the well point, well casing, screening, and other appurtenances associated with the construction and operation of the well.~~

~~C. Except as provided in 12VAC5-630-320, no person shall place a private well in operation, or cause or allow a private well to be placed in operation, without obtaining a written inspection statement pursuant to 12VAC5-630-310 and 12VAC5-630-330.~~

~~D. Except as provided in 12VAC5-630-270, 12VAC5-630-290 and 12VAC5-630-300, construction permits for a private well shall be deemed valid for a period of 54~~ 18 months from the date of issuance, with provision for one 18 month renewal.

12VAC5-630-230. Procedures for obtaining a construction permit for a private well.

A. Construction permits are issued by the authority of the commissioner. ~~All requests~~ Requests for a private well construction permit shall be by written application, signed by the owner or ~~his~~ the owner's agent, and shall be directed to the district or local health department. ~~All applications~~ Applications shall be made on an application form provided by the district or local health department and approved by the commissioner.

B. An application shall be deemed completed upon receipt by the district or local health department of a signed and dated application, together with the appropriate fee, containing the following information:

1. The property owner's name, address, and telephone number;
 2. The applicant's name, address, and phone number (if different from subdivision 1 above);
 3. A statement signed by the property owner, or ~~his~~ the owner's agent, granting the ~~Health Department~~ department access to the site for the purposes of evaluating the suitability of the site for a well and allowing the department access to inspect the well after it is installed;
 4. A statement indicating whether the adjacent property is used for an agricultural operation;
 5. Information required per 12VAC5-630-380.E, if necessary.
4. 6. A site plan showing the proposed well site, property boundaries, accurate locations of actual or proposed sewage disposal systems, recorded easements, and other sources of contamination within 100 feet of the proposed well site, and at the option of the applicant a proposed well design; and
5. 7. When deemed necessary because of geological or other natural conditions, plans and specifications detailing how the well will be constructed.

12VAC5-630-240. Issuance of the construction permit.

A. A construction permit shall be issued to the owner by the commissioner no later than 60 days after receipt of a complete ~~and approvable~~ application submitted under 12VAC5-630-230 that meets requirements for issuance of the permit. If applicable, the applicant shall comply with 12VAC5-630-340 prior to issuance of the permit.

B. The permit shall indicate a well site or a well area.

1. A well site shall be designated as a specific location that can be identified on the property by means of measurement from identified fixed points on the property.
2. A well area may be designated as a polygon or as a defined radius around a proposed well site. The well area shall be described in sufficient detail that it can be identified on the property by means by means of measurement from identified fixed points on the property.

12VAC5-630-250. Emergency procedures.

Applications for replacement wells that meet the definition of an emergency well replacement (12VAC5-630-10) shall have priority over normal applications for private well permits. Emergency procedures are as follows:

A. Drinking water wells. ~~In the event~~ When a private drinking water well has failed and must be replaced, ~~the local health department will~~ a licensed onsite soil evaluator, professional engineer, or licensed water well systems provider shall conduct a sanitary survey of the property and surrounding area to determine the most suitable location. If a site is found that meets the minimum site requirements of this chapter, including the minimum separation distances contained in Table 3.1 and 12VAC5-630-380 ~~FH~~, the local health department will issue a permit for that site. If a site cannot be located that meets the minimum separation distances listed in Table 3.1 and 12VAC5-630-380 ~~FH~~, the local health department shall identify a site that complies with the minimum separation distances to the greatest extent possible. However, the replacement well shall not be located closer to ~~any~~ a source of contamination than the existing well it is replacing.

Replacement drinking water wells must meet the sampling requirements of ~~12VAC5-630-370 D and E~~ 12VAC5-630-431 E and F.

B. Heat pump wells or commercially dependent wells. If a heat pump well or commercially dependent well must be replaced, the applicant shall propose a replacement site based on the technical requirements of the heat pump system or commercial establishment. ~~The local health department will conduct a sanitary survey of the property and surrounding area to determine if the site meets the minimum site requirements of this chapter including the minimum separation distances contained in Table 3.1 and 12VAC5-630-380 F.~~ A licensed onsite soil evaluator, professional engineer, or water well systems provider shall conduct a sanitary survey of the property and surrounding area to determine the most suitable location. If the site meets the minimum requirements of this chapter, the local health department will issue a permit for that site. If a site cannot be located that meets the minimum separation distances listed in Table 3.1 ~~and 12VAC5-630-380 F,~~ the local health department shall identify a site that complies with the minimum separation distances to the greatest extent possible. However, the replacement well shall not be located closer to ~~any~~ a source of contamination than the existing well it is replacing. If the replacement heat pump well or commercially dependent well must be placed closer to a sewage disposal system (but no closer than the existing well it is replacing) the well shall be sampled for fecal coliforms. If fecal coliforms are present in the sample and further investigation reveals that the groundwater is contaminated, the well shall be abandoned.

12VAC5-630-260. Express Class IV construction permits.

If When a Class IV well is proposed for property that does not have an onsite sewage disposal system, either active or inactive, an application may be made for an express Class IV construction permit. An application for an express Class IV construction permit shall be made on a form provided by the district or local health department and approved by the commissioner.

An application shall be deemed completed upon receipt by the district or local health department of a signed and dated application, together with the appropriate fee, containing the following information:

1. The property owner's name, address, telephone number, and personal signature. The owner's signature will acknowledge that the permit will be issued without the benefit of a site visit by the local health department prior to the issuance of the construction permit; that the permit is being issued based upon the information provided on the accompanying site plan; that the property owner also acknowledges that if the well is found not to comply with the minimum separation distances or ~~any~~ other provision of this chapter, the well must be abandoned at the direction of the local or district health director; and that a variance will not be considered if the improper location of the well is a result of the failure by the owner, ~~his~~ the owner's agent, or the ~~well driller~~ water well systems provider to provide complete or accurate information on the site plan submitted with the application or to install the well in accordance with the permit.
2. Address and directions to the property;
3. The proposed use of the well;
4. The name, address, telephone number, ~~Class B (minimum)~~ license number, and signature of the ~~well driller~~ water well systems provider who is to construct the well;
5. A statement signed by the property owner (and not ~~his~~ the owner's agent) granting the department access to the site for the purposes of inspecting the property and the well during and after its installation until the well is approved by the department or ~~any~~ a required abandonment is completed; and
6. A site plan showing the proposed well site, property boundaries, recorded easements, and accurate locations of actual or proposed sources of contamination (including, but not limited to those listed in Table 3.1) within 100 feet of the proposed well site, and at the option of the applicant

a proposed well design. If the proposed well site is located on or at the base of sloping topography, the minimum separation distances shown on the site plan for any sources of contamination within a 60 degree arc slope of the proposed well site must be increased 25 feet for every 5.0% slope.

12VAC5-630-270. Issuance of express Class IV construction permits and final inspection.

A. Issuance of express Class IV construction permit. Upon receipt of a complete and approvable application, as defined in 12VAC5-630-260, by a local or district health department with multiple ~~sanitarians~~ environmental health specialists, the department shall exercise all due diligence to issue a permit either on the date of receipt or the following business day. If the local or district office has only one assigned ~~sanitarian~~ environmental health specialist, the local or district department will exercise all due diligence to issue the permit as soon as possible. Failure by the department to issue the permit within the specified time does not authorize the construction of the well without a permit. If applicable, the applicant shall comply with 12VAC5-630-340 prior to the issuance of the permit.

B. Validity of express Class IV construction permits. Express Class IV construction permits shall only be valid for a period of 30 days from the date of issuance.

C. Inspection. If, upon inspection of the well, it is found that the well location does not comply with the minimum separation distances or any other provision of this chapter, no inspection statement shall be issued and the well shall be immediately abandoned by the property owner in accordance with 12VAC5-630-450 upon notification and direction by the local or district health director. The commissioner shall not grant a variance if the improper location of the well is a result of the failure by the owner, ~~his~~ the owner's agent, or the ~~well driller~~ water well systems provider to provide complete or accurate information on the site plan submitted with the application or to install the well in accordance with the permit.

The construction of the well shall also comply with this chapter.

12VAC5-630-271. Express geothermal well permits.

A. The issuance of an express geothermal permit is contingent upon proper registration and payment of application fees and applies to the construction of wells used solely for a closed-loop geothermal heating system.

B. A single application and a single fee are required for any geothermal well system. The fee is the same as for a single private well. A registration statement for closed loop construction permitting shall be made on a form provided and approved by the division. The registration shall include the following information:

1. The property owner's name, address, and telephone number;
2. The address of and directions to the property;
3. The proposed use of the well;
4. The name, address, telephone number, and contractor license number of the ~~well driller~~ water well systems provider;
5. A statement signed by the property owner granting the department access to the site for the purpose of inspecting the property and the well during and after the well installation until the well is approved by the department or any required corrections are made;
6. A site plan, drawn to scale, showing the proposed well site or sites, property boundaries, recorded easements, and accurate locations of actual or proposed sources of contamination (including but not limited to those listed in Table 3.1 of 12VAC5-630-380) within 100 feet of the proposed well site or sites; and
7. A statement signed by the licensed ~~well driller~~ water well systems provider that the location and construction of the well or wells will comply with the requirements of this chapter.

C. A single application fee is required for any geothermal well system, regardless of the number of wells included in the system. The fee is the same as for a single private well.

12VAC5-630-272. Issuance of express geothermal well construction permit, inspection, and final approval.

A. Issuance of the express geothermal well permit. Upon receipt of a complete registration statement and the appropriate fee, the department will acknowledge receipt of the registration statement and issue the permit with a copy given to the contractor. The construction of the geothermal heating system may begin immediately upon submission of a complete registration statement and counter-signature denoting receipt by the department.

B. Inspection. The department, at its sole discretion, may inspect the closed-loop geothermal well ~~from any time~~ after acceptance of the registration statement until after the installation is approved. If, upon inspection of the well, it is found that the well location does not comply with the minimum separation distances or ~~any~~ other provision of this chapter, no inspection statement shall be issued until the deficiencies have been corrected.

C. Final approval. Upon receipt of the Uniform Water Well Completion Report, as required in 12VAC5-630-440, and completion of ~~any~~ inspections deemed necessary to ensure compliance with this chapter, ~~or~~ unless the department has evidence to indicate that the well is not in compliance with the requirements of this chapter, the local health department will provide the owner with a statement that the wells are approved for use.

12VAC5-630-280. Denial of a construction permit.

If it is determined that (i) the proposed design is inadequate, (ii) ~~or that~~ site, geological, hydrological, or other conditions exist that do not comply with this chapter or would preclude the safe and proper operation of a private well system, (iii) ~~or that~~ the installation of the well would create an actual or potential health hazard or nuisance, or (iv) the proposed design would adversely impact the ~~ground water~~ groundwater resource, the permit shall be denied and the owner shall be notified in writing, by certified mail, of the basis for the denial. The notification shall also state that the owner has the right to appeal the denial.

12VAC5-630-290. Revocation of construction permits or inspection statements.

In accordance with 12VAC5-630-331, ~~The~~ the commissioner may revoke a construction permit or inspection statement for any of the following reasons:

1. Failure to comply with the conditions of the permit;
2. Violation of ~~any of~~ this chapter for which no variance has been issued;
3. Facts become known which reveal that a potential health hazard would be created or that the ~~ground water~~ groundwater resources may be adversely affected by allowing the proposed well to be installed or completed.

12VAC5-630-300. Voidance of construction permits.

~~Null and void. All~~

A. In accordance with 12VAC5-630-331, ~~the commissioner may declare~~ well construction permits or inspection statements ~~are~~ null and void when (i) conditions such as house location, sewage system location, sewerage system location, topography, drainage ways, or other site conditions are changed from those shown on the application, or (ii) conditions are changed from those shown on the construction permit.

B. Construction permits are null and void when, ~~or (iii)~~ more than ~~54~~ 18 months elapse from the date the permit was issued or renewed. Reapplication for the purposes of having an expired permit reissued shall be the responsibility of the owner, and ~~such~~ reapplication shall be handled as an initial application and comply ~~fully~~ with 12VAC5-630-230.

12VAC5-630-310. Statement required upon completion of construction.

~~Upon~~ Within 30 days of completion of the construction, alteration, rehabilitation, abandonment or extension or deepening of a private well, the owner, or the owner's agent, or water well systems provider shall submit to furnish the district or local health department a statement, signed by the contractor, upon the form set out in 12VAC5-630-490, completed uniform water well completion report (GW-2). The GW-2 shall be signed by the water well systems provider and state that the well was installed, constructed, or abandoned in accordance with the permit, and further that the well complies with all applicable state and local regulations, ordinances and laws.

12VAC5-630-320. Inspection and correction.

No well shall be placed in operation, except for the purposes of testing the mechanical soundness of the system, until inspected by the district or local health department, corrections are made if necessary, and the owner has been issued an inspection statement by the district or local health department.

12VAC5-630-330. Issuance of the inspection statement.

Upon satisfactory completion of the requirements of 12VAC5-630-310, 12VAC5-630-320, 12VAC5-630-370, 12VAC5-630-430 and 12VAC5-630-440, the commissioner shall issue an inspection statement to the owner. The issuance of an inspection statement does not denote or imply ~~any~~ a warranty or guarantee of the water quality or quantity by the department or that the private well will function for any a specified period of time. It shall be the responsibility of the owner or ~~any~~ subsequent owner to maintain, repair, replace, or to comply with the requirements to abandon ~~any~~ a private well.

12VAC5-630-331. Enforcement, Notices, Informal Conferences.

A. The commissioner may, after providing a notice of intent to revoke a construction permit or inspection statement, and after providing an opportunity for an informal conference in accordance with § 2.2-4019 of the Code of Virginia, revoke or declare null and void a construction permit or inspection statement for flagrant or continuing violation of this chapter. Any person to whom a notice of revocation or null and void is directed shall immediately comply with the notice. Upon revocation, the former construction permit or inspection statement holder shall be given an opportunity for appeal of the revocation in accordance with the Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia).

B. The commissioner may summarily suspend an inspection statement to operate a private well if continued operation constitutes a substantial and imminent threat to public health. Upon receipt of such notice that an inspection statement is suspended, the well owner shall cease private well operations immediately. Whenever an inspection statement is suspended, the holder of the inspection statement shall be notified in writing by certified mail or by hand delivery. Upon service of notice that the inspection statement is immediately suspended, the former inspection statement holder shall be given an opportunity for an informal conference in accordance with § 2.2-4019 of the Code of Virginia. The request for an informal conference shall be in writing and shall be filed with the local health department by the former holder of the inspection statement. If written request for an informal conference is not filed within 10 working days after the service of notice, the suspension is sustained. Each holder of a suspended permit shall be afforded an opportunity for an informal conference within three working days of receipt of a request for the informal conference. The commissioner may end the suspension at any time if the reasons for the suspension no longer exist.

C. Any person affected by a determination issued in connection with the enforcement of this chapter may challenge such determination in accordance with the provisions of the Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia).

D. All private wells shall be constructed, operated, and maintained in compliance with the requirements as set forth in this chapter. The commissioner may enforce this chapter through any means lawfully available pursuant to § 32.1-27 of the Code of Virginia, and nothing in this chapter shall be construed as preventing the commissioner from making efforts to obtain compliance through warning, conference, or any other appropriate enforcement means.

12VAC5-630-340. Requirement for easement.

Whenever a private well subject to this chapter is proposed to be installed on property other than the owner's, an easement in perpetuity shall be recorded with the clerk of the circuit court prior to issuance of a construction permit. The easement shall be of sufficient area to permit access, construction, placement of the water line, and maintenance of the well.

Part III
Design and Construction Criteria
Article 1
General Requirements

12VAC5-630-350. General.

The location, construction, alteration, and abandonment of private wells shall be performed in accordance with this chapter. This chapter does not apply to private wells constructed, altered, rehabilitated, or extended, or abandoned prior to the effective date of these regulations September 1, 1990 unless the well construction is modified or expanded after the effective date of these regulations.

The class of well to be constructed shall be determined by the local or district health department or the division.

12VAC5-630-360. Classes of water wells.

~~The following classes~~Classes of private wells ~~are established~~ for purposes of this chapter. ~~These classes~~ are in addition to those established in the current Commonwealth of Virginia Waterworks Regulations (12VAC5-590-10 et seq.) and are intended for use for private well systems:

~~1. A.~~ Class III - Private wells constructed to be used as a source of drinking water. There are three subclasses:

~~a. 1.~~ Class IIIA - Drilled wells in which the annular space around the casing is grouted to a minimum depth of 20 feet.

~~(1) a.~~ The well shall be drilled and cased to a depth of at least 100 feet.

~~(2) b.~~ The cased drill hole shall pass through at least 50 feet of collapsing material such as caving sand, gravel or other material that will collapse against the casing.

~~b. 2.~~ Class IIIB - Drilled wells in which the casing is installed to a minimum depth of 50 feet and the annular space around the casing is grouted to at least 50 feet.

~~c. 3.~~ Class IIIC - Drilled, bored, driven or jetted wells other than Class IIIA and Class IIIB.

~~2. B.~~ Class IV - Private wells constructed for any a purpose other than use as a source of drinking water. There are three subclasses:

1. Class IVA - Drilled wells in which the annular space around the casing is grouted to a minimum depth of 20 feet.

a. The well shall be drilled and cased to a depth of at least 100 feet.

b. The cased drill hole shall pass through at least 50 feet of collapsing material such as caving sand, gravel or other material that will collapse against the casing.

2. Class IVB - Drilled wells in which the casing is installed to a minimum depth of 50 feet and the annular space around the casing is grouted to at least 50 feet.

3. Class IVC - Drilled, bored, driven or jetted wells other than Class IVA and Class IVB.

C. Conversion of well class. A Class IV well may be converted to a corresponding Class III well provided the well meets (i) the location and construction standards set forth in this chapter and the water quality standards set forth in 12VAC5-630-431, and (ii) a construction permit application and a revised GW-2 form are submitted to the department.

12VAC5-630-370. Water quality and quantity. (Repealed.)

~~A. Class IV wells exempt. The water quality requirements contained in this section apply only to Class III private wells. Class IV private wells (wells not constructed as a source of drinking water) are not subject to any quality requirements. These regulations contain no well yield requirements. See 12VAC5-630-460 for suggested minimum well yields for residential supplies.~~

~~B. Sample tap. A sample tap shall be provided at or near the water entry point into the system so that samples may be taken directly from the source; this requirement may be met by utilizing the first tap on a line near where the plumbing enters the house (may be a hose bib), provided the tap precedes any water treatment devices.~~

~~C. Disinfection. The entire water system including the well shall be disinfected prior to use (12VAC5-630-430 and 12VAC5-630-470).~~

~~D. Sampling. After operating the well to remove any remaining disinfectant, a sample of the water from the well shall be collected for bacteriological examination. The sample may be collected by the owner, well driller, or other person in accordance with procedures established by the department and provided the sample is submitted to a private laboratory certified by the Department of General Services, Division of Consolidated Laboratory Services, for analysis.~~

~~E. Test interpretation. A Class III private well shall be considered satisfactory if the water sample(s) test(s) negative for coliform organisms as described in subdivision 1 or 2 below. Sources with positive counts shall be tested as described in subdivision 3 below to determine if the water supply is amenable to continuous disinfection (chlorination). Samples that exhibit confluent growth shall be considered inconclusive and another sample shall be collected.~~

~~1. Where a private well has no unsatisfactory water sample within the previous 12 months, one water sample which tests negative for coliform bacteria shall be considered satisfactory for coliform organisms.~~

~~2. Where a private well has had one or more positive water samples within the past 12 months for coliform bacteria, at least two consecutive samples must be collected and found negative for coliform organisms before the supply may be considered satisfactory for coliform organisms. The samples must be collected at least 24 hours apart and the well may not be disinfected between samples.~~

~~3. When a private well does not test satisfactory for coliform organisms continuous disinfection may be recommended to the homeowner if the water supply is found to be suitable for continuous disinfection. A minimum of 10 samples shall be collected and tested for total coliform using an MPN methodology. The geometric mean of the samples shall be calculated and if the result is less than 100 organisms per 100 ml, the supply shall be considered satisfactory for continuous disinfection.~~

~~F. Water treatment. If tests indicate that the water is unsatisfactory and no other approvable source is available, adequate methods of water treatment shall be applied and demonstrated to be effective pursuant to 12VAC5-630-370 E 3 prior to the issuance of an inspection statement. The district or local health department shall be consulted when treatment is necessary.~~

12VAC5-630-380. Well location.

A. The private well shall be sited for the protection of public health and the aquifer, with appropriate consideration given to distance from potential contamination sources; vulnerability to known or suspected natural risks (e.g., flooding); potential for interference with utilities; accessibility for drilling machinery and support equipment; and safety of the public and well construction personnel.

~~A. B. Sanitary survey. Any obvious source~~ Obvious sources of potentially toxic or dangerous substances within 200 feet of the proposed private well shall be investigated as part of the sanitary survey by the district or local health department. Sources of contamination may include, but are not limited to, items listed in Table 3.1: ~~abandoned wells; underground petroleum or chemical storage tanks, drums, totes or other storage containers (aboveground and underground);~~ and other sources of physical, chemical or biological contamination. If the source of contamination could affect the well adversely, and preventive measures are not available to protect the ~~ground water~~ groundwater, the well shall be prohibited. The minimum separation distance between a private well and structures, topographic features, or sources of pollution shall comply with the minimum distances shown in Table 3.1. ~~Where the minimum separation distances for a Class IV well cannot be met, a permit may be issued under this chapter for a well meeting all of the criteria in 12VAC5-630-400 and 12VAC5-630-410 and the separation distance requirements for either a Class IIIA or IIIB well, without deviation, and such Class IV well shall not be required to meet the water quality requirements of 12VAC5-630-370.~~

TABLE 3.1 DISTANCES (IN FEET) BETWEEN A WELL AND A STRUCTURE OR TOPOGRAPHIC FEATURE

Structure or Topographic Feature	Class IIIC or IV	Class IIIA or B
Building foundation	40	40
Building foundation (termite treated)	50 ¹	50 ¹
House sewer line	50 ²	50 ²
Sewer main, including force mains	50 ³	50 ³
Sewerage system	50	50
Pretreatment system (e.g. septic tank, aerobic unit, etc.)	50	50
Sewage disposal system or other contaminant source (e.g., drainfield, underground storage tank, barnyard, hog lot, etc.)	400	50
Cemetery	400	50
Sewage Dump Station	400	50 ¹

¹See 12VAC5-630-380

²~~Private wells shall not be constructed within 50 feet of a house sewer line except as provided below. Where special construction and pipe materials are used in a house sewer line to provide adequate protection, and the well is cased and grouted to the water bearing formation, all classes of private wells may be placed as close as 10 feet to the house sewer line. Special construction for house sewer lines constitutes cast iron pipe with water-tight caulked joints or mechanical joints using neoprene gaskets, or solvent~~

welded Schedule 40 or better polyvinyl chloride (PVC) pipe. It is the responsibility of the applicant to provide documentation from the contractor that such construction and pipe materials have been installed. In no case shall a private well be placed within 10 feet of a house sewer line.

³Private wells shall not be constructed within 50 feet of a sewer main except as provided below. Where special construction and pipe materials are used in a sewer main to provide adequate protection, and the well is cased and grouted to the water bearing formation, Class III wells may be placed as close as 35 feet to a sewer main and Class IV wells as close as 10 feet. Special construction for sewer mains constitutes ductile iron pipe with water tight joints, solvent welded Schedule 40 or better polyvinyl chloride (PVC) pipe (SDR-35 plastic PVC with neoprene gaskets). It is the responsibility of the applicant to provide documentation from the local building official or sanitary district that such construction and pipe materials have been installed. In no case shall a Class III well be placed within 35 feet of a sewer main. Likewise, in no case shall a Class IV well be placed within 10 feet of a sewer main.

<u>TABLE 3.1 DISTANCES (IN FEET) BETWEEN A WELL AND A STRUCTURE OR TOPOGRAPHIC FEATURE</u>					
<u>Structure or Topographic Feature</u>	<u>Minimum Separation Distance</u>				<u>Exceptions</u>
	<u>Class IIIA/B</u>	<u>Class IIIC</u>	<u>Class IVA/B</u>	<u>Class IVC</u>	
<u>1. Building foundation</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>10 feet if structure is treated with borate based termite treatment</u>
<u>2. House sewer line</u> <u>a. Constructed of cast iron pipe with water-tight caulked joints; mechanical joints using neoprene gaskets; or solvent welded Schedule 40 or better PVC pipe – provided the well is cased and grouted to water bearing formation</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>None</u>
<u>b. Other or unknown construction; or if well is not cased</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>None</u>

<u>TABLE 3.1 DISTANCES (IN FEET) BETWEEN A WELL AND A STRUCTURE OR TOPOGRAPHIC FEATURE</u>					
<u>Structure or Topographic Feature</u>	<u>Minimum Separation Distance</u>				<u>Exceptions</u>
	<u>Class IIIA/B</u>	<u>Class IIIC</u>	<u>Class IVA/B</u>	<u>Class IVC</u>	
<u>and grouted to water bearing formation</u>					
<u>3. Sewer main, including force main</u> <u>a. Constructed of ductile iron pipe with water-tight joints; solvent welded Schedule 40 or better PVC (SDR-35 plastic PVC with neoprene gaskets) – provided the well is cased and grouted to water bearing formation</u>	<u>35</u>	<u>35</u>	<u>35</u>	<u>35</u>	<u>None</u>
<u>b. Other or unknown construction; or if well is not cased and grouted to water bearing formation</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>None</u>
<u>4. Sewerage system</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>None</u>
<u>5. Active or permitted pretreatment system (e.g., septic tank or aerobic unit)</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>None</u>
<u>6. Active or permitted drainfield (including reserve drainfield).</u>	<u>50</u>	<u>100</u>	<u>50</u>	<u>100</u>	<u>None</u>
<u>7. Other contamination source (e.g., petroleum</u>	<u>50</u>	<u>100</u>	<u>50</u>	<u>100</u>	<u>Tanks containing propane or other liquified petroleum</u>

<u>TABLE 3.1 DISTANCES (IN FEET) BETWEEN A WELL AND A STRUCTURE OR TOPOGRAPHIC FEATURE</u>					
<u>Structure or Topographic Feature</u>	<u>Minimum Separation Distance</u>				<u>Exceptions</u>
	<u>Class IIIA/B</u>	<u>Class IIIC</u>	<u>Class IVA/B</u>	<u>Class IVC</u>	
<u>storage tank, drum, tote or other container [aboveground or underground], barnyard, landfill, animal lot, fertilizer or pesticide storage)</u>					<u>gases are not deemed sources of contamination. However, the National Fire Protection Association Liquefied Petroleum Gas Code (NFPA-58) recommends a minimum of 10 feet from sources of ignition.</u>
<u>8. Permanently abandoned sewage disposal systems</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>None</u>
<u>9. Reclaimed water distribution pipeline</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>35 ft – if RWDP is constructed of water pipe material in accordance with AWWA specifications and pressure tested in place without leakage prior to backfilling. The hydrostatic test shall be conducted in accordance with the AWWA standard (ANSI/AWWA C600-05, current version) for the pipe material, with a minimum test pressure of 30 psi.</u>
<u>10. Biosolids application sites</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>None</u>
<u>11. Bioretention pond</u>					
<u>a. Unlined</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	
<u>b. Lined</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	
<u>12. Cemetery</u>	<u>50</u>	<u>100</u>	<u>50</u>	<u>100</u>	<u>None</u>
<u>13. Sewage dump station</u>	<u>50</u>	<u>100</u>	<u>50</u>	<u>100</u>	<u>None</u>

<u>TABLE 3.1 DISTANCES (IN FEET) BETWEEN A WELL AND A STRUCTURE OR TOPOGRAPHIC FEATURE</u>					
<u>Structure or Topographic Feature</u>	<u>Minimum Separation Distance</u>				<u>Exceptions</u>
	<u>Class IIIA/B</u>	<u>Class IIIC</u>	<u>Class IV A/B</u>	<u>Class IVC</u>	
<u>14. Property line</u> <u>a. All properties except as described below</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>None</u>
<u>b. With an adjacent property of three acres or larger used for an agricultural operation as defined in § 3.2-300 of the Code of Virginia.</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>Exemption for reduced distance applies if the adjacent property owner grants written permission for construction within 50 feet of the property line, or if it is certified that no other site on the property complies with the regulations for construction of a private well.</u>

~~B. C.~~ C. Downslope siting of wells from potential sources of pollution. Special precaution shall be taken when locating a well within a 60 degree arc directly downslope from any part of any an existing or intended onsite sewage disposal system or other known source of pollution identified in 12VAC5-630-380 B, including table 3.1., including, but not limited to, buildings subject to termite or vermin treatment, or used to store polluting substances or storage tanks or storage areas for petroleum products or other deleterious substances. The minimum separation distance shall be: (i) increased by 25 feet for every 5.0% of slope; or (ii) an increase shall be made to the minimum depth of grout and casing in the amount of five feet for every 5.0% of slope.

~~C. D.~~ D. Sites in swampy areas, low areas, or areas subject to flooding. No private well covered by this chapter shall be located in areas subject to the collection of pollutants such as swampy areas, low areas, or areas subject to flooding. Wells located in flood plains shall be adequately constructed so as to preclude the entrance of surface water during flood conditions. At a minimum, such construction will include extending the well terminus 18 inches above the annual flood level and grading to provide positive drainage in all directions. Other requirements may be made as determined on a case-by-case basis by the division.

~~D. E.~~ E. Property lines. There is no minimum separation distance between a private well and a property line established by this chapter. The owner is responsible for establishing a separation distance from property lines such that the construction and location of the well will be on the owner's property and comply with any local ordinances. No private well shall be constructed within 5 feet of a property line. If the proposed private well is on a property adjoining properties of three acres or larger used for an agricultural operation, no private well shall be constructed within 50 feet of the property line except as exempted by the following:

1. A notarized letter from the adjacent property owner grants permission to construct a well within 50 feet of the property line. The statement shall be recorded and indexed in the land records of the circuit court having jurisdiction over the property where the well is to be located, or

2. A certification statement from a licensed onsite soil evaluator, professional engineer, or licensed water well systems provider confirms that no other well location on the property complies with this chapter. Reasons that a well location on a property may not comply with this chapter include:

a. The property is not large enough to allow a location of a well 50 feet or more from the property line. In this case, the well should be located at the greatest distance from the property line consistent with this chapter.

b. The location of a well 50 feet or more from the property line prevents separation distance requirements identified on Table 3.1 and in 12VAC5-630-380.B being achieved on the property, provided that required separation distances can be achieved if the well is located fewer than 50 feet from the property line. In this case, the well should be located at the greatest distance from the property line consistent with this chapter. Well owners shall not be obligated to undertake otherwise optional actions, such as substitution of an alternative onsite sewage system in place of a conventional system where a conventional system is suitable, solely to comply with the requirement to maintain a 50 feet separation distance from an adjoining property of three acres or larger used for an agricultural operation.

c. The location is inaccessible to well drilling equipment as a result of topography, surface water, structures, existing onsite sewage system components, overhead or buried utilities, or other obstacle.

d. Other reasons that a well located greater than 50 feet from the property line may not comply with this chapter may be considered by the division on a case-by-case basis.

E. F. Utility lines. There is no minimum separation distance between a private well and subsurface utility lines (electric, gas, water, cable, etc.). The minimum separation distance may, however, be established by the individual utility company or local ordinance. Clearance distance from overhead electrical utilities relative to drilling equipment is subject to an Occupational Safety and Health Administration or related safety standard, and this factor shall be considered in determination of well location. No private well shall be constructed within a utility easement without documentation of permission from the utility.

G. Permanently abandoned sewage disposal systems.

1. No private well shall be constructed within 25 feet of a permanently abandoned sewage disposal system. The following criteria is to determine if a sewage disposal system is permanently abandoned.

a. The drainfield is no longer connected to a structure or other sewage source.

b. The drainfield has been inactive for at least 24 consecutive months.

c. The septic tank and distribution box have been pumped, limed, crushed, and either filled with an inert material or removed from the site.

2. Documentation of disconnection may include:

a. A statement from the owner of the drainfield.

b. A notification of onsite sewage system abandonment recorded and indexed in the grantor index of the land records of the circuit court having jurisdiction over the site where the sewage system is located.

c. A contractor invoice or other record documenting system disconnection, including disposition of septic tank and distribution box.

d. Record from a public sewer operator indicating date of connection.

3. Abandoned sewage disposal systems that do not meet the requirements of this subsection shall be treated as active systems with respect to determining the minimum separation distance to sources of contamination listed in Table 3.1.

~~F. Pesticide and termite treatment. No Class III private well shall be placed closer than 50 feet from a building foundation that has been chemically treated with any termiticide or other pesticide. No Class IV private well shall be placed closer than 50 feet to a building foundation that has been chemically treated with any termiticide or other pesticide except as provided below. Further, no termiticides or other pesticides shall be applied within five feet of an open water supply trench. A Class IV well may be placed as close as 10 feet to a chemically treated foundation if the following criteria are met:~~

- ~~1. The aquifer from which the water is withdrawn must be a confined aquifer (i.e., there must be an impermeable stratum overlying the water bearing formation).~~
- ~~2. The well must be cased and grouted a minimum of 20 feet or into the first confining layer between the ground surface and the water bearing formation from which water is withdrawn, whichever is greater. When the first confining layer is encountered at a depth greater than 20 feet, the well shall be cased and grouted to the first confining layer between the ground surface and the water bearing formation from which water is withdrawn.~~
- ~~3. The material overlaying the confined aquifer must be collapsing material.~~

G. H. Reclaimed water distribution pipeline. Reclaimed Water Distribution Pipeline. No private well shall be placed closer than 50 feet from a reclaimed water distribution pipeline. This separation distance can be reduced to 35 feet provided that the reclaimed water distribution pipeline is constructed from a water pipe material in accordance with American Water Works Association (AWWA) specifications and pressure tested in place without leakage prior to backfilling. The hydrostatic test shall be conducted in accordance with the AWWA standard (ANSI/AWWA C-600-05, as updated) for the pipe material, with a minimum test pressure of 30 psi. A Class IV well located closer than 35 feet from a reclaimed water distribution pipeline shall not be converted to a Class III well.

I. Biosolids application site. No private well shall be placed closer than 100 feet from land on which biosolids are applied.

J. Bioretention pond. No private well shall be placed closer than 50 feet from an unlined bioretention pond or 10 feet from a lined bioretention pond. A Class IV well shall not be converted to a Class III well if the Class III well separation distance is not met.

K. Exception for closed-loop ground-source heat pump wells. Closed-loop ground-source heat pump wells, depending upon construction, may not have to comply with the minimum separation distances for Class IV wells listed in Table 3.1. If the well is grouted 20 feet, the minimum separation distances must comply with those listed for Class IV wells. If the well is grouted a minimum of 50 feet, the separation distances shall be those listed for Class IIIA or IIIB wells. If the well is grouted the entire depth of the well, the well does not have to comply with the minimum separation distances contained in Table 3.1.

12VAC5-630-390. Site protection.

A. No objects, articles, or materials ~~of any kind~~ which are not essential to the operation of the well shall be placed or stored in a well, well house, on the well head or well pump or water treatment system, or within close proximity to them.

B. Fencing of an area around the well, or the placement of other barriers or restrictions, may be required as a condition of the permit under certain circumstances, such as to prohibit livestock access to the well head or to prohibit vehicles from damaging or polluting the area around the well head.

C. The area around the well shall be graded to divert surface water away from the well.

12VAC5-630-400. Materials.

A. General. ~~All materials~~ Materials used in private wells shall be lead free, approved by the National Sanitation Foundation (NSF) for water well use, have long-term resistance to corrosion and sufficient strength to withstand hydraulic, lateral and bearing loads.

B. Drilling Fluids. Materials used for well bore stabilization and well development shall meet NSF/ANSI Standard 60 environmental specifications.

~~C. Casing. Materials used for casing shall be watertight and shall consist of wrought iron, concrete tile, clay tile, steel, stainless steel, fiberglass, or plastic, all designed for water well use, or other suitable materials as determined by the division. The division shall maintain a list of approved casing materials.~~ Materials used for casing shall conform to current versions of, or successors to, NSF 61 (Drinking Water System Components – Health Effects) and NSF 372 (Drinking Water System Components – Lead Content).

1. Driven casings shall consist of ductile iron, steel or stainless steel and shall be equipped with a suitable drive boot.

2. Casings used for Class IIIA or IIIB drilled wells shall be steel, stainless steel, or plastic, or fiberglass.

3. Casings used for bored Class IIIC and IVC wells shall be concrete.

~~C. D. Screens. Where utilized, screens shall be constructed~~ factory manufactured of stainless steel, plastic or other suitable materials as determined by the division. Screens shall be constructed of materials which will not be damaged by any chemical or corrosive action of the ground water groundwater or future cleaning operations. Additionally, screens shall be constructed of materials which will not degrade ground water groundwater quality. Allowable screen types include wire wrap, louvered, bridge slot, and factory slotted, and shall conform to current versions of, or successors to, NSF 61 (Drinking Water System Components – Health Effects) and NSF 372 (Drinking Water System Components – Lead Content).

~~D. Joints. Joints shall be watertight and mechanically sound. Welded joints shall have smooth interior surfaces and shall be welded in accordance with acceptable welding practice.~~ E. Grout. The grouting material used shall meet the appropriate specification listed below.

1. Neat cement grout shall consist of cement and water with not more than six gallons of water per bag (94 pounds) of cement.

2. Bentonite clay may be used in conjunction with neat Portland cement to form a grouting mixture. The bentonite used must be specifically recommended by the manufacturer as being suitable for use as a well grout material and cannot exceed 6.0% by weight of the mixture.

3. Bentonite clay used for grouting shall be sodium bentonite with a minimum of 20% clay solids by weight of water. The bentonite clay shall be specifically recommended by the manufacturer for use as a grouting material.

Exception: (i) When exceptional conditions require the use of a less fluid grout, to bridge voids, a mixture of cement, sand and water in the proportion of not more than two parts by weight of sand to one part of cement with not more than six gallons of clean water per bag of cement may be used if approved by the district or local health department, or (ii) for bored wells only, a concrete (1-part sand, 1-part cement, 2-parts pea gravel mix with all aggregates passing a ½-inch sieve) grout with not more than six gallons of clean water per bag of cement may be used provided a minimum three-inch annular space is available.

4. Other materials. Other grouting materials may be approved by the division on a case-by-case basis. Review and approval shall be based on whether the proposed material can consistently be expected to meet the intent of grouting expressed in 12VAC5-630-410 F 2. The

proposed material must be an industry acceptable material used for the purpose of grouting water wells. Controlled low strength material (flowable fill) or other product incorporating coal ash shall not be approved for use as grout.

E. ~~F. Gravel.~~ Gravel and sand utilized for gravel filter packed wells shall be uniformly graded, cleaned, washed, disinfected and of a suitable size. , well rounded, acid resistant, and have a high silica content.

G. Water used during well construction shall be obtained from a suitable source or the well being constructed. A suitable source means a pure water source, or, when a pure water source is not locally available, water taken from another source then disinfected using compounds meeting NSF/ANSI Standard 60 environmental specifications.

H. Compounds used in the disinfection of completed wells shall meet NSF/ANSI Standard 60 environmental specifications.

12VAC5-630-410. Construction; general.

A. Private wells shall be constructed using the criteria described in this section. The water well system provider shall provide advance notification regarding the initiation of well construction to the district or local health department to allow department personnel the opportunity to observe well construction. The water well systems provider may construct the well as conditions warrant and shall be under no obligation to delay construction activities pending arrival of district or local health department personnel.

B. Well bore

1. The method of advancement of the well bore in which the private well is constructed shall be determined by the water well systems provider relative to local geologic and aquifer conditions.

2. When the construction permit designates a well site, the well bore shall be placed at the well site. When the construction permit designates a well area, the well bore may be placed anywhere within the well area. If a well bore advanced within a well area must be discontinued for any reason, the well bore shall be abandoned in accordance with 12VAC5-630-450 and a new well bore may be undertaken within the well area.

3. Other land disturbance associated with well construction, such as grading and mud pit construction, is not limited to the well area.

4. With the exception of driven wells, the well bore shall be large enough to accommodate the well casing and screen with sufficient annular space on all sides of the casing in the interval to be grouted to freely accommodate a tremie pipe or sounding tube.

5. Drilling fluids used to stabilize the well bore shall be maintained within limits that will allow their complete removal from the water produced from the well, and shall not damage the capacity, efficiency and quality of the well.

6. Representative samples of formation materials shall be collected during well bore advancement with sufficient frequency to allow for preparation of the driller's log (GW-2) of the type of rock, sediment, or soil encountered.

C. Casing.

1. The casing shall maintain the well bore by preventing its walls from collapsing, provide a channel for the conveyance of water, and protect the quality of the water withdrawn from the well. The thickness of the casing shall be sufficient to resist the force imposed during installation and which can be anticipated after installation.

2. Class IIIA and IVA wells shall be cased to a depth of at least 100 feet.

23. Class IIIB and IVB wells shall be cased to a depth of at least 50 feet.

34. Except as provided in subdivisions a through e below, all Class III C and IV C wells shall be cased to a minimum depth of 20 feet or terminated not less than one foot in bedrock when bedrock is encountered at a depth less than 20 feet.

a. When in collapsing material, the casing shall terminate in the aquifer but in no instance be less than 20 feet.

b. Where an aquifer is encountered at less than 20 feet, Class IV C wells may be cased to within one foot of the water bearing strata. In the instance of Class IV wells the intent of this chapter is to protect ground water quality, and not to ensure a potable water supply.

~~Exception: Class IV C wells placed closer than 50 feet t from a building foundation treated with a chemical termiticide or other pesticide shall comply with the minimum casing depth requirements of 12VAC5-630-380 F 2H.~~

c. Alternate casing depths may be accepted for bored wells when the only aquifer lies between 11 and 20 feet provided the casing is placed within one foot of the aquifer and must not be less than 10 feet in depth from the ground surface.

d. Class III C III C driven wells shall be cased to the water bearing strata; however, in no case less than 10 feet. No minimum casing requirements apply to Class IV C driven wells except that in order to protect ground water they shall be capable of meeting the minimum grouting requirements as described in subdivision G-5-e E-2 of this section.

e. Closed-loop ground-source heat pump wells do not have to be cased.

45. When PVC casing is terminated in bedrock, the well casing shall be sealed using a mechanical seal or packer.

6. Extension of casing above ground surface. All private Private well casings shall be extended at least 12 inches above ground or at least 12 inches above a concrete floor in a well house with a gravity flow drain. The following wells are exempted from this requirement; however, their location shall be permanently marked for easy location in the future:

a. Drilled shallow well suction pump systems that will not operate unless a vacuum is maintained. The casings for these wells are also the suction lines through which water is drawn.

b. Deep well ejector pump systems that utilize a casing adaptor and must maintain a vacuum to operate.

c. Closed-loop ground-source heat pump wells.

d. Heat pump return wells that are completely sealed.

~~5. All steel casings shall meet or exceed the material specifications found in 12VAC5-630-480.~~

~~6. No plastic well casing shall be installed which will exceed 80% of its RHCP (resistance to hydraulic collapse pressure). When experience has shown, in the division's opinion, that the prevailing geologic conditions are subject to collapse or shifting, or where heavy clay or unstable backfill materials occur, plastic well casings may not exceed 50% of the RHCP rating. It shall be the responsibility of the well driller to submit calculations to the division demonstrating that individual well casings do not exceed these ratings.~~

7. The casing shall be centered in the well bore the entire depth of the well in order to provide for even distribution of filter pack and grout in the annular space.

8. Joints shall be compatible with the casing material, specific to the task, and be watertight under normal operating conditions, with watertight joints above the screened interval.

9. Casing Straightness and Alignment

a. Casing in all private wells shall be sufficiently straight that it will not interfere with the installation and operation of a pump suitable for the intended purpose of the well.

b. For casing intended to accommodate a line shaft turbine pump, the maximum allowable horizontal deviation of the well from the vertical shall not exceed 2/3 times the smallest inside diameter per 100 feet of that part of the well being tested to the depth of the anticipated pump installation.

BD. Screens.

1. The screen shall allow passage of water from the aquifer and provide sufficient tensile, collapse, and compression strength to withstand the physical loading it will be exposed to during installation, completion, development, and operational conditions. When used for the prevention of entry of foreign materials, screens shall be free of rough edges, irregularities, or other defects. A positive watertight seal between the screen and the casing shall be provided when appropriate.

2. Screen length, diameter, and slot size shall be determined based on field examination of representative samples of formation material collected during advancement of the well bore, and may be supplemented by sieve analysis of materials in the water bearing zone or geophysical logging of the well bore.

3. Joints between (i) casing and screen and (ii) screen and screen shall meet the requirements of 12VAC5-630-410 C 8.

4. The bottom of the screen, or of the deepest screen in the case of multiple screens, shall be configured to reduce the possibility of native formation or well construction material heaving up into the screened interval. A closed bottom may not be required for screens installed in some formation materials.

5. The screen shall be centered in the well bore.

E. Filter pack

1. When a filter pack is required, the filter pack material used shall be determined based on field examination of representative samples of the water bearing formation in the withdrawal interval, and may be supplemented by sieve analysis. The filter pack shall be placed in the annular space by a method that prevents bridging and creates uniform distribution.

2. The filter pack shall extend above the top of the screened interval to a thickness sufficient to compensate for settling that may occur during development and operation of the well.

3. Filter pack material may be used with a screen as a formation stabilizer when water is withdrawn from a poorly consolidated rock subject to disintegration and caving when the well is pumped. Formation stabilizer shall be at least as coarse as the formation native material.

CF. Grouting.

1. General. All private Private wells shall be grouted. It is preferred that no openings are made in the side of the well casing.

2. Purpose. The annular space between the casing and well bore is one of the principal avenues through which undesirable water and contaminants may gain access to a well. The goal of grouting a well is to preclude the entrance of undesirable water and contaminants. Therefore, the annular space shall be filled with a neat cement grout, a mixture of bentonite and neat cement or bentonite clay grout specifically approved by the manufacturer for use as a grouting material.

3. Based on the well casing material and native geology, grout material shall be selected to minimize potential for spidering, cracking, or separation of grout from the well casing.

3. Specifications. The grouting material used shall meet the appropriate specification listed below:

a. Neat cement grout shall consist of cement and water with not more than six gallons of water per bag (94 pounds) of cement.

~~b. Bentonite clay may be used in conjunction with neat Portland cement to form a grouting mixture. The bentonite used must be specifically recommended by the manufacturer as being suitable for use as a well grout material and cannot exceed 6.0% by weight of the mixture.~~

~~c. Bentonite clay used for grouting shall be sodium bentonite with a minimum of 20% clay solids by weight of water. The bentonite clay shall be specifically recommended by the manufacturer for use as a grouting material.~~

~~Exception: (i) When exceptional conditions require the use of a less fluid grout, to bridge voids, a mixture of cement, sand and water in the proportion of not more than two parts by weight of sand to one part of cement with not more than six gallons of clean water per bag of cement may be used if approved by the district or local health department, or (ii) for bored wells only, a concrete (1-1-2 mix with all aggregates passing a 1/2-inch sieve) grout with not more than six gallons of clean water per bag of cement may be used provided a minimum three-inch annular space is available and its use approved by the district or local health department.~~

~~In cases where an open borehole has been drilled below the depth to which the casing is to be grouted, the lower part of the hole must be backfilled, or a packer must be set in the hole, to retain the slurry at the desired depth. Backfilling the hole with gravel and capping with sand is an acceptable practice. Material ordinarily sold as plaster or mortar sand is usually satisfactory; more than half the sand should be of grain sizes between 0.012 inches and 0.024 inches.~~

~~4. Other materials. Other grouting materials may be approved by the division on a case by case basis. Review and approval shall be based on whether the proposed material can consistently be expected to meet the intent of grouting expressed in 12VAC5-630-410 C 2. The proposed material must be an industry acceptable material used for the purpose of grouting water wells. When an open well bore has been drilled below the depth to which the casing is to be grouted, the lower part of the hole must be backfilled, or a packer must be set in the hole, to retain the slurry at the desired depth. Backfilling the hole with gravel and capping with sand is an acceptable practice. Material ordinarily sold as plaster or mortar sand is satisfactory; more than half the sand should be of grain sizes between 0.012 inches and 0.024 inches.~~

5. Depth.

a. All Class IIIA and IVA wells shall be grouted to a minimum depth of 20 feet.

b. All Class IIIB and IVB wells shall be grouted to a minimum depth of 50 feet.

c. All Class IIIC and Class IVC wells shall be grouted to a minimum depth of 20 feet when the casing depth is equal to or greater than 20 feet. When the casing depth is less than 20 feet, the casing shall be grouted in accordance with this subsection, from the lower terminus of the casing to the surface.

~~Exception: Class IVC wells placed closer than 50 feet from a building foundation treated with a chemical termiticide or other pesticide shall comply with the minimum grouting depth requirements of 12VAC5-630-380 F 2H.~~

d. Alternate grouting depths may be accepted for bored wells when the only aquifer suitable for a private well lies between 11 and 20 feet provided the grouting shall terminate at least one foot above the aquifer but must not be less than 10 feet in depth from the ground surface.

e. Driven wells shall be grouted to a minimum depth of five feet by excavating an oversize hole at least four inches in diameter larger than the casing and ~~pouring~~ placing an approved grout mixture into the annular space.

6. Installation. Grout shall be installed by means of one of the following methods.

a. Placement using a grout pump or tremie pipe from the bottom of the annular space upward in one operation until the annular space is filled, whenever the grouting depth exceeds 20 feet. Pouring of grout is acceptable for drilled wells whenever grouting depth does not exceed 20 feet.

b. Pouring of grout is acceptable for bored wells whenever when the grouting depth does not exceed 30 20 feet provided there is a minimum of a 3-inch annular space. Grouting shall be brought to the ground surface and flared to provide a one foot radius around the casing at least six inches thick. However, whenever pitless adapters are used, the grout shall terminate at the base of the pitless adapter. When an outer casing is necessary to construct a new well, where possible, the outer casing shall be pulled simultaneously with the grouting operation.

c. Bentonite chips or pellets are acceptable for bored wells when the grouting depth does not exceed 20 feet provided the annular space is at least four (4) inches greater than the outside diameter of the casing or coupling and the casing. Bentonite chips or pellets shall be placed via a tremie pipe having an interior diameter at least four times the size of the pellet or chip.

d. Placement of bentonite chips by free fall shall only occur within five feet of the ground surface.

7. Annular space. The clear annular space around the outside of the casing and the well bore shall be at least 1.5 inches on all sides except for bored Class III and IV wells which shall have at least a 3-inch annular space. Surface Completion of Grout. Grout shall be brought to the ground surface and flared to provide a one-foot radius around the casing at least six inches thick. However, whenever pitless adapters are used, the grout shall terminate at the base of the pitless adapter. When an outer casing is necessary to construct a new well, where possible, the outer casing shall be pulled simultaneously with the grouting operation.

DG. Additional casing and grouting. When a well is to be constructed within 100 feet of a subsurface sewage disposal system, which has been or is proposed to be installed at a depth greater than five feet below the ground surface, the casing and grouting of the water well shall be increased to maintain at least a 15-foot vertical separation between the trench bottom and the lower terminus of the casing and grouting.

EH. Well head.

1. General. No open wells or well heads or unprotected openings into the interior of the well shall be permitted. Prior to the driller water well systems provider leaving the well construction site, the owner shall have the driller water well systems provider protect the well bore hole by installing a cover adequate to prevent accidental contamination.

2. Mechanical well seals. Mechanical well seals (either sanitary well seals or pitless adapters) shall be used on all Class III and IV wells and shall be water and air tight except as provided in 12VAC5-630-410 F 4

3. Other. Wells greater than eight inches in diameter shall be provided with a watertight overlapping (shoebox) type cover, constructed of reinforced concrete or steel.

FI. Appurtenances passing through casing.

1. General. All openings Openings through well casings shall be provided with a positive water stop.

2. Pitless well adapters. Pitless well adapters shall be subject to approval by the division. All pitless adapters shall be installed according to the manufacturers recommendations. When used, pitless units and pitless adaptors shall be attached to the casing in a manner that will make the connection watertight. If an access port is installed, it shall be watertight.

3. Sanitary well seals. ~~Sanitary well seals shall be subject to approval by the division. When used, All sanitary well seals, shall be installed according to the manufacturers manufacturer's recommendations. A one piece top plate shall be used on a well that terminates outdoors.~~

4. Venting. Venting, ~~where necessary as determined by the district health department,~~ shall be provided in such a manner as to allow for the passage of air, but not water, insects, or foreign materials, into the well.

J. Well development

"Well development" means the act of repairing damage to the geologic formation from drilling procedures and increasing the porosity and permeability of the materials surrounding the intake portion of the well. It is accomplished by application of mechanical energy, chemicals or both to (1) remove drilling fluids and formation damage caused by the well bore drilling and well completion processes, (2) remove formation fines near the well bore to increase hydraulic conductivity and create a filter medium, (3) establish optimal hydraulic contact between the well and the geologic formation (aquifer) supplying water, (4) provide for an acceptable level of sand and turbidity, and (5) provide for an appropriate level of drawdown at the production pumping rate.

Private wells shall be developed. Disinfection required by 12VAC5-630-430 and water quality testing required by 12VAC5-630-431 shall not be conducted on a well prior to well development.

K. Well maintenance and repair.

1. Equipment and water or other materials used during hydraulic fracturing of bedrock wells shall comply with 12VAC5-630-400.

2. Private wells shall be disinfected per 12VAC5-630-430 following maintenance, redevelopment, or other activity requiring access to the interior of the casing of a completed well.

12VAC5-630-420. Observation, monitoring, and remediation wells.

A. Except as provided in subsections B and C of this section, ~~observation and~~ monitoring, ~~and remediation~~ wells are exempted from this chapter. The exemption shall not apply to test and exploration wells constructed for the purpose of evaluating groundwater quality or available quantity related to a proposed beneficial use such as water supply for a subdivision, office park, or proposed commercial or industrial application.

B. ~~Observation, or monitoring, and remediation~~ wells shall be constructed in accordance with the requirements for private wells if they are to remain in service after the completion of the ground water study.

C. ~~Observation, or monitoring, and remediation~~ wells shall be properly permanently abandoned in accordance with 12VAC5-630-450 within 90 days of cessation of use. Unless specifically allowed under terms of a permit issued by the DEQ, temporary abandonment of observation, monitoring, and remediation wells shall not occur.

12VAC5-630-430. Disinfection.

A. All Class III private Private wells shall be disinfected before placing the well(s) in service.

B. Methodology. Disinfection shall be accomplished by one of the following methods:

1. maintaining Maintaining a 100 mg/l solution of chlorine in the well for 24 hours utilizing the dosage rates set forth in 12VAC5-630-470.

2. Applying a quantity of water/chlorine solution to ensure a minimum of 100 mg/L of available chlorine throughout the well and immediate formation materials. Disinfection contact time shall be established on the basis of contact units, which are calculated as mg/L chlorine multiplied by hours of exposure. Contact time shall equate to a minimum of 1,000 contact units (50 mg/L chlorine x 20 hours = 1,000 contact units; 200 mg/L chlorine x 5 hours = 1,000 contact units; etc.).

12VAC5-630-431. Water Quality.

A. Class IV wells exempt. The water quality requirements contained in this section apply to Class III private wells. Class IV private wells (wells not constructed as a source of water for human consumption) are not subject to water quality requirements.

B. Sample tap. A sample tap shall be provided at or near the water entry point into the system so that samples may be taken directly from the source; this requirement may be met by utilizing the first tap on a line near where the plumbing enters the house (may be a hose bib), provided the tap precedes any water treatment devices.

C. Disinfection. The entire water system including the well shall be disinfected prior to use (12VAC5-630-430).

D. Sampling. After operating the well to remove any remaining disinfectant, a sample of the water from the well shall be collected for bacteriological examination. The sample may be collected by the owner, water well systems provider, or other person in accordance with procedures established by the department and provided the sample is submitted to a private laboratory accredited by the Department of General Services, Division of Consolidated Laboratory Services, for analysis.

E. Test interpretation. A Class III private well shall be considered satisfactory if the water sample(s) test(s) negative for coliform organisms as described in subdivision 1 or 2 below. Sources with positive counts shall be tested as described in subdivision 3 below to determine if the water supply is amenable to continuous disinfection. Samples that exhibit confluent growth shall be considered inconclusive and another sample shall be collected.

1. When a private well has no unsatisfactory water sample within the previous 12 months, one water sample which tests negative for coliform bacteria shall be considered satisfactory for coliform organisms.

2. When a private well has had one or more positive water samples within the past 12 months for coliform bacteria, at least two consecutive samples must be collected and found negative for coliform organisms before the supply may be considered satisfactory for coliform organisms. The samples must be collected at least 24 hours apart and the well may not be disinfected between samples.

3. When a private well does not test satisfactory for coliform organisms continuous disinfection may be recommended to the homeowner if the water supply is found to be suitable for continuous disinfection. A minimum of 10 independent samples shall be collected and tested for total coliform using an MPN methodology. To be independent, samples shall be collected no less frequently than one sample per day. The geometric mean of the samples shall be calculated and if the result is less than 100 organisms per 100 ml, the supply shall be considered satisfactory for continuous disinfection.

F. Water treatment. If tests indicate that the water samples test positive for coliform organisms and do not meet the standards described in 12VAC5-630-431 and no other approved source is available, adequate methods of water treatment shall be applied. The treatment device shall be demonstrated to be effective pursuant to 12VAC5-630-431 F 3 prior to the issuance of an inspection statement. The district or local health department shall be consulted when treatment is necessary.

G. Conversion of Class IV well to Class III potable well. In order to convert an existing Class IV to a Class III well, the owner shall provide the following information to the local health department.

1. A complete application indicating the intent to convert the well classification.

2. A copy of the existing uniform water well completion report documenting that the well meets Class IIIA, Class IIIB, or Class IIIC construction standards in accordance with this chapter.

3. Confirmation that the well meets separation distance criteria for Class III wells listed on Table 3.1.

4. A negative bacteria water sample in accordance with D, E, and F above.

12VAC5-630-440. Information to be reported.

A. A copy of a Uniform Water Well Completion Report (see ~~12VAC5-630-490~~) shall be provided to the district or local health department within 30 days of the completion of the well or completion of, alterations thereto, alteration, or abandonment of a private well.

12VAC5-630-450. Well abandonment.

A. Well abandonment is governed jointly by the Department of Environmental Quality and the Department of Health pursuant to § 62.1-44.92(6) of the Ground Water Act of 1973 (Repealed). In addition, the The abandonment of any a private well governed by this chapter, or any a private well abandoned as a condition of a permit issued under this chapter, shall be administered by the Department of Health in conformance with this section. The owner or owner's agent shall provide advance notification regarding the initiation of well abandonment to the district or local health department to allow department personnel the opportunity to observe well abandonment. The owner or owner's agent shall be under no obligation to delay abandonment activities pending arrival of department personnel.

B. Prohibited materials. The following materials, even if classifiable as clean fill or beneficial use byproducts in other applications, shall not be used as clean fill or grout in any well abandonment procedure.

1. Contaminated media.

2. Non-manufactured gravel, brick, broken concrete, crushed glass, porcelain, or road pavement, except as these materials are present as incidental constituents of undisturbed soil or natural earth materials.

3. Controlled low strength material (flowable fill) or other product incorporating coal ash.

C. Temporary abandonment. A temporarily abandoned well shall be sealed with a water-tight cap or well head seal. Such a well shall be maintained so that it will not be a source or channel for contamination to ground water during temporary abandonment.

D. Permanent abandonment. The object of proper permanent abandonment is to prevent contamination from reaching ground water resources via a component of the well, including casing, annular space, and well cap. Permanently abandoned wells, with the exception of bored wells abandoned per the methods identified in 12VAC5-630-450.D.5.a and 12VAC5-630-450-D.5.b.(3), shall no longer be classified as wells. A permanently abandoned well shall be abandoned in the following manner:

1. All casing Casing material may be salvaged.

2. Before the well is plugged/abandoned, it shall be checked from land surface to the entire depth of the well to ascertain freedom from obstructions that may interfere with plugging (sealing) abandonment operations.

3. The well shall be thoroughly chlorinated using the dosage rates in 12VAC5-630-430 prior to plugging (sealing) abandonment.

4. Grout used in well abandonment shall conform to 12VAC5-630-400.E.

5. Bored wells, rock or brick-lined, and uncased wells shall be abandoned using one of the following methods.

a. Clean fill method. Bored, rock or brick-lined and uncased wells abandoned by this method shall remain designated as wells with respect to the siting of onsite sewage treatment system components per the requirements of 12VAC5-610 and 12VAC5-613. The well shall be backfilled with clean fill to the water level. A two-foot-thick bentonite plug shall be placed immediately above

the water level. Clean fill shall be placed on top of the bentonite plug and brought up to at least five feet from the ground surface. The top five feet of the well casing, if present, shall be removed from the bore hole. In an open annular space is present around the well casing, the annular space shall be filled with grout to the maximum depth possible, but not less than or equal to 20 feet. A one-foot-thick cement or bentonite grout plug that completely fills the bore void space shall be placed a minimum of five feet from the ground surface. The remaining space shall be filled with clean fill which is mounded a minimum of one foot above the surrounding ground surface. When the well is fewer than 25 feet deep, this procedure shall be followed to the greatest extent possible, including removing at a minimum the top five feet of casing below ground and grouting the open annular space as described above. Bored wells or uncased wells abandoned in this manner shall be treated as wells with respect to determining the minimum separation distance to sources of contamination listed in Table 3.1. The location of these wells shall be permanently marked for future location reference.

b. Grout abandonment method. Bored, rock or brick-lined and uncased wells abandoned by this method shall no longer be designated as wells, with the exception of 12VAC5-63-450 D 5 b. (3) below. At a minimum, the top five feet of well casing below ground, if present, shall be removed from the well bore.

(1) When a continuous annular space is present around the well casing, the annular space shall be filled with grout, placed via a tremie pipe, to the maximum depth possible, but not less than 20 feet.

(2) When an annular space is present but not continuous, materials shall be completely removed from the annular space to the maximum depth possible, but not less than 20 feet, and the annular space shall be filled with grout placed via a tremie pipe.

(3) When an annular space is present but not continuous, and cannot be cleared sufficiently for the annular space to be filled with grout to a depth not less than 20 feet, then accessible annular space will be filled with grout placed via a tremie pipe. Wells in which the annular space cannot be filled with grout to depth of at least 20 feet shall be treated as a well with respect to the siting of onsite sewage treatment components per the requirements of 12VAC5-610 and 12VAC5-613.

(4) If existing well documentation (GW-2) indicates that the annular space is filled with grout to a minimum depth of 20 feet, the condition of the grout shall be confirmed by visual observation of the top of the grout following the removal of the top five feet of well casing below ground. If the grout appears intact, no further confirmation of grout condition shall be required and abandonment shall proceed. If the grout condition appears compromised based on visual examination, then the requirements of 12VAC5-630-450.D.5.b (2) or 12VAC5-630-450.D.5.b (3) shall apply.

(5) Once the annular space is addressed the well shall be pumped dry and completely filled with grout poured from the surface. If the well is not pumped dry, grout shall be placed by introduction through a tremie pipe. The placement of grout in the well bore shall completely fill the bore void space to within a minimum of five feet from the ground surface. The well shall be capped with clean fill which is mounded a minimum of one foot above the surrounding ground surface. When the well is fewer than 25 feet deep, this procedure shall be followed to the greatest extent possible, including removing at a minimum the top five feet of casing below ground and cleaning and/or grouting the open annular space as described above.

56. Wells Drilled wells, including observation, monitoring and remediation wells constructed in collapsing material shall be completely filled with grout or clay slurry by introduction through placed via a tremie pipe initially extending to the bottom of the well. Such pipe shall be raised, but remain submerged in grout, as the well is filled. The well shall be capped with clean fill mounded to a minimum of one foot above the surrounding ground surface and graded to provide positive drainage away from the well.

67. Wells Drilled wells, including observation, monitoring and remediation wells constructed in consolidated rock formations or which penetrate zones of consolidated rock shall be completely filled with grout placed via a tremie pipe. At the discretion of the water well service provider, the well may be filled with sand or gravel opposite the zones of consolidated rock. The top of the sand or gravel fill shall be at least five feet below the top of the consolidated rock and at least 20 feet below the land surface. The remainder of the well shall be filled with grout or clay slurry placed via a tremie pipe. The well shall be capped with clean fill mounded to a minimum of one foot above the surrounding ground surface and graded to provide positive drainage away from the well.

78. Other abandonment procedures may be approved by the division on a case by case basis.

~~8. Test and exploration wells shall be abandoned in such a manner to prevent the well from being a channel for the vertical movement of water or a source of contamination to ground water.~~

9. When bored wells are ~~bored~~ advanced and a water source is not found, and the casing has not been placed in the bore hole, the ~~well bore hole may~~ shall be abandoned by backfilling with the ~~bore spoils~~ cuttings or clean fill or both to at least five feet below the ground surface. A two-foot-thick ~~bentonite grout~~ plug of grout shall be placed at a minimum of five feet from the ground surface. The remainder of the bore hole shall be filled with the ~~bore spoils~~ cuttings or clean fill or both.

12VAC5-630-460. Water system yields for residential use wells.

A. ~~All drinking~~ Drinking water systems that utilize one or more Class III wells shall be capable of supplying water in adequate quantity for the intended usage. ~~All such systems, with~~ Systems with a capacity ~~less than~~ under three gallons per minute, shall have a ~~capacity~~ ability to produce and store 150 gallons per bedroom per day and be capable of delivering a sustained flow of five gallons per minute per connection for 10 minutes for ordinary residential use. Systems with a capacity of three gallons per minute or more do not require additional storage.

B. The certified water well systems provider shall certify the storage capacity and the yield of the well on the Uniform Water Well Completion Report.

12VAC5-630-470. Chlorination dosage rates.

Casing Diameter (Inches)	Volume per 100 Feet (Gallons)	70% Sodium Hypochlorite (Oz. Dry Wt.)	5% Sodium Hypochlorite (Liquid Meas.)
2	16	0.5	4 oz.
4	65	2	18 oz.
6	147	4	40 oz.
8	261	6	4.25 pts.
10	408	8	7 pts.
12	588	12	10 pts.
16	1045	20	2 gal.
20	1632	32	3.3 gal.
24	2350	48	4.67 gal.
30	3672	70	7.3 gal.
36	5288	101	10.5 gal.

12VAC5-630-480. Well casing specifications. (Repealed.)

Steel Casings				
Nom. Size (inches)	Weight (lbs./ft.)	Thickness (inches)	External Diameter	Internal Diameter
4	10.79	.188	4.5	4.026
6	13.00	.188	6.625	6.25
8	24.70	.277	8.625	8.074
10	31.20	.279	10.75	10.192

FORMS (12VAC5-630)

[Application for: Sewage System - Water Supply, AOSE Form D \(rev. 7/07\).](#)

[Application for Express Class IV Well Construction Permit.](#)

Record of Inspection - Private Water Supply System.

[Uniform Water Well Completion Report.](#)

[Registration Statement for Express Geothermal Well Permit \(eff. 06/12\).](#)

12VAC5-630-9999. Documents Incorporated by Reference.

NSF 61 (Drinking Water System Components – Health Effects)

NSF 372 (Drinking Water System Components – Lead Content)



COMMONWEALTH of VIRGINIA

Department of Health

P O BOX 2448

RICHMOND, VA 23218

M. NORMAN OLIVER, MD, MA
STATE HEALTH COMMISSIONER

TTY 7-1-1 OR
1-800-828-1120

MEMORANDUM

DATE: March 29, 2019

TO: Virginia State Board of Health

FROM: Julie Henderson, Office of Environmental Health Services

SUBJECT: Repeal of the Authorized Onsite Soil Evaluator Regulations 12VAC5-615

The 2007 Virginia General Assembly enacted House Bill 3134, which transferred implementation, administration, and enforcement of licensing requirements for authorized onsite soil evaluators from the Virginia Department of Health (VDH) to the Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals at the Department of Professional and Occupational Regulation (DPOR). DPOR promulgated regulations for onsite soil evaluators on July 1, 2009 (18VAC160-20). House Bill 3134 abrogated the Board of Health's authority to license authorized onsite soil evaluators. While Title 32.1 of the *Code of Virginia* contains other references to the Board of Health's regulation of authorized onsite soil evaluators, VDH has successfully implemented those statutory provisions independent of 12VAC5-615. As such, 12 VAC 5-615 is no longer necessary and the Board of Health does not have authority to implement the regulation.

All requirements in 12VAC 5-615 will be repealed. The Board still has legislative authority to accept and review evaluations and designs from licensed onsite soil evaluators pursuant to Va. Code §§ 32.1-163, 32.1-163.5, 32.1-163.6, and 32.1-164.

Upon approval by the Board of Health, the proposed repeal will undergo executive branch review. Should the final action be approved by the Governor, it will be published in the Virginia Register of Regulations following a 30-day final adoption period. After the final adoption period closes, the regulation repeal becomes effective.



townhall.virginia.gov

Final Regulation Agency Background Document

Agency name	Virginia Department of Health
Virginia Administrative Code (VAC) citation(s)	12VAC5-615
Regulation title(s)	Authorized Onsite Soil Evaluator Regulations
Action title	Repeal of AOSE Regulations
Date this document prepared	March 26, 2019

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 (1 VAC7-10), and the *Virginia Register Form, Style, and Procedure Manual for Publication of Virginia Regulations*.

Brief Summary

Please provide a brief summary (preferably no more than 2 or 3 paragraphs) of this regulatory change (i.e., new regulation, amendments to an existing regulation, or repeal of an existing regulation). Alert the reader to all substantive matters. If applicable, generally describe the existing regulation.

The 2007 Virginia General Assembly enacted House Bill 3134, which transferred implementation, administration, and enforcement of licensing requirements for authorized onsite soil evaluators from the Virginia Department of Health (VDH) to the Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals at the Department of Professional and Occupational Regulation (DPOR). DPOR promulgated regulations for onsite soil evaluators on July 1, 2009 (18VAC160-20). House Bill 3134 rescinded the Board of Health (Board)'s authority to license authorized onsite soil evaluators. While Title 32.1 of the *Code of Virginia* contains other references to the Board's regulation of authorized onsite soil evaluators, VDH has successfully implemented those statutory provisions independent of 12VAC5-615. As such, 12VAC5-615 is no longer necessary and

the Board does not have authority to implement the regulation. A 2016 effort to repeal the regulation using the Fast Track process did not result in repeal because objections were filed during the public comment period.

Acronyms and Definitions

Please define all acronyms used in the Agency Background Document. Also, please define any technical terms that are used in the document that are not also defined in the "Definition" section of the regulations.

All requirements in 12VAC5-615 are to be repealed. Definitions and terms are addressed adequately in the Code of Virginia and through DPOR's licensing programs and policies.

Statement of Final Agency Action

Please provide a statement of the final action taken by the agency including: 1) the date the action was taken; 2) the name of the agency taking the action; and 3) the title of the regulation.

Mandate and Impetus

Please list all changes to the information reported on the Agency Background Document submitted for the previous stage regarding the mandate for this regulatory change, and any other impetus that specifically prompted its initiation. If there are no changes to previously-reported information, include a specific statement to that effect.

House Bill 3134, 2007 Acts of the Assembly Ch. 892.

The 2007 Virginia General Assembly enacted House Bill 3134, which transferred implementation, administration, and enforcement of licensing requirements for authorized onsite soil evaluators from VDH to the Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals at DPOR. House Bill 3134, 2007 Acts of the Assembly Ch. 892, further rescinded the Board's authority to license authorized onsite soil evaluators. This action, along with DPOR's promulgation of regulations for onsite soil evaluators on July 1, 2009 (18VAC160-20), provides the impetus to repeal 12VAC5-615.

Legal Basis

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

The Board does not have statutory authority to establish and maintain certification for authorized onsite soil evaluators because of the amendments to the Code of Virginia (HB 3134 of the 2007 General Assembly session). The Board retains legislative authority to accept and review evaluations and designs from licensed onsite soil evaluators pursuant to Va. Code §§ 32.1-163, 32.1-163.5, 32.1-163.6, and 32.1-164.

Purpose

Please explain the need for the regulatory change, including a description of: (1) the rationale or justification, (2) the specific reasons the regulatory change is essential to protect the health, safety or welfare of citizens, and (3) the goals of the regulatory change and the problems it's intended to solve.

The repeal of the AOSE Regulations is essential to protect the health, safety, and welfare of citizens of the Commonwealth because it eliminates regulations for which the Board does not have statutory authority; thereby clarifying the use of appropriate regulations implemented by DPOR. The AOSE Regulations were promulgated July 1, 2002, pursuant to Va. Code §§ 32.1-163.4, 163.5, 164, and 164.1:01. During the 2007 General Assembly session, HB 3134 (2007 Acts of Assembly Ch. 892) amended and re-enacted Va. Code §§ 32.1-163, 32.1-164, 54.1-300, 54.1-2300, 54.1-2301, and 54.1-2302. The legislation rescinded certification requirements administered by VDH. In its place, the legislation directed DPOR to promulgate regulations for persons seeking a license as an onsite soil evaluator. The legislation eliminates the need for the Board to administer a certification program for AOSEs.

DPOR adopted regulations for onsite soil evaluators (18VAC160-20). The AOSE Regulations unnecessarily establish a certificate program for qualifying individuals as AOSEs, including conflict of interest requirements. Documentation requirements in the AOSE Regulations for reports and designs are now contained in VDH policies that implement other regulations (e.g., 12VAC5-610, 12VAC5-613, 12VAC5-640, and 12VAC5-630). Processing time limits and definitions established in the Code and agency policies further render the AOSE Regulations unnecessary.

Substance

Please briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both. A more detailed discussion is provided in the "Detail of Changes" section below.

All requirements in 12VAC5-615 will be repealed.

Issues

Please identify the issues associated with the regulatory change, including: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government

officials, and the public. If there are no disadvantages to the public or the Commonwealth, include a specific statement to that effect.

The primary advantage to the public and the Commonwealth will be to remove unnecessary regulations no longer implemented by VDH. Repealing the regulation will prevent confusion. There is not a disadvantage to the public and Commonwealth.

Requirements More Restrictive than Federal

Please list all changes to the information reported on the Agency Background Document submitted for the previous stage regarding any requirement of the regulatory change which is more restrictive than applicable federal requirements. If there are no changes to previously-reported information, include a specific statement to that effect.

There is no requirement that would be more restrictive than federal requirements. The federal government does not regulate the profession of onsite soil evaluators.

Agencies, Localities, and Other Entities Particularly Affected

Please list all changes to the information reported on the Agency Background Document submitted for the previous stage regarding any other state agencies, localities, or other entities that are particularly affected by the regulatory change. If there are no changes to previously-reported information, include a specific statement to that effect.

Other State Agencies Particularly Affected

DPOR has adopted regulations for onsite soil evaluators (18VAC160-20), and repeal of this regulation will eliminate duplication and apparent conflict. No other state agency is particularly affected.

Localities Particularly Affected

No locality is particularly affected.

Other Entities Particularly Affected

No other entity is particularly affected.

Public Comment

Please summarize all comments received during the public comment period following the publication of the previous stage, and provide the agency response. Ensure to include all comments submitted: including those received on Town Hall, in a public hearing, or submitted directly to the agency or board. If no comment was received, enter a specific statement to that effect.

An announcement of the repeal of 12VAC5-615 was published in Volume 35, Issue 2, of the Virginia Register of Regulations (September 17, 2018). The deadline for public comment was November 16, 2018. No public comments were received.

Detail of Changes Made Since the Previous Stage

*Please list all changes made to the text since the previous stage was published in the Virginia Register of Regulations and the rationale for the changes. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. * Please put an asterisk next to any substantive changes.*

No changes have been made since the announcement of the repeal of the regulation was published in Volume 35, Issue 2, of the Virginia Register of Regulations.

Detail of All Changes Proposed in this Regulatory Action

*Please list all changes proposed in this action and the rationale for the changes. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. * Please put an asterisk next to any substantive changes.*

Current section number	Proposed new section number, if applicable	Current requirement	Proposed change, intent, rationale, and likely impact of proposed requirements
All Sections	NA	Authorized Onsite Soil Evaluator Regulations	The regulation is repealed. The rationale based on each section is provided below.
12 VAC 5-615-10*	N/A	Describes the authority for the regulations	The Board does not have authority to qualify individuals as Authorized Onsite Soil Evaluators (see HB 3134 from the 2007 General Assembly session). DPOR enacted regulations that administer a licensing program for onsite soil evaluators (18 VAC160-20). This regulation is not necessary.
12 VAC 5-615-20*	N/A	Describes the purpose of the regulations.	The Board does not have authority to qualify individuals as AOSEs. The Board does not need procedures to become an AOSE or maintain a certificate. Site documentation procedures are addressed through other agency policy and regulations. There is no authority to establish standards of practice or conduct for AOSEs. This regulation is not necessary.
12 VAC 5-615-30*	N/A	Describes the relationship to the Sewage Handling and Disposal Regulations	The Board is repealing the regulation so its relationship to another regulation is moot.
12 VAC 5-615-40*	N/A	Describes the administration of the regulation.	The Board is repealing the regulation so its administration is moot.
12 VAC 5-615-	N/A	Describes the creation of an advisory committee.	The Board is repealing the regulation. The Sewage Handling and Disposal Regulations

50*			establish an advisory committee at 12 VAC 5-610-50.
12 VAC 5-615-60*	N/A	Describes the scope of the regulation.	The Board is repealing the regulation so its scope is moot. Content and form for site and soil evaluation reports are administered through the Sewage Handling and Disposal Regulations (12VAC5-610). Local ordinances are addressed in the Code of Virginia.
12 VAC 5-615-70*	N/A	Describes roles and responsibilities for AOSE or professional engineers working in consultation with an AOSE.	The Board has already established procedures to process applications with supporting private sector work through its administration of the Sewage Handling and Disposal Regulations (12VAC5-610). This regulation is not necessary.
12 VAC 5-615-80*	N/A	Describes processing time limits and deemed approval.	Processing time limits and deemed approval are addressed in Title 32.1, Chapter 6 of the Code of Virginia. The regulation is not necessary.
12 VAC 5-615-90*	N/A	Describes the practice of engineering.	The practice of engineering is defined in the Regulations for Alternative Onsite Sewage Systems. Va. Code § 54.1-400 provides additional guidance regarding the practice of engineer. This regulation is not necessary.
12 VAC 5-615-100*	N/A	Requires a person to sign a certification statement for submissions to the Department of Health.	The Board does not have authority to qualify individuals as AOSEs. DPOR regulates the practice. The Board has other policies and regulations that implement this regulation. Va. Code § 32.1-163.5 of the Code of Virginia requires private sector evaluations and designs to be certified as complying with the Board's regulations. This regulation is not necessary.
12 VAC 5-615-110*	N/A	Describes right of entry.	The agency already has this authority pursuant to Va. Code § 32.1-25. This regulation is not necessary.
12 VAC 5-615-120*	N/A	Provides a list of definitions.	These terms are adequately addressed in the Code of Virginia and through DPOR's licensing programs and policies. Deleting these definitions will not impact the Board's program. This regulation is not necessary.
12 VAC 5-615-130*	N/A	Provides notice of the administrative process act.	Va. Code § 2.2-4000 applies to the agency. This regulation is not necessary.
12 VAC 5-615-140*	N/A	Provides authority to develop an emergency order or rule.	12 VAC5-615 is being repealed in its entirety so there is no need for this authority.
12 VAC 5-615-150*	N/A	Provides details about the enforcement of the regulation.	The Board is repealing the regulation so details about the enforcement of the regulation are moot.
12 VAC 5-615-160*	N/A	Provides notice that the regulations may be suspended during disasters.	The Board is repealing the regulation so this regulation is not necessary.
12 VAC 5-615-	N/A	Provides ability to grant variances.	The Board is repealing the regulation so procedures to grant a variance are not

170*			necessary.
12 VAC 5-615-180*	N/A	Provides requirements for agency case decisions.	The Board is repealing the regulation so notice for case decisions is not necessary.
12 VAC 5-615-190*	N/A	Reserved for future use.	The Board is repealing the regulation so future use will not occur.
12 VAC 5-615-200*	N/A	Provides requirements for an agency case decision.	The Board is repealing the regulation so case decisions pursuant to this regulation will not be made.
12 VAC 5-615-210*	N/A	Describes renewal of AOSE certificates.	DPOR has regulatory oversight for onsite soil evaluators. This regulation is not necessary.
12 VAC 5-615-220*	N/A	Reserved for future use.	The Board is repealing the regulation so future use will not occur.
12 VAC 5-615-230*	N/A	Describes application requirements to obtain an AOSE certification.	DPOR has regulatory oversight for licensing onsite soil evaluators. This regulation is not necessary.
12 VAC 5-615-240*	N/A	Describes processing procedures for AOSE applications.	DPOR has regulatory oversight for licensing onsite soil evaluators. This regulation is not necessary.
12 VAC 5-615-250*	N/A	Describes fees to process applications for certification as an AOSE.	DPOR has regulatory oversight for licensing onsite soil evaluators. This regulation is not necessary.
12 VAC 5-615-260*	N/A	Describes expiration of the AOSE certificate.	DPOR has regulatory oversight for licensing onsite soil evaluators. This regulation is not necessary.
12 VAC 5-615-270*	N/A	Describes renewal procedures for the AOSE certificate.	DPOR has regulatory oversight for licensing onsite soil evaluators. This regulation is not necessary.
12 VAC 5-615-280*	N/A	Describes site evaluation and design requirements for certificate holders.	The Board does not issue certificates. DPOR has regulatory oversight for licensing onsite soil evaluators. The Board has regulations and policies that address applications with supporting private sector work. The Board is repealing this regulation because it is not necessary.
12 VAC 5-615-290*	N/A	Describes authority to revoke or suspend an AOSE certification.	DPOR has regulatory oversight for licensing onsite soil evaluators. This regulation is not necessary.
12 VAC 5-615-300*	N/A	Describes means to have a certificate re-instated.	DPOR has regulatory oversight for licensing onsite soil evaluators. This regulation is not necessary.
12 VAC 5-615-310*	N/A	Describes appeal process for suspension or revocation of a certificate.	DPOR has regulatory oversight for licensing onsite soil evaluators. This regulation is not necessary.
12 VAC 5-615-320*	N/A	Provides that a certificate holder cannot certify a site that has been previously denied.	The Board has other regulations and policies that address applications with supporting private sector work. This regulation is not necessary.
12 VAC 5-615-330*	N/A	Requires an AOSE to notify when there has been a change in status.	DPOR has regulatory oversight for licensing onsite soil evaluators. This regulation is not necessary.
12 VAC	N/A	Describes minimum requirements	The Board has other regulations and policies

5-615-340*		for documentation	that address applications with supporting private sector work. This regulation is not necessary.
12 VAC 5-615-350*	N/A	Describes minimum documentation requirements and time limits to process applications.	The Board has other regulations and policies that address applications with supporting private sector work. This regulation is not necessary.
12 VAC 5-615-360*	N/A	Describes minimum information needed for a site evaluation report.	The Board has other regulations and policies that address applications with supporting private sector work. This regulation is not necessary.
12 VAC 5-615-370*	N/A	Describes access to information	The Board has other regulations and policies that address this topic. The Freedom of Information Act also adequately addresses this topic. This regulation is not necessary.
12 VAC 5-615-380*	N/A	Describes minimum information needed for design and construction, including site denial.	The Board has other regulations and policies that address applications with supporting private sector work. This regulation is not necessary.
12 VAC 5-615-390*	N/A	Describes professional courtesy reviews.	The Board has other regulations and policies that address applications with supporting private sector work. This regulation is not necessary.
12 VAC 5-615-400*	N/A	Describes field checks.	The Board has other regulations and policies that address applications with supporting private sector work. This regulation is not necessary.
12 VAC 5-615-410*	N/A	Describes a certificate holder's responsibility to the public.	DPOR has regulatory oversight for licensing onsite soil evaluators. This regulation is not necessary.
12 VAC 5-615-420*	N/A	Describes obligations of the certificate holder.	DPOR has regulatory oversight for licensing onsite soil evaluators. This regulation is not necessary.
12 VAC 5-615-430*	N/A	Describes conflict of interest disclosure for a certificate holder.	DPOR has regulatory oversight for licensing onsite soil evaluators. This regulation is not necessary.
12 VAC 5-615-440*	N/A	Describes additional obligations of a certificate holder.	DPOR has regulatory oversight for licensing onsite soil evaluators. This regulation is not necessary.
12 VAC 5-615-450*	N/A	Describes a certificate holder's obligation to be truthful.	DPOR has regulatory oversight for licensing onsite soil evaluators. This regulation is not necessary.
12 VAC 5-615-460*	N/A	Describes the certificate holder's other responsibilities.	The Board is repealing the regulation. DPOR has regulatory oversight for licensing onsite soil evaluators. This regulation is not necessary.
12 VAC 5-615-470*	N/A	Describes the certificate holder's good standing in other jurisdictions.	The Board is repealing the regulation. DPOR has regulatory oversight for licensing onsite soil evaluators. This regulation is not necessary.

Project 3127 - Other Action

**DEPARTMENT OF HEALTH
Repeal of Authorized Onsite Soil Evaluator Regulations**

**CHAPTER 615
AUTHORIZED ONSITE SOIL EVALUATOR REGULATIONS (REPEALED)**

**Part I
General Provisions**

12VAC5-615-10. Authority for regulations. (Repealed.)

~~Section 32.1-164 of the Code of Virginia provides that the State Board of Health has the duty to qualify individuals as authorized onsite soil evaluators (AOSEs) and establish procedures for utilizing the work of AOSEs and professional engineers (PEs) in consultation with AOSEs when issuing construction permits, certification letters, and subdivision approvals. Section 32.1-163.4 of the Code of Virginia provides that the department shall contract with an AOSE for the field evaluation of backlogged application sites and that the department shall only accept private evaluations from AOSEs. Section 32.1-163.5 of the Code of Virginia provides that the department shall accept private evaluations and designs for residential development from an AOSE or a PE in consultation with an AOSE and that the department is not required to perform a field check of such evaluations and designs prior to issuing an approval; the department may, although it is not required to, accept evaluations and designs from an AOSE or a PE in consultation with an AOSE for a proprietary, pre-engineered system that has been deemed by the department to comply with the board's regulations.~~

12VAC5-615-20. Purpose of regulations. (Repealed.)

~~These regulations have been promulgated to:~~

- ~~1. Guide the state health commissioner in determining who should be listed as an authorized onsite soil evaluator.~~
- ~~2. Guide certified professional soil scientists and others in the procedures necessary to become and maintain the status of authorized onsite soil evaluator.~~
- ~~3. Guide authorized onsite soil evaluators and professional engineers in the processes and site documentation procedures necessary to secure timely responses to applications submitted to the department.~~
- ~~4. Establish standards of practice and conduct for AOSEs.~~

12VAC5-615-30. Relationship to the Sewage Handling and Disposal Regulations. (Repealed.)

~~This chapter is supplemental to the current Sewage Handling and Disposal Regulations (12VAC5-610) adopted by the State Board of Health pursuant to Title 32.1 of the Code of Virginia. This chapter addresses the department's program for qualifying authorized onsite soil evaluators, processing applications with AOSE/PE supporting documentation, quality control procedures, and enforcement.~~

12VAC5-615-40. Administration of regulations. (Repealed.)

~~This chapter is administered by the following:~~

- ~~1. The State Board of Health, hereinafter referred to as the board, has the responsibility to promulgate, amend, and repeal regulations necessary to recognize and use the work of AOSE/PEs to site and design onsite wastewater systems in a manner that protects public health and the environment.~~

~~2. The State Health Commissioner, hereinafter referred to as the commissioner, is the chief executive officer of the State Department of Health. The commissioner has the authority to act, within the scope of regulations promulgated by the board, for the board when it is not in session. The commissioner may delegate authority under this chapter with the exception of the authority to issue orders under § 32.1-26 of the Code of Virginia.~~

~~3. The State Department of Health, hereinafter referred to as the department, is designated as the primary agent of the commissioner for the purpose of administering this chapter.~~

~~4. The district or local health departments are responsible for implementing and enforcing the operational activities required by this chapter.~~

~~5. The Sewage Handling and Disposal Appeal Review Board may hear the appeal of an aggrieved named party in any case where the department has revoked a sewage disposal system permit, certification letter, or subdivision approval when that approval was issued in reliance upon the certified evaluation and design of an AOSE/PE.~~

~~12VAC5-615-50. Authorized Onsite Soil Evaluator Advisory Committee. (Repealed.)~~

~~The commissioner shall appoint an Authorized Onsite Soil Evaluator Advisory Committee consisting of up to 15 appointed members and one ex officio member. The commissioner shall appoint members to the Authorized Onsite Soil Evaluator Advisory Committee as follows: four AOSEs from four different regions of the Commonwealth, one or more of whom must be a member of the Virginia Association of Professional Soil Scientists; four individuals currently employed by the department as Environmental Health Specialist Senior (these may or may not also be AOSEs); two persons actively engaged in the installation of onsite sewage systems; one professional engineer; one person who is a realtor licensed in Virginia; and three discretionary voting positions intended to provide substantive expertise, when needed, from the following categories (but not limited to these categories): Homebuilder/Developer, Well Driller, Local Government, Lending Institution, Surveyor. Each member of the advisory committee may be appointed to serve a term of two years; however, the commissioner, when making initial appointments, shall designate seven of the members to serve terms of three years. The appointment, renewal and removal of each advisory committee member lies in the sole discretion of the commissioner. The commissioner should seek to ensure that one or more members of the advisory committee is a homeowner with experience with onsite sewage systems so that homeowner's interests may be represented on the committee. The director of the division, or a designee, shall serve as an ex officio member of the advisory committee. The commissioner shall designate the chairman of the committee and members shall serve at the discretion of the commissioner. The committee shall make recommendations to the commissioner regarding AOSE/PE policies, procedures, and programs. The committee shall meet at least annually. The committee shall establish its rules of order.~~

~~12VAC5-615-60. Scope of regulations. (Repealed.)~~

~~A. This chapter describes the content and form of site and soil evaluation reports submitted to the department by an AOSE/PE pursuant to an application filed for an approval under the Sewage Handling and Disposal Regulations (12VAC5-610). The department will accept applications from owners (or their agents) without any site evaluation work (bare applications), with complete supporting documentation from an AOSE/PE, and until December 31, 2005, with complete supporting documentation from non-AOSE/PE consultants. After December 31, 2005, the department will continue to accept bare applications from owners (or their agents) and will only accept site evaluation reports and designs from AOSE/PEs.~~

~~B. The provisions of local ordinances regarding onsite wastewater systems that are more restrictive than, and not inconsistent with, the Sewage Handling and Disposal Regulations are not affected by this regulation unless a locality indicates in writing to the commissioner that it wants the department to apply its more restrictive ordinances in concert with the provisions of~~

~~this chapter. When such a request is made, the department will require all AOSE/PE reports submitted in the locality to be certified as complying with both the Sewage Handling and Disposal Regulations and the more restrictive local requirements and implement the provisions of the more restrictive ordinances pursuant to this chapter. In those localities with more restrictive ordinances where the local government has not indicated to the commissioner in writing that it desires that the provisions of this chapter be applied to the more restrictive ordinances, the department will review all applications for compliance with state law and regulations only. Such applicants then must obtain a certification of compliance with local ordinances from a local official. The department shall maintain a list of all localities that have notified the commissioner in writing pursuant to this section.~~

~~C. The department may accept evaluations and designs from AOSE/PEs in accordance with this chapter that include a certification as to the suitability of sites for the construction of private wells in accordance with the Private Well Regulations (12VAC5-630).~~

12VAC5-615-70. Roles and responsibilities. (Repealed.)

~~A. An AOSE/PE must certify that a site meets or does not meet the requirements of either the Sewage Handling and Disposal Regulations (12VAC5-610), the Private Well Regulations (12VAC5-630), or both, and may design certain traditional systems in accordance with the same regulations. Responsibility for assuring that site evaluations and designs comply with the Sewage Handling and Disposal Regulations or the Private Well Regulations rests with the AOSE/PE submitting the work.~~

~~B. The Department of Health shall have the following responsibilities:~~

~~1. The department's role in evaluating an AOSE/PE submission will be to review the materials submitted with an application as it deems necessary to assure compliance with this chapter, the Sewage Handling and Disposal Regulations, the Private Well Regulations and the department's policies prior to approval or disapproval of an application.~~

~~2. The department is not required to conduct a field check of any evaluation and/or design submitted pursuant to this chapter prior to issuing the appropriate approval; however, it will conduct such field reviews as it deems necessary to protect public health and the environment and to assess the performance of AOSE/PEs.~~

~~3. When requested by an AOSE/PE prior to the filing of an application for a construction permit or certification letter, the department may provide a site-specific field review consultation. Such requests shall not be included in any calculation of backlogs nor shall they be subject to the time limits contained in 12VAC5-615-80 or to deemed approval. The department may limit the number of such professional courtesy reviews provided to any individual AOSE/PE as it deems reasonable and as its resources allow. The professional courtesy review shall not be considered to be a case decision.~~

~~4. The department may provide professional courtesy reviews as it deems reasonable and as its resources allow when requested by an AOSE/PE in conjunction with a proposed subdivision, provided such field reviews are general in nature (not site-specific) and provided the developer or owner has generated a base map or preliminary plat of the proposed subdivision and provided that the request for review is made prior to any submission of a subdivision package to the local government for consideration under local subdivision ordinances. Such professional courtesy reviews shall be voluntary and within the sole discretion of the department and shall not be subject to any time limits. Professional courtesy reviews shall not be considered to be case decisions.~~

~~5. Whenever the department has approved a permit, certification letter, or subdivision approval in reliance upon an AOSE/PE certification and later has reason to believe that the site or sites or system design submitted by the AOSE/PE does not substantially comply with the minimum requirements of the Sewage Handling and Disposal Regulations, the department may~~

~~initiate proceedings, in accordance with the Sewage Handling and Disposal Regulations, to revoke or modify its approval. Such approvals, when revoked, shall be deemed to be permit denials and may be appealed by the aggrieved named party to the Sewage Handling and Disposal Appeal Review Board in accordance with § 32.1-166.6 of the Code of Virginia. All requests for appeals to the Appeal Review Board must be in writing and received by the commissioner within 30 days of receipt of notice of the revocation. With the written consent of the owner, the department may revise a permit, certification letter, or subdivision approval to substantially comply with the Sewage Handling and Disposal Regulations. The owner may be required to file a new application and to provide formal or informal plans if such plans are required under the Sewage Handling and Disposal Regulations.~~

~~C. An AOSE/PE must make minor revisions that are discovered to be necessary at any time, including, but not limited to, during the installation of the system, to a permit, certification letter or subdivision approval issued in reliance on the evaluations and/or designs of an AOSE/PE. This subsection shall not be construed to require an AOSE to make revisions, minor or major, that result from actions taken by the owner including, but not limited to, improper site grading, improper location of structures, removal, compaction or other damages to soils.~~

~~1. Minor revisions do not include changes in design flow or substantive changes in square footage of absorption area.~~

~~2. All revisions must fully comply with the Sewage Handling and Disposal Regulations and must be approved by the department before the issuance of the operation permit.~~

~~3. Whenever major revisions, such as changes in system design or location, are required, a new application in accordance with Part IV (12VAC5-615-340 et seq.) of this chapter shall be required.~~

~~D. Whenever a construction permit has been issued pursuant to a design certified by an AOSE/PE, the certifying AOSE/PE shall inspect that system at the time of installation and provide an inspection report, including an "as-built" drawing, and completion statement to the owner and the local health department. The inspection report and completion statement shall be in a form approved by the division and shall state that the AOSE/PE has inspected the installation. It shall state any deficiencies discovered and identify the methods of correction, and it shall state that the system was installed in accordance with the construction permit, approved plans where appropriate, and the requirements of 12VAC5-610. The local or district health department may, but is not required to, perform an inspection of such systems as required under 12VAC5-610-320. Whenever an AOSE/PE is unable to conduct an inspection under this section, the owner may provide an inspection report and completion statement executed by another AOSE or PE. An Operation Permit (12VAC5-610-340) shall not be issued for any system until the appropriate report and completion statement have been received by the local or district health department.~~

~~E. When the department has issued a construction permit for a private well only (no onsite sewage system), in reliance on a certification by an AOSE/PE, the construction inspection required by 12VAC5-630-320 will be performed by the local or district health department. In such cases, the owner shall provide to the local or district health department a written inspection statement signed by the AOSE/PE stating that the private well was installed in accordance with the permit and the Private Well Regulations. Whenever an AOSE/PE is unable to conduct an inspection under this section, the owner may provide an inspection report and completion statement executed by another AOSE or PE.~~

12VAC5-615-80. Processing time limits and deemed approval. (Repealed.)

~~A. The provisions of this section apply only to applications for residential development and do not apply to any application for a proprietary, pre-engineered system that has been deemed by the department to comply with the board's regulations. The department may accept~~

~~evaluations and designs for proprietary, pre-engineered systems in accordance with this chapter; however, the processing time limits and deemed approval shall not apply to any such application.~~

~~B. The department shall review applications submitted with AOSE/PE documentation in the form specified in this chapter and shall issue a written approval or denial within the time frames specified in Table 1 of this subsection. In the event the application is denied, the department shall set forth in writing the reasons for denial.~~

~~Table 1~~

TYPE OF APPLICATION	TIME LIMIT
Individual Permit Application	15 working days
Individual Certification Letter	20 working days
Multiple Lot Certification Letter	60 days
Subdivision Review	60 days

~~C. If the department does not approve or disapprove an AOSE/PE application or a request for a subdivision review properly submitted in accordance with this chapter within the time limits specified in Table 1, the application or request for subdivision review shall be deemed approved and the appropriate letter, permit, or approval shall be issued.~~

~~12VAC5-615-90. The practice of engineering. (Repealed.)~~

~~A. An AOSE may site and design traditional onsite systems; however, § 32.1-163.5 of the Code of Virginia provides that no one other than a licensed professional engineer may practice engineering. Section 54.1-400 of the Code of Virginia states the "practice of engineering" means any service wherein the principles and methods of engineering are applied to, but are not necessarily limited to, the following areas: consultation, investigation, evaluation, planning and design of public or private utilities, structures, machines, equipment, processes, transportation systems and work systems, including responsible administration of construction contracts. The term "practice of engineering" shall not include the service or maintenance of existing electrical or mechanical systems.~~

~~B. An AOSE may submit site and soil evaluations as described in this chapter for any traditional system regardless of whether the system design requires an engineer. An AOSE, however, may only submit system designs and specifications for systems that do not require the practice of engineering. When a system is sufficiently complex to require the practice of engineering, formal plans and specifications, sealed by a professional engineer (PE) shall be required.~~

~~C. Some traditional systems (see definition) may require the practice of engineering. An AOSE may design traditional systems that do not require the practice of engineering.~~

~~D. When engineering plans and specifications are required for an application submitted pursuant to this chapter, the site evaluation work shall be either conducted and certified by an AOSE or certified by a PE working in consultation with an AOSE. When the site and soil evaluation submitted in support of the application is submitted by a PE, the engineer shall submit a statement indicating that he consulted with a specific AOSE, giving both the name and certification number of the AOSE, on the proposal under review.~~

~~12VAC5-615-100. AOSE certification required. (Repealed.)~~

~~No person shall sign a certification statement for submittal to the department in support of an application for a sewage disposal system construction permit representing that he is an~~

~~AOSE/PE or otherwise represent that he is an AOSE/PE unless that person possesses a valid certification as an AOSE issued by the commissioner in accordance with 12VAC5-615-240 A or unless that person is a Virginia licensed Professional Engineer who has consulted with an AOSE in accordance with this chapter.~~

~~12VAC5-615-110. Right of entry. (Repealed.)~~

~~The commissioner or the commissioner's designee shall have the right to enter any property to assure compliance with this chapter in accordance with the provisions of § 32.1-25 of the Code of Virginia.~~

~~12VAC5-615-120. Definitions. (Repealed.)~~

~~The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:~~

~~"AOSE/PE" means an authorized onsite soil evaluator or a professional engineer working in consultation with an authorized onsite soil evaluator.~~

~~"Authorized onsite soil evaluator (AOSE)" means a person currently listed by the board as possessing the qualifications to evaluate soils and soil properties in relationship to the effects of these properties on the use and management of these soils as the locations for traditional onsite sewage disposal systems.~~

~~"Backlog" is deemed to exist when the processing time for more than 10% of a local or district health department's complete bare applications for construction permits exceeds a predetermined number of working days (i.e., a 15-day backlog exists when the processing time for more than 10% of permit applications exceeds 15 working days). When calculating backlogs, only applications for construction permits shall be counted.~~

~~"Bare application" means an application for a construction permit or a certification letter submitted without supporting documentation from an AOSE/PE.~~

~~"Board" means the State Board of Health.~~

~~"Certification letter" means a letter issued by the department, in lieu of a construction permit, that identifies a specific site and recognizes the appropriateness of the site for an onsite wastewater disposal system.~~

~~"Complete application" means an application for a construction permit or certification letter that includes all necessary information needed to process the application as specified in 12VAC5-610-250 including a site plan as specified in 12VAC5-610-460.~~

~~"Deemed approved" or "deemed approval" means that the department has not taken action to approve or disapprove an application for a permit, an individual lot certification letter, multiple lot certification letters, or subdivision approval for residential development within the time limits prescribed in §§ 32.1-163.5 and 32.1-164 H of the Code of Virginia. In such cases, an application submitted in proper form pursuant to this chapter is deemed approved and the appropriate letter or letters, permit, or approval shall be immediately issued by the department. Deemed approval applies only to applications for single lot construction permits, subdivision review, and single or multiple lot certification letters submitted with evaluations and designs certified by an AOSE/PE in accordance with the provisions of the Code of Virginia, the Sewage Handling and Disposal Regulations, and this chapter. Sites that have been previously denied by the department and proprietary, pre-engineered systems deemed by the department to comply with the board's regulations are not subject to the provisions of deemed approval. An application "deemed approved" means that it is approved only with respect to the Board of Health's regulations. In accordance with 12VAC5-615-60 B a local government may authorize the department in writing to implement the provisions of any local ordinance that are more restrictive than the Sewage Handling and Disposal Regulations through the provisions of this chapter.~~

~~"Multiple lot certification letters" means two or more applications for certification letters filed by the same owner for existing or proposed lots to serve detached, individual dwellings.~~

~~"Professional courtesy review" means a site-specific field review requested by an AOSE/PE prior to the submission of an application for a construction permit or certification letter or a general field consultation (not site-specific) regarding a proposed subdivision.~~

~~"Professional engineer in consultation with an AOSE" means that a professional engineer has communicated with an AOSE regarding the site and soil conditions present where the system is proposed, in a manner sufficient to assure compliance with the Sewage Handling and Disposal Regulations and this chapter.~~

~~"Processing time" means the number of working days from the date a complete, bare application is received by a local or district health department to the date a permit or certification letter is issued. Working days characterized by severe weather conditions shall not be included in any calculation of processing time.~~

~~"Residential development" means development, including repair or replacement systems in accordance with 12VAC5-610-280 C 2, using single family homes, which utilize individual onsite sewage systems for each structure. Mass drainfields and other cluster systems that serve more than one dwelling are not considered residential development for the purposes of this chapter.~~

~~"Single lot construction permit/certification letter" means one application filed by an owner for a sewage disposal system construction permit or certification letter to serve an individual dwelling on one lot or parcel of land.~~

~~"Subdivision review" means the review of a proposed subdivision plat by a local health department for a local government pursuant to a local ordinance or ordinances and pursuant to §§ 15.2-2242 and 15.2-2260 of the Code of Virginia and 12VAC5-610-360 of the Sewage Handling and Disposal Regulations for the purposes of determining and documenting whether an approved sewage disposal site is present on each proposed lot.~~

~~"Traditional systems" means onsite wastewater treatment and disposal systems, including proprietary, pre-engineered systems deemed by the department to comply with the board's regulations, that have received provisional or general approval under, or for which design criteria are contained in, the Sewage Handling and Disposal Regulations, except as noted below. For the purposes of this chapter, traditional systems do not include experimental permits, conditional permits issued for temporary, intermittent or seasonal use, septage stabilization systems, or systems permitted under a soil drainage management plan. Conditional construction permits issued for limited occupancy or the use of permanent water saving fixtures are not excluded (see 12VAC5-610-250 J).~~

Part II

Compliance With Administrative Process Act

12VAC5-615-130. Compliance with Virginia Administrative Process Act. (Repealed.)

~~The provisions of the Virginia Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia) shall govern the promulgation and administration of this chapter and shall be applicable to the appeal of any case decision based upon this chapter.~~

12VAC5-615-140. Emergency order or rule. (Repealed.)

~~If an emergency exists, the commissioner may issue an emergency order or rule as is necessary for preservation of public health, safety, and welfare. The emergency order or rule shall state the reasons and precise factual basis upon which the emergency rule or order is issued. The emergency order or rule shall state the time period for which it is effective.~~

12VAC5-615-150. Enforcement of regulations. (Repealed.)

~~A. All activities of an AOSE/PE pertaining to evaluations and designs of sewage treatment systems governed by the Sewage Handling and Disposal Regulations (12VAC5-610) and applications for certification as an AOSE shall comply with the requirements set forth in this chapter. The commissioner may enforce this chapter through any means lawfully available.~~

~~B. Subject to the exceptions indicated below, whenever the commissioner, the commissioner's designee, or the district or local health department has reason to believe a violation of this chapter, any law administered by the board, commissioner, or department, any regulations of the board, any order of the board or commissioner, or any conditions in a permit has occurred or is occurring, the department shall notify the alleged violator. Such notice shall be made in writing, shall be delivered personally or sent by certified mail, shall cite the regulation or regulations that are allegedly being violated, shall state the facts that form the basis for believing the violation has occurred or is occurring, shall include a request for a specific action by the recipient by a specified time and shall state the penalties associated with such violations (see § 32.1-27 of the Code of Virginia). In addition, or in the alternative, when the commissioner or the commissioner's designee deems it necessary, the department may initiate criminal prosecution or seek civil relief in circuit court through mandamus or injunctive relief without giving notice. Written notice pursuant to this section is required only when the department intends to pursue administrative enforcement pursuant to the Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia).~~

~~C. Pursuant to the authority granted in § 32.1-26 of the Code of Virginia, the commissioner may issue orders to require any person to comply with the provisions of this chapter. The order shall be signed by the commissioner and may require, for example:~~

- ~~1. The immediate cessation or correction, or both, of the violation;~~
- ~~2. The submission of a plan to prevent future violations to the commissioner for review and approval;~~
- ~~3. The submission of an application for certification as an AOSE, an application for a permit, or an application for a variance; and~~
- ~~4. Any other corrective action deemed necessary for proper compliance with the regulations or to protect public health.~~

~~D. Before the issuance of an order described in subsection C of this section, a hearing must be held with at least 30 days notice to the affected party of the time, place and purpose thereof, for the purpose of adjudicating the alleged violation or violations of this chapter. The procedure at the hearing shall be in accordance with § 2.2-4020 of the Code of Virginia.~~

~~E. All orders shall become effective not less than 15 days after mailing a copy thereof by certified mail to the last known address of the person violating this chapter. Violation of an order is a misdemeanor. (See § 32.1-27 of the Code of Virginia.)~~

~~F. The commissioner may enforce all orders. Should any person fail to comply with any order, the commissioner may:~~

- ~~1. Apply to an appropriate court for an injunction or other legal process to prevent or stop any practice in violation of the order;~~
- ~~2. Seek mandamus against any owner or person that is a municipal corporation;~~
- ~~3. Request the Attorney General to bring an action for civil penalty;~~
- ~~4. Request the Commonwealth's Attorney to bring a criminal action.~~

~~G. Nothing contained in this section shall be interpreted to require the commissioner to issue an order prior to seeking enforcement of any regulations or statute through an injunction, mandamus or criminal prosecution.~~

12VAC5-615-160. Suspension of regulations during disasters. (Repealed.)

~~If in the case of a man-made or natural disaster, the commissioner finds that certain regulations cannot be complied with and that the public health is better served by not fully complying with this chapter, the commissioner may authorize the suspension of the application of the regulations for specifically affected localities and institute a provisional regulatory plan until the disaster is abated.~~

12VAC5-615-170. Variances. (Repealed.)

~~A. The commissioner may grant a variance to this chapter. The commissioner shall follow the appropriate procedures set forth in this section in granting a variance.~~

~~B. A variance is a conditional waiver of a specific regulation which is granted to a specific person and may be for a specified time period.~~

~~C. The commissioner may grant a variance if a thorough investigation reveals that the hardship imposed (may be economic) by this chapter outweighs the benefits that may be received by the public and that the granting of such variance does not subject the public to unreasonable health risks.~~

~~D. Any person who seeks a variance shall apply in writing for a variance. The application shall be sent to the commissioner for review. The application shall include:~~

- ~~1. A citation to the regulation from which a variance is requested;~~
- ~~2. The nature and duration of the variance requested;~~
- ~~3. Any relevant information in support of the request including information relating to experience or education received, or evaluations and designs conducted pursuant to the requirements of this chapter;~~
- ~~4. The hardship imposed by the specific requirement of this chapter;~~
- ~~5. A statement of reasons why the public health and welfare would be better served if the variance were granted;~~
- ~~6. Suggested conditions that might be imposed on the granting of a variance that would limit the detrimental impact on the public health and welfare;~~
- ~~7. Other information, if any, believed pertinent by the applicant; and~~
- ~~8. Such other information as the commissioner may require.~~

~~E. The commissioner shall act on any variance request submitted pursuant to subsection D of this section within 60 working days of receipt of the request.~~

~~F. In the commissioner's evaluation of a variance application, the commissioner shall consider the following factors:~~

- ~~1. The effect that such a variance would have on the performance of the AOSE/PE or system;~~
- ~~2. The cost and other economic considerations imposed by this requirement;~~
- ~~3. The effect that such a variance would have on protection of the public health;~~
- ~~4. Any relevant information in support of the request including information relating to experience or education received, or evaluations and designs conducted pursuant to the requirements of this chapter;~~
- ~~5. The hardship imposed by enforcing the specific requirement of this chapter;~~
- ~~6. The applicant's statement of reasons why the public health and welfare would be better served if the variance were granted;~~
- ~~7. The suggested conditions that might be imposed on the granting of a variance that would limit the detrimental impact on the public health and welfare;~~

8. Other information, if any, believed pertinent by the applicant;
9. Such other information as the commissioner may require; and
10. Such other factors as the commissioner may deem appropriate.

~~G. Disposition of a variance request:~~

~~1. The commissioner may reject any application for a variance by sending notice to the applicant. The rejection notice shall be in writing and shall state the reasons for rejection. The applicant may petition for a hearing to challenge the rejection pursuant to 12VAC5-615-180 within 30 calendar days of receipt of notice of rejection.~~

~~2. If the commissioner proposes to grant a variance request submitted pursuant to subsection D of this section, the applicant shall be notified in writing of this decision. Such notice shall identify the variance, person, property, or sewage handling or disposal facility covered, and shall specify the period of time for which the variance will be effective and any conditions imposed pursuant to issuing the variance. The effective date of a variance shall be 15 calendar days following its issuance.~~

~~3. No person may challenge the terms set forth in the variance after 30 calendar days have elapsed from the date of issuance.~~

~~H. All variances granted are nontransferable. A variance may be attached to a person's certification to act as an AOSE or to a permit or other approval document. A variance is revoked when the permit or other approval or AOSE certification to which it is attached is revoked.~~

~~I. Any request for a variance must be made by the applicant in writing and received by the department prior to the denial of a certification for authorization as an AOSE, or within 30 days after such denial.~~

12VAC5-615-180. Case decisions. (Repealed.)

~~The agency may make case decisions via informal hearings or by agreement. An informal hearing, for purposes of this chapter, is conducted by a department employee designated by the commissioner. The agency shall provide the named party with reasonable notice of violations and administrative hearings, the right to be present at administrative hearings or by counsel or other qualified representative before the agency or its subordinates for the informal presentation of factual data, argument or proof in connection with any case. A named party shall also have the right to (i) have notice of any contrary fact basis or information in the possession of the agency which can be relied upon in making an adverse decision, (ii) receive a prompt decision of any application for a permit, benefit or renewal, and (iii) to be informed, briefly and generally, in writing, of the factual basis or procedural basis for an adverse decision in any case. The commissioner's designee shall review the facts presented and based on those facts render a case decision. Such case decision shall be the final administrative decision of the agency. The agency may, but is not required to, have a verbatim record made of the hearing proceedings. When a verbatim record is made at the direction of the agency, it shall constitute the official record of the proceedings. A written copy of the decision and the basis for the decision shall be sent to the named party in a timely manner in accordance with the Administrative Process Act unless the parties mutually agree to a later date in order to allow the department to evaluate additional evidence. Only an aggrieved named party to a case decision may appeal an adverse decision to the appropriate circuit court pursuant to § 2.2-4026 of the Code of Virginia and Part Two A of the Rules of the Supreme Court of Virginia.~~

12VAC5-615-190. (Reserved.) (Repealed.)

12VAC5-615-200. Appeal. (Repealed.)

~~A. Any appeal from a denial of an application for certification as an AOSE must be made by the applicant in writing and received by the department within 30 days of the date of receipt of notice of the denial.~~

~~B. Any request for hearing on the denial of an application for a variance pursuant to 12VAC5-615-170 must be made by the applicant in writing and received within 30 days of receipt of the notice.~~

~~C. In the event a person applies for a variance within the 30-day period provided by 12VAC5-615-170 I, the date for appealing the denial of the certification pursuant to subsection B of this section shall commence from the date on which the department acts on the request for a variance.~~

~~D. Pursuant to the Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia), an aggrieved named party may appeal an adverse case decision to an appropriate circuit court.~~

Part III

AOSE Certification Requirements

12VAC5-615-210. Persons holding a valid certificate on July 1, 2002. (Repealed.)

~~Any person holding a valid certificate as an AOSE on July 1, 2002, may apply for renewal in accordance with 12VAC5-615-270. Such individuals will not be required to pass the written and field tests.~~

12VAC5-615-220. (Reserved.) (Repealed.)

12VAC5-615-230. Application requirements. (Repealed.)

~~Any person may apply to the department for certification as an AOSE by filing a complete application in a form approved by the division, by paying the application fee in accordance with 12VAC5-615-250, and by submitting three professional references from an AOSE, a PE, or a Virginia Certified Professional Soil Scientist. In addition, all applicants for certification as an AOSE shall pass the AOSE written and field tests and meet at least one of the requirements below:~~

~~1. A person holding a current certificate as a Virginia Certified Professional Soil Scientist from the Board of Professional Soil Scientists shall be eligible to receive a certificate as an AOSE upon passing the AOSE written and field tests.~~

~~2. A person who demonstrates to the satisfaction of the division that he has at least four years of full-time experience evaluating site and soil conditions for onsite sewage systems in Virginia in accordance with the Board of Health's Sewage Handling and Disposal Regulations (12VAC5-610) and a related four-year college degree such as science or engineering shall be eligible to receive a certificate as an AOSE provided:~~

~~a. The applicant successfully completes a training course or courses designated and approved by the division; and~~

~~b. The applicant successfully completes the AOSE written and field tests approved by the division.~~

~~3. A person who demonstrates to the satisfaction of the division that he has at least six years of full-time experience evaluating site and soil conditions for onsite sewage systems in Virginia in accordance with the Board of Health's Sewage Handling and Disposal Regulations (12VAC5-610) and a two- or four-year college degree shall be eligible to receive a certificate as an AOSE provided:~~

~~a. The applicant successfully completes a training course or courses designated and approved by the division;~~

~~b. The applicant passes the AOSE written and field tests; and~~

~~c. The applicant provides a written statement signed by a current or former supervisor or an AOSE with a current certification stating that the person is sufficiently experienced to become an AOSE.~~

~~4. A person who demonstrates to the satisfaction of the division that he has at least eight years of experience evaluating site and soil conditions for onsite sewage systems in Virginia in accordance with the Board of Health's Sewage Handling and Disposal Regulations (12VAC5-610) shall be eligible to receive a certificate as an AOSE, provided:~~

- ~~a. The applicant successfully completes a training course or courses designated and approved by the division;~~
- ~~b. The applicant successfully completes the AOSE written and field tests approved by the division; and~~
- ~~c. The applicant provides a written statement signed by a current or former supervisor or an AOSE with a current certification stating that the person is sufficiently experienced to become an AOSE.~~

~~12VAC5-615-240. Disposition of AOSE applications. (Repealed.)~~

~~A. Upon satisfactory completion of the requirements of 12VAC5-615-230, the commissioner shall issue to the applicant a certification as an AOSE.~~

~~B. Applicants who have been found ineligible for any reason may request further consideration by submitting in writing evidence of additional qualifications, training, or experience. No additional fee will be required provided the requirements for certification are met within one year from the date the original application is received by the department. After such period, a new application shall be required.~~

~~C. If the commissioner finds that the applicant has not met the minimum requirements for certification as an AOSE, the applicant shall be notified in writing, sent by certified mail or hand delivered, and the reasons for denial of the certification shall be stated. The notice to the applicant of denial shall also state that the applicant has the right to a hearing as specified in 12VAC5-615-180 to challenge the certification denial. Any request for a hearing must be received by the commissioner within 30 days of the affected party's receipt of written notice of the decision.~~

~~D. Before approving an AOSE application, the commissioner or the commissioner's designee may make further inquiries and investigations with respect to the qualifications of the applicant and all references, etc. to confirm or amplify the information supplied. The commissioner may also require a personal interview with the applicant.~~

~~12VAC5-615-250. Fees for applications, training, and testing. (Repealed.)~~

~~A. The following fees will be assessed. All fees due the department shall be paid by check or money order.~~

~~B. Any person making application for certification as an AOSE or applying for renewal of an AOSE certification shall pay an application fee of \$100.~~

~~C. Those persons taking a department-sponsored training course or courses as specified in 12VAC5-615-230 shall pay the fee for such course as determined by the department. Fees for such course or courses will be based on the department's actual expenses in preparing course materials and conducting the training. This section is not intended to prevent or discourage training courses recognized by the department and offered by entities other than the department. In the case of training that is not directly sponsored by the department, applicants will pay appropriate fees to the sponsoring entity.~~

~~D. Those persons taking written and field tests specified in 12VAC5-615-230 shall pay a fee for such testing as determined by the department based on the actual costs of preparing and administering the tests.~~

12VAC5-615-260. Expiration of AOSE certifications. (Repealed.)

~~AOSE certifications shall expire on June 30 of the second calendar year following the year in which the certificate was issued unless revoked or suspended.~~

12VAC5-615-270. Renewal of expired AOSE certifications. (Repealed.)

~~A. Any person whose AOSE certification has expired in accordance with 12VAC5-615-260 may apply to the department for renewal of that certification. An AOSE may apply for renewal not more than 60 days prior to the expiration of his AOSE certification. If more than six months have elapsed from the expiration of the most recent certification, the department may require an applicant to comply with the provisions of 12VAC5-615-230 and subsection C of this section. Suspended certifications are not renewable until reinstated by the department; revoked certifications cannot be renewed.~~

~~B. Any person making application for renewal of an AOSE certification shall file a complete application in a form approved by the division and pay the application fee in accordance with 12VAC5-615-250.~~

~~C. Any person making application for renewal of an AOSE certification shall provide documentation that he has earned two continuing education units (CEUs) in topics related to the evaluation of site and soil conditions for onsite sewage treatment and disposal and/or the design of onsite sewage treatment and disposal systems during the previous two years. For the purposes of this chapter, a CEU shall be equivalent to 10 contact hours of instruction in subject matter and from sources approved by the division. Each AOSE shall be responsible for maintaining appropriate records of CEUs and for providing proof of satisfactory completion of CEUs to the department.~~

12VAC5-615-280. Site evaluations and design certifications to comply with regulations. (Repealed.)

~~No AOSE/PE shall certify a site evaluation and/or design unless such evaluation and/or design complies with the minimum requirements of the Sewage Handling and Disposal Regulations (12VAC5-610) and such certification and/or design is produced in accordance with this chapter. An AOSE/PE shall make a good faith effort to secure complete, accurate, and timely information regarding site and soil conditions, including relevant factors on adjacent parcels, including but not limited to utilities, water supplies, and other sewage systems. The AOSE/PE shall certify that all information submitted is true and correct to the best of his knowledge and shall be required to be aware of all information in agency files pertaining to the site he is certifying.~~

12VAC5-615-290. Revocation or suspension of AOSE certification. (Repealed.)

~~A. The commissioner may revoke or suspend an AOSE certification for failure to comply with any law administered by the board, commissioner, or department, any regulations of the board, any order of the board or commissioner, or any conditions in a permit.~~

~~B. Actions that may result in revocation or suspension include, but are not limited to, certifying as suitable a site that does not comply with the minimum requirements of the Sewage Handling and Disposal Regulations (12VAC5-610), certifying as suitable a site that has been rejected by the department unless certified pursuant to 12VAC5-615-320, falsifying any document, and any act of misrepresentation made related to AOSE activities.~~

~~C. Whenever the commissioner or the commissioner's designee takes action to revoke or suspend an AOSE certification, there must be an informal fact-finding conference in accordance with 12VAC5-615-180 and proper notice must be given to the affected party.~~

~~1. The AOSE shall be notified in writing. The notice must be hand delivered or sent by certified mail. The notice must provide the factual and legal basis for the contemplated action and must give the date, time, place, and location of the informal fact-finding conference.~~

~~2. The informal fact-finding conference is to be conducted by an employee of the department designated by the commissioner. The conference shall be conducted in accordance with, but is not limited to, the requirements of § 2.2-4019 of the Code of Virginia and may include the creation of a verbatim or summary record of the proceedings.~~

~~3. The commissioner or the commissioner's designee shall render a decision from the informal fact-finding conference in a timely manner in accordance with § 2.2-4021 of the Code of Virginia. Such decisions shall constitute the final administrative decision and may be appealed in accordance with 12VAC5-615-180.~~

~~4. When action is taken to suspend an AOSE certification, that suspension shall be for a specified period of time. Remedial actions including, but not limited to, additional training courses, additional testing, and reevaluation of a site and/or redesign of an onsite sewage system may be specified as conditions of any suspension.~~

~~12VAC5-615-300. Application for reinstatement of AOSE certification. (Repealed.)~~

~~Any person whose AOSE certification has been revoked pursuant to 12VAC5-615-290 may apply to the department for reinstatement as an AOSE no sooner than 12 months after the effective date of the revocation. Any person making application for reinstatement of an AOSE certification pursuant to this section shall:~~

~~1. File a complete application in a form approved by the division and pay the application fee in accordance with 12VAC5-615-250. The AOSE application for reinstatement must also include a certification that the AOSE has not engaged in AOSE activities after his certification was revoked; and~~

~~2. Provide documentation that the applicant has satisfactorily completed any remedial actions required as a result of the revocation. Remedial actions including, but not limited to, additional training courses, additional testing, and reevaluation of a site and/or redesign of an onsite sewage system may be specified as conditions for reinstatement.~~

~~12VAC5-615-310. Appeal of suspension or revocation. (Repealed.)~~

~~In accordance with 12VAC5-615-180, any person whose AOSE certification has been suspended or revoked shall have the right to review by the appropriate circuit court.~~

~~12VAC5-615-320. AOSE/PE cannot certify a site that has been previously denied by the department. (Repealed.)~~

~~No AOSE/PE shall certify a site as meeting the minimum requirements of the Sewage Handling and Disposal Regulations (12VAC5-610) if the department has previously denied that site.~~

~~Exceptions:~~

~~1. An AOSE/PE may certify a previously denied site as meeting the requirements of the Sewage Handling and Disposal Regulations if the board's regulations or policies have changed in such a way that the site is suitable for a system that was not allowed by the board's prior regulations or policies at the time of the original denial; and~~

~~2. An AOSE/PE may certify as meeting the requirements of the Sewage Handling and Disposal Regulations a site located on the same property as a site previously denied by the department if the site being certified is not the same one that was denied by the department.~~

~~12VAC5-615-330. Change of address or other status. (Repealed.)~~

~~The AOSE shall be responsible for notifying the commissioner of any change in address, business partnership or affiliation, or any other status that affects his standing as an AOSE. Such notice must be in writing and must be delivered to the commissioner as soon as practicable after the effective date of the change.~~

Part IV
Procedures and Reports

12VAC5-615-340. Application processing. (Repealed.)

~~A. All applications that are submitted with evaluation and design documentation by an AOSE/PE shall contain the minimum required information necessary to complete the application and shall be accompanied by the required fees. Such applications when submitted for residential development will be processed within specified time limits in 12VAC5-615-80.~~

~~B. When such an application is found to be complete an approval may be issued without field review.~~

~~C. Applications that are found to be incomplete or defective in any manner shall be denied and the owner and AOSE/PE will be notified of deficiencies. If an application has been denied, the owner or his agent may submit a new application to correct the deficiency or deficiencies contained in his first application. If the application is received within 90 days, the department will waive all state fees associated with the new application. This waiver may be granted not more than once per site.~~

12VAC5-615-350. Documentation requirements for AOSE/PE reports. (Repealed.)

~~A. Applications may be submitted for a single lot construction permit, a single lot certification letter, multiple lot certification letters, and subdivision reviews. The minimum requirements for each type of application are listed below. Additional information may be submitted when an AOSE/PE believes it may be in the interest of public health, the environment, or the client.~~

~~B. A complete application for a construction permit shall consist of the following:~~

- ~~1. A complete application for a Sewage Disposal System Construction Permit (CHS 200), signed, dated, and with all pertinent information supplied;~~
- ~~2. The appropriate fee for the application as per the Code of Virginia;~~
- ~~3. A site evaluation report in accordance with 12VAC5-615-360 and the department's policies;~~
- ~~4. A proposed well site (when a private water supply is proposed);~~
- ~~5. Construction drawings and specifications for the recommended system in accordance with 12VAC5-615-380 and the department's policies; and~~
- ~~6. A statement in accordance with 12VAC5-615-70, 12VAC5-615-280, and 12VAC5-615-380 C certifying that the site and soil conditions and design conform with the Sewage Handling and Disposal Regulations (12VAC5-610).~~

~~C. A complete application for certification letter differs from an equivalent application for a construction permit in that a complete design is not required. It is, however, necessary to assure a system meeting the requirements specified on the application can be supported by the proposed site. Therefore, the requirements for a single certification letter are:~~

- ~~1. A complete application for a Sewage Disposal System Construction Permit (CHS 200), signed, dated, and with all pertinent information supplied;~~
- ~~2. The appropriate fee for the application;~~
- ~~3. A site evaluation report in accordance with 12VAC5-615-360 and the department's policies;~~
- ~~4. A proposed well site (when a private water supply is proposed);~~
- ~~5. An abbreviated system design for the type of system proposed in a form approved by the division; and~~

~~6. A statement in accordance with 12VAC5-615-70, 12VAC5-615-280, and 12VAC5-615-380 C certifying that the site and soil conditions and design conform with the Sewage Handling and Disposal Regulations.~~

~~D. Applications for multiple certification letters may be used as the method for reviewing proposed subdivisions in localities that do not require the local health department to review proposed subdivisions. Each application submitted must contain the following:~~

- ~~1. Complete applications for Sewage Disposal System Construction Permits (CHS 200), signed, dated, and with all pertinent information supplied;~~
- ~~2. The appropriate fee for each site to be reviewed;~~
- ~~3. Site evaluation reports in accordance with 12VAC5-615-360 and the department's policies;~~
- ~~4. Proposed well sites (when a private water supply is proposed);~~
- ~~5. Abbreviated system designs for the type of system proposed in a form approved by the division;~~
- ~~6. A statement in accordance with 12VAC5-615-70, 12VAC5-615-280, and 12VAC5-615-380 C for each proposed site certifying that the site and soil conditions and design conform with the Sewage Handling and Disposal Regulations; and~~
- ~~7. If the multiple certification letters are intended to establish the suitability of soils for a proposed subdivision, the information specified in subdivision E 3 c of this section is to be submitted by the applicant.~~

~~E. Section 32.1-163.5 of the Code of Virginia provides that the department shall accept private site evaluations and designs, for subdivision review for residential development, designed and certified by a licensed professional engineer in consultation with an AOSE or by an AOSE. The following shall apply to all requests for subdivision review and approval:~~

- ~~1. All requests for subdivision reviews must be submitted to the local health department with a request from the local government entity specifically asking for review of the proposed lots for onsite wastewater system approvals pursuant to the local ordinance governing such proposals (cite reference to local ordinance).~~
- ~~2. In localities where there is no subdivision ordinance, subdivisions should be handled using applications for multiple certification letters (see subsection D of this section).~~
- ~~3. All requests submitted by local governments for review and approval must contain the following minimum information:
 - ~~a. A letter requesting subdivision review and certification by the locality that the subdivision package has been determined to be complete.~~
 - ~~b. Individual site and soil evaluation reports in accordance with 12VAC5-615-360 for each proposed lot in the subdivision. These individual reports must be identified as to the subdivision and the proposed lot number.~~
 - ~~c. A preliminary subdivision plat that provides the information specified in 12VAC5-610-360. This includes all information required by the local ordinance, and includes the following if not required by local ordinance: proposed streets, utilities, storm drainage, water supplies, easements, lot lines, existing and proposed water supplies for each proposed lot and within 200 feet of any proposed or existing sewage system, and original topographic contour lines by detail survey. The plat shall be prepared according to suggested scales and contour intervals contained in Appendix L of the Sewage Handling and Disposal Regulations.~~~~
- ~~4. Abbreviated system designs in a form approved by the division for the type of system proposed.~~

5. A statement in accordance with 12VAC5-615-70, 12VAC5-615-280, and 12VAC5-615-380 C for each proposed site certifying that the site and soil conditions and design conform to the Sewage Handling and Disposal Regulations.

Table 2
Types of Applications

	Single-Lot Construction Permit	Single-Lot Certification Letter	Multiple-Lot Certification Letters	Subdivision
Application	X	X	X	
Fee	X	X	X	
Site Evaluation	X	X	X	X
Proposed Well Site	X	X	X	X
Construction Drawings	X			
Construction Specifications	X			
Design Calculations	X			
Abbreviated Design Calculations		X	X	X
Certification of Compliance	X	X	X	X
Local Government Request				X
Preliminary Subdivision Plat			X (as necessary)	X
Max. Time to Process	15 Working Days	20 Working Days	60 Days	60 Days
Rec. Time to Process	5 Working Days	10 Working Days	45 Days	45 Days

12VAC5-615-360. Site evaluation reports. (Repealed.)

All site evaluation reports submitted to the department shall be in a form approved by the division, shall contain the minimum information specified by the division, and shall be certified as fully complying with the Sewage Handling and Disposal Regulations (12VAC5-610). A statement approved by the department shall be used to certify that a site evaluation and/or design complies with the board's regulations for onsite sewage systems. No approval shall be granted pursuant to this chapter for any site that has not been certified by an AOSE/PE. Additional information required by local ordinances (i.e., Chesapeake Bay requirements) may be included with an AOSE submission in order to facilitate processing the application. However, for the purposes of an AOSE/PE certifying that an evaluation and/or design complies with the Sewage Handling and Disposal Regulations and for "deemed approval" only those requirements contained in the Board of Health's regulations are considered to apply unless a local government has requested its health department to implement a more restrictive local ordinance

~~in accordance with 12VAC5-615-60 B. Wastewater system sites proposed for use must be defined in a manner that allows them to be identified with an accuracy and precision of three feet or less.~~

~~12VAC5-615-370. Access to information. (Repealed.)~~

~~When requesting information from the department's official records, an AOSE/PE shall clearly and accurately identify property locations, using tax map numbers when possible, and specify the information requested on a form approved by the division. The department shall, as resources permit, provide the requested information in as timely a manner as possible, and shall in all cases comply with the Virginia Freedom of Information Act (§ 2.2-3700 et seq. of the Code of Virginia).~~

~~12VAC5-615-380. System design requirements, construction drawings, certification statement, and site denial. (Repealed.)~~

~~A. Any application for a construction permit accompanied by an AOSE/PE certification shall contain construction drawings, plans, and specifications in a form approved by the division sufficient to allow the system to be installed by the contractor in accordance with the Sewage Handling and Disposal Regulations (12VAC5-610) and the proposed permit. When a system is sufficiently complex to require the practice of engineering, a professional engineer shall seal the plans and specifications. The design information necessary to issue a sewage disposal system construction permit includes:~~

- ~~1. All the information required on form CHS 202 A and B (see Forms, Sewage Handling and Disposal Regulations);~~
- ~~2. System construction drawings containing the minimum information as determined by the division;~~
- ~~3. Plans and specifications sufficient to allow the successful installation of a system when the application is for a construction permit;~~
- ~~4. Design calculations used to establish the design parameters of the recommended system, including the minimum information deemed appropriate by the division; and~~
- ~~5. Three copies of the construction drawings and specifications.~~

~~Subdivisions 1 through 5 of this subsection establish the minimum information necessary to issue a construction permit. Additional information may be necessary depending on the specific site. Applications that do not contain this minimum data set shall be denied.~~

~~B. Certification letters and subdivision submittals do not normally require a complete design with specifications. Prior to applying for a certification letter or preparing a package for subdivision review an AOSE/PE shall conduct evaluations and provide documentation sufficient to verify that specific and sufficient area is available for the proposed system, including setback distances, and that the soils are capable of supporting the proposed design flow.~~

~~C. All site evaluation work submitted in support of a construction permit, certification letter, or subdivision review shall be in the form specified above and shall be certified as fully complying with the Sewage Handling and Disposal Regulations. A certification statement approved by the department shall be used to make such certification.~~

~~D. In some cases an owner may desire to submit an application with a certification by an AOSE/PE stating that a site does not comply with the minimum requirements of the Sewage Handling and Disposal Regulations. In such cases an AOSE/PE may submit the appropriate reports and information as required by this chapter and the department shall process the application in accordance with the procedures for processing applications for permits and letters. Instead of issuing a permit or letter, the department will issue a denial letter.~~

12VAC5-615-390. Professional courtesy review. (Repealed.)

~~A. Any AOSE/PE may request a site-specific professional courtesy review, prior to the submission of an application for a construction permit or certification letter, where he has determined that the site and soil conditions in a specific area proposed for an onsite sewage system are marginal or where he has not been able to determine with certainty that the conditions comply with the requirements of the Sewage Handling and Disposal Regulations (12VAC5-610). A request for review shall be in a form approved by the division and shall include written authorization from the owner giving the department permission to enter the property and a complete evaluation report as described in 12VAC5-615-360, with the exception of the certification statement. In place of the certification statement required under 12VAC5-615-360 the AOSE/PE shall provide a brief description of the particular site and soil features or characteristics that the AOSE/PE has identified as marginal or questionable and which form the basis for the request for review and a preliminary opinion as to whether the site meets the requirements of the Sewage Handling and Disposal Regulations. Professional courtesy reviews are not intended to replace the AOSE/PE's responsibility to exercise professional judgement in determining whether a site meets the minimum requirements of the Sewage Handling and Disposal Regulations. The department is not required to perform such reviews but may do so in its sole discretion.~~

~~B. In accordance with 12VAC5-615-70 B 3, the department may limit professional courtesy reviews for construction permits and certification letters. Whenever the department determines that it will not provide a requested review, it shall notify the AOSE/PE and the applicant in writing within a reasonable time. When the department elects to provide professional courtesy reviews, it shall do so in a reasonable time.~~

~~C. Any AOSE/PE may request a general (not site-specific) professional courtesy review, prior to the submission of a proposal for subdivision approval to a local government entity, where he has determined that the site and soil conditions in an area proposed for a subdivision with onsite sewage systems are marginal or where he has not been able to determine with certainty that the conditions comply with the requirements of the Sewage Handling and Disposal Regulations. A request for review shall be in a form approved by the division and shall include written authorization from the owner giving the department permission to enter the property and a summary evaluation report that generally comports with the requirements of 12VAC5-615-360, with the exception of the certification statement. In place of the certification statement required under 12VAC5-615-360, the AOSE/PE shall provide a brief description of the particular site and soil features or characteristics that the AOSE/PE has identified as marginal or questionable and which form the basis for the request for review and a preliminary opinion as to whether the area generally meets the requirements of the Sewage Handling and Disposal Regulations. Such requests are intended to allow the department to consult with AOSE/PEs in a nonsite-specific manner where the local health department's knowledge of general site and soil conditions and the requirements of the Sewage Handling and Disposal Regulations can assist the AOSE/PE and local governments in the planning stages of subdivision approval. Professional courtesy reviews are not intended to replace the AOSE/PE's responsibility to exercise professional judgment in determining whether a specific site meets the minimum requirements of the Sewage Handling and Disposal Regulations.~~

~~D. In accordance with 12VAC5-615-70 B 4, the department may limit professional courtesy reviews for proposed subdivisions. Whenever the department determines that it will not provide a requested review, it shall notify the AOSE/PE and the applicant in writing within a reasonable time. When the department elects to provide professional courtesy reviews, it shall do so in a reasonable time.~~

~~E. Professional courtesy reviews shall not be construed as case decisions.~~

12VAC5-615-400. Field checks. (Repealed.)

~~The department is not required to perform a field check of AOSE/PE evaluations and designs prior to issuing a permit, certification letter, or subdivision approval; however, it may conduct a field analysis as it deems necessary to protect public health and the environment. Whenever the department performs such field checks, it shall make a record of the results of the analysis in a form approved by the division. The department shall mail a copy of such report to the owner and to the AOSE/PE at the address provided by the AOSE/PE with the evaluation and design reports or at the address supplied to the department with the AOSE's application for AOSE certification or renewal of certification.~~

~~Part V~~

~~Conflict of Interest and Disclosure~~

12VAC5-615-410. Responsibility to the public. (Repealed.)

~~The primary obligation of the AOSE is to the public. If the judgment of the AOSE is overruled under circumstances when the safety, health, property and welfare of the public are endangered, the AOSE shall inform the employer or client of the possible consequences and notify appropriate authorities.~~

12VAC5-615-420. Public statements. (Repealed.)

~~A. The AOSE shall be truthful in all AOSE matters.~~

~~B. When serving as an expert or technical witness, the AOSE shall express an opinion only when it is based on an adequate knowledge of the facts and in areas on which he is competent to testify. Except when appearing as an expert witness in court or an administrative proceeding where the parties are represented by counsel, the AOSE shall issue no statements, reports, criticisms, or arguments on matters relating to AOSE practice that are inspired or paid for by an interested party or parties, unless the AOSE has prefaced the comment by disclosing the identities of the party or parties on whose behalf the AOSE is speaking and by revealing any self-interest.~~

~~C. An AOSE shall not knowingly make a materially false statement or fail deliberately to disclose a material fact requested in connection with his application for licensure, certification, registration, renewal or reinstatement.~~

~~D. An AOSE shall not knowingly make a materially false statement or fail to deliberately disclose a material fact requested in connection with an application submitted to the department by any other individual or business entity for licensure, certification, registration, renewal or reinstatement.~~

12VAC5-615-430. Conflicts of interest. (Repealed.)

~~A. The AOSE shall promptly and fully inform an employer or client of any business association, interest, or circumstance or circumstances that may influence the AOSE's judgment or the quality of service.~~

~~B. The AOSE shall not accept compensation, financial or otherwise, from more than one party for services on or pertaining to the same project, unless the circumstances are fully disclosed in writing to all parties of current interest and he obtains the parties' written approval.~~

~~C. The AOSE shall neither solicit nor accept financial or other valuable consideration from suppliers for specifying their products or services.~~

~~D. The AOSE shall not solicit or accept gratuities, directly or indirectly, from contractors, their agents, or other parties dealing with a client or employer in connection with work for which the AOSE is responsible.~~

12VAC5-615-440. Solicitation of work. (Repealed.)

~~In the course of soliciting work:~~

~~1. The AOSE shall not bribe.~~

~~2. The AOSE shall not falsify or permit misrepresentation of the AOSE's work or an associate's academic or AOSE qualifications, nor shall the AOSE misrepresent the degree of responsibility for prior assignments. Materials used in the solicitation of employment shall not misrepresent facts concerning employers, employees, associates, joint ventures or past accomplishments of any kind.~~

12VAC5-615-450. Competency for assignments. (Repealed.)

~~An AOSE shall not misrepresent to a prospective or existing client or employer his qualifications and the scope of his responsibility in connection with work for which he is claiming credit.~~

12VAC5-615-460. AOSE responsibility. (Repealed.)

~~A. The AOSE shall not knowingly associate in a business venture with, or permit the use of the AOSE's name or firm name by, any person or firm where there is reason to believe that person or firm is engaging in activity of a fraudulent or dishonest nature or is violating any law or regulations of the department.~~

~~B. An AOSE who has direct knowledge that another individual or firm may be violating any of these provisions, or the provisions of Article 1 (§ 32.1-163 et seq.) of Chapter 6 of Title 32.1 of the Code of Virginia, shall immediately inform the commissioner in writing and shall cooperate in furnishing any further information or assistance that may be required.~~

~~C. The AOSE shall, upon request or demand, produce to the commissioner, or any of his agents, any plan, document, book, record or copy thereof in his possession concerning a transaction covered by this chapter, and shall cooperate in the investigation of a complaint filed with the commissioner against a certificate holder.~~

~~D. Except as provided in subsection E of this section, an AOSE shall not utilize the evaluations, design, drawings or work of another AOSE without the knowledge and written consent of the AOSE or organization of ownership that originated the design, drawings or work. In the event that the AOSE who generated the original document is no longer employed by the firm retaining ownership of the original documents or is deceased, another AOSE who is a partner or officer in the firm retaining ownership of the original documents may authorize utilization of the original documents by another AOSE or firm. This fact must be disclosed to the department when submitting applications supported by AOSE materials and certifications.~~

~~E. The information contained in Department of Health records, on which a decision to approve or deny a site has been made, shall be considered to be in the public domain and may be utilized by an AOSE without permission.~~

~~F. An AOSE who relies on information in Department of Health files or has received permission to modify or otherwise utilize the evaluation, design, drawings or work of another AOSE pursuant to subsection D or E of this section may certify that work only after a thorough review of the evaluation, design, drawings or work and after he determines that he is willing to assume full responsibility for all design, drawings or work on which he relies for his opinion.~~

~~G. The information contained in recorded plats or surveys may be utilized by an AOSE without permission. If modifications are to be made to the plats or surveys, such modifications shall only be made by a person or persons authorized pursuant to Chapter 4 (§ 54.1-400 et seq.) of Title 54.1 and Title 13.1 of the Code of Virginia to make such changes or modifications to the plats or surveys.~~

12VAC5-615-470. Good standing in other jurisdictions. (Repealed.)

~~An AOSE licensed or certified to practice site and soil evaluations or to design onsite wastewater systems in other jurisdictions shall be in good standing in every jurisdiction where licensed or certified, and shall not have had a license or certificate suspended, revoked or~~

~~surrendered in connection with a disciplinary action or have been the subject of discipline in another jurisdiction.~~

~~FORMS (12VAC5-615)~~

~~Application to Become an Authorized Onsite Soil Evaluator (eff. 9/01).~~

~~Renewal Application Authorized Onsite Soil Evaluator (eff. 9/01).~~

~~Continuing Education Classes attended in the previous two years (eff. 7/02).~~