
COMMONWEALTH OF VIRGINIA
BOARD FOR WATERWORKS AND WASTEWATER WORKS
OPERATORS AND ONSITE SEWAGE SYSTEM PROFESSIONALS



**REGULATIONS GOVERNING
WATERWORKS AND WASTEWATER
WORKS OPERATORS AND ONSITE
SEWAGE SYSTEM PROFESSIONALS**

Last Updated October 1, 2015

STATUTES
Title 54.1, Chapter 23



Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400

Richmond, VA 23233

(804) 367-8500

www.dpor.virginia.gov

**NOTICE
SUMMARY OF SIGNIFICANT CHANGES**

Included in this document are relevant excerpts from the Virginia Administrative Code. Please note that the Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals is responsible for promulgating regulations in accordance with the Administrative Process Act (§ 2.2-4000 et seq.), and the Virginia Code Commission is responsible for compiling and codifying all of the administration regulations of state agencies into the Virginia Administrative Code.

It is your responsibility to stay informed and follow all regulations and statutes governing your profession or occupation. As a regulant of the Board, you should read and become familiar with all regulations applicable to your profession or occupation. You can stay informed of regulatory actions that may result in changes to the regulations at Virginia Regulatory Town Hall (www.townhall.virginia.gov).

This document is a complete, edited (unofficial) copy of the Waterworks and Wastewater Works Operators Regulations (18 VAC 160-20). Please refer to the Virginia Administrative Code for an official copy of the regulations applicable to your profession or occupation. You can access the Virginia Administrative Code online at <http://law.lis.virginia.gov/admincode>.

The following is a brief summary of a significant revision to the regulations effective October 1, 2015, but may not include all changes that were made to the Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals Regulations:

The definitions of “direct supervisor” and “direct supervision” were amended to clarify that licensees may supervise the work of unlicensed individuals who are not seeking licensure. In addition, the requirements for conventional onsite sewage system installer licensure were revised to reflect current procedures.

STATEMENT OF PURPOSE

This document contains the information you will need to obtain your license. The law that governs your profession is found in the *Code of Virginia*, 1950, as amended, in Title 54.1, Chapter 23. That law permits the Department of Professional and Occupational Regulation to issue regulations that tell you more about what is expected of you in your profession. This document contains a copy of the law and regulations that you will need to know and obey to obtain and keep your license. **BE SURE YOU READ AND UNDERSTAND THE STANDARDS OF PRACTICE AND CONDUCT. YOUR FAILURE TO OBEY THESE STANDARDS COULD RESULT IN A MONETARY PENALTY OR THE LOSS OF YOUR LICENSE.**

It is the goal of the Department of Professional and Occupational Regulation to provide you with the information you need to comply with the law and regulations. If you have a question and cannot find the answer to it in this document, please write to:

Virginia Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals
Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400
Richmond, Virginia 23233

You may also call the Agency at (804) 367-8500 or (804) 367-8595 or e-mail WaterWasteOper@dpor.virginia.gov.

TABLE OF CONTENTS

REGULATIONS:

Part I Definitions

18VAC160-20-10. Definitions.....	1
----------------------------------	---

Part II License Requirements

18VAC160-20-74. License Required.....	7
---------------------------------------	---

18VAC160-20-76. Application.....	8
----------------------------------	---

18VAC160-20-80. Individuals Certified or Licensed in Other Jurisdictions.....	10
---	----

18VAC160-20-82. Interim Licensure of Certain Individuals Employed by the Virginia Department of Health (VDH).....	10
--	----

18VAC160-20-84. Interim License, Onsite Sewage System Installer and Operator.....	11
---	----

18VAC160-20-90. Qualifications for Licensure of Waterworks Operators and Wastewater Works Operators.....	12
---	----

18VAC160-20-94. Qualifications for Licensure – Individuals Holding Authorized Onsite Soil Evaluator Certifications.....	17
--	----

18VAC160-20-95. Provisional Licensure – Nonclassified Facility Operation Experience Only.....	17
--	----

18VAC160-20-96. Qualifications for Licensure – Onsite Soil Evaluators.....	18
--	----

18VAC160-20-97. Qualifications for Licensure – Onsite Sewage System Installers.....	21
---	----

18VAC160-20-98. Qualifications for Licensure – Onsite Sewage System Operators.....	24
--	----

18VAC160-20-102. Fees.....	26
----------------------------	----

18VAC160-20-104. Maintenance of License.....	27
--	----

Part III Renewal

18VAC160-20-106. Renewal.....	28
-------------------------------	----

18VAC160-20-109. Continuing Professional Education (CPE).....	29
---	----

Part IV Classification Requirements

18VAC160-20-120. Waterworks..... 32

18VAC160-20-130. Wastewater Works..... 34

Part V Standards of Practice

18VAC160-20-140. Discipline..... 37

18VAC160-20-145. Conflicts of Interest..... 38

Part VI Approval of Training

18VAC160-20-150. Approval of Training..... 39

EXCERPTS FROM THE *CODE OF VIRGINIA*:

Chapter 23 of Title 54.1 (§§ 54.1-2300 through 54.1-2302).....42

PART I.

DEFINITIONS

18VAC160-20-10. Definitions.

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

"Alternative onsite sewage system" means a treatment works that is not a conventional onsite sewage system and does not result in a point source discharge.

"Alternative onsite sewage system installer" means an individual licensed by the board to construct, install, and repair conventional and alternative onsite sewage systems.

"Alternative onsite sewage system operator" means an individual licensed by the board to operate and maintain conventional and alternative onsite sewage systems.

"Alternative onsite soil evaluator" means an individual licensed by the board to evaluate soils and soil properties in relationship to the effect of these properties on the use and management of these soils as the locations for conventional and alternative onsite sewage systems, to certify in accordance with applicable state regulations and local ordinances that sites are suitable for conventional and alternative onsite sewage systems, and to design conventional and alternative onsite sewage systems suitable for the soils.

"Authorized onsite soil evaluator" or "AOSE" means an individual holding an authorized onsite soil evaluator certification issued by the Virginia Department of Health that was valid on June 30, 2009.

"Board" means the Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals or any successor agency.

"Category" means waterworks operator, wastewater works operator, onsite soil evaluator, onsite sewage system installer, and onsite sewage system operator.

"Classification" means the divisions within each category of waterworks and wastewater works operators' licenses into classes where Class "1" represents the highest classification.

"Classified facility" means a waterworks that has been granted a classification by the Virginia Department of Health or a wastewater works that has been granted a classification by the Virginia Department of Environmental Quality.

"Contact hour" means 50 minutes of participation in a structured training activity.

"Continuing Professional Education (CPE)" means participation in a structured training activity that enables a licensee to maintain and increase the competence required to assure the public's protection.

"Conventional onsite sewage system" means a treatment works consisting of one or more septic tanks with gravity, pumped, or siphoned conveyance to a gravity distributed subsurface drain field.

"Conventional onsite sewage system installer" means an individual licensed to construct, install, and repair conventional onsite sewage systems.

"Conventional onsite sewage system operator" means an individual licensed by the board to operate and maintain a conventional onsite sewage system.

"Conventional onsite soil evaluator" means an individual licensed by the board 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 conventional and alternative onsite sewage systems, to certify in accordance with applicable state regulations and local ordinances that sites are suitable for conventional and alternative onsite sewage systems, and to design conventional onsite sewage systems suitable for the soils.

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

"Direct supervision" means being responsible for the compliance with this chapter by any unlicensed individual who is engaged in activities requiring an operator, installer, or evaluator license.

"Direct supervisor" means a licensed operator, installer, or evaluator who undertakes the supervision of an unlicensed individual engaged in activities requiring a license. The direct supervisor shall be responsible for the unlicensed individual's full compliance with this chapter.

"Distance learning" means participation in a training activity, with or without interaction with an instructor, that utilizes DVDs, videos, or other audio/visual materials, or is computer-based. Documentation of distance learning must meet the requirements of 18VAC160-20-109 D.

"Experience" means time spent learning how to physically and theoretically operate the waterworks, wastewater works, or onsite sewage system as an operator-in-training or time spent operating a waterworks or wastewater works for which the operator is currently licensed for the purpose of obtaining the necessary competence to qualify for a specific license. Experience also means the time spent under the direct supervision of an authorized onsite soil evaluator, onsite soil evaluator licensee, onsite sewage system installer licensee or onsite site sewage system operator licensee for the purpose of obtaining the necessary competence to qualify for a specific license.

"Interim license" means a method of regulation whereby the board authorizes an unlicensed individual to engage in activities requiring a specific license provided for in this chapter for a limited time to obtain the necessary competence to qualify for that specific license.

"Interim licensee" means an individual holding a valid interim license.

"Licensed operator" means an operator with a license in the category of onsite sewage systems operator, waterworks operator, or wastewater works operator. For waterworks operators and wastewater works operators, the license classification must be equal to or higher than the classification of the waterworks or wastewater works being operated.

"Licensee" means an individual holding a valid license issued by the board.

"Licensure" means a method of regulation whereby the Commonwealth, through the issuance of a license, authorizes a person possessing the character and minimum skills to engage in the practice of a profession or occupation that is unlawful to practice without a license.

"Maintenance" or "maintain" means performing adjustments to equipment and controls and in-kind replacement of normal wear and tear parts such as light bulbs, fuses, filters, pumps, motors, or other like components. Maintenance includes pumping the tanks or cleaning the building sewer on a periodic basis. Maintenance shall not include replacement of tanks, drain field piping, distribution boxes, or work requiring a construction permit and a licensed onsite sewage system installer.

"Nonclassified facility" means a facility located in Virginia that has not been classified by the Virginia Department of Health or a facility that has not been classified by the Virginia Department of Environmental Quality.

"Onsite sewage system" means a conventional onsite sewage system or an alternative onsite sewage system.

"Operate" means any act of an individual that may impact on the finished water quality at a waterworks, the plant effluent at a wastewater works, or the effluent at an onsite sewage system.

"Operating staff" means individuals employed or appointed by an owner to work at a waterworks or wastewater works.

"Operator" means any individual employed or appointed by any owner, and who is designated by such owner to be the person in responsible charge, such as a supervisor, a shift operator, or a substitute in charge, and whose duties include testing or evaluation to control waterworks, wastewater works operations, or to operate onsite sewage systems. Not included in this definition are superintendents or directors of public works, city engineers, or other municipal or industrial officials whose duties do not include the actual operation or direct supervision of waterworks or wastewater works.

"Operator-in-training" means an individual employed by an owner to work under the direct supervision and direction of an operator holding a valid license in the proper category and classification for the purpose of gaining experience and knowledge in the duties and responsibilities of an operator of a waterworks, wastewater works, or onsite sewage system. An operator-in-training is not an operator.

"Owner" means the Commonwealth of Virginia, or any political subdivision thereof, any public or private institution, corporation, association, or any other entity organized or existing under the laws of this Commonwealth or of any other state or nation, or any person or group of persons acting individually or as a group, who own, propose to own, manage, or maintain waterworks, wastewater works, or onsite sewage systems.

"Provisional licensee" means an individual holding a valid provisional license issued by the board.

"Provisional licensure" or "provisional license" means a method of regulation whereby the Commonwealth recognizes an individual as having met specific standards but who is not authorized to operate a classified facility until he has met the remaining requirements for licensure and has been issued a license.

"Renewal" means continuing the effectiveness of a license for another period of time.

"Responsible charge" means the designation by the owner of any individual to have the duty and the authority to operate a waterworks, wastewater works, or onsite sewage system.

"Sewage" means water-carried and nonwater-carried human excrement, kitchen, laundry, shower, bath or lavatory wastes separately or together with such underground, surface, storm or other water and liquid industrial wastes as may be present from residences, buildings, vehicles, industrial establishments or other places.

"Sewage handler" means any person who removes or contracts to remove and transports by vehicle the contents of any septic tank, sewage treatment plant, privy, holding tank, portable toilet, or other treatment or holding device, or any sewage, septage or sewage sludges and who is permitted under the Sewage Handling and Disposal Regulations (12VAC5-610) or successor regulation.

"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, as defined in the Sewage Handling and Disposal Regulations (12VAC5-610).

"Structured training activity" means a formal educational process designed to permit a participant to learn a given subject or subjects through interaction with an instructor in a course, seminar, conference, or other performance-oriented format, or distance learning.

"Training credit or education credit" means a unit of board-approved training or formal education completed by an individual that may be used to substitute for experience when applying for a license. Formal education used to meet a specific education requirement for license entry cannot also be used as a training credit for experience substitution.

"Transportation" means the vehicular conveyance of sewage, as defined in § 32.1-163 of the Code of Virginia.

"Treatment works" means any 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 ultimate disposal of residues or effluent resulting from such treatment.

"VDH" means Virginia Department of Health.

"Wastewater works" means a system of (i) sewerage systems or sewage treatment works serving more than 400 persons, as set forth in § 62.1-44.18 of the Code of Virginia; (ii) sewerage systems or sewage treatment works serving fewer than 400 persons, as set forth in § 62.1-44.18 of the Code of Virginia, if so certified by the State Water Control Board; and (iii) facilities for discharge into state waters of industrial wastes or other wastes, if certified by the State Water Control Board.

"Wastewater works operator" means any individual employed or appointed by any owner, who is designated by such owner to be the person in responsible charge, such as a supervisor, a shift operator, or a substitute in charge, and whose duties include testing or evaluation to control wastewater works operations. Superintendents or directors of public works, city engineers, or other municipal or industrial officials whose duties do not include the actual operation or direct supervision of wastewater works are not included in this definition.

"Waterworks" means a system that serves piped water for drinking or domestic use to (i) at least 15 connections or (ii) at least 25 of the same individuals for more than six months out of the year. The term waterworks shall include all structures, equipment, and appurtenances used in the storage, collection, purification, treatment and distribution of pure water, except the piping and fixtures inside the building where such water is delivered.

"Waterworks operator" means any individual employed or appointed by any owner, who is designated by such owner to be the person in responsible charge, such as a supervisor, a shift operator, or a substitute in charge, and whose duties include testing or evaluation to control waterworks operations. Superintendents or directors of public works, city engineers, or other municipal or industrial officials whose duties do not include the actual operation or direct supervision of waterworks are not included in this definition.

Historical Notes

Derived from VR675-01-02 § 1.1, eff. November 6, 1989; amended, Virginia Register Volume 7, Issue 15, eff. May 22, 1991; Volume 8, Issue 4, December 18, 1991; Volume 8, Issue 22, eff. August 26, 1992 (was 675-01-03); Volume 17, Issue 9, eff. February 15, 2001; Volume 23, Issue 1, eff. December 1, 2006; Volume 25, Issue 19, eff. July 1, 2009; Volume 26, Issue 6, eff. January 1, 2010, eff. October 1, 2015, Volume 31, Issue 25

18VAC160-20-20 to 18VAC160-20-60. [Repealed]

Historical Notes

Derived from VR675-01-02 §§ 1.2 to 1.6, eff. November 6, 1989; amended, Virginia Register Volume 7, Issue 15, eff. May 22, 1991; Volume 8, Issue 4, December 18, 1991; Volume 8, Issue 22, eff. August 26, 1992 (was 675-01-03); Volume 15, Issue 26, eff. November 1, 1999; repealed, Virginia Register Volume 17, Issue 9, eff. February 15, 2001.

18VAC160-20-70. [Repealed]

Historical Notes

Derived from VR675-01-02 § 2.1, eff. November 6, 1989; amended, Virginia Register Volume 7, Issue 15, eff. May 22, 1991; Volume 8, Issue 4, December 18, 1991; Volume 8, Issue 22, eff. August 26, 1992 (was 675-01-03); repealed, Virginia Register Volume 17, Issue 9, eff. February 15, 2001.

PART II.

LICENSE REQUIREMENTS

18VAC160-20-74. License required.

- A. To serve as an operator of a waterworks or wastewater works, it shall be necessary to hold a valid license issued by the board for a classification equal to or greater than the classification of the waterworks or wastewater works to be operated and in the appropriate category. Issuance of a new classification of license shall void all previously issued licenses in the same category. No licensee shall hold two licenses of different classifications in the same category. The board shall issue a license only after an individual has met all experience and examination requirements as set forth in this chapter.
- B. Provisional licensure shall not authorize an individual to serve as the operator of a classified waterworks or waste waterworks facility.
- C. No individual shall act as a conventional onsite soil evaluator, alternative onsite soil evaluator, conventional onsite sewage system installer, alternative onsite sewage system installer, conventional onsite sewage system operator, or alternative onsite sewage system operator without possessing a valid license issued by the board. Issuance of an alternative license shall void the previously issued conventional license and shall authorize the alternative licensee to perform duties on both conventional and alternative onsite sewage systems consistent with the license category. The board shall issue a license only after an individual has met all experience and examination requirements as set forth in this chapter.
- D. No individual shall act as an alternative onsite sewage system operator of an alternative onsite sewage system that exceeds 10,000 gallons per day design flow without possessing the appropriate class of wastewater works operator license in addition to an alternative onsite sewage system operator license.

Historical Notes

Derived from Virginia Register Volume 17, Issue 9, eff. February 15, 2001; amended, Virginia Register Volume 23, Issue 1, eff. December 1, 2006; Volume 25, Issue 19, eff. July 1, 2009.

18VAC160-20-76. Application.

- A. Application shall be made as follows:
 - 1. Individuals desiring to sit for the board's examination shall apply on forms made available by the board or by an examination vendor approved by the board.
 - 2. Individuals who have passed the board's examination shall apply for a license on forms made available by the board or by an examination vendor approved by the board.
 - 3. All applications shall be completed in accordance with the accompanying instructions and shall have all required documentation attached.
 - 4. The examination fee established in 18VAC160-20-102 shall accompany each examination application and the application fee established in 18VAC160-20-102 shall accompany each license application.
- B. The receipt of an application and the deposit of fees in no way indicates approval of an application.
- C. All fees shall be nonrefundable.
- D. Individual applicants shall be at least 18 years of age.
- E. Each applicant shall disclose his physical home address. A post office box shall not be accepted in lieu of a physical address.
- F. Each applicant for a license shall have passed the appropriate board-approved examination.
- G. Each applicant holding a license as a waterworks operator, wastewater works operator, onsite soil evaluator, onsite sewage system operator, or onsite sewage system installer shall be in good standing in every jurisdiction where licensed; and the applicant shall not have had a license as a waterworks operator, wastewater works operator, onsite soil evaluator, onsite sewage system operator, or onsite sewage system installer that was suspended, revoked or surrendered in connection with a disciplinary action or that has been the subject of disciplinary action in any jurisdiction prior to applying for licensure in Virginia.
- H. Each applicant shall not have been convicted or found guilty, regardless of the manner of adjudication, in any jurisdiction of the United States of any misdemeanor involving lying, cheating, or stealing; of any misdemeanor directly related to the practice of a waterworks operator, a wastewater works operator, an onsite soil evaluator, an onsite sewage system operator, or an onsite sewage system installer; or of any felony, there being no appeal

pending therefrom or the time for appeal having elapsed. Any plea of nolo contendere shall be considered a conviction for the purposes of this subsection. The record of conviction, authenticated in such form as to be admissible in evidence under the laws of the jurisdiction where convicted, shall be admissible as prima facie evidence of such conviction or guilt. Review of prior criminal convictions shall be subject to the provisions of § 54.1-204 of the Code of Virginia.

- I. Applicants for licensure who do not meet the requirements set forth in subsections G and H of this section may be approved for licensure following consideration by the board in accordance with § 54.1-204 of the Code of Virginia.
- J. Examinations. A board-approved examination shall be administered by the board or by an examination vendor approved by the board.
 - 1. Each individual applying to sit for the examination shall satisfy the licensure requirements established by this chapter before being approved to sit for the examination. Individuals approved to sit for the examination shall be provided with written instructions for examination registration.
 - 2. Examinees will be given specific instructions as to the conduct of the examination at the examination site. Examinees shall follow these instructions during the course of the examination. Misconduct may result in removal from the examination site, voided examination scores, the denial of the application, or any combination of the foregoing.
 - 3. Upon submission of an application for reexamination and payment of the examination fee established in 18VAC160-20-102, an applicant who is unsuccessful in passing the examination shall be allowed to retake the examination an unlimited number of times within one year after the date that the application to sit for the examination was approved. If the one-year period elapses, then the applicant shall submit a new application to sit for the examination establishing that he meets the then-current requirements of this chapter and the examination fee established in 18VAC160-20-102.
- K. Any applicant relying on experience with VDH to meet the minimum requirements for licensure shall provide an endorsement from the applicant's direct supervisor at VDH stating that the applicant's job performance has been satisfactory.
- L. Licensure. Individuals who have passed the board-approved examination shall apply for licensure and shall satisfy the licensure requirements established in this chapter.

Historical Notes

Derived from Virginia Register Volume 17, Issue 9, eff. February 15, 2001; amended, Virginia Register Volume 22, Issue 26, eff. December 1, 2006; Volume 25, Issue 19, eff. July 1, 2009.

18VAC160-20-80. Individuals certified or licensed in other jurisdictions.

Any applicant holding a valid license or certificate in another jurisdiction who meets the requirements of this chapter, including experience and education, shall pass the appropriate Virginia examination to become licensed.

Historical Notes

Derived from VR675-01-02 § 2.2, eff. November 6, 1989; amended, Virginia Register Volume 7, Issue 15, eff. May 22, 1991; Volume 8, Issue 4, December 18, 1991; Volume 8, Issue 22, eff. August 26, 1992 (was 675-01-03); Volume 17, Issue 9, eff. February 15, 2001; Volume 25, Issue 19, eff. July 1, 2009.

18VAC160-20-82. Interim licensure of certain individuals employed by the Virginia Department of Health (VDH).

- A. Applicants for an interim onsite soil evaluator license who are employees of the Virginia Department of Health and whose duties include onsite soil evaluation and onsite septic system design shall meet the following standards:
 - 1. Submit a complete application form documenting at least the minimum combination of education and experience required for licensure as a conventional onsite soil evaluator required by this chapter; and
 - 2. Include an endorsement from the applicant's direct supervisor stating that the applicant's job performance has been satisfactory.
- B. An interim onsite soil evaluator licensee shall be authorized to act as a conventional onsite soil evaluator solely for the purpose of performing his duties as an employee of VDH.
- C. Each interim onsite soil evaluator license shall expire on the last day of the month that is 48 months after the date of issuance by the department or on the date that the employee is no longer performing onsite soil evaluation duties for VDH, whichever occurs first, and shall not be subject to renewal.
- D. Each applicant for an interim onsite soil evaluator license shall make application in accordance with 18VAC160-20-76 .
- E. Virginia Department of Health employees who fail to have their application for the interim onsite soil evaluator license in the department's possession by December 31, 2009, shall not be eligible for an interim onsite soil evaluator license and shall apply for a license pursuant to 18VAC160-20-96.

Historical Notes

Derived from Virginia Register Volume 25, Issue 19, eff. July 1, 2009.

18VAC160-20-84. Interim license, onsite sewage system installer and operator.

- A. The board may issue an interim onsite sewage system installer license or an interim onsite sewage system operator license to any individual who makes application in accordance with 18VAC160-20-76, and who meets the specific entry requirements of this section, provided that the application is received by the department no later than June 30, 2010. Individuals who fail to have their application in the department's possession by June 30, 2010, shall not be eligible for an interim license and shall apply for a license pursuant to 18VAC160-20-97 or 18VAC160-20-98 as appropriate.
- B. Each interim onsite sewage system installer license and interim onsite sewage system operator license shall expire on the last day of the month that is 48 months after the date of issuance by the department and shall not be subject to renewal.
- C. To maintain licensure, each interim onsite sewage system license holder shall apply for and be issued a license under the provisions of 18VAC160-20-97 or 18VAC160-20-98, as appropriate, before the interim onsite sewage system installer license or interim onsite sewage system operator license expiration date.
- D. Each applicant shall apply in accordance with 18VAC160-20-76 and shall meet the specific entry requirements provided for in this section.
- E. Specific entry requirements - installer.
 - 1. Interim conventional onsite sewage system installer applicants shall have six months of documented full-time experience installing alternative or conventional onsite sewage systems under the direct supervision of a properly licensed contractor holding a sewage disposal systems (SDS) specialty issued by the Virginia Board for Contractors or the applicant must have six months of documented full-time experience installing alternative or conventional onsite sewage systems as a properly licensed contractor holding a SDS specialty issued by the Virginia Board for Contractors.
 - 2. Interim alternative onsite sewage system installer applicants shall have six months of documented full-time experience installing alternative onsite sewage systems under the direct supervision of a properly licensed contractor holding a sewage disposal systems (SDS) specialty issued by the Virginia Board for Contractors or the applicant must have six months of documented full-time experience installing alternative onsite sewage systems as a properly licensed contractor holding a SDS specialty issued by the Virginia Board for Contractors.
- F. Specific entry requirements - operator.
 - 1. Interim conventional onsite sewage system operator applicants shall have 12 months of documented full-time experience providing operation and maintenance

services for conventional onsite sewage systems or as a sewage handler permitted by VDH.

2. Interim alternative onsite sewage system operator applicants shall have 12 months of documented full-time experience providing operation and maintenance services for alternative onsite sewage systems.

Historical Notes

Derived from Virginia Register Volume 25, Issue 19, eff. July 1, 2009.

18VAC160-20-85. Repealed.

Historical Notes

Derived from Virginia Register Volume 17, Issue 9, eff. February 15, 2001; Volume 26, Issue 6, eff. January 1, 2010.

18VAC160-20-90. Qualifications for licensure of waterworks operators and wastewater works operators.

- A. Waterworks operator and wastewater works operator licensure is based upon having applicable experience and demonstrating minimum required knowledge, skills, and abilities through an examination. Education, training, and experience in the other category may be substituted for the required experience as specified in this section.
- B. Experience. For purposes of this section, experience requirements are expressed in terms of calendar periods of full-time employment as an operator or as an operator-in-training at a waterworks or wastewater works in the same category as the license being applied for.
 1. A year of full-time employment is defined as a minimum of 1,760 hours during a 12-month period or a minimum of 220 workdays in a 12-month period. A workday is defined as attendance at a waterworks or wastewater works to the extent required for proper operation. More than 1,760 hours or 220 work days during a 12-month period will not be considered as more than one year of full-time employment.
 2. Experience gained as an operator-in-training must be obtained under the direct supervision of an operator holding a valid license of the same category and of a classification equal to or higher than the classification of the waterworks or wastewater works at which the experience is gained. The direct supervisor shall certify the experience on the application form as accurate and relevant to the classification and category of license for which the application is being submitted. In the event that a licensed operator is not available to certify the experience on the application, the experience may be certified by a representative of the facility owner, as defined in 18VAC160-20-10, with first-hand knowledge of the applicant's experience.

3. Partial credit may be given for actual hours of work or workdays experience if the applicant works as an operator or as an operator-in-training less than full time.
4. Experience solely limited to the operation and maintenance of wastewater collection systems and water distribution systems, laboratory work, plant maintenance, and other nonoperating duties shall not be counted as experience as an operator or as an operator-in-training.
5. Experience limited to water distribution system operation and maintenance shall be considered only when applying for a Class 5 or Class 6 waterworks operator license.

C. Specific requirements for licenses.

1. Specific requirements for a Class 6 license. Applicants for licensure as a Class 6 waterworks operator shall meet one of the following requirements and pass a board-approved Class 6 examination:
 - a. Have (i) a high school diploma or GED and (ii) at least six months of experience as an operator-in-training in a Class 6, Class 5, Class 4, Class 3, Class 2, or Class 1 waterworks; or
 - b. Have (i) no high school diploma and (ii) at least one year of experience as an operator-in-training in a Class 6, Class 5, Class 4, Class 3, Class 2, or Class 1 waterworks.
2. Specific requirements for a Class 5 license. Applicants for licensure as a Class 5 waterworks operator shall meet one of the following requirements and pass a board-approved Class 5 examination:
 - a. Have (i) a high school diploma or GED and (ii) at least six months of experience as an operator-in-training in a Class 5, Class 4, Class 3, Class 2, or Class 1 waterworks; or
 - b. Have (i) no high school diploma and (ii) at least one year of experience as an operator-in-training in a Class 5, Class 4, Class 3, Class 2, or Class 1 waterworks.
3. Specific requirements for a Class 4 license. Applicants for licensure as either a Class 4 waterworks or wastewater works operator shall meet one of the following requirements and pass the appropriate board-approved Class 4 examination:
 - a. Have (i) a high school diploma or GED and (ii) at least six months of experience as an operator-in-training in a Class 4, Class 3, Class 2, or Class 1 waterworks or wastewater works (as appropriate); or

- b. Have (i) no high school diploma and (ii) at least one year of experience as an operator-in-training in a Class 4, Class 3, Class 2, or Class 1 waterworks or wastewater works (as appropriate).

Experience obtained as a licensed alternative onsite sewage system operator may substitute for the wastewater works operator-in-training experience requirements established under subdivisions a and b of this subdivision.

- 4. Specific requirements for a Class 3 license. Applicants for licensure as either a Class 3 waterworks or wastewater works operator shall meet one of the following requirements and pass the appropriate board-approved Class 3 examination:
 - a. Have (i) a bachelor's or master's degree with a major in engineering, engineering technology, or in a related physical, biological, environmental, or chemical science; and (ii) at least one year of experience as an operator-in-training in a Class 4, Class 3, Class 2, or Class 1 waterworks or wastewater works (as appropriate);
 - b. Have (i) a high school diploma or GED and (ii) at least two years of experience as an operator-in-training in a Class 4, Class 3, Class 2, or Class 1 waterworks or wastewater works (as appropriate); or
 - c. Have (i) no high school diploma, (ii) a Class 4 license, and (iii) a total of at least four years of experience as an operator or operator-in-training in a Class 4 waterworks or wastewater works (as appropriate) or as an operator-in-training in a Class 3, Class 2, or Class 1 waterworks or wastewater works (as appropriate).
- 5. Specific requirements for a Class 2 license. Applicants for licensure as either a Class 2 waterworks or wastewater works operator shall meet one of the following requirements and pass the appropriate board-approved Class 2 examination:
 - a. Have (i) a bachelor's or master's degree with a major in engineering, engineering technology, or in a related physical, biological, environmental, or chemical science; and (ii) a total of at least 18 months of experience, of which at least nine months without substitutions shall be as an operator-in-training in a Class 3, Class 2 or Class 1 waterworks or wastewater works (as appropriate);
 - b. Have (i) a high school diploma or GED, (ii) a Class 3 license, and (iii) a total of at least three years of experience of which at least 18 months without substitutions shall be as an operator or operator-in-training in a Class 3 waterworks or wastewater works (as appropriate) or as an operator-in-training in a Class 2 or Class 1 waterworks or wastewater works (as appropriate); or

- c. Have (i) no high school diploma, (ii) a Class 3 license, and (iii) a total of at least six years of experience of which at least three years without substitutions shall be as an operator or operator-in-training in a Class 3 waterworks or wastewater works (as appropriate) or as an operator-in-training in a Class 2 or Class 1 waterworks or wastewater works (as appropriate).
 6. Specific requirements for a Class 1 license. Applicants for licensure as either a Class 1 waterworks or wastewater works operator shall meet one of the following requirements and pass the appropriate board-approved Class 1 examination:
 - a. Have (i) a bachelor's or master's degree with a major in engineering or engineering technology, or in a related physical, biological, environmental, or chemical science; (ii) a Class 2 license; and (iii) a total of at least 2-1/2 years of experience, of which at least 15 months without substitutions shall be as an operator or operator-in-training in a Class 2 waterworks or wastewater works (as appropriate) or as an operator-in-training in a Class 1 waterworks or wastewater works (as appropriate);
 - b. Have (i) a high school diploma or GED, (ii) a Class 2 license and (iii) a total of at least five years of experience of which at least 30 months without substitutions shall be as an operator or operator-in-training in a Class 2 waterworks or wastewater works (as appropriate) or as an operator-in-training in a Class 1 waterworks or wastewater works (as appropriate); or
 - c. Have (i) no high school diploma, (ii) a Class 2 license, and (iii) a total of at least 10 years of experience of which at least five years without substitutions shall be as an operator or operator-in-training in a Class 2 waterworks or wastewater works (as appropriate) or as an operator-in-training in a Class 1 waterworks or wastewater works (as appropriate).
- D. Substitutions for required experience. For the purpose of meeting the experience requirements for Class 3, Class 2, and Class 1 licenses, experience in the other category, relevant training in waterworks and wastewater works operation, and formal education may be substituted for actual hands-on experience in the category being applied for.
 1. Category experience substitution. One half of the actual experience gained in the other category may be substituted for required experience in the category of the license being applied for.
 2. Education substitution. Education may be substituted for part of the required experience in the category of the license being applied for, subject to the following limitations:

- a. Education used to meet the educational requirements for any class of license may not be substituted for experience.
- b. Formal education courses at a post-secondary level in a related physical, biological, environmental, or chemical science; engineering or engineering technology; waterworks or wastewater works operation; or public health may be substituted for part of the required experience.
 - (1) All education substituted for experience must be relevant to the category and classification of the license being applied for.
 - (2) Education may be substituted for experience at a rate of up to one month experience for each semester hour of college credit approved by the board. One quarter hour of college credit will be considered equal to two thirds of a semester hour.
 - (3) Substitution of formal education experience will be approved by the board only for applicants who submit a transcript from the institution where the course was taken.
- c. Training substitution. Waterworks or wastewater works operator training courses, seminars, workshops, or similar training, specifically approved by the board, may be substituted for part of the required experience.
 - (1) All training substituted for experience must be relevant to the category and classification of the license being applied for.
 - (2) Training may be substituted for experience at a rate of one month experience for each training credit approved by the board. Up to one training credit is awarded for each 10 hours of classroom contact time or for each 20 hours of laboratory exercise and field trip contact time. No credit towards training credits is granted for breaks, meals, receptions, and time other than classroom, laboratory and field trip contact time.
 - (3) All courses used for substitution must be approved by utilizing the criteria set forth in Part VI (18VAC160-20-150) of this chapter.
 - (4) Substitution of training for experience will be approved by the board only for applicants who submit a copy of an appropriate certificate identifying the subject matter of the course and the training credit value, and signed by a representative of the organization sponsoring the training.

3. Limitations on substitution.
 - a. Under no circumstances shall category experience, education, and training substitutions exceed 50% of the total experience required under subsection B of this section.
 - b. No category experience, education, or training substitutions are permitted for the experience required to obtain a Class 6, Class 5 or a Class 4 license as specified in subsection C of this section.

Historical Notes

Derived from VR675-01-02 § 2.3, eff. November 6, 1989; amended, Virginia Register Volume 7, Issue 15, eff. May 22, 1991; Volume 8, Issue 4, December 18, 1991; Volume 8, Issue 22, eff. August 26, 1992 (was 675-01-03); Volume 17, Issue 9, eff. February 15, 2001; Volume 22, Issue 26, eff. December 1, 2006; Volume 25, Issue 19, eff. July 1, 2009; Volume 26, Issue 6, eff. January 1, 2010.

18VAC160-20-94. Qualifications for licensure - individuals holding authorized onsite soil evaluator certifications.

Individuals holding a valid authorized onsite soil evaluator certification issued by VDH that was valid on June 30, 2009, may apply for an alternative onsite soil evaluator license and shall be deemed to have met the specific entry requirements of 18VAC160-20-96 C 2 and to have passed a board-approved examination for alternative onsite soil evaluator, provided that the application is received by the department by December 31, 2009. Each applicant shall make application in accordance with 18VAC160-20-76.

Historical Notes

Derived from Virginia Register Volume 25, Issue 19, eff. July 1, 2009.

18VAC160-20-95. Provisional licensure – nonclassified facility operation experience only.

- A. Each person desiring provisional licensure shall make application in accordance with 18VAC160-20-76 and shall meet all of the requirements of 18VAC160-20-90 except that the experience requirement may be met through experience gained as an operator of a nonclassified facility provided that:
 1. The experience is obtained at a nonclassified facility that is comparable in size and in the treatment processes used to those facilities described in 18VAC160-20-120 in the case of waterworks or to those facilities described in 18VAC160-20-130 in the case of wastewater works.
 2. The experience is obtained while performing actual nonclassified facility operation duties that provide experience comparable to that obtained at a

classified facility. Experience limited solely to the operation and maintenance of wastewater collection systems and water distribution systems, laboratory work, plant maintenance and other nonoperating duties shall not be counted as qualifying experience for Class 1, Class 2, Class 3, or Class 4 provisional licenses but may be counted for a provisional Class 5 or Class 6 license.

- B. Each applicant meeting the requirements of subsection A of this section shall be eligible to sit for the operator examination for the category and class of operator license that is comparable to the nonclassified facility where the experience was obtained. The provisional license shall not be issued until all applicable requirements have been met and satisfactorily verified.
- C. Each individual holding provisional licensure may apply for licensure by submitting evidence of having met 50% of the experience required by 18VAC160-20-90.

Historical Notes

Derived from Virginia Register Volume 23, Issue 1, eff. December 1, 2006; Volume 26, Issue 6, eff. January 1, 2010.

18VAC160-20-96. Qualifications for licensure - onsite soil evaluators.

- A. Each applicant shall make application in accordance with 18VAC160-20-76 and shall meet the specific entry requirements provided for in this section.
- B. Each applicant holding a valid interim onsite soil evaluator license shall submit documentation of compliance with the continuing professional education requirements provided for in this chapter at the time of application.
- C. Specific entry requirements.
 - 1. Conventional onsite soil evaluator. Each individual applying for an initial conventional onsite soil evaluator license shall pass a board-approved examination and shall have a valid interim onsite soil evaluator license or meet one of the following requirements:
 - a. Possess a valid certificate as a Virginia certified professional soil scientist from the Board for Professional Soil Scientists and Wetland Professionals and one year of full-time onsite soil evaluation and conventional onsite sewage system design experience;
 - b. Possess a bachelor's degree with a major in soil science, biology, chemistry, engineering, environmental science, geology, agronomy, earth science, or environmental health and have two years of full-time experience evaluating site and soil conditions and designing conventional onsite sewage systems in compliance with this chapter under the direct supervision of any of the following:

- (1) An authorized onsite soil evaluator certified by VDH before July 1, 2009;
 - (2) An interim licensed onsite soil evaluator;
 - (3) A licensed conventional onsite soil evaluator; or
 - (4) A licensed alternative onsite soil evaluator;
- c. Possess a bachelor's degree with a major in soil science, biology, chemistry, engineering, environmental science, geology, agronomy, earth science, or environmental health and have two years of full-time experience evaluating site and soil conditions and designing conventional onsite sewage systems in compliance with this chapter as a VDH employee prior to July 1, 2009;
- d. Possess an associate's degree in waterworks, wastewater works, environmental science, or engineering technology and have three years of full-time experience evaluating site and soil conditions and designing conventional onsite sewage systems in compliance with this chapter under the direct supervision of any of the following:
- (1) An authorized onsite soil evaluator certified by VDH before July 1, 2009;
 - (2) An interim licensed onsite soil evaluator;
 - (3) A licensed conventional onsite soil evaluator; or
 - (4) A licensed alternative onsite soil evaluator;
- e. Possess an associate's degree in waterworks, wastewater works, environmental science, or engineering technology and have three years of full-time experience evaluating site and soil conditions and designing conventional onsite sewage systems in compliance with this chapter as a VDH employee prior to July 1, 2009;
- f. Have satisfactorily completed the VDH onsite sewage system training program and have four years of full-time experience evaluating site and soil conditions and designing conventional onsite sewage systems in compliance with this chapter under the direct supervision of any of the following:

- (1) An authorized onsite soil evaluator certified by VDH before July 1, 2009;
 - (2) An interim licensed onsite soil evaluator;
 - (3) A licensed conventional onsite soil evaluator; or
 - (4) A licensed alternative onsite soil evaluator;
- g. Have eight years of full-time experience evaluating site and soil conditions and designing conventional onsite sewage systems in compliance with this chapter under the direct supervision of any of the following:
- (1) An authorized onsite soil evaluator certified by VDH before July 1, 2009;
 - (2) An interim licensed onsite soil evaluator;
 - (3) A licensed conventional onsite soil evaluator; or
 - (4) A licensed alternative onsite soil evaluator; or
- h. Have eight years of full-time experience evaluating site and soil conditions and designing conventional onsite sewage systems in compliance with this chapter as an employee of VDH prior to July 1, 2009.
2. Alternative onsite soil evaluator. Each individual applying for an initial alternative onsite soil evaluator license shall possess a valid interim onsite soil evaluator license or a valid conventional onsite soil evaluator license, pass a board-approved examination, and meet one of the following requirements:
- a. Have two years of full-time experience in evaluating soils and designing alternative onsite sewage systems obtained during the last four years under the direct supervision of either an authorized onsite soil evaluator certified by VDH before July 1, 2009, a currently licensed interim onsite soil evaluator, or a currently licensed alternative onsite soil evaluator;
 - b. Have two years of full-time experience in evaluating soils and designing onsite sewage systems, including the review of alternative onsite sewage system designs, as either an employee of VDH or a local government;
 - c. Have three years of full-time experience as an authorized onsite soil evaluator certified by the Virginia Department of Health (VDH), regardless of the date of certification expiration, and evidence of completing the soil evaluation and system design work on a total of at

least 36 onsite sewage systems (12 of which must be alternative systems approved by the VDH through the issuance of a permit or a certification); or

- d. Have four years of full-time experience as an authorized onsite soil evaluator certified by VDH (regardless of the date of expiration), an interim onsite soil evaluator licensee, a conventional onsite soil evaluator licensee, an employee of VDH (whose duties included onsite soil evaluation and onsite septic system design prior to July 1, 2009), or any combination thereof.

D. Education and training substitution. Each individual applying for a conventional or an alternative onsite soil evaluator license may receive credit for up to half of the experience required by this section for:

1. Satisfactory completion of postsecondary courses in wastewater, biology, chemistry, geology, hydraulics, hydrogeology, or soil science at the rate of one month per semester hour or two-thirds of a month per quarter hour; or
2. Satisfactory completion of board-approved onsite soil evaluator training courses at the rate of one month for each training credit earned. Up to one training credit is awarded for each 10 hours of classroom contact time or for each 20 hours of laboratory exercise and field trip contact time. No credit towards training credits is granted for breaks, meals, receptions, and time other than classroom, laboratory and field trip contact time.

Historical Notes

Derived from Virginia Register Volume 25, Issue 19, eff. July 1, 2009.

18VAC160-20-97. Qualifications for licensure - onsite sewage system installers.

- A. Each applicant shall make application in accordance with 18VAC160-20-76 and shall meet the specific entry requirements provided for in this section for the license desired.
- B. Each applicant holding a valid interim onsite sewage system installer license shall submit documentation of compliance with the continuing professional education requirements of this chapter at the time of application.
- C. Specific entry requirements.
 1. Conventional onsite sewage system installer. Each individual applying for an initial conventional onsite sewage system installer license shall pass a board-approved examination and shall meet one of the following requirements:

- a. Have two years of full-time experience successfully installing alternative or conventional onsite sewage systems during the last four years and be currently employed by a firm holding a current and valid Virginia contractor license with the sewage disposal system (SDS) specialty; or
 - b. Have two years of full-time experience successfully installing alternative or conventional onsite sewage systems during the last four years and be a member of responsible management in a firm holding a current and valid Virginia contractor license with the sewage disposal system (SDS) specialty; or
 - c. Have two years of full-time experience successfully installing alternative or conventional onsite sewage systems during the last four years working under the direct supervision of, or working as, a properly licensed Virginia contractor with the sewage disposal system (SDS) specialty; or
 - d. Have documentation certifying that the applicant is competent to install conventional onsite sewage systems. Certification must be provided by any combination of three of the following individuals:
 - (1) VDH Authorized Onsite Soil Evaluators (AOSE) for work performed prior to July 1, 2009;
 - (2) Licensed interim onsite soil evaluators;
 - (3) Licensed conventional or alternative onsite soil evaluators;
 - (4) Licensed conventional or alternative onsite sewage system installers; or
 - (5) Virginia licensed professional engineers.
2. Conventional onsite sewage system installer. The examination requirement provided for in subdivision 1 of this subsection shall not apply to applicants seeking initial licensure as a conventional onsite sewage system installer provided that:
- a. The applicant is able to satisfactorily demonstrate that he has been actively engaged in performing the duties of a conventional onsite sewage system installer, as defined in this chapter, for at least eight years within the 12-year period immediately preceding the date of application.
 - b. The department receives a completed application no later than June 30, 2016. An individual who fails to have his application in the department's possession

by June 30, 2016, shall be required to pass the board-approved examination provided for in subdivision 1 of this subsection.

3. Alternative onsite sewage system installer. Each individual applying for an initial alternative onsite sewage system installer license shall pass a board-approved examination and shall meet one of the following requirements:
 - a. Provide completion statements and each corresponding professional engineer's or onsite soil evaluator's inspection report filed with VDH for work performed after June 30, 2009. Where applicable, a VDH inspection report shall accompany the corresponding completion statement in lieu of a professional engineer's or an onsite soil evaluator's inspection report and completion statement. The complete statements must verify that the applicant had successfully installed 36 onsite sewage systems during the preceding three years, six of which must be alternative systems.
 - b. Provide completion statements and each corresponding AOSE/professional engineer inspection report and completion statement for work performed on or before June 30, 2009. The contractor statements must verify that the applicant successfully installed 12 alternative onsite sewage systems during the past three years. All AOSE/professional engineer inspection reports and completion statements shall be certified;
 - c. Have two years of full-time experience successfully installing sewage systems, be a member of responsible management in a firm holding a current and valid Virginia contractor license with a sewage disposal system (SDS) specialty, and provide certification by at least three interim or alternative onsite soil evaluator licensees, Virginia-licensed professional engineers, or any combination thereof, that the applicant is competent to install alternative onsite sewage systems;
 - d. Have two years of full-time experience successfully installing sewage systems, be currently employed by a firm holding current and valid Virginia contractor license with the sewage disposal system (SDS) specialty, and provide certification by at least three interim or alternative onsite soil evaluator licensees, Virginia-licensed professional engineers, or any combination thereof, that the applicant is competent to install alternative onsite sewage systems;
 - e. Have two years of full-time experience successfully installing sewage systems during the last four years working under the direct supervision of, or working as, a properly licensed Virginia contractor with the sewage disposal system (SDS) specialty and provide certification by at least three interim or alternative onsite soil evaluator licensees, Virginia-licensed

professional engineers, or any combination thereof, that the applicant is competent to install alternative onsite sewage systems; or

- f. Have two years of full-time experience as a licensed or interim licensed conventional onsite sewage system installer and provide certification by at least three interim or alternative onsite soil evaluator licensees, Virginia-licensed professional engineers, or any combination thereof, that the applicant is competent to install alternative onsite sewage systems.

Each applicant applying under subdivision 3 a or b of this section shall provide written and signed verification from a supervisor within the company that is listed each contractor completion statement. The verification must explicitly show that the applicant was employed by the company that performed the installation as well as show that the applicant himself performed the installation.

- D. Education and training substitution. Each individual applying for a conventional or an alternative onsite sewage system installer license may receive credit for up to half of the experience required by this section for:
 1. Satisfactory completion of postsecondary courses in wastewater, biology, chemistry, geology, hydraulics, hydrogeology, or soil science at the rate of one month per semester hour or two-thirds of a month per quarter hour; or
 2. Satisfactory completion of board-approved onsite sewage system installer training courses at the rate of one month for each training credit earned. Up to one training credit is awarded for each 10 hours of classroom contact time or for each 20 hours of laboratory exercise and field trip contact time. No credit towards training credits is granted for breaks, meals, receptions, and time other than classroom, laboratory and field trip contact time.

Historical Notes

Derived from Virginia Register Volume 25, Issue 19, eff. July 1, 2009; Volume 28, Issue 19, eff. July 1, 2012, eff. October 1, 2015, Volume 31, Issue 25.

18VAC160-20-98. Qualifications for licensure - onsite sewage system operators.

- A. Each applicant shall make application in accordance with 18VAC160-20-76 and shall meet the specific entry requirements provided for in this section.
- B. Each applicant holding a valid interim onsite sewage system operator license shall submit documentation of compliance with the continuing professional education requirements of this chapter at the time of application.
- C. Specific entry requirements.

1. Conventional onsite sewage system operator. Each individual applying for an initial conventional onsite sewage system operator license shall pass a board-approved examination and shall meet one of the following requirements:
 - a. Have at least one year of full-time experience as a sewage handler;
 - b. Have one year of full-time experience working under the direct supervision of either an interim conventional, interim alternative, conventional, or alternative onsite sewage system operator licensee; or
 - c. Possess a valid wastewater works operator license.

 2. Alternative onsite sewage system operator. Each individual applying for an initial alternative onsite sewage system operator license shall possess a valid interim onsite sewage system operator license or a valid conventional onsite sewage system operator license, shall pass a board-approved examination, and shall meet one of the following requirements:
 - a. Have no high school diploma and 24 months of full-time experience working under the direct supervision of an alternative onsite sewage system operator licensee or an interim alternative onsite sewage system operator licensee;
 - b. Have a high school diploma or GED and 12 months of full-time experience working under the direct supervision of an alternative onsite sewage system operator licensee or an interim alternative onsite sewage system operator licensee; or
 - c. Possess a valid Class IV or higher wastewater works operator license and have satisfactorily completed an onsite sewage system operator course approved by the board or have six months of full-time experience working under the direct supervision of an alternative onsite sewage system operator licensee or an interim alternative onsite sewage system operator licensee.
- D. Education and training substitution. Each individual applying for a conventional or an alternative onsite sewage system operator license may receive credit for up to half of the experience required by this section for:
1. Satisfactory completion of postsecondary courses in wastewater, biology, chemistry, geology, hydraulics, hydrogeology, or soil science at the rate of one month per semester hour or two-thirds of a month per quarter hour; or
 2. Satisfactory completion of board-approved onsite sewage system operator training courses at the rate of one month for each training credit earned. Up to one training

credit is awarded for each 10 hours of classroom contact time or for each 20 hours of laboratory exercise and field trip contact time. No credit towards training credits is granted for breaks, meals, receptions, and time other than classroom, laboratory and field trip contact time.

Historical Notes

Derived from Virginia Register Volume 25, Issue 19, eff. July 1, 2009; amended, Virginia Register Volume 29, Issue 19, eff. July 1, 2013.

18VAC160-20-100. [Repealed]

Historical Notes

Derived from VR675-01-02 § 2.4, eff. November 6, 1989; amended, Virginia Register Volume 7, Issue 15, eff. May 22, 1991; Volume 8, Issue 4, December 18, 1991; Volume 8, Issue 22, eff. August 26, 1992 (was 675-01-03); repealed, Virginia Register Volume 17, Issue 9, eff. February 15, 2001.

18VAC160-20-102. Fees.

- A. All fees shall be nonrefundable.
- B. The date of receipt of the fee by the board or its agent is the date that shall be used to determine whether the fee is timely received.
- C. The following fees shall apply:
 - 1. The license application fee shall be \$100.
 - 2. The license renewal fee shall be \$80.
 - 3. The license renewal late penalty fee shall be \$25, in addition to the license renewal fee.
 - 4. The fee for examination or reexamination is subject to charges to the department by an outside vendor based on a contract entered into in compliance with the Virginia Public Procurement Act (§ 2.2-4300 et seq. of the Code of Virginia). Fees may be adjusted and charged to the candidate in accordance with this contract.

Historical Notes

Derived from Virginia Register Volume 17, Issue 9, eff. February 15, 2001; amended, Virginia Register Volume 21, Issue 3, eff. December 1, 2004; Volume 25, Issue 19, eff. July 1, 2009.

18VAC160-20-104. Maintenance of license.

- A. The licensee, provisional licensee, or interim licensee shall notify the board in writing within 30 days of any change of name or address.
- B. All licensees, provisional licensees, and interim licensees shall operate under the name in which the license is issued.

Historical Notes

Derived from Virginia Register Volume 17, Issue 9, eff. February 15, 2001; amended, Virginia Register Volume 23, Issue 1, eff. December 1, 2006; Volume 25, Issue 19, eff. July 1, 2009.

PART III.

RENEWAL

18VAC160-20-106. Renewal.

- A. Licenses and provisional licenses for waterworks operators shall expire on the last day of February of each odd-numbered year. Licenses and provisional licenses for wastewater works operators shall expire on the last day of February of each even-numbered year. Licenses for onsite soil evaluators, onsite sewage system installers, and onsite sewage system operators shall expire 24 months from the last day of the month wherein issued. Interim licenses shall expire 48 months from the last day of the month wherein issued.
- B. Interim licenses shall not be renewed.
- C. The Department of Professional and Occupational Regulation shall mail a renewal notice to the licensee and the provisional licensee outlining the procedures for renewal. Renewal notices shall be mailed to the licensee and to the provisional licensee at the last known address of record. Failure to receive written notice shall not relieve the licensee or the provisional licensee of the obligation to renew and pay the required fee outlined in 18VAC160-20-102.
- D. Each licensee and provisional licensee applying for renewal shall return the renewal notice and fee prior to the expiration date shown on the license. If the licensee or provisional licensee fails to receive the renewal notice, a copy of the expired license or provisional license may be submitted in place of the renewal notice along with the required fee.
- E. By submitting the renewal fee, an applicant for license renewal is certifying his continued compliance with this chapter and compliance with the continuing professional education requirements of this chapter.
- F. The date on which the renewal fee and any required forms are actually received by the board or its agent shall determine whether an additional fee is due.
- G. If the requirements of subsection D of this section are met more than 30 days but less than 12 months after the expiration date on the license or provisional license, a late penalty fee shall be required as established in 18VAC160-20-102. The date on which the renewal application, any required documentation and the required fees are actually received by the board or its agent shall determine whether the licensee or provisional licensee is eligible for renewal and whether an additional fee is due.
- H. Any individual who fails to renew his license or provisional license within 12 months after the expiration date printed on the license or the provisional license, as appropriate,

shall apply for a new license by examination or for a new provisional license in accordance with Part II (18VAC160-20-74 et seq.) of this chapter. Such individual shall be deemed to be eligible to sit for the examination for the same category and class of license as the expired license or provisional license.

- I. The board may deny renewal of a license or provisional license for the same reasons as it may refuse initial licensure or provisional licensure or discipline a licensee or provisional licensee.

Historical Notes

Derived from Virginia Register Volume 17, Issue 9, eff. February 15, 2001; amended, Virginia Register Volume 23, Issue 1, eff. December 1, 2006; Volume 25, Issue 19, eff. July 1, 2009; Volume 26, Issue 6, eff. January 1, 2010.

18VAC160-20-109. Continuing professional education (CPE).

- A. Each licensee, provisional licensee, and interim licensee shall have completed the following number of CPE contact hours during each renewal cycle:
 1. Class 1, 2, and 3 waterworks and wastewater works operators shall obtain a minimum of 20 contact hours.
 2. Class 4 waterworks and wastewater works operators shall obtain a minimum of 16 contact hours.
 3. Class 5 waterworks operators shall obtain a minimum of eight contact hours.
 4. Class 6 waterworks operators shall obtain a minimum of four contact hours.
 5. Conventional onsite soil evaluators, conventional onsite sewage system installers, and conventional onsite sewage system operators shall obtain a minimum of 10 contact hours.
 6. Alternative onsite soil evaluators, alternative onsite sewage system installers, and alternative onsite sewage system operators shall obtain a minimum of 20 contact hours.
 7. All interim licensees shall obtain a minimum of 10 contact hours during the first 24 months that the interim license is valid and shall obtain a minimum of 10 contact hours during the second 24 months that the interim license is valid.

CPE provisions do not apply for the renewal of waterworks operator licenses or provisional licenses that were held for less than two years on the date of expiration. CPE shall be required for all wastewater works licenses for the license period beginning March 1, 2010, and each license period thereafter.

- B. The subject matter addressed during CPE contact hours shall be limited to the content areas covered by the board's examination appropriate to the license for which renewal is sought. Safety subjects shall not count for more than one-half of the total CPE required content hours for waterworks operators and for wastewater works operators.
- C. Any course approved by the board for substitution as training credits or formal education semester hours, as provided for in 18VAC160-20-150, shall also be acceptable on an hour-for-hour basis for CPE contact hours. One semester hour of college credit shall equal 15 CPE contact hours, and one quarter hour of college credit shall equal 10 CPE credit hours.
- D. The following evidence shall be maintained to document completion of the hours of CPE specified in subsection A of this section:
 - 1. Evidence of completion of a structured training activity which shall consist of the name, address and telephone number of the sponsor;
 - 2. The dates the applicant participated in the training;
 - 3. Descriptive material of the subject matter presented; and
 - 4. A statement from the sponsor verifying the number of hours completed.
- E. Each licensee and provisional licensee shall maintain evidence of the satisfactory completion of CPE for a period of at least two years following the end of the license renewal cycle for which the CPE was taken. Such documentation shall be in the form required by subsection D of this section and shall be provided to the board or its duly authorized agents upon request.
- F. The licensee or provisional licensee shall not receive CPE credit for the same training course or structured training activity more than once during a single license renewal cycle to meet the CPE requirement.
- G. The licensee or provisional licensee may receive CPE credit for a training course or structured training activity which has been mandated by Virginia or federal regulation towards fulfilling the CPE requirement.
- H. CPE instructors who hold a license issued by the board may receive CPE credit for the time spent actually instructing subject matter that is pertinent to their license. CPE credit shall not be allowed for instructing the same subject matter more than once during a single renewal cycle.

- I. CPE instructors who hold a license issued by the board may be granted two additional hours of CPE credit for the initial development of or the substantial updating of a CPE activity that is pertinent to the license held for each hour spent delivering the initial presentation. CPE credit for the initial development or the substantial updating of a specific CPE activity shall be granted no more than once during a single renewal cycle.
- J. The licensee or provisional licensee may petition the board for additional time to meet the CPE requirement. However, CPE hours earned during a license renewal cycle to satisfy the CPE requirement of the preceding license renewal cycle shall be valid only for that preceding license renewal cycle.

Historical Notes

Derived from Virginia Register Volume 17, Issue 9, eff. February 15, 2001; amended, Virginia Register Volume 23, Issue 1, eff. December 1, 2006; Volume 25, Issue 19, eff. July 1, 2009; Volume 26, Issue 6, eff. January 1, 2010.

18VAC160-20-110. [Repealed]

Historical Notes

Derived from VR675-01-02 § 3.1, eff. November 6, 1989; amended, Virginia Register Volume 7, Issue 15, eff. May 22, 1991; Volume 8, Issue 4, December 18, 1991; Volume 8, Issue 22, eff. August 26, 1992 (was 675-01-03); repealed, Virginia Register Volume 17, Issue 9, eff. February 15, 2001.

PART IV.

CLASSIFICATION REQUIREMENTS

18VAC160-20-120. Waterworks.

- A. A Class 6 waterworks licensee may operate any waterworks as follows:
 - 1. A waterworks providing no treatment and serving fewer than 400 persons; or
 - 2. A waterworks classified by the Virginia Department of Health as a Class 6 waterworks.

- B. A Class 5 waterworks licensee may operate any waterworks as follows:
 - 1. A waterworks serving 400 or more persons which (i) provides no treatment or (ii) employs hypochlorination for disinfection; or
 - 2. A waterworks classified by the Virginia Department of Health as either a Class 5 or Class 6 waterworks.

- C. A Class 4 waterworks licensee may operate any waterworks as follows:
 - 1. A waterworks serving fewer than 5,000 persons or having a design hydraulic capacity of less than 0.5 MGD, employing one or more of the following (i) disinfection other than with hypochlorination, (ii) corrosion control, (iii) iron and manganese removal, (iv) ion exchange, (v) membrane technology without pretreatment, (vi) slow sand filtration, (vii) aeration, (viii) rechlorination other than with hypochlorination, or (ix) activated carbon contactors; or
 - 2. A waterworks classified by the Virginia Department of Health as a Class 4, 5, or 6 waterworks.

- D. A Class 3 waterworks licensee may operate any waterworks as follows:
 - 1. A waterworks serving fewer than 5,000 persons or having a design capacity less than 0.5 MGD, employing chemical coagulation or lime softening in combination with one or more of the following (i) sedimentation, (ii) rapid sand filtration with a filtration rate of 2 gpm/square foot or less, (iii) fluoridation, (iv) disinfection, (v) aeration, (vi) corrosion control, or (vii) membrane technologies;
 - 2. A waterworks serving 5,000 or more persons or having a design hydraulic capacity of 0.5 MGD, employing one or more of the following: (i) disinfection other than with hypochlorination, (ii) corrosion control, (iii) iron and manganese removal, (iv) ion exchange, (v) membrane technology without pretreatment, (vi)

slow sand filtration, (vii) aeration, (viii) rechlorination other than with hypochlorination, or (ix) activated carbon contactors;

3. A waterworks employing (i) membrane technology requiring pretreatment consisting of pH adjustment; or (ii) diatomaceous earth filtration, coupled with aeration, corrosion control, disinfection, or fluoridation;
4. A waterworks employing fluoridation which is not under a higher classification; or
5. A waterworks classified by the Virginia Department of Health as a Class 3, 4, 5, or 6 waterworks.

E. A Class 2 waterworks licensee may operate any waterworks as follows:

1. A waterworks serving 5,000 or more persons but fewer than 50,000 persons or having a design hydraulic capacity of 0.5 MGD or more but less than 5.0 MGD employing chemical coagulation or lime softening in combination with one or more of the following: (i) sedimentation, (ii) rapid sand filtration, (iii) fluoridation, (iv) disinfection, (v) aeration, (vi) corrosion control, or (vii) membrane technologies;
2. A waterworks serving fewer than 50,000 persons or having a design hydraulic capacity of less than 5.0 MGD which employs chemical coagulation or lime softening coupled with multimedia granular filtration or granular filtration at rates above 2.0 gpm/square foot (high rate filtration) in combination with one or more of the following: (i) sedimentation, (ii) fluoridation, (iii) disinfection, (iv) aeration, or (v) corrosion control;
3. A waterworks employing biological activated carbon contactors or membrane technology requiring pretreatment other than pH adjustment; or
4. A waterworks classified by the Virginia Department of Health as a Class 2, 3, 4, 5, or 6 waterworks.

F. A Class 1 waterworks licensee may operate any waterworks as follows:

1. A waterworks serving 50,000 or more persons or having a design hydraulic capacity of 5.0 MGD or more employing chemical coagulation or lime softening in combination with one or more of the following: (i) sedimentation, (ii) rapid sand filtration, (iii) fluoridation, (iv) disinfection, (v) aeration, (vi) corrosion control, or (vii) membrane technologies;
2. A waterworks serving 50,000 or more persons or having a design hydraulic capacity of 5.0 MGD or more that employs chemical coagulation or lime

softening coupled with multimedia granular filtration or granular filtration at rates above 2.0 gpm/square foot (high rate filtration) in combination with one or more of the following: (i) sedimentation, (ii) fluoridation, (iii) disinfection, (iv) aeration, or (v) corrosion control;

3. A waterworks employing biological activated carbon contactors or membrane technology requiring pretreatment other than pH adjustment; or
4. A waterworks classified by the Virginia Department of Health as a Class 1, 2, 3, 4, 5, or 6 waterworks.

G. The term membrane technologies includes (i) electro dialysis reversal, (ii) reverse osmosis, (iii) ultrafiltration, (iv) microfiltration, and (v) nanofiltration.

Historical Notes

Derived from Virginia Register Volume 17, Issue 9, eff. February 15, 2001; Volume 26, Issue 6, eff. January 1, 2010.

18VAC160-20-130. Wastewater works.

A. A Class 4 wastewater works licensee may operate any wastewater works as follows:

1. A wastewater works employing natural treatment methods (i.e., those not utilizing aerated or mixed flows and not using electrical or outside energy sources to accomplish treatment) with a design hydraulic capacity greater than 0.04 MGD but equal to or less than 1.0 MGD; or
2. A wastewater works classified by the Virginia Department of Health or the Virginia Department of Environmental Quality as a Class 4 wastewater works.

B. A Class 3 wastewater works licensee may operate any wastewater works as follows:

1. A wastewater works using biological treatment methods consisting of but not limited to (i) suspended growth reactors, (ii) aerated lagoons, (iii) constructed wetlands, (iv) biological filters or other attached growth contactors, (v) processes utilizing biological nutrient control, or (vi) processes utilizing land application having a design hydraulic capacity greater than 0.04 MGD, but equal to or less than 0.5 MGD;
2. A wastewater works using advanced waste treatment methods consisting of but not limited to (i) ammonia stripping, (ii) breakpoint chlorination, (iii) carbon adsorption, (iv) chemical coagulation, (v) flocculation, (vi) precipitation, (vii) filtration, or (viii) demineralization (ion exchange, reverse osmosis or electro dialysis) having a design hydraulic capacity greater than 0.04 MGD, but equal to or less than 0.5 MGD;

3. A wastewater works using combinations of biological and advanced waste treatment methods having a design hydraulic capacity greater than 0.04 MGD, but equal to or less than 0.1 MGD;
4. A wastewater works using natural treatment methods (i.e., those not using aerated or mixed flows and not using electrical or outside energy sources to accomplish treatment) with a design hydraulic capacity greater than 1.0 MGD; or
5. A wastewater works classified by the Virginia Department of Health or the Virginia Department of Environmental Quality as either a Class 3 or 4 wastewater works.

C. A Class 2 wastewater works licensee may operate any wastewater works as follows:

1. A wastewater works using biological treatment methods consisting of but not limited to (i) suspended growth reactors, (ii) aerated lagoons, (iii) constructed wetlands, (iv) biological filters or other attached growth contactors, (v) processes utilizing biological nutrient control, or (vi) processes utilizing land application having a design hydraulic capacity greater than 0.5 MGD, but equal to or less than 5.0 MGD;
2. A wastewater works using advanced waste treatment methods consisting of but not limited to (i) ammonia stripping, (ii) breakpoint chlorination, (iii) carbon adsorption, (iv) chemical coagulation, (v) flocculation, (vi) precipitation, (vii) filtration, or (viii) demineralization (ion exchange, reverse osmosis or electro dialysis) having a design hydraulic capacity greater than 0.5 MGD, but equal to or less than 5.0 MGD;
3. A wastewater works using combinations of biological and advanced waste treatment methods, having a design hydraulic capacity greater than 0.1 MGD, but equal to or less than 2.5 MGD; or
4. A wastewater works classified by the Virginia Department of Health or the Virginia Department of Environmental Quality as a Class 2, 3, or 4 wastewater works.

D. A Class 1 wastewater works licensee may operate any wastewater works as follows:

1. A wastewater works using biological treatment methods consisting of, but not limited to (i) suspended growth reactors, (ii) aerated lagoons, (iii) constructed wetlands, (iv) biological filters or other attached growth contactors, (v) processes utilizing biological nutrient control, or (vi) processes utilizing land application having a design hydraulic capacity greater than 5.0 MGD;

2. A wastewater works using advanced waste treatment methods consisting of, but not limited to (i) ammonia stripping, (ii) breakpoint chlorination, (iii) carbon adsorption, (iv) chemical coagulation, (v) flocculation, (vi) precipitation, (vii) filtration, or (viii) demineralization (ion exchange, reverse osmosis or electro dialysis) having a design hydraulic capacity greater than 5.0 MGD;
3. A wastewater works using combinations of biological and advanced waste treatment methods, having a design hydraulic capacity greater than 2.5 MGD; or
4. A wastewater works classified by the Virginia Department of Health or the Virginia Department of Environmental Quality as a Class 1, 2, 3, or 4 wastewater works.

Historical Notes

Derived from Virginia Register Volume 17, Issue 9, eff. February 15, 2001; Volume 26, Issue 6, eff. January 1, 2010.

PART V.

STANDARDS OF PRACTICE

18VAC160-20-140. Discipline.

The board has the power to discipline and fine any licensee, interim licensee, or provisional licensee and to suspend or revoke or refuse to renew or reinstate any license, interim license, or provisional license as well as the power to deny any application for a license, interim license, or provisional license under the provisions of Chapter 23 (§ 54.1-2300 et seq.) of Title 54.1 of the Code of Virginia and this chapter for any of the following:

1. Obtaining, renewing, or attempting to obtain or renew a license, interim license, or provisional license through fraudulent means or misrepresentation;
2. Having been convicted or found guilty by a court in any jurisdiction of any felony or of any misdemeanor involving lying, cheating or stealing; or for activities related to the performance of the licensee's or interim licensee's duties, there being no appeal pending therefrom or the time for appeal having lapsed. Any plea of nolo contendere shall be considered a conviction for purposes of this subdivision. A certified copy of a final order, decree or case decision by a court or regulatory agency with the lawful authority to issue such order, decree or case decision shall be prima facie evidence of such conviction or discipline. The record of conviction certified or authenticated in such form as to be admissible in evidence under the laws of the jurisdiction where convicted shall be admissible as prima facie evidence of such guilt;
3. Not demonstrating reasonable care, judgment, or application of the required knowledge, skill and ability in the performance of the licensee's or interim licensee's duties;
4. Violating or inducing another person to violate any provisions of Chapter 1, 2, 3 or 23 of Title 54.1 of the Code of Virginia, the provisions of any other relevant Virginia or federal regulation, or of any provision of this chapter;
5. Having been found guilty by the board, an administrative body or by a court of any activity related to the performance of the licensee's or interim licensee's duties that resulted in the harm or the threat of harm to human health or the environment;
6. Failing to inform the board in writing within 30 days of pleading guilty or nolo contendere or being convicted or found guilty, regardless of adjudication, of any felony which resulted in the harm or the threat of harm to human health or the environment. Failing to inform the board in writing within 30 days of pleading guilty or nolo contendere or being convicted of or found guilty, regardless of

adjudication, of any felony or of any misdemeanor related to the performance of the licensee's or interim licensee's duties or involving lying, cheating or stealing;

7. Negligence or a continued pattern of incompetence in the practice of a licensee or interim licensee; or
8. Having undertaken to perform or performed a professional assignment that the licensee or interim licensee is not qualified to perform by education, experience, or both.

Historical Notes

Derived from Virginia Register Volume 17, Issue 9, eff. February 15, 2001; amended, Virginia Register Volume 23, Issue 1, eff. December 1, 2006; Volume 25, Issue 19, eff. July 1, 2009; Volume 26, Issue 6, eff. January 1, 2010.

18VAC160-20-145. Conflicts of interest.

Individuals holding any evaluator, installer, or operator license shall:

1. Promptly and fully inform an employer or client of any business association, interest, or circumstance that may influence the regulant's judgment or the quality of service.
2. 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 to, and agreed to by, all interested parties in writing.
3. Neither solicit nor accept financial or other valuable consideration from material or equipment suppliers for specifying their products or services.
4. 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 regulant is responsible.

Historical Notes

Derived from Virginia Register Volume 25, Issue 19, eff. July 1, 2009.

PART VI.

APPROVAL OF TRAINING

18VAC160-20-150. Approval of training.

- A. Training courses may be substituted for some of the experience required for Waterworks and Wastewater Works Class 3, Class 2 and Class 1 licenses and for onsite soil evaluators, onsite sewage system installers, and onsite sewage system operators subject to the limitations in this section. Training courses that may be substituted for required experience must be approved by the board except those provided by federal or state agencies, institutions, schools and universities approved by the State Council of Higher Education for Virginia, for which continuing education units are awarded. Training courses requiring board approval shall be approved by the board prior to commencing in accordance with the following:
- B. Training courses for which experience credit may be granted must be conducted in general conformance with the guidelines of the International Association for Continuing Education and Training (Association). The board reserves the right to waive any of the requirements of the association's guidelines on a case-by-case basis. Only classroom, laboratory and field trip contact time will be used to compute training credits. No credit will be given for breaks, meals, or receptions.
1. Organization. The board will only approve training offered by a sponsor who is an identifiable organization with a mission statement outlining its functions, structure, process and philosophy, and that has a staff of one or more persons with the authority to administer and coordinate a training credit (TC) program.
 2. TC records. The board will only approve training offered by a sponsor who maintains TC records for all participants for a minimum of seven years, and who has a written policy on retention and release of TC records.
 3. Instructors. The board will only approve training conducted by personnel who have demonstrated competence in the subject being taught, an understanding of the learning objective, a knowledge of the learning process to be used, and a proven ability to communicate.
 4. Objectives. The board will only approve courses that have a series of stated objectives that are pertinent to the tasks performed by a licensee. The training course content must be consistent with those objectives.
 5. Course completion requirements. For successful completion of a training course, participants must attend 90% or more of the class contact time and must demonstrate their learning through written examinations, completion of a project, oral examination, or other similar assessment technique.

- C. The board shall consider the following information, to be submitted by the course sponsor or instructor on forms provided by the board, at least 45 days prior to the scheduled training course:
1. Course information.
 - a. Course title;
 - b. Planned audience;
 - c. Name of sponsor;
 - d. Name, address, phone number of contact person;
 - e. Scheduled presentation dates;
 - f. Detailed course schedule, hour-by-hour;
 - g. List of planned breaks;
 - h. Scheduled presentation location; and
 - i. Relevancy of course to the category of licensure.
 2. Instructor qualifications.
 - a. Name of instructor;
 - b. Title, employer; and
 - c. Summary of qualifications to teach this course.
 3. Training materials.
 - a. Course objectives. A listing of the course objectives stated in terms of the skills, knowledge, or attitude the participant will be able to demonstrate as a result of the training.
 - b. Course outline. A detailed outline showing the planned activities that will occur during the training course, including major topics, planned presentation sequence, laboratory and field activities, audio-visual presentation, and other major activities.

- c. Course reference materials. A list of the name, publisher and publication date for commercially available publications. For reference materials developed by the course sponsor or available exclusively through the course, a copy of the reference.
 - d. Audio-visual support materials. A listing of any commercially available audio-visual support material that will be used in the program. A brief description of any sponsor or instructor generated audio-visual material that will be used.
 - e. Handouts. Identification of all commercially available handout materials that will be used; as well as copies of all other planned handouts.
4. Determination of successful completion. A description of the means that will be used to assess the learning of each participant to determine successful completion of the training program, such as examinations, projects, personal evaluations by the instructor, or other recognized evaluation techniques.
- D. Recurring training programs. If there are plans to present the same course of instruction routinely at multiple locations with only minor modifications and changes, the board may approve the overall program rather than individual presentations if so requested by the sponsor.
1. The board shall consider all of the information listed above except those items related to specific offerings of the course.
 2. Board approval may be granted for a specific period of time or for an indefinite period.
 3. Board approval will apply only to those specific offerings certified by the sponsoring organization as having been conducted by instructors meeting the established criteria and in accordance with the board-approved course outlines and objectives.
 4. To maintain approval of the program, changes made to the program since its approval must be submitted.

Historical Notes

Derived from Virginia Register Volume 17, Issue 9, eff. February 15, 2001; amended, Virginia Register Volume 25, Issue 19, eff. July 1, 2009; Volume 26, Issue 6, eff. January 1, 2010.

Included in this document are relevant excerpts from the *Code of Virginia*. Please note that the Virginia General Assembly is responsible for creating and amending the *Code*, not the Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals. The version contained herein contains all changes, if any, that have been made by the General Assembly through the 2013 session. Any changes made during the 2013 session became effective July 1, 2013 unless otherwise noted. It is your responsibility to stay informed of revisions to the regulations and the statutes governing your profession or occupation. Please consult the General Assembly or your local library for annual changes.

Code of Virginia

§ 54.1-2300. Definitions.

As used in this chapter, unless the context requires a different meaning:

"Board" means the Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals.

"Onsite sewage system" means a conventional onsite sewage system or alternative onsite sewage system as defined in § 32.1-163.

"Operator" means any individual employed or appointed by any owner, and who is designated by such owner to be the person in responsible charge, such as a supervisor, a shift operator, or a substitute in charge, and whose duties include testing or evaluation to control waterworks or wastewater works operations or to operate and maintain onsite sewage systems. Not included in this definition are superintendents or directors of public works, city engineers, or other municipal or industrial officials whose duties do not include the actual operation or direct supervision of waterworks or wastewater works.

"Owner" means the Commonwealth of Virginia, or any political subdivision thereof, any public or private institution, corporation, association, firm or company organized or existing under the laws of this Commonwealth or of any other state or nation, or any person or group of persons acting individually or as a group, who own, manage, or maintain waterworks or wastewater works.

"Person" means any individual, group of individuals, a corporation, a partnership, a business trust, an association or other similar legal entity engaged in operating waterworks or wastewater works.

"Wastewater works" means each system of (i) sewerage systems or sewage treatment works, serving more than 400 persons, as set forth in § 62.1-44.18; (ii) sewerage systems or sewage treatment works serving fewer than 400 persons, as set forth in § 62.1-44.18, if so certified by the State Water Control Board; and (iii) facilities for discharge to state waters of industrial wastes or other wastes, if certified by the State Water Control Board.

"Waterworks" means each system of structures and appliances used in connection with the collection, storage, purification, and treatment of water for drinking or domestic use and the distribution thereof to the public, except distribution piping. Systems serving fewer than 400 persons shall not be considered to be a waterworks unless certified by the Board to be such.

(1970, c. 768, § 54-573.2; 1972, c. 682; 1988, c. 765; 2007, cc. 892, 924.)

§ 54.1-2301. (Effective until July 1, 2016) Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals; membership; terms; duties.

A. The Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals shall consist of 11 members as follows: the Director of the Office of Water Programs of the State Department of Health, or his designee, the Executive Director of the State Water Control Board, or his designee, a currently employed waterworks operator having a valid license of the highest classification issued by the Board, a currently employed wastewater works operator having a valid license of the highest classification issued by the Board, a faculty member of a state university or college whose principal field of teaching is management or operation of waterworks or wastewater works, a representative of an owner of a waterworks, a representative of an owner of a wastewater works, a licensed alternative onsite sewage system operator, a licensed alternative onsite sewage system installer, a licensed onsite soil evaluator, and one citizen member. The alternative onsite sewage system operator, alternative onsite sewage system installer, and onsite soil evaluator shall have practiced for at least five consecutive years immediately prior to appointment. No owner shall be represented on the Board by more than one representative or employee operator. The term of Board members shall be four years.

B. The Board shall examine waterworks and wastewater works operators and issue licenses. The licenses may be issued in specific operator classifications to attest to the competency of an operator to supervise and operate waterworks and wastewater works while protecting the public health, welfare and property and conserving and protecting the water resources of the Commonwealth.

C. The Board shall establish a program for licensing individuals as onsite soil evaluators, onsite sewage system installers, and onsite sewage system operators.

D. The Board, in consultation with the Board of Health, shall adopt regulations for the licensure of (i) onsite soil evaluators; (ii) installers of alternative onsite sewage systems, as defined in § 32.1-163; and (iii) operators of alternative onsite sewage systems, as defined in § 32.1-163. Such regulations shall include requirements for (a) minimum education and training, including approved training courses; (b) relevant work experience; (c) demonstrated knowledge and skill; (d) application fees to cover the costs of the program, renewal fees, and schedules; (e) the division of onsite soil evaluators into classes, one of which shall be restricted to the design of conventional onsite sewage systems; (f) the division of sewage system installers into classes, one of which shall be restricted to the installation of conventional onsite sewage systems; and (g) other criteria the Board deems necessary.

E. The Board shall not require applicants for initial licensure as a conventional onsite sewage system installer to pass an examination prior to issuance of such license provided that the applicant satisfactorily demonstrates to the Board that he has been actively engaged in performing the duties of a conventional onsite sewage system installer for at least eight years within the 12-year period immediately preceding the date of application for licensure.

F. The Board shall permit any wastewater works operator to sit for the conventional onsite sewage system operator examination.

(1970, c. 768, §§ 54-573.1, 54-573.3; 1981, c. 447; 1988, c. 765; 1989, c. 97; 2007, cc. 892, 924; 2008, c. 67; 2012, cc. 677, 704; 2013, c. 731.)

§ 54.1-2301. (Effective July 1, 2016) Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals; membership; terms; duties.

A. The Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals shall consist of 11 members as follows: the Director of the Office of Water Programs of the State Department of Health, or his designee, the Executive Director of the State Water Control Board, or his designee, a currently employed waterworks operator having a valid license of the highest classification issued by the Board, a currently employed wastewater works operator having a valid license of the highest classification issued by the Board, a faculty member of a state university or college whose principal field of teaching is management or operation of waterworks or wastewater works, a representative of an owner of a waterworks, a representative of an owner of a wastewater works, a licensed alternative onsite sewage system operator, a licensed alternative onsite sewage system installer, a licensed onsite soil evaluator, and one citizen member. The alternative onsite sewage system operator, alternative onsite sewage system installer, and onsite soil evaluator shall have practiced for at least five consecutive years immediately prior to appointment. No owner shall be represented on the Board by more than one representative or employee operator. The term of Board members shall be four years.

B. The Board shall examine waterworks and wastewater works operators and issue licenses. The licenses may be issued in specific operator classifications to attest to the competency of an operator to supervise and operate waterworks and wastewater works while protecting the public health, welfare and property and conserving and protecting the water resources of the Commonwealth.

C. The Board shall establish a program for licensing individuals as onsite soil evaluators, onsite sewage system installers, and onsite sewage system operators.

D. The Board, in consultation with the Board of Health, shall adopt regulations for the licensure of (i) onsite soil evaluators; (ii) installers of alternative onsite sewage systems, as defined in § 32.1-163; and (iii) operators of alternative onsite sewage systems, as defined in § 32.1-163. Such regulations shall include requirements for (a) minimum education and training, including approved training courses; (b) relevant work experience; (c) demonstrated knowledge and skill;

(d) application fees to cover the costs of the program, renewal fees, and schedules; (e) the division of onsite soil evaluators into classes, one of which shall be restricted to the design of conventional onsite sewage systems; and (f) other criteria the Board deems necessary.

E. The Board shall permit any wastewater works operator to sit for the conventional onsite sewage system operator examination.

(1970, c. 768, §§ 54-573.1, 54-573.3; 1981, c. 447; 1988, c. 765; 1989, c. 97; 2007, cc. 892, 924; 2008, c. 67; 2013, c. 731.)

§ 54.1-2302. License required.

No person shall operate a waterworks or wastewater works, perform the duties of an onsite soil evaluator, or install or operate an alternative onsite sewage system, without a valid license.

(1979, c. 408, § 54-573.18; 1988, c. 765; 2007, cc. 892, 924.)