

# Waterworks Operator Licensing

(Last updated October 1, 2010)

Applying for a Virginia Waterworks License is a two-step process. The first step is to apply to sit for the open-book exam administered by PSI, the Department of Professional and Occupational Regulation's (DPOR) vendor that provides examinations for various professions including waterworks operators. After submitting your application and fee, staff at PSI will screen your application to determine if it is complete and that all regulatory requirements have been met. If it does, you will be contacted to schedule your exam at one of several PSI locations. If the application is incomplete, you will be contacted for additional information. If complete, and PSI staff cannot determine whether the regulatory requirements have been met, PSI will forward your application to the staff at DPOR for review.

If the DPOR staff determines that all requirements for licensure have been met, PSI will be notified that you may sit for the examination and you, in turn, will be notified as above. (The licensure board has granted DPOR staff approval authority for specific conditions that have not been extended to the exam vendor.) If the DPOR staff determines that regulatory requirements have not been met, PSI will be notified and you, in turn, will be notified that your application was not approved at this time. If the DPOR staff cannot make a determination, your application will be forwarded to the licensure board for determination at its next scheduled board meeting. The board then decides whether your application can move forward. As the board generally meets quarterly, a delay could be expected in the processing of your application.

Once approved to sit for the examination, you will schedule the location and date with PSI. Once you pass the examination, PSI will inform you that your next step is to apply to DPOR for your license (PSI forwards your exam results to DPOR.) This step requires an additional fee. DPOR reviews the application and if, everything is in order, issues you your license.

Ideally applicants should be contacted by PSI within two weeks of receiving your application, but it can take longer. Understand that the process can be cumbersome if documentation is misleading, incomplete, or regulatory requirements appear not to have been met and requires DPOR review. In some instances, PSI staff has lost part of the application process, requiring missing documents to be resubmitted as originals. (Missing forms cannot be sent electronically by FAX or e-mail.) If this occurs or you have not heard from PSI within several weeks of your submission, you will need to keep proactive in following the status of your application and what you may need to do to put it back on track. The status of your application can be viewed online.

## Step 1

Go to the PSI website and view the Bulletin which is your basic guidance at:

[www.psiexams.com](http://www.psiexams.com) and click on these hyperlinks

→ Government/State Licensing Agencies

→ Virginia  
→ VA Waterworks and Wastewater Works Operator ...  
→ VA Waterworks Operator Class for which you're  
applying  
→ Download Candidate Information Bulletin

The Bulletin is a 32-page Adobe PDF document that can be printed out or saved to your computer or a flash drive.

Page 2 of the bulletin describes the process and what you will need to provide in order to be able to sit for the exam.

Page 9 and 10 are the Virginia Operator Registration Form and Application.

## **Step 2**

Fill out the Virginia Operator Registration Form and Application and submit with the application fee of \$84 to PSI. You will also need to fill out the Experience Verification Form on page 12. This is a little tricky for some Class VI applicants that do not have a supervisor with a license. This situation is anticipated in the DPOR regulations which allow the unlicensed *owner* of the waterworks to verify the experience of his applicant. It is suggested that for line 7 you enter "not required by 18VAC160-20-90.B.2" If you are the owner applying to take the exam (that is, you are self-employed and have no supervisor), DPOR has accepted the appropriate Office of Drinking Water (ODW) staff (having direct knowledge of your on-the-job experience) verifying your experience.

## **Step 3**

When notified by PSI that you are eligible to site for the exam, schedule your exam at a location and on a date convenient for you. Scheduling instructions are found on page 3 of the Candidate Bulletin and locations are listed on pages 4-5 of the bulletin.

## **Step 4**

When you pass the exam, PSI will notify you that you passed. While at the exam center, you will be provided a license application to send to DPOR. Do not send to PSI. Along with the license application, you must submit a fee to DPOR.

## **Study Materials**

The Need-to-Know Criteria for each exam classification are found in the Candidate Bulletin after the instructions for the application forms. Start here to see which core competencies you will be responsible for knowing on the exam.

There is no dedicated source of study material that is designed for the Waterworks License exam, but a good place to start is the correspondence courses offered by California State University (Sacramento). The relatively inexpensive manuals are also available apart from the correspondence course and, if not written in, can be taken into the exam. Having a good glossary and index, subjects are readily found. Review of the *Virginia Waterworks Regulations* has also been helpful in the past.

On page 3 of the PSI Bulletin there are several study guides listed. It would be unreasonable to study all of these study materials so it is prudent to select the best source(s). The best technical guide for Class VI, V, and IV exams is *The Small Water System Operation and Maintenance: A Field Study Training Program*. A copy of this study material can be borrowed from the Training Officer at the Office of Drinking Water (804) 864-7514. Volumes I and II of the Water Treatment Plant Operations are good guides for Class III, II, and I exams. You may also find useful the *Water Distribution System Operation and Maintenance: A Field Study Training Program* manual for all classes of exams above Class VI. CSU correspondence courses and manuals can be ordered at <http://www.owp.csus.edu/training/courses/orderform.php>.

### **Training Opportunities**

A good source of training opportunities can be found at the Office of Drinking Water website: [www.vdh.virginia.gov/drinkingwater](http://www.vdh.virginia.gov/drinkingwater) .

→ *Information for Waterworks Owners* (shaded area on the left)

→ Training Opportunities (shaded area on the right side)

**Waterworks Operator Short Courses.** There are three levels to the Short Courses offered annually at Virginia Tech in late July-August. The courses are designed in a building block manner that the curricula for levels two and three are based on having completed the previous level. Year 1 (Introductory) is suitable for Class VI, V, and IV operators as it covers basic core competencies and groundwater treatment. Years 2 (Introduction to Surface Water Treatment) and 3 (Advanced Topics) are suitable for Class III, II, and I operators. For more information on the Short Courses, visit <http://www.cpe.vt.edu/wwplant/>.

**Applied Math and Basic Science Short Course.** This five-day short course covers applied math and basic science concepts than waterworks operators need to know. It is desirable to take this course before the waterworks operator short courses described above. As math is not covered in the short courses, having a strong math background is essential to be able to successfully complete Years 2 and 3. This course is also useful in preparation for any class licensure exam as questions on math and basic science concepts can be found on each class's licensure exam. Applicants for Class III, II, and I exams will benefit from this course the most as latter portions of the course focus on surface water treatment processes. For more information go to <http://www.cpe.vt.edu/mssc/>. VDH, in partnership with Virginia Tech, will offer a new applied math and basic science short course designed for operators of waterworks having groundwater supplies.

Very Small Water Supply Systems Training. This two-and-one-half short course covers various topics pertinent to the operation and maintenance of Class V and VI waterworks. Among the topics covered are water sources, safety, sample collection and analysis, operation and maintenance, regulations, and record keeping. A session on basic math is also included so that the calculations associated with operating a system can be better understood. For more information visit <http://www.cpe.vt.edu/sswaterworks/>.

A possible e-Training site is the Mountain Empire Community College, Distance Learning <http://water.me.vccs.edu/>. Individual coursework can be taken that can lead to an associates degree. But there is free study materials and references, such as a math review and glossaries, under the related topics bar on the above web page.

An ongoing attempt in trying to improve this document is underway and will be updated when data from recent applicants are received— especially in hearing what the best study materials are for each class exam. If you can add value to this document please contact Carl Christiansen at [carl.christiansen@vdh.virginia.gov](mailto:carl.christiansen@vdh.virginia.gov) or at (540) 463-7136 x.123.

## Continuing Education

Continuing professional education (CPE) is required for waterworks operators. Licenses are good for two years and all waterworks license expire the end of February every odd-numbered year. The first two-year cycle in which you receive a license does not require continuing education. For example, you receive your license in September 2010. The two-year training cycle ends in February 2011 when your license expires. You will not be required to obtain CPE until the March 2011-February 2013 cycle. Required continuing education by class follows:

- Class VI licenses require four CPE hours every two-year cycle.
- Class V licenses require eight CPE hours every two-year cycle.
- Class IV licenses require 16 CPE hours every two-year cycle.
- Class III licenses require 20 CPE hours every two-year cycle.
- Class II licenses require 20 CPE hours every two-year cycle.
- Class I licenses require 20 CPE hours every two-year cycle.

A good source for continuing education is the Virginia Rural Water Association: <http://vrwa.org/training>. Most of the training VRWA offers is free. VRWA also offers training that may be helpful in preparing for the licensure exam. Continually checking the VRWA calendar is recommended.

Training that VDH offers along with other training providers and their links are found at: [http://www.shortschools.org/oper\\_education.html](http://www.shortschools.org/oper_education.html)