

COMMONWEALTH OF VIRGINIA ENVIRONMENTAL MONITORING WELL CONTRACTING EXAMINATION

Scope of Work: Environmental Monitoring Well Contracting (Abbr: EMW) means that service which provides for the construction of a well to monitor hazardous substances in the ground.

# of Questions	Minimum Passing Score	Time Allowed
40	70% (28 correct)	90 Minutes

CONTENT OUTLINE

Subject Area	# of Items
Requirements for Components and Standards	12
VA Waste Management Regulations	6
EPA Suggested Practices for Design and Installation	6
Evaluating Shallow Water Table Conditions for Analysis of On-Site Waste Water Disposal	4
Groundwater Sampling Procedures	4
Groundwater Properties and Chemistry	4
Safety	4

EXAMINATION REFERENCE MATERIAL

The following is a list of possible reference materials for the examination. The list is given to identify resources and does not constitute an endorsement by PSI or by the Virginia Department of Professional and Occupational Regulation.

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge, or general industry practices. You can use any edition of references and Code books as they become available. However, for Code questions, the examination will be based only on the edition of the Code book that is listed.

NOTE: All examinations are open-book. You must bring your own references as they are not provided at the test site. No study guides are permitted.

No loose papers or unbound references are permitted. If you download a reference from the Internet, it must be spiral bound or hole-punched and placed in a binder or stapled in the left-hand corner.

References may be highlighted, underlined, and/or indexed prior to the exam. Reference materials containing any writing will not be allowed into the examination. You may not write in reference materials during the examination session.

A candidate caught writing in the references during the examination will have the references confiscated and will be reported to the Department.

References may be tabbed with permanent tabs only. NO REMOVABLE TABS are allowed.

The following list of tabs may be used. These items may be purchased at local office supply stores.

Acceptable Tabs

Avery Swift Tabs Self-Adhesive Permanent Plastic Tabs
Redi-Tag Self-Stick Permanent Adhesive Index Tabs

Unacceptable Tabs

Post-It Index Flags
Post-It Flags

The URL listed for each reference is generated from the most current searches. However, placement of material on websites may be modified resulting in some discrepancies. If you are unable to find the reference under the URL listed, it is recommended that you search online via a search engine (e.g., Google).

- *Code of Federal Regulations - 29 CFR Part 1926 (OSHA)*, with latest available amendments, (866)-512-1800, https://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1926
OR
Code of Federal Regulations - 29 CFR Part 1926 Selections by PSI, with latest available amendments, (866) 589-3088, <https://www.psionlinestore.com/29-cfr-part-1926-selections-2013/>
- *ASTM D4448 - 01(2013) Standard Guide for Sampling Ground-Water Monitoring Wells*, <https://www.astm.org/Standards/D4448.htm>
- *ASTM D5092 - 04 (2010)e1 Standard Practice for Design and Installation of Groundwater Monitoring Wells*, <http://www.astm.org/Standards/D5092.htm>
- *Design and Installation of Monitoring Wells; Number SESCUID-101-R0*, 2013, Region 4 U.S Environmental Protection Agency Science and Ecosystem Support Division, Athens, GA; https://www.epa.gov/sites/production/files/2016-01/documents/design_and_installation_of_monitoring_wells.pdf
- *Recommended Procedures and Standards for Conduction a Water Table Study, December 2008*; Virginia Tech Interpretive Soil Scientist, Department of Crop and Soil Environmental Science, College of Agriculture and Life Sciences, 330 Smyth Hall (0404) Blacksburg, VA 24060; <http://www.vdh.virginia.gov/content/uploads/sites/20/2018/06/Recommended-Procedures-and-Standards-for-Conducting-a-Water-Table-Study.pdf>
- VA Waste Management Regulations 9VAC20-81-10 Definitions and 9VAC20-81-250 Groundwater Monitoring Program; <http://leg1.state.va.us/cgi-bin/legp504.exe?000+reg+9VAC20-81-10> and <http://lis.virginia.gov/cgi-bin/legp604.exe?000+reg+9VAC20-81-250>
- Virginia Professional Excavator’s Manual, VA811.com Dig with CARE, Virginia State Corporation Commission



Division of Utility and Railroad Safety, 2011;
<https://va811.com/excavator-manual-marking-standards-manual/>

