



## Part 1 Practice Exam Small Water System Training Course

1. Each small water system operator is important. The state's goal is to help you understand and facilitate the safe delivery of drinking water. You need to be honest and upfront when dealing with the state and your consumers, keeping in mind that you are responsible for protecting public health.
  - a. True
  - b. False
  
2. Each water system should have an Emergency Response Plan in place. Ideally this should include a contact list and be updated routinely.
  - a. True
  - b. False
  
3. What are the primary functions of the regulatory agencies that oversee public drinking water systems in Oregon (county health departments, Department of Agriculture, and Oregon Health Authority–Drinking Water Services [DWS])? (choose one)
  - a. Technical assistance and training and ensure and enforce compliance
  - b. Water system survey inspections and investigate and respond to contamination incidents
  - c. Emergency response planning
  - d. Regulate Oregon Very Small public water systems
  - e. All of the above

4. Public water systems are responsible for ensuring that contaminants in tap water do not exceed Environmental Protection Agency (EPA) standards. To ensure that drinking water is safe, the Safe Drinking Water Act (SDWA) sets up multiple barriers against pathogens. Which of the following protocols are part of a multiple barrier approach to pollution? (choose one)
  - a. Source waters are protected.
  - b. Water is treated to ensure the inactivation of pathogenic organisms.
  - c. Routine inspections, sampling, and testing are done at drinking water systems.
  - d. Water distribution system integrity is adequate and public information is made readily available.
  - e. All of the above
  
5. Depending on the water system classification, there may be different requirements for sampling amounts and reporting.
  - a. True
  - b. False
  
6. Water quality monitoring and reporting requirements are based on the source type of the water being treated. What are the main categories of drinking water sources? (choose one)
  - a. Groundwater
  - b. Surface water
  - c. Groundwater under the direct influence of surface water (GWUDI)
  - d. A combination of groundwater and surface water
  - e. All of the above
  
7. What are the three main features of a groundwater system? (choose one)
  - a. Source protection of a groundwater well field
  - b. Water treatment
  - c. Water distribution system monitoring
  - d. All of the above
  
8. Sampling for a small water system needs to take place routinely. Samples from small water systems and community water systems are analyzed for the same constituents. Budgeting for lab analyses and collecting the proper number of samples is the responsibility of the small water system operator.
  - a. True
  - b. False

9. As a small water system operator you may not have all the answers, but you are expected to know where to find answers in your quest to protect public health.
  - a. True
  - b. False
  
10. You must submit a plan to DWS Plan Review before constructing a new system or modifying an existing system.
  - a. True
  - b. False
  
11. It's best to be proactive and reach out to regulatory agencies if there are any concerns or problems with your system. Because you are responsible for protecting public health, being deceitful is not encouraged.
  - a. True
  - b. False
  
12. If you are in direct responsible charge (DRC) of a small water system you need to fill out the small water system operator certification application for the Oregon Health Authority–DWS. To complete this process, you need to include (choose one):
  - a. Your certificate of completion for the small water system operator training course and the date you passed the exam.
  - b. Name of the water system
  - c. Your name, address, and signature
  - d. All of the above
  
13. Operators of all community and non-community water systems must meet certain certification requirements that are based on system size and complexity. What are the three basic types of water operator certifications in Oregon? (choose one)
  - a. Small Water System Operator, Water Treatment, and Water Distribution
  - b. Wastewater Treatment
  - c. Wastewater Collections
  - d. None of the above

14. According to the American Water Works Association (AWWA), the minimum pressure needed for a water distribution system is \_\_\_\_\_ psi. (choose one)
  - a. 5
  - b. 10
  - c. 20
  - d. 85
  
15. What is the operator required to do whenever there is a power outage or a loss of pressure in a small water system? (choose one)
  - a. Do nothing.
  - b. Perform testing on the system.
  - c. Keep the power off until the entire system has been flushed.
  - d. Drain the system before turning it back on and report the loss of power to the local electric company.
  
16. Chlorine bleach for disinfection can be purchased at a grocery store and poured directly into the system. In Oregon, chlorine used for drinking water disinfection is not required to be NSF-60 certified.
  - a. True
  - b. False
  
17. How many times per week must chlorine residual samples be collected and analyzed and the results recorded? (choose one)
  - a. Once
  - b. Twice
  - c. Seven times
  - d. Chlorine residual samples are not required to be collected.
  
18. The Oregon Health Authority–DWS Data Online web page is where operators can go to find valuable information (all the testing, water system surveys, well logs, etc. required by the system).
  - a. True
  - b. False
  
19. All public water systems are required to collect microbiological and chemical samples to establish, demonstrate, and maintain water quality.
  - a. True
  - b. False

20. Small systems with fewer than 150 connections that use only groundwater or purchase water from another public system without adding treatment are classified as small water systems.
- True
  - False
21. Oregon Health Authority–DWS has an after-hours emergency phone number you can call if you encounter an emergency in your water system outside of normal working hours.
- True
  - False
22. The Drinking Water State Revolving Fund (DWSRF) provides financing to community and nonprofit non-community public water systems to assist them with complying with the Safe Drinking Water Act and amendments.
- True
  - False
23. A water system survey is a detailed on-site review of the water sources, facilities, equipment, operation, and maintenance of a public water system to evaluate the adequacy of those elements for producing and distributing safe drinking water. What are the goals of a water system survey? (choose one)
- Evaluate the system's capability for providing safe drinking water, assess compliance with regulations, and provide feedback to the water system so that public health protections are maintained.
  - Asses the cost-ratio benefit of the water system and offer insight into proper management techniques to increase rate payer efficiencies.
  - Assess the informational technology components of the water district and implement a state-required asset management plan.
  - Provide the water district with a preventative maintenance plan and upgrade recommendations for Supervisory Control and Data Acquisition (SCADA) programs.
  - All of the above

24. If a Community Water System is not an outstanding performer it must conduct a water system survey every \_\_\_\_\_ years. (choose one)
- a. 1
  - b. 2
  - c. 3
  - d. 4
  - e. 5
25. Which of the following are potential source risks for source water contaminants in Oregon? (choose one)
- a. Industrial agriculture
  - b. Dry cleaners and parking lots
  - c. Gas stations with leaky underground storage tanks
  - d. Septic systems
  - e. All of the above
26. All community waters systems are required to have a written enabling authority or local ordinance that authorizes the discontinuation of water service for the following reasons (choose one):
- a. Unprotected cross connections
  - b. An approved backflow assembly not installed or maintained properly
  - c. Approved assemblies not tested annually
  - d. Approved back flow tester and device lists
  - e. All of the above
27. In community water systems, when is backflow prevention required? (choose one)
- a. There is an auxiliary water supply which is, or can be, connected to the potable water piping.
  - b. There is piping for conveying liquids other than potable water, and that piping is under pressure and is installed in proximity to potable water piping.
  - c. The facility is a mortuary.
  - d. The facility is a car wash.
  - e. All of the above

28. Water users or owners of premises where required backflow preventers are installed must have those assemblies tested (choose one):
- a. At least once per year
  - b. After installation and before use
  - c. When they are moved
  - d. After they are repaired
  - e. All of the above
29. Approved backflow prevention methods are based on the degree of identified hazard. The two hazards are health hazard (contaminant) and non-health hazard (pollutant).
- a. True
  - b. False
30. It's best to collect water samples earlier in the month; in case the sample fails, you'll have time to take action. The operator is responsible for ensuring that routine sampling is conducted.
- a. True
  - b. False
31. Chronic health-effect problems typically occur after short-term exposure (within hours or days of exposure) and from consumption of very small amounts of contaminated water that can lead to gastrointestinal issues.
- a. True
  - b. False
32. Acute health-effect problems typically occur after prolonged exposure to low levels of contaminants and can lead to cancers and possible organ damage.
- a. True
  - b. False
33. Long-term exposure to contaminants in drinking water typically involves communities, schools, or workplaces where the same people drink the water daily. Short-term exposure typically involves campgrounds, parks, motels, or restaurants where different people drink the water daily. Regardless of the source of exposure, EPA bases drinking water exposure on consuming \_\_\_\_\_ liters per day of water. (choose one)
- a. 1
  - b. 2
  - c. 3
  - d. 4

34. EPA regulates drinking water that to prevent adverse effects on public health. Regulation presents meaningful opportunities for health risk reduction for persons served by public water systems.
- True
  - False
35. Total coliform testing is relatively easy and inexpensive to conduct. Coliforms are used as indicators of possible pathogenic contamination in the water system. False positives can occur due to poor sampling techniques and/or sample locations. Tests give presence or absence results, which are easy to interpret.
- True
  - False
36. Drinking water standards limit the amount of contamination to a level considered “acceptable,” Primary standards set enforceable limits (the maximum contaminant level [MCL]) on the amount of contamination allowed in public drinking water. What do secondary standards provide guidelines for? (choose one)
- Aesthetic effects like taste, odor, and color
  - Radionuclides
  - Inorganic solvents
  - All of the above
37. Chlorine bleach from your local grocery store should not be used in your water system. You should use chemicals with which stamp or label? (choose one)
- AWWA stamped
  - CWA stamped
  - National Sanitation Foundation NSF-60 label
  - ABC stamped
38. Why is drinking water tested?
- To determine drinking water quality
  - To detect water quality problems
  - It’s a legal requirement
  - All of the above



39. What are the potential consequences of failure to conduct tests? (choose one)
- a. Customer health problems
  - b. Compliance violations
  - c. Financial penalties against the water supplier
  - d. All of the above
40. Raw untreated source water from wells and springs are required to be routinely sampled for which constituents? (choose one)
- a. Lead and zinc
  - b. Synthetic organic compounds (SOCs), volatile organic compounds (VOCs), inorganic compounds IOCs, arsenic, nitrate, and radionuclides
  - c. Coliforms
  - d. Disinfectant byproducts (DBPs) and chlorine residual
41. On a system with chlorination drinking water samples collected from within a distribution system need to be sampled for which constituents? (choose one)
- a. Lead and zinc
  - b. Synthetic organic compounds (SOCs), volatile organic compounds (VOCs), inorganic compounds IOCs, arsenic, nitrate, and radionuclides
  - c. Viruses
  - d. Total coliforms, disinfectant byproducts (DBPs), and chlorine residual
42. After water is treated and enters a water distribution system, it must be sampled for which constituents? (choose one)
- a. Lead and molybdenum
  - b. Synthetic organic compounds (SOCs), volatile organic compounds (VOCs), inorganic compounds IOCs, arsenic, nitrate, and radionuclides\*

43. Water that has been treated, entered the distribution system, and is a first draw sample collected at a consumers kitchen sink faucet is typically analyzed for which constituents? (choose one)
- a. Lead and copper
  - b. Synthetic organic compounds (SOCs), volatile organic compounds (VOCs), inorganic compounds IOCs, arsenic/ nitrate, radionuclides
  - c. Coliforms
  - e. Total coliforms, disinfectant byproducts (DBPs), and chlorine residual
44. When collecting a sample ensure that the aerator has been removed from the faucet. Ideally, representative samples should be collected from a designated site within the distribution system, not at the consumer tap of the bathroom sink.
- a. True
  - b. False
45. Drinking water samples may be collected only by the person in direct responsible charge (DRC) of the water system. Labs are not allowed to collect or analyze samples from water systems.
- a. True
  - b. False
46. It's best to collect water samples early in the month so if resampling is needed, you'll have ample time to do so.
- a. True
  - b. False
47. Testing is the responsibility of the water supplier.
- a. True
  - b. False
48. Who can collect water samples? (choose one)
- a. The operator
  - b. Someone trained by the operator
  - c. Contracted personnel (lab, operator)
  - d. State-certified drinking water laboratory personnel
  - e. All of the above

49. The water supplier must report results directly to DWS or arrange for the lab to report results to DWS. Labs are required to report all MCLs (including positive coliform results) to DWS within 24 hours of notification. A system must report results to DWS within \_\_\_\_ days following the end of the reporting period. (choose one)
- a. 7
  - b. 10
  - c. 21
  - d. 30
50. Coliform bacteria are indicator bacteria – their presence is an indication of potential contamination pathways. *E. coli* bacteria are a type of fecal coliform bacteria.
- a. True
  - b. False