

iii. Permanent taps or other provisions to allow insertion of a small meter to determine leakage and obtain water samples shall be made on each side of the valve closest to the supply source. (3-24-22)

543. FACILITY AND DESIGN STANDARDS: CROSS CONNECTION CONTROL.

There shall be no connection between the distribution system and any pipes, pumps, hydrants, water loading stations, or tanks whereby unsafe water or other contaminating materials may be discharged or drawn into a public water system. The water purveyor is responsible through its cross connection control program to take reasonable and prudent measures to protect the water system against contamination and pollution from cross connections through premises isolation or containment, internal or in-plant isolation, fixture protection, or some combination of premises isolation, internal isolation, and fixture protection. (3-24-22)

01. Testable Assemblies. All double check valve backflow prevention assemblies, reduced pressure principle backflow prevention assemblies, spill resistant vacuum breakers, and pressure vacuum breakers used must pass a performance test conducted by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research (USC Foundation) and be included on the USC Foundation "List of Approved Assemblies." (3-24-22)

02. Atmospheric Vacuum Breakers. All atmospheric vacuum breakers used shall be marked approved either by the International Association of Plumbing and Mechanical Officials (IAPMO) or by the American Society of Sanitation Engineers (ASSE). (3-24-22)

03. Replacement Parts and Components. All replacement parts and components, including resilient seated shutoff valves, shall meet original manufacturer's specifications or otherwise be approved by the USC Foundation as replacement parts or components for use on double check valve backflow prevention assemblies, reduced pressure principle backflow prevention assemblies, pressure vacuum breakers, and spill resistant pressure vacuum breakers. The design, material, or operational characteristics of any assembly must not be altered during maintenance or repair. (3-24-22)

04. Assembly Selection. Appropriate and adequate backflow prevention assembly types for various facilities, fixtures, equipment, and uses of water should be selected from the AWWA Pacific Northwest Section Cross Connection Control Manual, the Uniform Plumbing Code, the AWWA Recommended Practice for Backflow Prevention and Cross Connection Control (M14), the USC Foundation Manual of Cross Connection Control, or other sources deemed acceptable by the Department. The selected assembly manufacturer model number must be included on the USC Foundation "List of Approved Assemblies" and must comply with local ordinances. (3-24-22)

544. FACILITY AND DESIGN STANDARDS: GENERAL DESIGN OF FINISHED WATER STORAGE.

The materials and designs used for finished water storage structures shall provide stability and durability as well as protect the quality of the stored water. Finished water storage structures shall be designed to maintain water circulation and prevent water stagnation. Steel structures and facilities such as steel tanks, standpipes, reservoirs, and elevated tanks shall be designed and constructed in accordance with applicable AWWA Standards, incorporated by reference into these rules at Subsection 002.01. Other materials of construction are acceptable when properly designed to meet the requirements of Section 544. (3-24-22)

01. Sizing and Isolation Requirements. (3-24-22)

a. Storage facilities shall have sufficient capacity, as determined from engineering studies that consider peak flows, fire flow capacity, and analysis of the need for various components of finished storage as defined under the term "Components of Finished Water Storage" in Section 003. The requirement for storage may be reduced when the source and treatment facilities have sufficient capacity with standby power to supply peak demands of the system. (3-24-22)

b. All storage structures which provide pressure directly to the distribution system, such as elevated storage structures or ground level storage structures with associated pumping systems, shall be designed so they can be isolated and drained for cleaning or maintenance without causing a loss of pressure in the distribution system. (3-24-22)

02. Location. Storage facilities shall be located in a manner that protects against contamination,

- b.** Fluoride compounds shall be stored in covered or unopened shipping containers. (3-24-22)
- c.** Provisions shall be made to minimize the quantity of fluoride dust. Empty bags, drums, or barrels shall be disposed of in a manner that will minimize exposure to fluoride dusts. (3-24-22)
- d.** Daily records of flow and amounts of fluoride added shall be kept. An analysis for fluoride in finished water shall be made at least weekly. Records of these analyses shall be kept by the supplier of water for five (5) years. (3-24-22)

06. Cross Connection Control Program - Community Water Systems. The water purveyor is responsible through its cross connection control program to take reasonable and prudent measures to protect the water system against contamination and pollution from cross connections through premises isolation, internal or in-plant isolation, fixture protection, or some combination of premises isolation, internal isolation, and fixture protection. Pursuant to Section 543, all suppliers of water for community water systems shall implement a cross connection control program to prevent the entrance to the system of materials known to be toxic or hazardous. The water purveyor is responsible to enforce the system's cross connection control program. The program will at a minimum include: (3-24-22)

- a.** An inspection program to locate cross connections and determine required suitable protection. For new connections, suitable protection must be installed prior to providing water service. (3-24-22)
- b.** Required installation and operation of adequate backflow prevention assemblies. Appropriate and adequate backflow prevention assembly types for various facilities, fixtures, equipment, and uses of water should be selected from the AWWA Pacific Northwest Section Cross Connection Control Manual, the Uniform Plumbing Code, the AWWA Recommended Practice for Backflow Prevention and Cross Connection Control (M14), the USC Foundation Manual of Cross Connection Control, or other sources deemed acceptable by the Department. The assemblies must meet the requirements of Section 543 and comply with local ordinances. (3-24-22)
- c.** Annual inspections and testing of all installed backflow prevention assemblies by a tester licensed by a licensing authority recognized by the Department. Testing shall be done in accordance with the test procedures published by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research. See the USC Foundation Manual of Cross-Connection Control referenced in Subsection 002.02. (3-24-22)
- d.** Discontinuance of service to any structure, facility, or premises where suitable backflow protection has not been provided for a cross connection. (3-24-22)
- e.** Assemblies that cannot pass annual tests or those found to be defective shall be repaired, replaced, or isolated within ten (10) business days. If the failed assembly cannot be repaired, replaced, or isolated within ten (10) business days, water service to the failed assembly shall be discontinued. (3-24-22)

07. Cross Connection Control - Non-Community Water Systems. All suppliers of water for non-community water systems shall ensure that cross connections do not exist or are isolated from the potable water system by an approved backflow prevention assembly. Backflow prevention assemblies shall be inspected and tested annually for functionality by an Idaho licensed tester, as specified in Subsections 552.06.c. and 552.06.e. (3-24-22)

08. Start-up Procedures For Seasonal Systems Subject To Subsections 100.01.a., c., and d. (3-24-22)

- a.** All seasonal system owners and operators must demonstrate completion of a Department approved start-up procedure, including start-up sampling, prior to serving water to the public. The system owner or operator must submit information on a Department provided or approved form that includes a statement certifying that the system owner or operator followed proper start-up procedures. The form shall be submitted to the Department within 30 (thirty) days following the system's start-up date. (3-24-22)
- b.** The Department may exempt any seasonal system from Subsection 552.08.a. if the entire distribution system remains pressurized during the entire period that the system is not operating, except that the