

O'Connor Tract Co-Operative Water Co.
BACKFLOW PREVENTION AND CROSS-CONNECTION CONTROL
POLICY

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1 Definitions.

The following terms used in this policy have the same definition as in the most recent edition of the University of Southern California, Foundation for Cross-Connection Control and Hydraulic Research, Manual of Cross-Connection Control: Double Check Valve Assembly (DC), Double Check Valve Detector Assembly (DCDA), Reduced Pressure Principle Assembly (RP), Reduced Pressure Principle Detector Assembly (RPDA).

(a) "Approved backflow prevention assembly" is an assembly that has been manufactured in full conformance with the standards established by the American Water Works Association and has met completely the laboratory and field performance standard of the University of Southern California's Foundation for Cross-Connection Control and Hydraulic Research. Approved assemblies are included in the Foundation's most current edition of the List of Approved Backflow Prevention Assemblies.

(b) "Approved backflow prevention assembly tester" is a Certified Tester as defined in the San Mateo County Backflow Prevention Ordinance, so long as O'Connor Tract Co-Operative Water Co. (Water Co.) partners with San Mateo County Environmental Health to implement portions of the required cross connection control program. Otherwise, an approved backflow prevention assembly tester must possess valid certification with the California-Nevada Section of the American Water Works Association or equivalent certification as determined by the Water Co. Additional requirements, such as oral and written tests, may be required prior to being placed on the approved tester list.

(c) "Auxiliary water supply" is any water supply other than that received from the water system.

(d) "Backflow" is the undesirable reverse of flow of water, or any other liquids, gases or other substances or any combination or any mixture thereof, from the member's system into the Water Co.'s distribution system.

(e) "Backflow prevention assembly" (BPA) is any effective assembly used to prevent backflow into a potable water system. For the purposes of this policy, backflow prevention assembly, including definitions of all types of backflow prevention assemblies, shall have the same meanings as defined in the most recent edition of the University of Southern California, Foundation for Cross-Connection Control and Hydraulic Research, Manual of Cross-Connection Control.

(f) "Cross-connection" is an unprotected actual or potential connection between the water system and any source or system containing unapproved water or a substance that is not or cannot be approved as safe, wholesome, and potable. Bypass arrangements, jumper connections, removable sections, swivel or changeover devices, or other devices through which backflow could occur shall be considered to be cross-connections.

(g) "Cross-connection control specialist" is a person certified by the California-Nevada Section of the American Water Works Association, or equivalent certification as determined by the San Mateo County Cross Connection Control Program or by the Water Co.

(h) "Cross-connection survey" is an office-based or on-site survey performed by a cross-connection control specialist to determine the presence of actual or potential cross connections, as well as the degree of potential hazards on site that may require correction and/or installation of an appropriate backflow prevention assembly.

(i) "Water Co." is the O'Connor Tract Co-Operative Water Co.

(j) "Member" is any person or organization who receives water from the Water Co. and owns property in the district. Customer is any person or organization who receives water from the Water Co. but does not own property in the district.

(k) "Member's water system" is the water piping system located on the member's property.

(l) "Service connection" is the point of connection of a member's system to the Water Co.'s distribution system, usually considered immediately downstream from a curb stop when the curb stop is located on the member's property as near as possible to the public right-of-way.

2 Purpose.

The purpose of this chapter is:

(1) To protect the water system from the possibility of contamination or pollution by isolating within the member's internal distribution system(s) or the member's private water system(s) such contaminants or pollutants which could backflow into the public water systems; and

(2) To promote the elimination or control of existing cross-connections, actual or potential, between the member's in-plant potable water system(s) and nonpotable water system(s), plumbing fixtures and industrial piping systems; and

(3) To provide for the maintenance of a continuing cross-connection control program that will systematically and effectively prevent the contamination or pollution of all potable water systems.

3 Responsibility.

The Water Co. has the authority and responsibility to implement an effective cross-connection control program and for the enforcement of the provisions of this policy based on requirements of the State Water Resources Control Board Cross-Connection Control Policy Handbook (Dec. 2023). The Water Co. has partnered with San Mateo County Environmental Health to ensure that staff trained in cross-connection control are able to implement all or portions of the cross-connection program described below. In addition, the Water Co. has partnered with San Mateo County Environmental Health for enforcement of installation, maintenance, and testing of backflow prevention assemblies, including supporting all potential elements of enforcement available in the County Backflow Prevention Ordinance for non-compliance with that ordinance code.

4 General requirements.

(a) Backflow prevention assemblies may be required per Sections 5 and 10.

(b) Backflow prevention assemblies must be approved by the University of Southern California's Foundation for Cross-Connection Control and Hydraulic Research and installed only in the manner in which they were approved.

(c) The backflow prevention assemblies are owned and maintained by the member.

(d) The member shall install backflow prevention assemblies as required by the Water Co., San Mateo County Environmental Health, and in accordance with city and State of California requirements, including California Plumbing Code.

(e) The member is responsible for having backflow prevention assemblies tested at least annually, and for any required repair or replacement as required by the Water Co. and/or San Mateo County Environmental Health.

(f) The member is responsible for obtaining the proper permits to install, repair, or replace a backflow prevention assembly.

(g) When backflow prevention assemblies are required, they shall be installed on each service connection to a member's water system as close as practical at or near the property line, and, in all cases, before the member's first branch line leading off the service line. If backflow prevention assemblies are required to be installed internal to the member's water system, they must be located as specified by the Water Co. and/or San Mateo County Environmental Health.

(h) Premises with multiple service connections, where at least one (1) service connection has backflow protection, shall have backflow protection installed on each service connection.

5 Type of backflow protection required.

At a minimum, backflow prevention assemblies shall be required for premises in the following described categories:

(1) Residential service connections (two (2) dwellings or less) with fire sprinklers branched from the domestic service line shall either have an RP at the service connection, or a DC on the fire sprinkler branch line, or both.

(2) A BPA is not necessary for a low hazard fire protection system on a residential user premises if the following criteria are satisfied:

(A) the user premises has only one service connection to the PWS;

(B) a single service line onto the user premises exists that subsequently splits on the property for domestic flow and fire protection system flow, such that the fire protection system may be isolated from the rest of the user premises;

(C) a single, water industry standard, water meter is provided to measure combined domestic flow and fire protection system flow;

(D) the fire protection system is constructed of piping materials certified as meeting NSF/ANSI Standard 61; and

(E) the fire protection system's piping is looped within the structure and is connected to one or more routinely used fixtures (such as a water closet) to prevent stagnant water.

(3) Residential service connections (more than three (3) dwellings) shall have an RP.

(4) Commercial, industrial, and dedicated irrigation service connections shall have an RP.

(5) Dedicated fire service connections shall have, at a minimum, a DCDA. The Water Co. may require an RPDA depending on the degree of hazard.

(6) Premises that have multiple users sharing one (1) curb stop shall have an RP due to the risk of occupancy change without notification to the utility.

6 Installation.

Backflow prevention assemblies installed for the purpose of eliminating a potential cross-connection shall be installed with all applicable city permits, in accordance with city standards, and at a location approved by the Water Co. and/or San Mateo County Environmental Health.

(1) New Service Connections. At the time an application for a new water service is made by a potential member, in accordance with procedures established by the Water Co., the Water Co. will review the application to determine the type of backflow protection required on the member's service connection. It shall be the member's responsibility at the member's expense to install the backflow prevention assembly in accordance with city standards and at a location

approved by the Water Co. and/or San Mateo County Environmental Health. Installation and testing of a backflow prevention assembly shall be a condition of installation and connection of water service. If a member fails to install and test the backflow prevention assembly within a reasonable time limit set forth in a written notification to the member, the Water Co. may suspend water service to the premises and San Mateo County Environmental Health may take enforcement action, including fines, as provided in County ordinance code.

(2) Upgrading Existing Backflow Prevention Assemblies. An existing backflow prevention assembly which, in the opinion of the Water Co. or San Mateo County Environmental Health, is a type that does not provide adequate protection for the degree of potential hazard from backflow shall be upgraded at the member's expense. It shall be the member's responsibility at the member's expense to upgrade the backflow prevention assembly in accordance with city standards and at a location approved by the Water Co. and/or San Mateo County Environmental Health. Upgrading may include complete replacement and relocation of the backflow prevention assembly, installation of additional backflow prevention assemblies, and or correction of any on-site cross connection hazards. If a member fails to install and test the upgraded backflow prevention assembly within a reasonable time limit set forth in a written notification to the member, the Water Co. may suspend water service to the premises and San Mateo County Environmental Health may take enforcement action, including fines, as provided in County ordinance code.

7 Testing.

(a) Approved backflow prevention assemblies shall be tested by an approved backflow prevention tester.

(b) Approved backflow prevention assemblies shall be tested immediately after installation and relocation.

(c) Backflow prevention assemblies shall be tested at least annually, or more frequently if determined to be necessary by the Water Co. and/or San Mateo County Environmental Health.. San Mateo County Environmental Health or the Water Co. shall notify members when annual testing is required, and the notice shall contain the date when the test must be completed and test results submitted.

(d) Air-gap separations must be visually inspected at least annually to determine compliance with proper installation by persons certified as backflow prevention assembly testers or certified as a cross-connection control specialist.

(e) If a member does not test their backflow prevention assembly and their assembly is out of compliance with the annual test requirement, the Water Co. may suspend water service to the premises and San Mateo County Environmental Health may take enforcement action, including fines, as provided in County ordinance code.

(f) Backflow prevention assemblies that fail to pass testing shall be repaired and retested or replaced within 30 days.

(g) All test reports shall be filed with San Mateo County Environmental Health within ten (10) days of the test being performed.

(h) For assemblies that fail to pass inspection and testing, the Water Co. reserves the right to require more frequent testing when the Water Co. determines it to be in the public interest. Member shall bear the cost of additional tests.

(i) PWS must require backflow prevention assembly testers to notify the PWS as soon as possible within 24 hours if a backflow incident or an unprotected cross-connection is observed at the BPA or prior to the user premises during field testing.

8 Maintenance and repair.

(a) Backflow prevention assemblies shall be tested immediately after relocation or repair, and shall not be placed in service unless the assembly is functioning as required.

(b) The member shall at all times maintain the backflow prevention assembly in proper working order and provide for unobstructed access by the Water Co. to the assembly for inspection as a condition of continued water service.

(c) All repair and retest reports shall be filed with the San Mateo County Environmental Health within ten (10) days of the repair and retest being performed.

(d) Failure by member to repair a backflow prevention assembly or failure to submit a completed test form within the time period allowed by the Water Co. may result in termination of water service.

9 Existing service connections without backflow protection.

The Water Co. and/or San Mateo County Environmental Health will perform cross-connection surveys for hazard assessment to evaluate the degree of potential health hazard to the public water supply based on conditions existing on a member's premises. Special consideration shall be given to premises of the following types of water users:

(1) Premises having an auxiliary water supply.

(2) Premises where there is a substance that would be objectionable but not hazardous to health if introduced into the water system.

(3) Premises where there is any material dangerous to health, which is handled in such a fashion as to create an actual or potential hazard to the water system.

(4) Premises where substances harmful to health are handled under pressure in a manner which could permit possible entry into the water system. This includes chemical or biological process waters and water from the water system which has deteriorated in sanitary quality.

(5) Premises where there are unprotected cross-connections, either actual or potential, that could result in the pollution or contamination of the water system.

(6) Premises where, because of security requirements or other prohibitions or restrictions, it is impossible or impractical to make a complete in-plant cross-connection survey.

(7) Premises where recycled or reclaimed water is used.

10 Cross-connection surveys.

(a) Cross-connection surveys shall, at a minimum, consider the existence of cross-connections, the nature of materials handled on the premises, the probability of backflow occurring, the degree of piping complexity, and the potential for piping system modification.

(b) The Water Co. and/or San Mateo County Environmental Health will, from time to time, inspect the premises of existing service connections that, to assess if they require backflow protection.

(c) The member, or representative who is knowledgeable about on-site activities, shall accompany the cross-connection control specialist during the survey to answer any questions that may arise.

(d) If it is determined that a backflow prevention assembly is required, such determination by the Water Co. and/or San Mateo County Environmental Health shall be final, and the installation of a backflow prevention assembly shall be a condition of continued water service.

(e) The Water Co. and/or San Mateo County Environmental Health shall notify the member in writing if a backflow prevention assembly must be installed. The notice shall contain the date when the installation must be completed and test results submitted.

(f) Failure by member to install a backflow prevention assembly or failure to submit a completed test form within the time period allowed by the Water Co. and/or San Mateo County Environmental Health may result in termination of water service and San Mateo County Environmental Health may take enforcement action, including fines, as provided in County ordinance code.

(g) Failure by member to allow the Water Co. and/or San Mateo County Environmental Health access to member's premises to perform the cross-connection survey may result in termination of water service.

11 Penalties.

(a) The Water Co. may terminate water service to any premises served with or without notice if a required backflow prevention assembly is removed or tampered with by the member, or if the Water Co. and/or San Mateo County Environmental Health finds evidence that an installed backflow prevention assembly has been bypassed, modified, made, or allowed to remain ineffective. In addition, San Mateo County Environmental Health may take enforcement action as allowed by the County Backflow Prevention Ordinance.

(b) The Water Co. may terminate water service if an incidence backflow is found until the cause is repaired.

(c) All costs incurred by the Water Co. for discontinuance of water service and all fees associated with reinstating water service shall be paid by the member.

Approved Board of Directors May 11, 2025