Castroville Community Services District

System No. 2710005

Cross-Connection Control Program 2025

I. Purpose

A. The purpose of this Cross-Connection Control program is to achieve the primary goals listed below and serve as operating rules for implementation and maintenance of an effective program:

1. To protect the public water supply against actual or potential contamination through cross-connections by isolating sources of contamination that may occur within a water user's premises because of some undiscovered or unauthorized cross-connection on the premises; and
2. To eliminate existing connections between drinking water systems and other sources of water that are not approved as safe and potable for human consumption; and
3. To eliminate cross-connections between drinking water systems and sources of contamination; and
4. To prevent the making of cross-connections in the future.
5. To ensure compliance with the State Water Resources Resources Control Board Cross-Connection Control Policy Handbook, effective July 1, 2024.

B. This program is pursuant to the State Water Resources Control Board adoption of the new Cross-Connection Control Policy Handbook (CCCPH) on 12/19/2023, which took effect on 7/1/2024, and now sets forth rules and regulations governing cross-connections. Previously these rules were enforced through Title 17 CCR sections 7583-7605. The newly adopted CCCPH replaces the Cross-Connection Control section of Title 17 CCR and is intended to provide more specific guidance of what is expected to protect potable water supplies from pollution and contamination in California.

C. It is unlawful for any person, firm, or corporation at any time to make or maintain or cause to be made or maintained, temporarily or permanently, for any period of time whatsoever, any cross-connection between plumbing pipes or water fixtures being served with water by the water company water department and any other source of water supply or to maintain any sanitary fixture or other appurtenances or fixtures which, by reason of their construction, may cause or allow backflow of water or other substances into the water supply system of the water company.

II. Requirements

A. General provisions and rules

1. Unprotected cross-connections with the public water supply are prohibited.
2. Whenever back-flow protection has been found necessary, the water company will require the water user to install an approved backflow prevention device by and at his/her expense for continued service or before a new service is evaluated for hazards.
3. Wherever backflow protection has been found necessary on a water supply line entering a water user's premises, then any and all water supply lines from the water company's mains entering such premises, buildings, or structures shall be protected by an approved backflow prevention device. The type of device to be installed will be at the discretion of the water company.

B. Where protection is required

1. Each service connection from the water company water system for supplying water to premises having an auxiliary water supply shall be protected against backflow of water from the premises into the public water system unless the auxiliary water supply is accepted as an additional source by the water company, and is approved by the public health agency having jurisdiction.

2. Each service connection from the water system for supplying water to any premises on which any substance is handled in such fashion as may allow its entry into the water system shall be protected against backflow of the water from the premises into the public system. This shall include water meters that are not installed/located on the customers property line and results in an excessively long water service line from the meter to the building connection, the handling of process waters and waters originating from the water company water system which have been subjected to deterioration in sanitary quality.

3. Backflow prevention devices shall be installed on the service connection to any premises having: (a) internal cross-connections that cannot be permanently corrected and controlled to the satisfaction of the state or local health department and the water company, or (b) intricate plumbing and piping arrangements or (c) where entry to all portions of the premises is not readily accessible for inspection purposes, making it impracticable or impossible to ascertain whether or not cross-connections exist or (d) all multifamily residential units with three separate dwelling units or more.

C. Type of protection required

1. The type of protection that shall be provided to prevent backflow into the approved water supply shall be commensurate with the degree of hazard that exists on the water user's premises. The types of protective devices that may be required (listed in an increasing level of protection) include: Double Check Valve Assembly (DC), Reduced Pressure Principle Backflow Prevention Device (RP), and an Air-Gap Separation (AG). The water user may choose a higher level of protection than required by the water company. The minimum types of backflow protection required to protect the public water supply, at the water user's connection to premises with various degrees of hazard are given in the new CCCPH. Situations which are not covered in Appendix D of the CCCPH and shall be evaluated on a case-by-case basis and the appropriate backflow protection shall be determined by the water company or health agency.

2. Two or more services supplying water from different street mains to the same building, structure, or premises through which an inter-street main flow may occur, shall have Reduced Pressure Principle backflow prevention assembly installed on each water service to be located adjacent to and on the property side of the respective meters.

3. The water company shall ensure the distribution system is protected with no less than a DC for all user premises s with a fire protection system within ten years of adopting the CCCPH

4. For existing fire protection systems that cannot install DC protection within ten years, the water company may propose an alternative date or methodology of back flow protection as long as it provides the same or greater level of protection.

5. A backflow is not required on low hazard fire protection system on a residential user premises if ALL of the following criteria are satisfied:

   (a) the user connection only has one connection to the water system

   (b) a single service line onto the user’s premises exists that splits on the property for domestic and fire protection flow. Such that the fire system can be isolated from the domestic use.

   (c) a single water industry standard water meter is provided to measure the combined domestic and fire system flows.

(d) the fire protection system's piping is constructed of piping materials certified as m meeting NSF/ANSI Standard 61: and

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

III. Backflow prevention devices

A. Approved backflow prevention devices

1. Only lead free backflow prevention devices which have been approved by the water company shall be acceptable for installation by a water user connected to the potable water system. Backflow prevention devices approved by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research (USC) shall be deemed acceptable for installation.
2. The water company will provide, upon request, to any affected customer a list of USC approved backflow prevention devices.
3. Prior to installation, the water company must approve a submittal on the proposed device.
4. After the installation of the device is completed, the water company must inspect all piping from meter (or connection point) to backflow before backfilling is approved.

B. Backflow prevention device installation

1. Backflow prevention devices shall be installed in the manner prescribed in Article 3 of the CCCPH and in accordance with water company requirements. Location of the devices should be as close as practical to the water user's connection. The water company shall have the final authority in determining the required location of a backflow prevention device. Building renovations and change of tenancy or ownership may require the installation of a backflow assembly device on the fire sprinkler or domestic water service if it is determined to be warranted by water company staff.
    a. AG: The air-gap separation shall be located on the water user's side of and as close to the service connection as is practical. All piping from the service connection to the receiving tank shall be above grade and entirely visible. No water use shall be provided from any point between the service connection and the air-gap separation. The water inlet piping shall terminate at a distance of at least two pipe diameters of the supply inlet, but in no case less than two inches above the overflow rim of the receiving tank.
    b. RP: The approved reduced pressure principle backflow prevention device shall be installed on the water user's side of and as close to the service connection as is practical. The device shall be installed a minimum of twelve inches above grade and not more than thirty-six inches above grade measured from the bottom of the device and with a minimum of twelve inches side clearance. The device shall be installed so that it is readily accessible for maintenance and testing. Water supplied from any point between the service connection and the RP device shall be protected in a manner approved by the water company.
    c. DC: The approved double check valve assembly shall be located as close as practical to the water user's connection and shall be installed above grade, if possible, and in a manner where it is readily accessible for testing and maintenance.

C. Backflow prevention device testing and maintenance

1. The owners of any premises on which, or on account of which, backflow prevention devices are installed, shall have the devices tested by a person who has demonstrated his or her competency in testing of these devices to the water company. Persons who have current certification issued by CA/NV AWWA as Backflow Prevention Assembly General Testers shall be deemed to have demonstrated such competency. Backflow prevention devices must be tested at least annually and immediately after installation, repiping, relocation or repair. The water company may require a more frequent testing schedule if it is determined to be necessary. No device shall be placed back in service unless it is functioning as required. A report in a form acceptable to the water company shall be filed with the water company each time a device is tested, relocated, or repaired. These devices shall be serviced, overhauled, or replaced whenever they are found to be defective and all costs of testing, repair, and maintenance shall be borne by the water user. If a device fails to pass the test, and is no longer on the USC list of approved assemblies, it must be replaced by an assembly that is on the current USC list of approved assemblies and installed according to the most recent water company installation requirements.
2. The water company will supply affected water users with a list of persons acceptable to the water company to test backflow prevention devices. The water company will notify affected customers by mail when annual testing of a device is needed and also supply users with the necessary forms which must be filled out each time a device is tested or repaired.

D. Backflow prevention device removal

Approval must be obtained from the water company before a backflow prevention device is removed, relocated, or replaced:

1. Removal. The use of a device may be discontinued and the device removed from service upon presentation of sufficient evidence to the water company to verify that a hazard no longer exists or is not likely to be created in the future;
2. Relocation. A device may be relocated following confirmation by the water company that the relocation will continue to provide the required protection and satisfy installation requirements. A retest will be required following the relocation of the device;
3. Repair. A device may not be removed for repair, unless the water use is either discontinued until repair is completed and the device is returned to service, or the service connection is equipped with other adequate backflow protection approved by the water company. A retest will be required following the repair of the device; and
4. Replacement. A device may be removed and replaced provided the water use is discontinued until the replacement device is installed. All replacement devices must be on the USC list of approved assemblies, approved by the water company and must be commensurate with the degree of hazard involved.

IV. User supervisor - N/A - There are no recycled water customers in this water system.

V. Administrative procedures

A. Water system Hazard Assessment/Survey

1. The water company shall review all requests for new service and remodels/additions that will include plumbing changes/modifications, to determine if backflow protection is needed. Plans and specifications must be submitted to the water company upon request for review of possible cross-connection hazards as a condition of service for new service connections and existing customers that are planning a remodel or addition. If it is determined that a backflow prevention device is necessary to protect

the public water system, the required device must be installed before service will be granted.

2. The water company may require an on-premise inspection on any existing water service connections to evaluate cross-connection hazards. The water company, or representative of the water company, will contact the customer requesting an inspection/Cross-Connection Control Survey appointment to each affected water user.

3. If the inspection/survey reveals that cross-connection hazards do exist on any premises, the water company or representative of the water company, and/or the health agency shall conduct a detailed inspection/survey to evaluate the potential and existing hazards.

4. Any water user who cannot or will not allow an on-premise inspection/survey of water user's piping system shall be required to install the backflow prevention device at the meter if the water company or health agency considers necessary.

5. Based on findings of the detailed inspection, the water company will prepare a report outlining the findings of the survey and list the required actions of the user and the manner in which it is to be corrected.

6. The water company may utilize a brief survey questionnaire for residential connections/ customers.

7. If the survey questionnaire is not completed and returned the water company as requested, the water company will request the customer install and test a backflow prevention device at the meter. See Attachment 1

B. Customer notification—Device installation/repair

1. The water company will notify the water user of the inspection/survey findings, listing the corrective actions to be taken. A period of thirty calendar days will be given to complete all required corrective actions, including installation, repair and testing of backflow prevention devices.

2. The water company will reinspect the premises at the end of that time period to verify compliance or noncompliance.

3. If the water user does not comply within the time period allowed, the water company and/or the health agency will issue a second notice. The second notice will give the water user fifteen calendar days to take the required corrective action.

4. If the water user fails to comply within the fifteen day period, a final notice will give the water user fifteen calendar days to take the required corrective action.

5. If the water user fails to comply within the fifteen day period, the water company may terminate water service to the affected water user until compliance is obtained.

C. Customer notification—Testing and maintenance and outreach

1. The water company will notify each affected water user when it is time for the backflow prevention device installed on their service connection to be tested. This written notice shall give the water user thirty calendar days to have the device tested and supply the water user with the necessary form to be completed and submitted to the water company.

2. A second notice shall be sent to each water user who fails to have the backflow prevention device tested as prescribed in the first notice within the thirty day period allowed. The second notice will give the water user fifteen calendar days to comply.

3. A final notice shall be sent to each water user who fails to have the backflow prevention device tested as prescribed in the second notice within the fifteen calendar day period allowed. The final notice will give the water user fifteen calendar days to comply.

4. Annual test reports and inventory of testing and maintenance of back flow prevention devices installed at the meter shall be maintained by the water company for a minimum of three years.

5. Annually the water company shall send out informational flyers to educate customers about the health risks of Cross-Connections.

VI. Water service termination

A. General

When the water company encounters water uses that represent clear and immediate hazards to the potable water supply that cannot be immediately abated, the water company shall discontinue water service as described in subsection C of this section.

B. Basis for termination

Conditions or water uses that create a basis for water service termination shall include, but are not limited to, the following:

1. Refusal/failure to install a required backflow prevention device;
2. Refusal/failure to test a backflow prevention device;
3. Refusal/failure to repair a faulty backflow prevention device;
4. Refusal/failure to replace a faulty backflow prevention device;
5. Direct or indirect connection between the public water system and a sewer line;
6. Unprotected direct or indirect connection between the public water system and a system or equipment containing pollutants or contaminants;
7. Unprotected direct or indirect connection between the public water system and an auxiliary water system; and
8. A situation which presents an immediate health hazard to the public water system.

C. Water service termination procedures

1. For conditions of subsections (B)(1), (2), (3), or (4) of this section, the water company will terminate service to a customer's premises after three written notices have been sent specifying the corrective action needed and the time period in which it must be taken. If no action is taken within the time period allowed, the water company may terminate water service.
2. For conditions of subsections (B)(5), (6), (7), or (8) of this section, the water company will take the following steps:
    a. Make reasonable efforts to advise the water user of its intent to terminate water service;
    b. Immediately terminate water service and lock the service valve. The water service will remain inactive until the condition has been corrected to the satisfaction of the water company.
    c. Once the condition has been corrected to the satisfaction of the water company, reconnection fees may apply.

VII. WATER QUALITY COMPLAINTS

1. All water quality complaints or events shall be investigated promptly as a potential Cross-Connection event and an incident investigation report as shown in Appendix 1 must be filled out by a qualified individual.

2. The water company must notify the State Water Resources Control Board and local health agency of any known or suspected incident of back flow within 24 hours of the determination and submit a written incident investigation report if required by the State.

VIII. DEFINITIONS

The following definitions describe those terms and phrases that are pertinent to the various elements of a cross-connection control program:

Air-Gap Separation
The term “air-gap separation” shall mean a physical break between the free flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel. An “approved air-gap separation” shall be at least double the diameter of the supply pipe measured vertically above the overflow rim of the vessel, in no case less than 1 inch.

Approved Backflow Prevention Assembly
The term “Approved Backflow Prevention Assembly” shall mean assemblies which have passed laboratory and field evaluation tests performed by a recognized testing organization which has demonstrated their competency to perform such tests to the California Department of Health Services (DOHS).

Approved Water Supply
The term “approved water supply” means any local water supply whose potability is regulated by a State or Local health agency.

Auxiliary Water Supply
The term “auxiliary water supply” means any water supply on or available to the premises other than the approved water supply as delivered by the water purveyor to the service connection.

AWWA Standard
The term “AWWA Standard” means an official standard developed and approved by the American Water Works Association (AWWA).

Backflow
The term “backflow” shall mean a flow condition, caused by a differential in pressure, that causes the flow of water or other liquid, gases, mixtures or substances into the distributing pipes of a potable supply of water from any source or sources other than an approved water supply source. Back siphonage is one cause of backflow. Back pressure is the other cause.

Confined Space
Means a space that:
1. Is large enough and so configured that an employee can bodily enter and perform assigned work; and
2. Has limited or restricted means for entry or exit (for example, tanks vessels, silos, storage bins, hoppers, vaults and pits are spaces that may have limited means of entry.); and
3. Is not designed for continuous employee occupancy.
This definition is given because backflow assemblies are often found in these types of spaces.

Consumer of Record
The consumer of record is the person, business, or owners that have applied for service from TPWD. This may be, but is not limited to, the tenant, landlord, resident, business, or property owner.

Contamination
The term “contamination” means a degradation of the quality of the potable water by any foreign substance which creates a hazard to the public health, or which may impair the usefulness or quality of the water.

Pollution
The term “pollution” shall mean an impairment of the quality of the water to a degree which does not create a hazard to the public health, but, which does adversely and unreasonably affect the aesthetic qualities of such waters for domestic use.

Cross-Connection
The term “cross-connection” as used in this document means any unprotected actual or potential connection between a potable water system used to supply water for drinking purposes and any source or system containing unapproved water or a substance that is not or cannot be approved as safe, wholesome, and potable. By-pass arrangements, jumper connections, removable sections, swivel or changeover devices, or other devices through which backflow could occur, shall be considered to be cross-connections.

Double Check Valve Assembly
The term “double check valve assembly” means an assembly of at least two independently acting check valves including tightly closing, resilient seated, shutoff valves on each side of the check valve assembly and test cocks available for testing the water tightness of each check valve.

Health Agency
The term “health agency” means the California State Water Resources Control Board, Division of Drinking Water (DDW), District 17, Santa Clara office.

Local Health Agency
The term “local health agency” means the California State Water Resources Control Board, Division of Drinking Water (DDW), District 17, Santa Clara office.

Person
The term “person” means an individual, corporation, company, association, partnership, municipality, public utility or other public body or institution.

Premises
The term “premises” means any and all areas on a water user’s property which are served or have the potential to be served by the public water system.

Public Water System
The term “public water system” means a system for the provision of pipe water to the public for human consumption that has five or more service connections or regularly serves an average of 25 individuals daily at least 60 day out of the year.

Reclaimed Water
The term “reclaimed water” means a wastewater which, as a result of treatment, is suitable for uses other than direct potable use.

Reduced Pressure Principle Backflow Prevention Assembly
The term “reduced pressure principle backflow prevention assembly” means an assembly incorporating two or more check valves and an automatically operating differential relief valve located between the two checks, a tightly closing, resilient seated, shut-off valve on each side of the check valve assembly, and equipped with the necessary test cocks for testing

Service Connection
The term “service connection” refers to the point of connection of a user’s piping to the water supplier’s facilities.

Water Supplier
The term “water supplier” means the person who owns or operates the approved water supply system.

Water User
The term “water user” means any person obtaining water from an approved water supply system.

USC
The term “USC” means The University of Southern California Foundation For Cross-Connection Control and Hydraulic Research.

Appendix 1

Residential Questionnaire

Castroville Community Services District

Residential Cross-Connection Survey

Date_____ **Account #**_____

Name_____

Address_____

Please put a check next to any of the following equipment located on your premises.

Auxiliary water supply:
- o Private well
- o Storage tank
- o Ornamental Fountains / Ponds
- o Swimming Pool / Spa
- o Blue Valve Water Service

Heating / Cooling Systems
- o Air conditioners
- o Boilers
- o Chillers
- o Cold Storage
- o Cooling Towers
- o Heat Exchangers
- o Hydronic Heat
- o Refrigeration (Commercial)
- o Solar Panels
- o Water Cooled Condensers
- o Water Cooled Equipment
- o Other_____

Industrial Fluids / Pressure Systems
- o Booster Pumps
- o Circulating Pumps
- o Hydraulic Lines
- o Hydro-pneumatic Systems
- o Laboratory Facilities
- o Photo Processing/Printing
- o Priming Lines
- o Steam Lines

Chemical Injection / Feeder Systems
- o Corrosion / Scale Inhibitors
- o Algae/Microorganism Biocides
- o Soaps
- o Softeners
- o Other_____

Irrigation Systems
- o Chemical / Fertilizer Injection
- o Booster Pumps
- o Separate Service Connection
- o Other_____

Kitchen Facilities (Commercial)
- o Coffee Urns
- o Dishwasher
- o Double Boiler
- o Garbage Disposal
- o Pressure Cooker
- o Steam Table
- o Other_____

Sewage System
- o Pumped Septic System
- o Wastewater Lift Station
- o Water Operated Sump Ejector
- o Water Conn. for Unclogging
- o Trailer Flushing Facilities
- o Holding Tanks

Do you have any special equipment or needs which require an uninterrupted water supply? Yes_____ No_____

Please return to: **Castroville CSD**
ATTN: James Derbin
11499 Geil Street
Castroville, CA 95012
or
Email to: james@castrovillecsd.org

Appendix 2

Backflow Incident Investigation Form

Sample
Backflow Incident Report Form

Reported By: _____ Title: _____

Mailing Address: _____ City: _____

State: _____ Zip Code: _____ Phone: _____

Reporting Agency: _____ Report Date: _____

Date of Incident: _____ Time of Occurrence: _____

General Location (Street, etc.): _____

Backflow Originated From:

Name of Premises: _____

Type of Business: _____

Address: _____ City: _____ Zip Code: _____

Description of Contaminants: ***(Attach Chemical Analysis if available)***

_____

_____

_____

_____

_____

_____

_____

Distribution of Contaminants:

Contained within customer's premises: Yes ☐ No ☐

Number of persons affected: _____

Effect of Contamination:

Illness Reported: _____

_____

_____

Physical Irritation Reported: _____

_____

_____

Backflow Incident Report:

Cross-Connection Source of Contaminant (boiler, chemical pump, irrigation system, etc.):

_____

_____

_____

Cause of Backflow (main break, fire flow, etc.):

_____

_____

Corrective Action Taken to Restore Water Quality (main flushing, disinfection, etc.):

_____

_____

Corrective Action Ordered to Eliminate or Protect from Cross-Connection (type of backflow preventer, location, etc.)

_____

_____

Previous Cross-Connection Survey of Premises:

Date: _____ By: _____

Types of Backflow Prevention Isolating the Premises:

RPZ: ☐ RPDC: ☐ DCVA: ☐ DCDC: ☐ PVB: ☐ SVB: ☐

AVB: ☐ Air Gap: ☐ None: ☐ Other Type: _____

Date of Latest Test of Assembly: _____

Notification to Water Department's Cross-Connection Control Division

Date: _____ Time: _____ Person Notified: _____

Attach sheets with additional information, sketches, and/or media information, and mail to:

Water Department
Cross-Connection Control Division
Address
City / State / zip