Attachment 1

CITY OF East Palo Alto

CROSS-CONNECTION CONTROL PLAN

IN ACCORDANCE WITH THE CROSS-CONNECTION CONTROL POLICY HANDBOOK

City of East Palo Alto
December 2025

Cross-Connection Control Plan

Prepared for

City of East Palo Alto

City of East Palo Alto
December 2025

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LIST OF ACRONYMS AND ABBREVIATIONS

AG	Air Gap
AMI	Advanced Metering Infrastructure
ANSI	American National Standards Institute
BPA	Backflow Prevention Assembly
CCCP	Cross-Connection Control Plan
CCCPH	Cross-Connection Control Policy Handbook
City	City of East Palo Alto
co	City Ordinance
DC	Double Check Valve Backflow Prevention Assembly
DCDA	Double Check Detector Backflow Prevention Assembly
DCDA-11	Double Check Detector Backflow Prevention Assembly -Type II
DDW	Division of Drinking Water
ERP	Emergency Response Plan
FY	Fiscal Year
Program	City of East Palo Alto Cross-Connection Control Program
PVB	Pressure Vacuum Breaker Backflow Prevention Assembly
PWS	Public Water System
RP	Reduced Pressure Principle Backflow Prevention Assembly
RPDA	Reduced Pressure Principle Detector Backflow Prevention Assembly
RPDA-11	Backflow Prevention Assembly-Type II Recycled Water
SVB	Spill-Resistant Pressure Vacuum Breaker Back siphonage Prevention Assembly
Swivel-Ell	Swivel-Ell Backflow Prevention Assembly
SWRCB	State Water Resource Control Board
Worker	Utility Maintenance Worker

1.0 *CROSS-CONNECTION CONTROL PLAN*

1.1 Introduction

The State Water Resources Control Board (SWRCB) adopted the Cross-Connection Control Policy Handbook (CCCPH) on December 19, 2023. The effective date for the CCCPH is July 1, 2024, replacing the previous regulations covered under Title 17, Chapter V, Sections 7583-7622 under California Code of Regulations (Title 17). The 2023 adopted version of the CCCPH is included in Appendix A of this document. Title 17 became inoperative and repealed 90 days after July 1, 2024. The CCCPH expands on the previous Title 17 requirements for initial and follow-up hazard assessments, training, backflow prevention testing and certification, maintenance of records, incident response, reporting and notification, public outreach and education, and local entity coordination. The CCCPH requires any public water system (PWS) to develop a Cross-Connection Control Plan (CCCP) to describe how the PWS will manage and administer their Cross-Connection Control Program (Program).

1.2 Purpose

The intent of this document is to describe the Program implemented and administered by the City of East Palo Alto (City). The purpose of this CCCP is to protect the health of the water customers by:

1. Proper installation and maintenance of backflow preventers on services to premises where actual or potential cross-connections exist. The presence of backflow preventers is intended to prevent the backflow or back-siphonage of contaminants or pollutants from a customer's premises into the PWS.
2. Promoting the elimination of existing or future cross-connections through inspection and regulation of plumbing and water piping within or between a customer's premises and the PWS.

1.3 City of East Palo Alto Service Area

The city is a public community water system managed by the city government and overseen by an elected City Council. The city owns and maintains the public water system, sewer collection system, and stormwater system. The PWS includes four purchased water connections with the SFPUC. The City of East Palo Alto has contracted out the service of its distribution system to Veolia Water, who serves 30,000 residents through 4,000 connections. The other 20% of the City is separately owned and operated by Palo Alto Park Mutual and O'Connor Collective.

2.0 DEFINITIONS

The following definitions describe terms and phrases pertinent to the various elements of this CCCP. The definitions presented in this section are divided into three groups, within which each definition is listed alphabetically: 1) Water and Water System Definitions; 2) Agencies/Personnel; and 3) Equipment Definitions.

2.1 Water and Water System Definitions

Air Gap Separation (AG)
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 twice the diameter of the supply pipe measured vertically above the overflow rim of the vessel, in no case less than 1-inch.

Approved Water Supply
A water source that has been approved by the SWRCB for domestic use in a PWS and designated as such in a domestic water supply permit.

Auxiliary Water Supply
A source of water, other than an approved water supply, that is either used or equipped or can be equipped to be used as a water supply, and is located on the premises of, or available to, a water customer.

Backflow
The undesirable flow of water or other liquids, gases, mixtures, or substances, under pressure, into the distributing pipes of a potable supply of water from any source other than an approved water supply. Back-siphonage or backpressure are the two conditions that cause backflow to occur.

City Water System
The City water system consists of the source facilities and distribution system under the control of the City water utilities department up to and including water meters. The City water system may also be referred to as the public water system or the distribution system.

Contamination/Contaminant
Any impairment of the quality of the potable water by sewage, industrial fluids or waste liquids, compounds or other materials to a degree that creates an actual hazard to the public health through poisoning or through the spread of disease.

Cross-Connection
Any actual or potential connection or structural arrangement between a PWS, including a piping system connected to the PWS and located on the premises of a water customer or available to the water customer, and any source or distribution system containing liquid, gas, or other substances not from an approved water supply.

Customer's Water System
All facilities beyond the water meter. The customer's system or systems may include both potable and non-potable water systems.

Distribution System
Shall include the network of conduits used for the delivery of water from the source to the customer's water system. See also City Water System.

Hazard, Degree of
A hazard assessment must identify the degree of hazard (or no hazard) to the City's distribution system through evaluation of customer premises based on the following classifications:

High Hazard Cross-Connection
A cross-connection that poses a significant threat to the potability or safety of the public water supply. Materials entering the public water supply through a high hazard cross-connection are contaminants or health hazards.

Low Hazard Cross-Connection
A cross-connection that has been found to not pose a significant threat to the potability or safety of the public water supply but may adversely affect the aesthetic quality of the potable water supply. Materials entering the public water supply through a low hazard cross-connection are pollutants or non-health hazards.

No Hazard Cross-Connection
A cross-connection that poses no hazard to potability or safety of the public water supply.

Isolation
Otherwise known as Internal Protection. The appropriate type or method of backflow prevention within the customer's potable water system at the point of use, commensurate with the degree of hazard.

Pollution/Pollutant
The presence of any foreign substance (organic, inorganic, or biological) in water that tends to degrade its quality to constitute a hazard or to impair the usefulness or quality of the water to a degree that does not create an actual hazard to public health, but which does adversely and unreasonably affect such waters for domestic use.

Premises
All areas on a customer's property that are served or have the potential to be served by the PWS.

Premises Containment
Protection of a PWS distribution system from backflow from a customer's premises through the installation of one or more air gaps or backflow prevention assemblies, installed as close as practical to the customer's service connection at the water meter, in a manner that isolates the water customer's water supply from the PWS distribution system.

Public Water System {PWS}
A system for the provision of piped water to the public for human consumption, which has five or more service connections or regularly serves an average of 25 individuals daily at least 60 days per year. Additionally, a PWS consists of the source facilities and the distribution system and shall include all those facilities of the water system under the complete control of the City up to the point of the service connection at the water meter to the customer's water system.

Recycled Water
Wastewater that is suitable for uses other than potable use due to appropriate levels of treatment. Currently the City of East Palo Alto does not use or distribute any recylced water.

Service Connection
The point where a water customer's piping is connected to the PWS or the point in the customer's water system where the PWS can be protected from backflow using an AG or a BPA. Typically, this location is immediately after the water meter.

Used Water
Any water supplied by the City from the PWS to a customer's water system after it has passed through the service connection at the water meter and is no longer under the control of the City.

Water System
The water system shall be considered as made up of two parts: The PWS and the customer's water system.

2.2 Agencies/Personnel

Backflow Prevention Assembly Tester
A person who is certified as a Backflow Prevention Assembly Tester pursuant to Section 4 of this CCCP. A certified Backflow Prevention Assembly Tester is authorized to test backflow prevention assemblies at customer premises.

Cross-Connection Control Program Coordinator
The designated individual, under the guidance of the Public Works Division Manager- Engineering, that is involved in the development of and being responsible for reporting, tracking, and other administration duties for the CCCP. This person must hold a Cross-Connection Control Specialist Certification.

Cross-Connection Control Specialist
A person who is certified as a Cross-Connection Control Specialist pursuant to Section 4 of this CCCP. A certified Cross-Connection Control Specialist must obtain a Backflow Prevention Assembly Tester Certificate prior to becoming a Cross-Connection Control Specialist. Only a Cross-Connection Control Specialist is authorized to assess the hazard level present at customer premises. A Cross-Connection Control Specialist that maintains a Backflow Prevention Assembly Tester certificate is also able test backflow prevention assemblies.

State Water Resources Control Board
Unless otherwise specified, means the SWRCB, Division of Drinking Water (DDW) or the local primacy agency having been delegated authority by the SWRCB to enforce the requirements of Chapter 3 of the CCCPH.

User Supervisor
A person designated by a water user to oversee a water use site and responsible for the avoidance of cross-connections.

Water Supplier
The person who owns or operates the approved water supply system. The City owns and operates the public community water system and is the Water Supplier.

Water Customer
Any person or entity obtaining water from an approved water supply system.

2.3 Equipment Definitions

Backflow Prevention Assembly (BPA)
A generic term referencing multiple types of mechanical assembly designed and constructed to prevent backflow, such that while in-line it can be repaired and its ability to prevent backflow, as designed, can be field tested, inspected, and evaluated. The assembly must have passed laboratory and field evaluation tests performed by a recognized testing organization that has demonstrated its competency to the SWRCB, Division of Drinking Water.

Double Check Detector Back/low Prevention Assembly (DCDA)
A double check valve backflow prevention assembly that includes a bypass with a water meter and a double check backflow prevention assembly, with the bypass water meter accurately registering flow rates up to two gallons per minute and visually indicating all rates of flow. This type of assembly may only be used for protection from back-siphonage and backpressure events (low-hazard connection). These devices are not allowed for new installations unless approved by the City Engineer.

Double Check Detector Back/low Prevention Assembly - Type II (DCDA-11}
A double check valve backflow prevention assembly that includes a bypass around the second check, with the bypass having a single check valve and a water meter accurately registering flow rates up to two gallons per minute and visually indicating all rates of flow. This type of assembly may only be used for protection from back-siphonage and backpressure events (low-hazard cross-connection). These devices are not allowed for new installations unless approved by the City Engineer. Double Check Valve Backflow Prevention Assembly (DC)

An assembly consisting of two independently acting internally-loaded check valves, with tightly closing shut-off valves located at each end of the assembly (upstream and downstream of the two check valves) and fitted with test cocks that enable accurate field testing of the assembly. This type of assembly may only be used for protection from back-siphonage and backpressure events (low-hazard cross-connection). These devices are not allowed for new installations unless approved by the City Engineer.

Pressure Vacuum Breaker Back/low Prevention Assembly (PVB)

An assembly with an independently-acting internally-loaded check valve and an independently-acting loaded air inlet valve located on the discharge side of the check valve, with test cocks and tightly closing shutoff valves located at each end of the assembly that enable accurate field testing of the assembly. This type of assembly may only be used for protection from back siphonage (low hazard and high hazard cross-connection) events and is not to be used to protect from backpressure events. These devices are not allowed for new installations unless approved by the City Engineer.

Reduced Pressure Principle Back/low Prevention Assembly (RP)

An assembly with two independently acting internally-loaded check valves, with a hydraulically operating, mechanically independent differential-pressure relief valve located between the check valves and below the upstream check valve. The assembly shall have shut-off valves located upstream and downstream of the two check valves, and test cocks to enable accurate field testing of the assembly. This type of assembly may be used for protection from back siphonage and backpressure events (low-hazard and high-hazard cross-connections). To be approved, these assemblies must be accessible for in-line maintenance and testing and be installed per City Standards. A schematic of this assembly is provided in Appendix D.

Reduced Pressure Principle Detector Back/low Prevention Assembly (RPDA)

A reduced pressure principle backflow prevention assembly that includes a bypass with a water meter and reduced pressure principle backflow prevention assembly, with the bypass water meter accurately registering flow rates up to two gallons per minute and visually indicating all rates of flow. This type of assembly may be used for protection from back-siphonage and backpressure events (low-hazard and high-hazard cross-connections). To be approved, these assemblies must be accessible for in-line maintenance and testing and be installed per City Standards. A schematic

Reduced Pressure Principle Detector Back/low Prevention Assembly - Type II (RPDA-11}

A reduced pressure principle backflow prevention assembly that includes a bypass around the second check, with the bypass having a single check valve and a water meter accurately registering flow rates up to two gallons per minute and visually indicating all rates of flow. This type of assembly may be used for protection from back siphonage and backpressure events (low-hazard and high-hazard cross-connection). To be approved, these assemblies must be accessible for in-line maintenance and testing and be installed per City Standards. A schematic of this assembly is provided in Appendix D.

Spill-Resistant Pressure Vacuum Breaker Backsiphonage Prevention Assembly (SVB}

An assembly with an independently-acting internally-loaded check valve and an independently-acting loaded air inlet valve located on the discharge side of the check valve, with shutoff valves at each end and

a test cock and bleed/vent port, to enable accurate field testing of the assembly. This type of assembly may only be used for protection from back siphonage events (low hazard-connection) and is not to be used to protect from backpressure events. These devices are not allowed for new installations.

Swivel-Ell Back/low Prevention Assembly (Swivel-Ell)
An assembly consisting of a reduced pressure principle backflow prevention assembly combined with a changeover piping configuration (swivel-ell connection) designed and constructed pursuant to Section 5 of this CCCP. These devices are not allowed for new installations.

3.0 CCCP ADMINISTRATION

This section describes the legal authority and administration of the CCCP.

3.1 Legal Authority (CCCPH 3.1.3 & EPA CO 15.44)

The City administers the Program in accordance with City Ordinance (CO), 15.44 - Backflow Prevention & Cross-Connection Control. The original adoption was in 1988 in agreement with Title 17, Chapter V, Sections 7583-7622, California Code of Regulations. The CO will be amended in Fiscal Year (FY) 25-26 to include new elements presented in this CCCP and in compliance with CCCPH.

The CO includes the authority to implement corrective actions if a water customer fails to comply in a timely manner with provisions regarding the installation, inspection, field testing or maintenance of a BPA required by the CCCPH. Additional authority exists to eliminate existing or future cross-connections through inspection and regulation of plumbing and water piping within a customer's premises, PWS or between them. The City's corrective actions include the ability to discontinue water service until all violations or non-compliant conditions have been corrected.

The current Municipal Code is included in Appendix B.

3.2 CCCP Administration

The program administrator for the cross-connection control program is the city's public works director or designee. At a minimum, the program administrator must be in a supervisor capacity and must be a cross-connection specialist certified by ABPA or AWWA. The city has a contract with the county division through an agreement to implement portions of the program, as allowed by state law and regulations, and any future SWRCB requirements. City and the city's water provider are ultimately responsible for the implementation of the program.

The Program is administered within the City's Public Works Department by the Utilities Engineering Section, in partnership with the San Mateo County Department of Environmental Health. Program administration includes cross-connection control reporting, backflow testing & hazard assessment notification, record keeping, and enforcement. For privately-owned BPA's the City typically requires the water customer to

perform annual inspection/testing, initial hazard assessment and as-needed hazard assessment through a City prescribed process detailed in the CCCP. In FY24-25 the City conducted initial hazard assessments at high-hazard non-residential premises. City-owned BPA's have these services performed either by San Mateo County or certified private contractor.

The San Mateo County Backflow Prevention Ordinance (Chapter 4.72) allows Environmental Health to issue administrative enforcement orders and fines to owners of backflow prevention assemblies within the City of East Palo Alto water system service area for failure to comply with annual testing of backflow prevention assemblies, failure to install backflow prevention assemblies as directed by Environmental Health, and all other violations of the County Backflow Prevention Ordinance, thus supporting the City's water system's cross-connection control program. While Veolia water system staff are primarily responsible for hazard assessments within its service area, Environmental Health and the backflow prevention testers approved through Environmental Health's programs, also support our cross-connection control program in identifying actual or potential cross-connection hazards, degree of hazard, and any backflow protection needed.

Environmental Health implements the BPA testing portion of the City's water system cross-connection control program. Environmental Health implements the BPA testing portion of the City's water system cross-connection control program. Through the Environmental Health programs, as described in more detail below, Environmental Health ensures that all BPAs are field tested, inspected and maintained in accordance with CCCPH section 3.3.3.

Environmental Health maintains all records related to testing of BPAs within the water system service area, as well as records of all certified/approved BPA testers testing within the water system service area.

The Cross-Connection Specialist reports directly to the San Mateo County Department of Environmental Health. The Specialist is responsible for carrying out the administrative responsibilities of the CCCP under the guidance of the Public Works Division Manager. Professional consultant and contract services are used as needed.

Public Works Call Center: 650-853-3189 - The Public Works Call Center is the City's emergency water phone number answered during normal business hours. For calls received during non-business hours, the calls are automatically forwarded to 911 police department dispatch. For all calls, the operator will dispatch calls to the correct personnel and department. Veolia Water staff will be the first responders to any water emergency. The San Mateo County cross-connection Control Specialist or a designee on-call water operator will be notified as necessary to investigate a potential backflow event.

4.0 CERTIFICATION REQUIREMENTS

This section specifies the certification requirements for Backflow Prevention Assembly Testers and Cross-Connection Control Specialists.

4.1 Backflow Prevention Assembly Tester Certification Requirements

Chapter 3, Article 4 of the CCCPH provides the requirements of a SWRCB recognized and American National Standards Institute (ANSI) accredited organization certifying Backflow Prevention Assembly Testers. Within an accredited organization, the program must include provisions for revocation of a backflow prevention assembly testers certification and a publicly available list of certified backflow prevention assembly testers. Certification from an accredited organization requires completion of a program that includes the following:

- Timed and proctored written exams with prescribed number of test questions and covering specified material.
- Performance of a hands-on exam demonstrating proficiency in accurately determining the operating condition of an RP, DC, PVB, and SVB.
- Recertification no less frequently than every three years including both a written and performance exam.
- Prerequisite of either two years prior experience or completion of an instructional training course.

4.1.1 Approved Back/low Prevention Assembly Tester & Specialist Lists (CCCPH 3.4.1 & SMC 4.72.080)

San Mateo County Department of Environmental Health maintains a list of testing companies who have Backflow Prevention Assembly Tester qualified to perform backflow related work within the City. This list is available by contacting the San Mateo County Department of Environmental Health.

Environmental Health always maintains at least one AWWA Cross-Connection Control Special on staff. Contact information for Environmental Health can either be general phone 650-372-6200, and email backflow@smchealth.org, or can include current Environmental Health staff contact information as long as the PWS is willing to keep the information up-to-date in their plan.

4.2 Cross-Connection Control Specialist Certification Requirement {CCCPH 3.4.1 & EPA CO 15.44.090)

Cross-Connection Control Specialists that maintain their Backflow Prevention Assembly Tester certification can perform BPA inspection and testing in addition to conducting onsite hazard assessments.

Cross-Connection Control Specialists shall maintain valid certification from a certifying organization recognized by the SWRCB pursuant to CCCPH Chapter 3 Article 4. Certification requires completion of a program that includes the following:

- Timed and proctored written exams with prescribed number of test questions and covering specified material.
- Completion of an instructional training course.
- Recertification no less than every three years.
- Recertification through an exam, 12 contact hours of continuing education, or a combination of both.

Cross-Connection Control Specialist from the certifying organization must contain:

- Provisions for revocation of a specialist's certification.
- Publicly available list of certified specialists.
- For initial certification or when an examinee has not held a valid certification for three or more years, a valid backflow prevention assembly tester certification will be required as well as completion of an instructional training course.

San Mateo County Department of Environmental Health will require testing companies to annually submit applications to be considered qualified as a Cross-Connection Control Specialist.

The requirements to be listed as a County qualified Cross-Connection Control Specialist are:

- All other requirements as required for the approved backflow tester.
- The specialist must hold a valid certification for Cross-Connection Specialist from a recognized certification organization.
- The specialist must register and utilize the City's online platform for hazard assessment report submissions.

Cross-Connection Control Specialists may be removed from the County's qualified lists for the same reasons as Backflow Prevention Assembly Testers may be removed.

5.0.1 CROSS-CONNECTION CONTROL PROTECTION REQUIREMENTS (CCCPH 3.2.2 & EPA CO 15.44.050)

Unprotected cross-connections with the PWS are prohibited. No water service connection to any premises shall be installed or maintained by the City unless the water supply is protected from contamination and pollution. Whenever backflow protection is found to be necessary, the City will require the water customer to install, test, and maintain an approved backflow prevention assembly at the expense of the water customer for continued water service or before a new water service will be granted.

EPA CO 15.44.050 allows customers with non-compliant assemblies (but were compliant at the time of installation), and which have been properly maintained, to not replace the assembly if the City Engineer is assured that the assembly will satisfactorily protect the PWS.

When Environmental Health becomes aware of the existence of a cross-connection and the BPA installed is not commensurate with the user premises' hazard or no BPA has been installed, Environmental Health will work with the PWS to require current BPA be upgraded to an appropriate type or require proper BPA protection be installed to properly protect the public water supply. PWS can notify Environmental Health of a cross connection via email to backflow@smcgov.org, or a phone call to any cross-connection control program staff.

Directive letters written by Environmental Health typically allow facilities 30 days to comply with requirements, with extensions provided in cases where calculations of fire systems are required before installation of BPA, or BPA in vaults are required to be replaced above grade. Additional extensions may be granted upon request by facility depending on individual circumstances. In all cases, Environmental Health tracks all requirements, including status of compliance, through use of our Salesforce-based database.

Failure to comply with directives results in the same potential enforcement action on facilities as failure to test BPA annually, including potential administrative enforcement orders, fines, and possible termination of water service.

When Environmental Health receives a report indicating a BPA failed annual testing, and the BPA in question no longer provides adequate protection from the associated hazard or is not installed appropriately as required by the CCCPH, Environmental Health will require the BPA be replaced with a BPA that provides the proper degree of protection against the associated hazard or installation criteria is corrected to align with CCCPH requirements.

Facilities are given 30 days to repair or replace BPA after failure. Failure to comply with repair or replacement directives results in the same potential enforcement action on facilities as failure to test BPA annually, including potential administrative enforcement orders, fines, and possible termination of water service.

Wherever backflow protection is found to be necessary on a water supply line entering a water customer's premises, then all water supply lines from the City's potable mains entering such premises, buildings, or structures shall be protected by an approved backflow prevention assembly.

The type of assembly to be installed will be in accordance with the requirements of this Chapter. If it is found that a backflow protection control or assembly has been removed or bypassed, water service will be discontinued until corrected, and fines may be imposed.

Topics addressed in this section include:

- Open for Inspection
- Approval of Assemblies
- Evaluation of Hazard

- Existing Customers - With a Non-Complying Device

5.1 Backflow Protection Requirements {EPA CO 15.44.050)

A. New Construction, Remodels and Tenant Improvements.

1. Residential (Single-Family, Duplexes and Multiple Family), Commercial, Industrial and Institutional.

a. Domestic Water. City may require an approved backflow prevention assembly to be installed on the facility as close as possible to the service connection. The assembly shall be a lead-free reduced pressure principle backflow prevention assembly. If it is determined that a backflow prevention assembly is required, the customer may also need to install a thermal expansion tank in accordance with the California Plumbing Code.

b. Irrigation System. City requires an approved backflow prevention assembly to be installed on the facility on the branch line serving an irrigation system. The assembly shall be a pressure vacuum breaker, reduced pressure principle backflow prevention assembly, or atmospheric pressure vacuum breaker as determined by the city.

c. Fire Suppression System. All facilities with an installed fire suppression system must have an approved backflow prevention assembly, excluding flow-through fire systems, on the branch line serving the fire suppression system. The assembly shall be a double check valve backflow prevention device, a double check detector assembly, a reduced pressure principle backflow prevention assembly, or a reduced pressure principle detection assembly or as determined by the city. Flow-through fire protection systems shall be constructed with approved potable water piping and materials.

B. Fire Protection System. Except as noted below, a public water system must ensure its distribution system is protected with no less than double check detector assembly protection for a premises with a fire protection system.

1. A high hazard cross-connection fire protection system, including, but not limited to, fire protection systems that may utilize chemical addition (e.g., anti-freeze) or an auxiliary water supply, must have no less than a reduced pressure principle backflow prevention assembly protection. An air gap is required for customers where the fire system is supplied from the public water system and interconnected with an unapproved auxiliary water supply.

C. Sewage and Hazardous Substances.

1. An air gap is required for facilities where there are waste water pumping and/or treatment plants and there is no interconnection with the potable water system. This does not include a single-family residence that has a sewage lift pump.

2. An air gap is required for facilities where hazardous substances are handled in any manner in which the substances may enter the potable water system. This does not include a single-family residence that has a sewage lift pump.

3. A reduced pressure principle backflow prevention assembly is required for facility's where there are irrigation systems into which fertilizers, herbicides, or pesticides are, or can be, injected.

D. Auxiliary Water Supplies.

1. An air gap is required for facilities where there is an unapproved auxiliary water supply which is interconnected with the public water system.

2. A reduced pressure principle backflow prevention assembly is required for facilities where there is an unapproved auxiliary water supply and there are no interconnections with the public water system.

E. Recycled Water.

1. A reduced pressure principle backflow prevention assembly or another city-approved device that is in accordance with the SWRCB is required for facilities where the public water system is used to supplement the recycled water supply.

2. A reduced pressure principle backflow prevention assembly is required for facilities where recycled water is used and there is no interconnection with the potable water system.

F. Existing Service Connection. When it is determined in a survey by the city or county cross-connection control program specialist that an actual or potential cross-connection or backflow condition is present on an existing facility, the installation of an appropriate backflow preventer shall be required. Should an existing backflow prevention assembly be in place that does not meet the city's installation requirements, does not comply with this section, or does not provide adequate protection with the degree of hazard found on-site, the assembly shall be replaced or upgraded as required by the city, at the expense of the customer or responsible party.

Protection is required when the following conditions exist:

- When a premises contains an auxiliary water supply, the water supply to the premises shall be protected against backflow.
- When a premises has the potential for any onsite industrial fluid or any other objectional substance handled in such a manner that could permit the fluid or substance to enter the water system, the PWS shall be protected against backflow from the premises.
- When a premises has internal cross-connections that cannot be permanently corrected or controlled to the satisfaction of the state, local health department, or City Engineer, the PWS shall be protected against backflow.
- When a premises has intricate piping arrangements or where entry to all or portions of the site are restricted so that inspections for cross-connections cannot be made with sufficient frequency or at sufficiently short notice to assure that no cross-connection exist, the PWS shall be protected against backflow.
- When a premises has a history of repeated cross-connections being established or reestablished, the PWS shall be protected against backflow.

5.2 Hazard Assessments (CCCPH Article 2, 3.2.1 & EPA CO 15.44.060)

A. Identification of Survey Candidates.

1. City may identify specific industries that might pose an actual or potential backflow hazard to the public water supply. Some of these industries are identified from common lists of industries where cross-connections are likely to be found, as provided by the State of California, the USC Foundation, and other recognized organizations. From these lists, specific facilities in the city's service area may be identified by directories, mailing lists, associations, and business licenses.
2. Surveys may take the form of office surveys or field surveys. Office surveys may include determination of facility hazards based on business type or known water use on the facility. Office surveys could also include evaluation of responses to mailed or on-line surveys.

B. Procedures for surveying and retrofitting existing facilities and for plan review and inspection of new construction:

1. Backflow preventers are tested annually, and the city's contracted water system operator works with the county when devices are out of compliance or needs testing. City recognizes and follows all state, county, and other jurisdictional authorities' procedures and guidelines. New construction is analyzed on a case-by-case basis by city.
2. Existing backflows will be identified, and those backflows will be tested per state testing procedures, at least annually. Customers with noncompliance backflow systems will be notified as outlined in Section 15.44.100 and required to come into compliance.

3. Portable backflows must be tested annually and or retested when disconnected or removed from any approved location. Anyone connecting to the public water system, by hydrant, temporarily or other, must have an acceptable and approved backflow preventer assembly and or plan from city. If the device is moved from place to place it must be tested by a city-approved certified tester.

C. Field surveys may include evaluation of water use by observations made from public or private areas not on the subject facility, or physical inspection on all or a portion of the facility. When possible, a request to survey the facility shall be made at least twenty-four (24) hours in advance, and a date and time agreed upon with a responsible party. Should the request to survey be denied by a responsible party, notice shall be sent to the customer or responsible party directing installation of a lead-free reduced pressure principle backflow assembly, at the water meter, based on best available knowledge of the water use and potential hazards at the facility.

During the survey many factors are considered to determine if activities or water use on facility are or could be a potential hazard to the public water supply. Factors that may be considered include:

1. Alternative sources of water on-site (auxiliary water supplies).
2. Piping configurations on-site.
3. Uses of water on-site.
4. Types of water using equipment.
5. Condition of water using equipment.
6. Complexity and elevations of plumbing on-site, and the potential for alterations of that system.
7. Storage and use of hazardous materials on-site.

All the factors found and recorded during the survey shall be considered in the determination of the degree of potential hazard (degree of hazard) to the public water supply. This information shall be considered in the determination of the appropriate backflow preventer. The customer or responsible party shall be informed of the requirement to provide backflow protection and the type of backflow prevention assembly required in accordance with Title 17 of the California Regulations Related to Drinking Water or any future state water resource control board requirements and regulations for cross-connection control, or the direction of the San Mateo County Health Officer.

Environmental Health will ensure each BPA (or AG) in inventory is field tested (or AG is visually inspected) at a frequency of at least once per calendar year by a BPA tester that is both currently certified by a State Water Board-recognized organization and authorized to test in San Mateo County by Environmental Health.

Local City building department, or Environmental Health, will require initial installation and test of BPA with results submitted to Environmental Health to allow BPA to be inventoried in the Environmental Health database. Additionally, any BPAs discovered during initial or subsequent hazard assessments, as described in section 3.2.1, will be added to the Environmental Health inventory of BPAs.

Each BPA (and AG) in the Environmental Health BPA database is assigned a “next test due date” between January and September of each calendar year (none between October and December to allow for delinquent testing to occur before December 31). To ensure testing occurs, a reminder notice to test is sent to a facility via US mail 30 days before its BPA “next test due date”. If a completed test report is not received, a second notice to test is sent to the facility on the “next test due date”. If a completed test report is still not received, an Administrative Enforcement Order (AEO) is sent to the facility 30 days after the “next test due date”. If a completed test report is not received within 14 days from the date on the AEO, Environmental Health will coordinate with the _____ water system on enforcement action, which may include:

- Hand delivery of AEO to the delinquent facility by PWS;
- AEO with fine sent by Environmental Health to the delinquent facility;
- Potential water termination threat by the PWS;
- Water termination to the delinquent facility by PWS;
- Other action as seen fit by PWS until compliance is met.

After results are received, next test due dates for each BPA move forward one calendar year to ensure a notice is mailed out at the appropriate time the following year.

BPA testers are required by Environmental Health Ordinance 4.72 to submit BPA results to Environmental Health within 10 days of testing.

(6) Environmental Health will only accept BPA test reports completed by individuals who are authorized through Environmental Health. The authorization process includes:

- Ensuring individuals are currently certified to test BPA through a State Water Board-recognized organization;
- Have a field test kit or gauge equipment that has been calibrated within the last calendar year;
- Have completed an examination created by Environmental Health to demonstrate that the tester understands their responsibilities as detailed in the County Backflow Prevention Ordinance;
- Have paid an annual tester fee to Environmental Health.

After initial authorization, Environmental Health will ensure BPA tester certifications and calibration reports remain current by tracking expiration dates in a database containing individual accounts of BPA testers.

To ensure the quality of BPA test result reports submitted by BPA testers, each report is reviewed upon submittal before being entered into the BPA database. Each BPA test record must, at a minimum, in addition to BPA information and test result information, include:

- Tester name;
- Test date;
- Repair or replacement date (if applicable);
- Tester certification number;
- Signature of the BPA tester;
- Backflow tag number purchased through Environmental Health that is unique to each test.

When an online portal that syncs to the Environmental Health BPA database becomes available to Environmental Health authorized testers for submittal of basic passing tests on existing assemblies, results will only be accepted if they contain all required criteria. In addition, random quality control checks on testers are conducted by Environmental Health to ensure results submitted match physical BPA description on the report and the tag number submitted matches the one attached to the BPA by the tester.

Environmental Health Ordinance includes the ability to suspend or revoke an Environmental Health BPA tester authorization. Environmental Health will report to the certifying agency if a tester's authorization has been suspended or revoked.

(9) Environmental Health maintains a Salesforce-based database containing records for each BPA that is initially submitted to Environmental Health as "new" on a blank test report. Each individual record contains, at a minimum:

- The associated hazard type (service, internal, fire);
- Site address;
- Location of BPA within the facility;
- Owner;
- Owner mailing;
- Type of BPA;
- Manufacturer and model of BPA;
- Size of BPA;
- Installation date of BPA;
- Next test due date of BPA;
- Last passed test date of BPA;
- Serial number of the BPA.

Additionally, a field is currently available under each BPA record to be populated with a hazard level of high, low, or none, to comply with the CCCPH recordkeeping requirement of maintaining the BPA associated hazard.

BPA test records are tied to BPA records and maintained in the Environmental Health database (including reports indicating failure, repair, replacement, or relocation) for at least 3 calendar years to comply with the CCCPH.

5.2.1 Follow Up Hazard Assessments

Unless protection is provided by an RP, and unless the RP continues to successfully pass the annual tests, the customer's Cross-Connection Control Specialist selected per Section 4.2 will perform subsequent assessments under the following criteria:

1. If a customer's premises changes ownership, excluding single-family residences
2. If a customer's premises is newly connected to the PWS
3. If evidence exists of potential changes in the activities or materials on a customer's premises
4. If backflow from a customer's premises occurs
5. If the SWRCB requests a hazard assessment of a customer's premises
6. If the City concludes an existing hazard assessment may no longer be correct

Notification to the customer of this requirement will be in each annual test notice. Additionally, internal City coordination will occur between the Planning and Finance Departments with the Water Engineering Section to monitor changes in business licenses and permit applications.

Follow up hazard assessments require the Cross-Connection Control Specialist to have hazard results uploaded to the online City portal managed by the City's Cross-Connection Specialist.

5.2.2 Hazard Assessment Outcomes

Following completion of either initial hazard assessments or subsequent assessments completed by the certified Cross-Connection Control Specialist selected per Section 4.2, the customer may need to address various outcomes related to backflow protection as further described below.

5.2.3 Non-Complying Assembly

Existing non-residential backflow prevention assemblies that do not meet the requirements (per the amended EPA CO 15.44.090 and as set forth in the CCCPH) will be required to either repair or replace the backflow prevention assembly to meet the requirements. This will occur for both high hazard locations assessed by the City and customer completed assessments.

Notices received by customers that have up to 180 calendar days to comply will initially be provided 30 calendar days to comply and through customer due diligence, extensions up to 150 calendar days will be provided.

5.2.4 Without an Assembly

All non-residential customers and premises (except the 483 high-hazard premises already assessed by the City) existing prior to the adoption of the CCCPH are required to have an initial hazard assessment completed by the certified Cross-Connection Control Specialist selected per Section 4.2. Upon upload of this information to the City portal, if it is determined that a premises requires backflow prevention, the City will provide a written notice to the customer to install an approved backflow prevention assembly within 180 calendar days or the City will discontinue water service. Notices received by customers will initially provide 30 calendar days for the installation and through customer due diligence, extensions up to 150 calendar days will be provided.

5.2.5 Non-Residential Fire Sprinkler Systems

Commercial and industrial premises with sprinkler systems have varying hazard levels depending on the class of fire sprinkler system (Class 1, 2, 3, or 4). Whether a fire system uses water only, chemical agents, fire suppression substances or is equipped with a Fire Department connection all new installations and/or replacements will require the installation of an RPDA unless determined otherwise by the City Engineer.

5.2.6 Residential Fire Sprinkler Systems

Single-family and multi-family homes with sprinkler systems typically have a low hazard level. These systems will require the installation of an RP unless determined otherwise by the City Engineer. Hazard assessments of these residential systems are not scheduled, instead administrative tools including, but not limited to, permitting information will be used. In FY25-26 coordination will occur among the Utility Engineering Section, Building, Fire and Finance to determine the number of locations and addresses of residential units with fire sprinkler systems. Once this is complete, public education/outreach will occur prior to notices sent out requiring an assessment. Once the assessment results are known, a timeline to achieve compliance will be set prior to the CCCPH allowed time.

6.0 *BACKFLOW PREVENTION ASSEMBLIES (CCCPH ARTICLE 3)*

This section provides a description of approved backflow prevention assemblies and of backflow prevention assembly installation requirements.

6.1 Location and Approved Backflow Prevention Assemblies (CCCPH 3.3.1 & EPA CO 15.44.070)

Only approved backflow prevention assemblies will be allowed for new installation by a water customer to protect the PWS. Approved backflow preventors, which may be subjected to back-pressure or back siphonage, must be fully tested and granted a certificate of approval by a certified laboratory. The City will provide, upon request, to any water customer required to install a backflow preventer, the City's standard detail that notes approved backflow prevention assemblies.

Approved backflow prevention assemblies must have passed both laboratory and field evaluation tests in accordance with standards found in any of the following:

- The latest edition of the Foundation for Cross-Connection Control and Hydraulic Research of the University of Southern California Manual of Cross-Connection Control;
- The certification requirements for backflow prevention assemblies in the Standards of ASSE International current as of 2020; or
- An equivalent testing organization approved by the SWRCB.

Additionally, only backflow prevention assemblies noted in the City's standard detail will be allowed for new installation. Backflow prevention assemblies must not be modified from the configuration granted approval. Backflow Prevention Assembly Testers are required to notify the City if a water customer or City-owned backflow prevention assembly has been modified.

6.2 Installation Requirements (CCCPH 3.3.2 and EPA CO 15.44.070)

Backflow prevention assemblies shall be installed by the customer on the customer's water service side according to City standard details and prior to issuance of a final occupancy permit for new water services. The backflow prevention assemblies shall be installed in a manner prescribed in the CCCPH and as close as practical to the customer's service connection on the customer's premises for containment. The City shall provide final authority in determining the required location. If internal protection installed as isolation protection and further proposed for the purpose of containment, the City must be able to access the customer's premises and ensure that the on-site protections meet the requirements of the CCCPH. All backflow prevention assemblies shall be readily accessible for field testing and maintenance. Requirements for the specific elements of backflow prevention assemblies are described in the following subsections.

6.2.1 Air Gap Separation (AG)

The approved AG is to be installed on the customer's premises at the water customer's service connection and in accordance with CCCPH requirements. The received water container must be located on the water customer's premises at the water customer's service connection. Alternate locations must be approved by the City. All piping between the water customer's service connection and the discharge location of the receiving water container must be above grade and accessible for visual inspection. If installed at the customer service connection, the air gap must be approved by the SWRCB prior to installation. The water inlet piping shall terminate a distance of at least two pipe diameters of the supply inlet, but in no case less than one inch above the overflow rim of the receiving tank.

6.2.2 Reduced Pressure Principle Back/low Prevention Assembly (RP)

The approved RP assembly shall be installed on the customer's side of and as close to the service connection as is practical. The assembly shall be installed such that the lowest point of the assembly is a minimum of 12 inches above the finished grade and not more than 18 inches above grade measured from the bottom of the assembly and with a minimum of 12 inches side clearance, unless an alternative is approved by the City. However, a minimum side clearance of 24 inches must be provided on the side of the assembly that contains the test cocks. The assembly should be installed so that it is readily accessible for maintenance and testing.

The same space requirements may be applied to RPDAs.

6.2.3 Double Check Valve Back/low Prevention Assembly (DC) and Pressure Vacuum Breaker Back/low Prevention Assembly (PVA)

Unless authorized by the City Engineer, double check valve backflow prevention assemblies and pressure vacuum breaker backflow prevention assemblies will not be approved. All new applications shall be RP & RPDA.

Existing applications of DC, DCDA, PVA backflow prevention device types will be considered acceptable if they are serviceable.

7.0 TESTING AND MAINTENANCE OF BACKFLOW PREVENTION ASSEMBLIES (CCCPH 3.3.3 AND EPA CO 15.44.080)

This section outlines the testing and maintenance of backflow prevention assemblies and notification procedures followed by the City.

7.1 Testing

7.1.1 Frequency of Testing

The City requires all backflow prevention assemblies with active water services to be field tested upon installation, repair, overhauled, replaced or when relocated/removed, and whenever an assembly is depressurized, which includes all procedures/work listed in this section. Thereafter, the City requires backflow prevention assemblies to be field tested at a minimum of at least once annually by a certified Backflow Prevention Assembly Tester acceptable to the City as described in Section 4.1.1. Prior to the City approving a Water Service Agreement, the City must receive a passing set of backflow prevention assembly test results for the given backflow prevention assembly. For water services that have been suspended, the City will require a backflow assembly test upon initiation of the water service.

The City, at its discretion, may require more frequent testing intervals or inspections than the annual requirement. AG installations providing protection at the water service, and swivel-ell installations will be inspected annually to ensure compliance. Currently, the City does not have any AGs within the City to inspect.

7.1.2 Procedures for Submitting Test Results

Testing results shall be submitted to the County on a City-approved backflow assembly form in electronic format, submitted through an online portal. Backflow Prevention Assembly Testers shall use the most current approved testing procedures. All backflow assembly testing is to be at the expense of the owner. Backflow assembly tests are performed by qualified testers retained by the customer.

7.1.2 New Installation

A passing field test must be received for all newly installed backflow prevention assemblies providing containment protection before water service can be provided. Newly installed assemblies or air gaps must be inspected for compliance with the CCCP and confirm successful passing of the assembly performance test.

7.1.3 Failed Test

Assemblies that fail the field test shall be repaired, overhauled, or replaced and then re-tested immediately. Upon receipt of a failed test report, the City will send a notification requiring that the backflow be repaired or that a new assembly be installed immediately. All repairs and replacements shall be submitted to the City as complete within 30 days of notification. If additional time is needed, the customer may request consideration of an extension from the City.

7.2 Notification Process

It is the responsibility of the customer to ensure that all premises with a backflow prevention assembly receive a passing field test at a minimum of at least once annually. In FY 24-25, customers with a backflow prevention assembly will receive a first notification notice the first week of June each calendar year, providing sixty (60 days to hire a certified backflow assembly tester to perform a field test and submit a test report on the condition of the backflow assembly. If a test report is not received, a second notice will be sent on August 15th, providing 45 days to have the assembly tested. In cases where a backflow assembly test has still not been received, a third notification notice will be sent with a 30-day compliance deadline. The City's goal is to work with customers to ensure timely backflow testing. Property owner/water customer communication and correspondence is documented by the City to establish a communication trail.

In situations where no action is taken by the backflow assembly owner after the third notice has been sent, the City will send an additional notice on October 1st that provides a five-day period for the customer to contact the City and advise of customer arrangements for the backflow assembly to be tested within 30 days. If testing does not occur within the 30 days, the water service will be terminated.

At the discretion of the City, a City's Backflow Prevention Assembly Tester will test the backflow assembly in question and charge the water customer a fee according to the City's Municipal Fee schedule. The City will not make repairs to backflow assemblies that did not pass the test.

7.2.1 Yearly Testing Notifications

Annual notification letters to water customers are currently sent out through USPS mail. Beginning in FY25-26, initial notifications will be sent by email to the customer. Second and third notifications (if needed) will continue to be sent through USPS mail. Notifications will include the following information:

- References to the Cross-Connection Control Policy Handbook and the City's ordinance
- City contact information

- Instructions for accessing the list of approved backflow testers
- Processes for submitting the backflow test report
- Due date for submitting test results
- The backflow assembly of records details, including meter number, assembly serial number, model and size, and location
- Requirement for initial hazard assessment and subsequent assessments if changes occur at the premises
- Requirement to notify the City if an imminent or occurring hazard
- Instructions on how to provide customer-provided information

7.2.2 Upgrading

Assemblies that are not noted on City's Standard Details may remain in place at the discretion of the City Engineer until the point of complete failure (repairs and overhauls cannot remedy) if the assembly passes field tests. For non-complying assemblies, refer to the requirements of Section 5.2.3. When an assembly fails the field test, a new assembly shall be installed at the property owner/water customer's expense. Only assemblies that are noted on the City's Standard Details shall be installed unless determined otherwise by the City Engineer.

7.2.3 Notification of Imminent Hazard

Backflow assembly property managers and/or water customers are required to notify the City within 24 hours of determining a known backflow or cross-connection incident. This requirement is stated in annual notifications received by the customer from the City.

Upon being notified, the City will immediately investigate and discontinue water service to the premises if an imminent hazard to public health is found. The water service will not be restored until confirmation of a correction is made and a passing backflow assembly field test is received.

8.0 RECORD MAINTENANCE

Cross-Connection control records and associated penalties for non-compliance are described in this section.

8.1 Records

The City will retain the following records in electronic form and make them available to the SWRCB upon request:

8.1.1 Cross-Connection Control Plan

This CCCP will be reviewed every five years and updated as necessary.

8.1.2 Hazard Assessments

Records will be retained for the two most recent hazard assessments conducted according to Section 5.3 of this CCCP.

8.1.3 Assembly Records

For each backflow prevention assembly, the following information shall be kept electronically: type, associated hazard, location, owner, manufacturer and model, size, installation date, serial number, account number, consumer of record, and repair history.

For each AG installation, the following information shall be kept electronically: associated hazard, location, owner, and as-built plans.

For each swivel-ell, the following information shall be kept electronically: location, appropriate contacts, agreements, and inspection results.

8.1.4 Testing Results

Test results on all assemblies, AGs, and swivel ells will be kept electronically for three calendar years and will include the name, test date, repair date, and certification number of the backflow assembly tester.

8.1.5 Repairs

Records will be retained for all repairs made to backflow prevention assemblies for the previous three calendar years.

8.1.6 Recycled Water Cross-Connection Control Shutdown Tests

The most recent cross-connection control shutdown test will be kept for each recycled water site.

8.1.7 Incident Reports

Descriptions and follow-up actions related to all backflow incidents for the most recent ten years will be retained.

8.1.8 Contracts and Agreements

All contracts and agreements executed related to cross-connection control or backflow will be retained by the City.

8.1.9 Educational Material

Public education and outreach materials will be kept for the previous four (4) years.

8.2 ENFORCEMENT (EPA CO 15.44.100)

A. The county has the authority to take enforcement action as specified in the county ordinance code relating to backflow prevention, consistent with the agreement between the city and county. The city and the city's water provider shall work with the county on enforcement. If the county is unable to reach the customer or responsible party, the city, with support from the city's water provider, will send a notice of violation by certified mail to the customer or responsible party.

B. Failure to comply with any requirement of this chapter may be cause for the discontinuance of water service. The program administrator shall give notice in writing of any violations of this chapter to the customer or responsible party. If appropriate action is not taken within ten (10) days after such notice has been mailed or delivered in person, the program administrator may discontinue delivery of water. However, if the program administrator or the health officer determines that the violation constitutes an immediate

C. All costs incurred by the city for discontinuance of water service and all fees associated with reinstating water service shall be paid by the customer or responsible party. Costs incurred by the county for inspections shall be paid by the customer or responsible party at the rate established by San Mateo County.

D. Any person found guilty of violating any provision of this chapter, or who bypasses or renders inoperative any backflow prevention assembly installed under the provisions of this chapter, shall be fined as follows:

   i. A fine not exceeding one hundred dollars ($100.00) for the first violation;

   ii. A fine not exceeding two hundred dollars ($200.00) for a second violation within twelve (12) months;

   iii. A fine not exceeding five hundred dollars ($500.00) for each additional violation within twelve (12) months.

E. In partnering with Environmental Health, the County Backflow Prevention Ordinance allows Environmental Health both legal authority and enforcement and administrative fine mechanisms in the event a water user fails to comply in a timely manner with the provisions of the City cross-connection control program that are implemented by Environmental Health.

F. The San Mateo County of Public Health Environmental Health shall have the authority to enforce this chapter as follows.

   (1) Environmental Health may require a water purveyor to discontinue water service to any facility wherein violations of this Chapter exist.

   (2) Any person who violates any provision of this Chapter, or bypasses or renders inoperative any backflow prevention assembly installed under the provisions of this Chapter may, in addition to other penalties provided by law and this Chapter, shall be subject to discontinuance of water service. Water service shall not again be reinstated until such violations have been corrected as determined by Environmental Health. Costs incurred by Environmental Health for inspections

shall be paid by the facility owner at the rates set forth in San Mateo County
(3) Ordinance code section 5.64.070.

(3) Pursuant to section 116820 of California Health and Safety Code, any person who violates any provision of Article 2 of Chapter 5 of Part 12 of Division 104 of the California Health & Safety Code, violates any order of Environmental Health pursuant to this article, or knowingly files a false statement or report required by Environmental Health pursuant to this article is guilty of a misdemeanor punishable by a fine not exceeding five hundred dollars ($500) or by imprisonment not exceeding 30 days in the county jail or by both such fine and imprisonment. Each day of a violation of any provision of Article 2 or of any order of Environmental Health beyond the time stated for compliance of the order shall be a separate offense.

9.0 INCIDENT RESPONSE AND NOTIFICATION

The City will investigate for possible backflow incidents when the following triggers are reported:

- Water quality complaint that cannot be explained as a normal aesthetic problem; especially receiving multiple reports indicating multiple properties impacted
- Advanced Metering Infrastructure (AMI) meters reporting negative usage
- A backflow incident suspected or known to have occurred
- Unknown increase in system pressure reported
- Unknown decrease in system pressure reported

Additionally, the City will initiate a notification and water quality sampling procedures when a water main break or power outage causes a negative loss of water pressure within a significant area of the distribution system as a precautionary measure in case of a potential back siphonage event.

The incident response procedures, notification procedures, and associated record keeping requirements are addressed below.

9.1 Incident Response Procedure (CCCPH 3.5.2)

The City will implement their Water Emergency Response Plan (ERP) if contamination of the City's distribution system is observed. The ERP contains the City's plan for notifying customers and other officials of a water emergency, contact information for internal and external pertinent staff, conditions for activating the Emergency Operations Center, and a description of roles and responsibilities of water staff. The ERP is intended to be a living document evaluated regularly for updates. The latest version is found in Appendix G of this report.

In the event of a potential backflow-related incident, the City will take the following steps, each of which is described in this subsection:

- Incident Investigation
- Isolation of Sources of Contamination
- Cleaning and Disinfection
- Notification and Coordination with Outside Agencies
- Notification of Affected Population

9.1.1 Incident Investigation

The City's Public Works Department will begin an investigation by sending a Utility Maintenance Worker (Worker) to the location of the reported incident. Through a field investigation, the Worker will determine if contamination is present in the PWS and the extent of the impacted area. Workers will perform the following actions to investigate for potential cross-connections:

- Survey area for possible main breaks
- Visit the premises to observe possible sources of contamination

9.1.2 Sources of Contamination Isolation

Once the cross-connection responsible for the system contamination is located and isolated from the PWS, the City will also isolate the portion of the system suspected of being contaminated by closing isolation valves and notifying customers impacted of the disruption of water.

9.1.3 Cleaning and Disinfection

The City will work with the SWRCB to establish procedures to remove the contamination and disinfect the PWS. A sampling plan will also be established and implemented to confirm when the system meets Safe Drinking Water Standards.

9.1.4 Notification and Coordination with Outside Agencies

The City will be responsible for notifying the SWRCB and the County's Public Health Officer as soon as practical to accurately communicate and properly mitigate potential health effects resulting from an incident. The City will use the Water Quality Emergency Notification Plan as outlined in the ERP. The Notification Plan identifies the persons designated to implement the plan and provides the contact information of the appropriate County Health Department personnel.

9.1.5 Notification of Affected Population

As soon as possible following an incident, the City will notify the public using methods outlined in the Emergency Notification Plan within the ERP. Notifications will be provided by any one or all of the following: television media, radio, social media, sound trucks, door hangers, and the City's website.

If the contamination is of a biological nature, the City will issue a Boil Water Order Notice. If the contamination is of a chemical nature, the City will issue an Unsafe Water Alerts as "Do-Not-Use" or "Do-Not-Drink" Notices. Notices will be communicated in English and Spanish. The City has a draft notification template that can quickly be populated with the necessary details and printed for distribution. Notices include instructions on what consumers should do; where potable water is available; and if applicable, dates of notice issuance and expected resolution; and the location where more information can be received.

The City will contact bottled water companies to purchase water for its customers. The City will determine the most efficient way to distribute the bottled water through either a delivery system or a central distribution location.

9.2 Backflow Incident Notification (CCCPH 3.5.3)

The City shall notify the SWRCB of any known backflow incident within 24 hours of the determination. If required by the SWRCB, the City shall issue a Tier 1 public notification pursuant to CCR, Title 22, Section 64463.1. If required by the SWRCB, the City must submit, by a date specified by the SWRCB, a written incident report describing the nature and severity of the backflow, the actions taken by the City in response to the incident, and any follow up actions required to prevent future incidents. The written report will contain, at a minimum, the information provided in Appendix F of the CCCPH.

9.3 Record Keeping

Incident notifications, which include results of and follow up actions of all backflow incidents, will be maintained by the City for up to three years. Results will be available to the SWRCB upon request.

10.0 *PUBLIC OUTREACH, EDUCATION, AND COORDINATION*

Topics addressed in this section include public outreach, training, designation of customer supervisors, and inter-agency coordination.

10.1 Public Outreach

The County maintains a Cross Connection Control and Backflow Prevention web page that contains references to the County's and City's Municipal Code and State of California regulations. The webpage describes the purpose of the CCCP, provides details on the annual backflow testing requirements, including links to City Standard Details that note the lists of Approved Backflow Assemblies, the list of qualified Backflow Prevention Assembly Testers, the list of Cross Connection Control Specialists as well as providing testers online access to the City's backflow management software. In addition, the City's Water Quality Report provides a description of backflow testing and the benefits it provides for maintaining water quality.

10.2 Training

The County will offer annual cross-connection control training to County employees who need to be knowledgeable about this CCCP. Employees responsible for parks, street landscape facilities, operations, and maintenance, Public Works Inspectors, Building Inspectors, and Fire Prevention will be included.

10.3 Designation of User Supervisor {CCCPH 3.2.2.-f)

The City may require, at the discretion of the City's Cross-Connection Specialist, a water customer to designate a user supervisor when the customer's premises have a multi-piping system that conveys various types of fluids and where changes in the piping system are frequently made. The designated user supervisor will be responsible for the avoidance of cross-connections during the installation, operation, and maintenance of the water customer's pipelines and equipment. The designated user supervisor must be trained on the fluids used and backflow protection methods present at the premises. The user supervisor will be responsible for informing the City of changes in piping and shall maintain current contact information on file with the City.

The user supervisor will be required to attend a training provided by the City that covers the types of hazards and concerns typically found on customers' premises. Upon successful completion of the training, a user supervisor certificate will be issued with a renewal requirement of every four years. Currently, the City has Recycled Water Site Supervisors trained by the South Bay Water Recycling Program. Part of the training includes the prevention of cross-connections.

10.4 Inter-Agency Coordination

The CCCP is shared with various departments across the organization and with other agencies as shown in Table 10-1.

Table 10-1. Inter-Agency Coordination

Entity	Responsibility	Coordination
Inter-Department Coordination		
Department of Engineering in partnership with San Mateo County Department of Environmental Health Services	• Administers the Cross-Connection Control Program • Performs testing and hazard assessments if not completed by the customer • Performs testing and hazard assessments for all City-owned facilities • Inspects newly installed backflow assemblies for proper installation • Leads on potential backflow investigations • Respond to customer cross-connection questions. • Maintains cross-connection standards and specifications • Ensures appropriate backflow protection is provided for new developments within the City • Coordinates with the SWRCB	• Coordination with customers, City departments, regulatory agencies, testers, and specialists
Public Works/ Veolia Water	• Assists with potential backflow investigations • Customer service staff field phone calls not related to cross-connection and water quality complaints	• Informs Utility Engineering on field investigations • Reporting water main breaks or other water complaints for further investigation
Planning Department	• Reviews and approves development projects	• Coordinates plan review with Utility Engineering
Building Department	• Reviews tenant improvement projects • Enforces building and plumbing codes	• Informs Utility Engineering of the proposed tenant improvements so that an assessment may be completed • Confirms backflow assemblies are installed as part of tenant Improvement permits • Informs Utility Engineering that the new assembly has been installed and tested
Menlo Fire District	• Reviews fire prevention plans • Reviews pressure and operational calculations for backflow retrofits	• Coordinates plan review with Utility Engineering

Finance Department	Track changes in business status (new businesses, ownership, businesses no longer operating)	Notify Utility Engineering of change of business status

Table 10-1. Inter-Agency Coordination

Entity	Responsibility	Coordination
Outside Agency Coordination		
San Mateo County Department of Environmental Health Services	• Oversees public health programs within San Mateo County, including administering Back Flow programs to partnered cities.	• Provides guidance to the City in situations where public health could be affected
SWRCB	• Regulates public water systems	• Provides guidance to the City during water-related emergencies • Perform regular sanitary surveys

City of East Palo Alto
December 2025


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