



June 25, 2025

Cross-Connection Control Policy Handbook

What is a Cross-Connection?



- **Cross-Connection:** Actual or potential connection between a potable water line and a non-potable source, which may contain liquid, gas, or other substances not from an approved water supply.
- **Backflow:** The undesirable reversal of the flow of water into the distribution system. This can occur due to backpressure and back-siphonage.

Common Sources of Cross-Connections and Backflow



The American Backflow Prevention Association (ABPA) survey of State and Public Water Systems (PWS) cross-connection control programs found that the most common cross-connections reported were from:

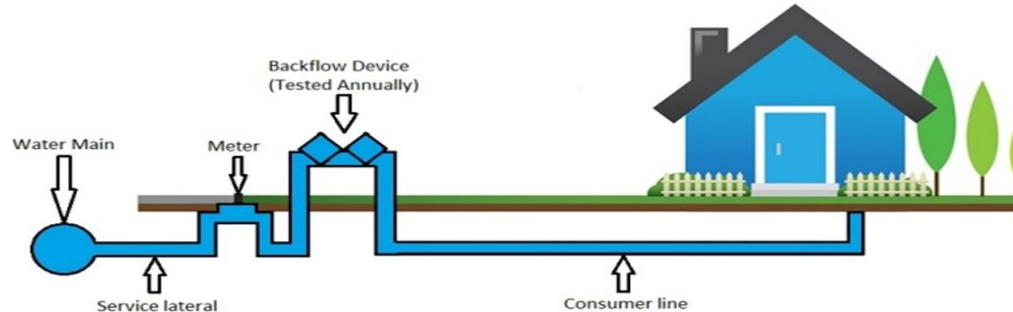
- Irrigation
- Fire systems
- Garden/washdown hoses
- Boilers

(USEPA, 2001, p. 19)



What is Backflow Prevention?

- Use of a device permanently installed on the water service line to ensure water flows in the intended direction.
- Maintains the integrity of the PWS and public health.
- Regular inspection, testing, and maintenance are essential for their effectiveness.



Cross-Connection Control Policy Handbook

- Issued by the State Water Resources Control Board, replaced sections of Title 17 pertaining to cross-connection and backflow regulations.
- Regulates the use and management of cross-connection control programs and backflow prevention assemblies in PWS's.
- Applies to all California PWS's and compliance with CCCPH is mandatory. No additional state funding to support these measures.
- Sweetwater Authority has a robust Cross-Connection Control Program in place. New regulations require enhancement of the existing program to meet updated standards.



Existing Title 17 Elements

- Operating Rules and Ordinance
- Conducting Surveys
- Backflow Protection
- One person trained in Cross-Connection Control
- Establishment of Testing Procedure
- Maintenance of Records

New CCCPH Elements

- Hazard assessments of all water services, including single-family residences.
- Cross-Connection Control Supervisor
- Increased Backflow Incident Response Measures
- Public Outreach and Education
- Local Entity Coordination
- Cross-Connection Control Specialists need to be on-staff or hired consultants



Cross-Connection Control Plan

- All PWS's must provide a Cross-Connection Control Plan to SWRCB by July 1, 2025. The plan must be comprehensive and align with the new policy guidelines and provided a projected date of full compliance.
- Must include a minimum 10 elements listed in section 3.1.3 of the CCCPH.
 1. Operating rules or ordinances
 2. Cross-Connection Control Supervisor
 3. Hazard Assessments
 4. Backflow Prevention
 5. Certified Testers & Cross-Connection Control Specialists
 6. Backflow Prevention Assembly Testing
 7. Recordkeeping
 8. Public Outreach & Education
 9. Local Entity Outreach
 10. Backflow Incident Response, Reporting & Notification



CCCPH High Hazard Premises

- Sewage handling facilities
- Wastewater lift stations and pumping stations
- Wastewater treatment processes, handling, or pumping equipment that is interconnected to a piping system connected to a PWS (+)
- Petroleum processing or storage plants
- Radioactive material storage, processing plants or nuclear reactors
- Mortuaries
- Cemeteries
- Sites with an auxiliary water supply interconnected with PWS (+)
- Sites with an auxiliary water supply not interconnected with PWS
- Premises with more than one connection to the PWS (++++)
- Recycled water (++)(+++)
- Recycled water interconnected to piping system that contains water received from a PWS (+)
- Graywater systems, as defined in California Water Code Section 14876, that are interconnected to a piping system that is connected to a PWS
- Medical facilities
- Kidney dialysis facilities
- Dental office with water-connected equipment
- Veterinarian facilities
- Dry cleaner facilities
- Industrial or commercial laundry facilities
- Metal-plating facilities
- Business park with a single meter serving multiple businesses
- Marine-port facilities
- Car wash facilities
- Mobile home park, RV park, or campgrounds with RV hookups
- Hotels/motels
- Gas stations
- Fire stations
- Solid waste disposal facilities
- Pet groomers
- Agricultural premises
- Hazard assessment access denied or restricted
- Railroad maintenance facilities
- Incarceration facilities (e.g. prisons)
- Temporary connections to fire hydrants for miscellaneous uses, including construction
- Private water distribution mains
- Drinking water storage tank overflow connected to a sump or storm drain (+)
- Airports



Key Requirements and Impact

Sections of CCCPH result in a higher workload and extra expenses for Sweetwater Authority and customers. Specifically:

- Hazard assessments on all sites. (over 34,500)
- Construction meters are now classified as high hazard and require backflow prevention assembly upgrades.
- Installation of backflow prevention assemblies on all fire protection systems within a ten-year period following the adoption of the CCCPH.
- Additional Cross Connection Specialist staff is required to manage the increased inspection workload and regulatory compliance.
- Staff currently oversee annual testing, maintenance, and inspection of fire service upgrades on 4,800 backflow prevention devices. Regulations will require the installation of more devices across the service area, adding to that number.
- There will be increased public outreach and education regarding cross connection control practices to ensure customers understand new protocols.



Impact To Customers

- Single-Family Homeowners with irrigation systems, or other water-connected devices will be required to install backflow assemblies if not already in place.
- multi-service properties (e.g., commercial buildings or multi-units), each service line requires individual backflow prevention devices.
- Sites with a well interconnected with PWS must be isolated by air gap. An air gap requires the installation of private pumps and reservoirs.
- Property must be classified as high hazard if hazard assessment access is denied or restricted.



Hazard Assessments



- SWA Cross Connection Specialists must conduct assessments on over 34,500 services and develop a procedure for resurveying commercial and multi-residential properties whenever ownership changes.
- Each assessment involves a four-step process: pre-assessment preparation, on-site inspection, post-assessment reporting, and follow-up compliance verification.
- Staff must manage an increase in plan review, inspection frequency, and backflow assembly compliance management, which will require more personnel and resources.

Questions

