

**ORDINANCE NO. 2025-01**

**AN ORDINANCE OF THE CHESTER PUBLIC UTILITY DISTRICT  
INSTITUTING A CROSS-CONNECTION CONTROL PROGRAM  
TO PROTECT THE PUBLIC WATER SYSTEM**

**THE CHESTER PUBLIC UTILITY DISTRICT DOES HEREBY ORDAIN AS FOLLOWS:**

**SECTION I - PURPOSE**

The purpose of this ordinance is to protect the public water supply system from contamination due to potential and actual cross-connections. This shall be accomplished by the establishment of a cross-connection control program as required by State regulations. This ordinance is adopted pursuant to the State Water Resources Board Cross-Connection Control Policy Handbook (CCCPH). The CCCPH and “Standards and Principals for California’s Public Water Systems-(PWS)”, apply to all California PWS’s as defined in California’s Health and Safety Code (CHSC, section 116275 (h)) and The California Plumbing Code: Chapter 6 Water Supply and Distribution. Compliance with the CCCPH is mandatory for all California PWS’s. As of July 1, 2024, the CCCPH requirements become effective and replace the previous mandates found in Title 17, Section 7583-7605.

**SECTION II - RESPONSIBILITY**

The General Manager shall be responsible for implementing and enforcing the CCCPH and the Chester Public Utility District (Chester PUD) Cross-Connection Control Program (CCCP). If the degree of hazard indicates, backflow is required to prevent backflow from the user’s premises to the domestic water system, an appropriate backflow prevention assembly must be installed “By and at the expense of the water user.” It is the water user’s responsibility to comply with CPUD’s requirements pursuant to CCCPH.

**SECTION III - CROSS-CONNECTION PROTECTION REQUIREMENTS**

The type of protection that shall be provided to prevent backflow into the public water supply system shall be commensurate with the degree of hazard, actual or potential, that exists on the water user’s premises. Unprotected cross-connections with the public water supply are prohibited. The type of backflow prevention assembly that may be required (listed in decreasing level of protection) includes Air-Gap (AG) separation, Reduced Pressure Principal Backflow Prevention Assembly (RP), and a Double Check Valve Assembly (DC). The water user may choose a higher level of protection than required by the water supplier. The minimum types of backflow protection required to protect the approved water supply at the user’s water connection to premises with varying degrees of hazard are listed in the CCCPH. Situations that are not covered in the CCCPH shall be evaluated on a case-by-case basis and the appropriate backflow protection shall be determined by the water supplier or health agency.

## **SECTION IV- SPECIAL REQUIREMENTS**

- a. ***Thermal Expansion:*** As a protection to the customer's plumbing system, a suitable expansion tank is recommended to be installed and maintained by the customer, at his or her expense, when check valves or other protective devices are used. The expansion tank shall be installed between the check valves and the water heater, or heating system. CPUD is not responsible for any damage caused by thermal expansion.
- b. Refusal of hazard assessment on the customers' property. The customers' service will be terminated under the procedures of - **SECTION VII- WATER SERVICE TERMINATION**, or be required to have a RP at the service, or CPUD will install a RP at the service. All expenses will be added to the customers' water bill.
- c. Refusal of required hazard assessment survey forms. The customers' service will be terminated under the procedures of - **SECTION VII- WATER SERVICE TERMINATION**, or be required to have a RP at the service, or CPUD will install a RP at the service. All expenses will be added to the customers' water bill.
- d. 30 days to repair or replace any backflow devices that have failed. Failure will fall under the procedures of - **SECTION VII- WATER SERVICE TERMINATION**, or be required to have a RP at the service, or CPUD will install a RP at the service. All expenses will be added to the customers' water bill.

## **SECTION V- BACKFLOW PREVENTION ASSEMBLIES**

CPUD's list of approved backflow prevention assemblies includes the list of approved backflow prevention assemblies as formulated by the University of Southern California, Foundation for Cross-Connection Control and Hydraulic Research, which is current at the time of the assembly installation.

<https://fccchr.usc.edu/list.html>

Backflow prevention assemblies shall be installed in a manner prescribed by the CCCPH. Location of the assemblies shall be as close as practical to the user's connection. Chester PUD shall have the final authority in determining the required location of a backflow prevention assembly.

Testing of backflow assemblies shall be conducted only by qualified testers, and testing will be the responsibility of the water user. Backflow prevention assemblies must be tested at least annually and immediately after installation, relocation, or repair. More frequent testing may be required if deemed necessary by Chester PUD. No assembly shall be placed back into service unless it is functioning as required. These assemblies 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. Approval must be obtained by Chester PUD prior to removing, relocating, or replacing a backflow prevention assembly.

1. Customers with existing back flow devices must ensure the device installation is to code with CCCPH. Any backflow device not to code with height installation requirements or any other code requirements must come into compliance. If a customer refuses to come into compliance, CPUD is required by CCCPH state regulations to install a new back flow device that is to code. All expenses incurred will be applied to the customer's account.

2. CPUD requires that annual testing is performed by a CPUD employee who is a licensed backflow assembly tester, or a District subcontracted licensed backflow assembly tester.

## **SECTION VI - Where Protection from Backflow is Required.**

1. Protection shall be required at each service connection from a public water system that supplies water to premises having an auxiliary water system, which is any water source or system, other than the primary public water supply, that is available for use on a property.
2. Protection shall be required at each service connection from a public water system that supplies water to premises on which any substance is or may be handled in such a manner as to permit entry into a public water system, including water originating from a public water system which is or may be subjected to deterioration in sanitary quality.
3. Protection shall be required at each service connection to any premises that has cross-connections unless such cross-connections are abated to the satisfaction of CPUD.

The type of protection that shall be provided to prevent backflow into a public water system or a small water system shall be commensurate with the degree of hazard that exists on the owner and/or operator's premises. The types of backflow prevention mechanisms that may be required (listed in an increasing level of protection) include double check valve assembly (DC, DCDA, or DCDA-II), Pressure Vacuum Breaker (PVB), reduced pressure principle assembly (RP, RPDA, or RPDA-II), or an air-gap separation (AG). The owner and/or operator may choose a higher level of protection than required by this section, if allowed by CPUD.

Premises or situations which are not listed in this section shall be evaluated on a case-by-case basis, and the appropriate type of protection shall be determined by CPUD.

The minimum level of required service connection protection at specific owner and/or operator's premises and facilities shall include the following, unless otherwise specified by a cross-connection control hazard assessment performed by the public water supplier having jurisdiction. Additional types of premises with specific levels of backflow prevention required are listed in CCCPH Appendix D.

When a DC is required or referenced, a DCDA or DCDA-II type of assembly may be substituted if appropriate. When an RP is required or referenced, an RPDA or RPDA-II type of assembly may be substituted if appropriate.

1. Commercial properties - RP
2. Aircraft plants - RP;
3. Automotive plants - RP;
4. Autopsy facilities - RP;
5. Auxiliary water systems - Defined as any water supply on, or available to, an owner and/or operator's premises other than an approved public water system:
  - a. Auxiliary water systems with no known cross-connections - RP,

- b.** Auxiliary water systems where cross-connections are known to exist - RP;
- 6.** Beverage bottling plants - RP;
- 7.** Breweries - RP;
- 8.** Buildings:
  - a.** Hotels, apartments, houses, public and private buildings, or other structures where sewage pumps and/or sewage ejectors have been installed - RP,
    - b.** Any commercial structure in which the specific business activity cannot be ascertained - RP,
    - c.** Any residential structure in which the specific business activity cannot be ascertained - RP,
    - d.** Multi-storied buildings that use booster pumps or elevated storage tanks to distribute potable water within the premises - DC,
    - e.** Any building that exceeds 40 feet in height, as measured from the service connection to the highest water outlet - DC;
- 9.** Canneries, packing houses, and reduction plants - RP;
- 10.** Chemical plants - Any premises served from a public water supply, where there is a facility requiring the use of water in the industrial process of manufacturing, storing, compounding, or processing chemicals. This also includes facilities where chemicals are used as additives to the water supply or in the processing of products - RP;
- 11.** Chemically contaminated water systems - Any premises, served from a public water supply, where chemicals are used as additives to the water supply, or where the water supply is used for transmission or distribution of chemicals, or where chemicals are used with water in the compounding or processing of products - RP;
- 12.** Cold storage plants - RP;
- 13.** Convalescent homes - RP;
- 14.** Dairy processing plants - RP;
- 15.** Dental clinics - RP;
- 16.** Dry cleaning facilities - RP;
- 17.** Dye works - RP;
- 18.** Film processing facilities or film manufacturing plants - RP;

**19. Fire protection systems that are supplied from a public water system:**

***a. Low-Hazard Fire Protection Systems.***

- i.** Fire protection system is directly supplied from a public water system and where there is an auxiliary water supply on or to the premises (not interconnected) - DC,
- ii.** Fire protection system is supplied from a public water system and where either elevated storage tanks or fire pumps which take suction from private reservoirs and tanks are used - DC,
- iii.** Fire protection system is directly supplied from a public water system and interconnected with another public water service - DC;

***b. High-Hazard Fire Protection Systems.***

- i.** Fire protection system is directly supplied from a public water system and interconnected with an auxiliary water supply - RP,
- ii.** Fire protection system is supplied from a public water system and contains any hazardous substance - RP;

**20. Hazardous or potentially hazardous treatment processes, handling, and/or pumping equipment interconnected to a piping system that can be connected to the public water system - AG;**

**21. Hospitals - RP;**

**22. Ice manufacturing plants - RP;**

**23. Irrigation Systems.**

- a.** Premises or locations where facilities have been installed for pumping, injecting, or spreading fertilizers, pesticides, or other hazardous substances - RP,
- b.** Premises or locations having a separate service connection for irrigation purposes - RP;
- c.** Premises or locations have no ability to cause back pressure. – PVB

**24. Laboratories - Including, but not limited to, teaching institutions, biological, and analytical facilities - RP;**

**25. Laundries (commercial) - RP;**

**26. Medical buildings and clinics - RP;**

**27. Metal manufacturing, cleaning, processing, or fabricating plants - RP;**

**28. Morgues - RP;**

**29. Mortuaries - RP;**

**30. Multi-storied buildings (see "Buildings" above);**

**31. Nursing homes - RP;**

32. Oil/gas production, storage, or transmission premises - RP;
33. Paper and paper products manufacturing plants - RP;
34. Plastic manufacturing, extruding, and injection molding - RP (see "Chemical plants" above);
35. Plating plants - RP;
36. Portable spray or cleaning equipment which can be connected to a public water system - AG;
37. Radioactive materials or substances - Plants or facilities that process, handle, or store radioactive materials or substances - RP;
38. Recycled Water Distribution Systems.
  - a. Premises where the public water system is used to supplement the recycled water system - AG,
  - b. Premises where recycled water is used and there is no interconnection with the potable water system - RP;
39. Restricted, classified, or other closed facilities - RP;
40. Rubber manufacturing plants - Natural or synthetic - RP;
41. Sand and gravel plants - RP;
42. Sanitariums - RP;
43. Schools, colleges, and universities - RP;
44. Sewage treatment processes, handling, and/or pumping equipment interconnected to a piping system that can be connected to the public water system - AG;
45. Solar heating systems.
  - a. Solar collector system which contains any hazardous substance and where there is a direct makeup connection to the public water system - RP,
  - b. Service connection protection is not required for "once through" solar heating systems including, but not limited to, domestic hot water systems;
46. Tank trucks - AG (see "Portable spray" and "Cleaning equipment" above);
47. Vehicle washing facilities - RP;
48. Veterinary clinics - RP;

## **SECTION VII- ADMINISTRATION**

The General Manager shall administer the cross-connection control program. Chester PUD will establish and maintain a list of approved backflow prevention assemblies as well as a list of approved backflow prevention assembly testers. Chester PUD shall conduct necessary surveys of water user premises to evaluate the types and degrees of hazards at a user's premises. Chester PUD shall notify users when an assembly needs to be tested. The notice shall contain the date when the test must be completed.

## **SECTION VIII- WATER SERVICE TERMINATION**

When CPUD encounters water use that represents a clear and immediate hazard to the potable water supply that cannot be immediately abated, CPUD shall initiate the procedure for discontinuing water service. Conditions or water uses that create a basis for water termination shall include, but are not limited to, the following items:

- Condition 1:** Refusal to install a required backflow prevention assembly.
- Condition 2:** Refusal to test a backflow prevention assembly.
- Condition 3:** Refusal to repair a faulty backflow prevention assembly.
- Condition 4:** Refusal to upgrade a backflow prevention assembly to the necessary level of protection.
- Condition 5:** Refusal to return the required cross-connection control survey form by the consumer.
- Condition 6:** A situation which presents an ***immediate health hazard*** to the public water system.

**For condition "6",** CPUD shall take the following steps:

1. Make a reasonable effort to advise the water user of intent to terminate water service.
2. Attempt to contact the party responsible listed on the account by telephone and follow-up letter.
3. Terminate water supply and lock service valve. The water service will remain inactive until corrective action is taken, or a backflow prevention assembly is installed and tested.

**For conditions 1, 2, 3, 4 & 5** outlined above, CPUD shall terminate service to a consumer's premises after four (4) written notices have been sent specifying the corrective action needed and the time in which it must be done.

**The *first notice*** is an information letter which outlines the requirements and a specific period to comply within 10 days.

If no response is received within the specified period, **a second letter** will be sent. The ***second notice*** gives a 10-day period to comply. Also, the consumer is notified that the water service will be terminated if no response is received.

**The *third and final notice*** gives the consumer an additional 5 days to comply and restates the consequences of not complying.

**The *fourth (or termination) notice*** gives the consumer another 5 days to comply and sets out the actual date that service will be terminated.

## **SECTION IX EFFECTIVE DATE**

This Ordinance shall supersede all previous cross-connection control ordinances and shall take effect thirty (30) days from the date of its adoption.



# Cross-Connection Control Program

## Cross-Connection Control Program

Accompanying this Cross-Connection Control Program (CCCP) is the Cross-Connection Control Policy Handbook that became effective on July 1, 2024, and will replace the rules and regulations of Title 17.

The purpose of a cross-connection control program is to prevent the occurrence of backflow into a Public Water System (PWS's) distribution system to protect customers from contamination or pollution from any on-site hazards. Properly installed and maintained Backflow Prevention Assemblies (BPAs), devices or methods provide protection against the threat posed by many conditions typically found on a user's premise.

This CCCP adopted by Chester Public Utility District (Chester PUD) is meant to be utilized in conjunction with the CCCPH as an appendix and policy guidelines. The CCCPH provides the basis for regulating the use and management of cross-connection control programs and BPAs in PWSs, and related requirements for supporting programs and policies. Activities or uses outside of the scope of the authority of the State Water Board to regulate PWSs are not regulated by the CCCPH, including California Plumbing Code requirements and definitions not related to PWS's.

### 3.1.3 Program for Public Water System Cross-Connection Control

(a) A PWS must protect the public water supply through implementation and enforcement of a cross-connection control program. Unless otherwise specified by this Chapter or directed by the State Water Board, a PWS may implement its cross-connection control program, in whole or in part, either directly or by way of contract or agreement with another party. The PWS, however, shall not be responsible for abatement of cross-connections which may exist within a user's premises. The cross-connection control program must include at a minimum the following 10 elements:

**Element 1-Operating rules or ordinances** – Each PWS must have operating rules, ordinances, by-laws or a resolution to implement the cross-connection program. The PWS must have legal authority to implement corrective actions in the event a water user fails to comply in a timely manner with the PWS's provisions regarding the installation, inspection, field testing, or maintenance of BPAs required pursuant to this Chapter. Such corrective actions must include the PWS's ability to perform at least one of the following:

- (A) deny or discontinue water service to a water user,
- (B) install, inspect, field test, and/or maintain a BPA at a water user's premises, or

(C) otherwise address in a timely manner a failure to comply with the cross-connection control program.

**Chester PUD Compliance with Element 1-** Chester PUD will adopt an Ordinance that will provide the necessary authority required for the District, to enforce the regulations of the CCCPH. Chester PUD will utilize the CCCPH as the official Cross-Connection Control Program rules.

**Element 2- Cross-Connection Control Program Coordinator** – The PWS must designate at least one individual involved in the development of and be responsible for the reporting, tracking, and other administration duties of its cross-connection control program. For PWS with more than 3,000 service connections the Cross Connection Control Program Coordinator must be a cross-connection control specialist.

**Chester PUD Compliance with Element 2-** Chester PUD will designate the General Manager as the CCCP Coordinator, as well as designate the Distribution Chief Operator as the assistant program coordinator. The District is less than 3,000 service connections, however they will consult a Cross-Connection Control Specialist if necessary or required by the State Water Resources Control Board-Division of Drinking Water, District Engineer.

**Element 3- Hazard Assessments-** The PWS must survey its service area and conduct hazard assessments per Article 2 of this Chapter that identifies actual or potential cross-connection hazards, degree of hazard, and any backflow protection needed.

**Chester PUD Compliance with Element 3-** Chester PUD will conduct surveys of its service area and conduct hazard assessments that would identify potential or actual cross-connection hazards, the degree of hazards, and identify any backflow protection needed. CPUD will complete all hazard assessments within 5 years of adoption of this Cross Connection Control Plan. CPUD will start a new set of Hazard assessments once the 5 years have expired.

**Element 4- Backflow Prevention-** The PWS must ensure that actual and potential cross-connections are eliminated when possible or controlled by the installation of approved BPAs or AG's consistent with the requirements of the Article 3 of this Chapter.

**Chester PUD Compliance with Element 4-** Chester PUD through a system of customer premises contact, PWS surveys and inspection, will institute the applicable procedures for notification of potential or actual cross-connection hazards, up to and including termination of the service connection to the user's premises to eliminate or control potential or actual cross-connections consistent with the requirements of the Article 3.

**Element 5- Certified Backflow Prevention Assembly Testers and Certified Cross-Connection Control Specialists** – The PWS must ensure all BPA testers and cross-connection control specialists used are certified per Article 4.

**Chester PUD Compliance with Element 5-** Chester PUD will develop and maintain lists of BPA testers and Cross-Connection Control Specialists, and that maintenance will include check certifications and qualifications of testers and specialists provided to users.

**Element 6- Backflow Prevention Assembly Testing** – The PWS must develop and implement a procedure for ensuring all BPAs are field tested, inspected, and maintained and AG's are inspected and maintained in accordance with CCCPH section 3.3.3.

**Chester PUD Compliance with Element 6-** Chester PUD will develop and implement within six (6) months of the adoption of the CCCP Ordinance, a database to ensure all BPAs are field tested, inspected, and maintained and AGs are inspected and maintained in accordance with CCCPH section 3.3.3.

**Element 7- Recordkeeping** – The PWS must develop and implement a recordkeeping system in accordance with CCCPH section 3.5.1.

**Chester PUD Compliance with Element 7-** Chester PUD will develop and implement a recordkeeping system within six (6) months of the adoption of the CCCP Ordinance, in accordance with CCCPH section 3.5.1.

**Element 8-Backflow Incident Response, Reporting and Notification** – The PWS must develop and implement procedures for investigating and responding to suspected or actual backflow incidents in accordance with Article 5 of this chapter.

**Chester PUD Compliance with Element 8-** Chester PUD will develop and implement procedures for investigating and responding to suspected or actual backflow incidents in accordance with Article 5 within 6 months of the adoption of the CCCP Ordinance.

**Element 9-Public Outreach and Education** – The PWS must implement a cross-connection control public outreach and education program element that includes educating staff, customers, and the community about backflow protection and cross-connection control. The PWS may implement this requirement through a variety of methods which may include providing information on cross-connection control and backflow protection in periodic water bill inserts, pamphlet distribution, new customer documentation, email, and consumer confidence reports.

**Chester PUD Compliance with Element 9-** Chester PUD will implement a cross-connection control public outreach and education program element that includes educating staff, customers, and the community about backflow protection and cross-connection control. The District will utilize California Rural Water Association technical assistance providers to educate the staff on cross-connection control, and the District will utilize bill inserts, new customer notification, and the consumer confidence report.

**Element 10- Local Entity Coordination** – The PWS must coordinate with applicable local entities that are involved in either cross-connection control or public health protection to ensure hazard assessments can be performed, appropriate backflow protection is provided and provide assistance in the investigation of backflow incidents. Local entities may include but are not limited to plumbing, permitting, or health officials, law enforcement, fire departments, maintenance, and public and private entities.

**Chester PUD Compliance with Element 10-** Chester PUD will reach out to local entities such as fire departments, correctional facilities, and commercial businesses to provide outreach to ensure the successful implementation of the CCCP.

**\*\* Chester PUD** will submit to the SWRCB-DDW, program elements, details, databases, recordkeeping plans, and program timeframes for successful implementation after the adoption of the CCCP Ordinance by the District.

**PASSED, AND APPROVED AND ADOPTED this \_\_\_\_\_ day of \_\_\_\_\_, 2025.**

\_\_\_\_\_

**Chairman**

**ATTEST:**

**I, Cheryl Johnson, Board Secretary/Clerk of the Chester Public Utility District, hereby certify that the foregoing Ordinance & Cross Connection Control Plan was duly passed at a regular meeting of the Chester Public Utility District held on the \_\_\_\_\_ day of \_\_\_\_\_, 2025 by the following vote:**

**Ayes:**

**Noes:**

**Abstain:**

**Absent:**

\_\_\_\_\_

**Board Secretary/Clerk**