Title 17, CALIFORNIA CODE OF REGULATIONS

Division 1. State Department of Health Services, Chapter 5. Sanitation, Subchapter 1. Engineering (Sanitary), Group 4. Drinking Water Supplies

Article 1 - General

Delete Section 7583 as follows:

Section 7583. Definitions.

In addition to the definitions in Section 116275 of the Health and Safety Code, the following terms are defined for the purpose of this Chapter:

- (a) "Approved Water Supply" is a water supply whose potability is regulated by a State of local health agency.
- (b) "Auxiliary Water Supply" is any water supply other than that received from a public water system.
- (c) "Air-gap Separation (AG)" is a physical break between the supply line and a receiving vessel.
- (d) "AWWA Standard" is an official standard developed and approved by the American Water Works Association (AWWA).
- (e) "Cross-Connection" is an unprotected actual or potential connection between a potable water system used to supply water for drinking purposes and any source or system containing unapproved water or a substance that is not or cannot be approved as safe, wholesome, and potable. By-pass arrangements, jumper connections, removable sections, swivel or changeover devices, or other devices through which backflow could occur, shall be considered to be cross-connections.
- (f) "Double Check Valve Assembly (DC)" is an assembly of at least two independently acting check valves including tightly closing shut-off valves on each side of the check valve assembly and test cocks available for testing the watertightness of each check valve.
- (g) "Health Agency" means the State Water Resources Control Board, or the local health officer with respect to a small water system.
- (h) "Local Health Agency" means the county or city health authority.
- (i) "Reclaimed Water" is a wastewater which as a result of treatment is suitable for uses other than potable use.

- (j) "Reduced Pressure Principle Backflow Prevention Device (RP)" is a backflow preventer incorporating not less than two check valves, an automatically operated differential relief valve located between the two check valves, a tightly closing shut-off valve on each side of the check valve assembly, and equipped with necessary test cocks for testing.
- (k) "User Connection" is the point of connection of a user's piping to the water supplier's facilities.
- (I) "Water Supplier" is the person who owns or operates the public water system.
- (m) "Water User" is any person obtaining water from a public water supply.

Note: Authority cited: Sections 116271, 116350, 116375 and 116555, Health and Safety Code. Reference: Sections 116325, 116350 and 116555, Health and Safety Code.

Delete Section 7584 as follows:

Section 7584. Responsibility and Scope of Program.

The water supplier shall protect the public water supply from contamination by implementation of a cross-connection control program. The program, or any portion thereof, may be implemented directly by the water supplier or by means of a contract with the local health agency, or with another agency approved by the health agency. The water supplier's cross-connection control program shall for the purpose of addressing the requirements of Sections 7585 through 7605 include, but not be limited to, the following elements:

- (a) The adoption of operating rules or ordinances to implement the cross-connection program.
- (b) The conducting of surveys to identify water user premises where cross-connections are likely to occur,
- (c) The provisions of backflow protection by the water user at the user's connection or within the user's premises or both,
- (d) The provision of at least one person trained in cross-connection control to carry out the cross-connection program,
- (e) The establishment of a procedure or system for testing backflow preventers, and
- (f) The maintenance of records of locations, tests, and repairs of backflow preventers.

Note: Authority cited: Sections 208 and 4026, Health and Safety Code. Reference: Section 4026, Health and Safety Code.

Delete Section 7585 as follows:

Section 7585. Evaluation of Hazard.

The water supplier shall evaluate the degree of potential health hazard to the public water supply which may be created as a result of conditions existing on a user's premises. The water supplier, however, shall not be responsible for abatement of cross-connections which may exist within a user's premises. As a minimum, the evaluation should consider: the existence of cross-connections, the nature of materials handled on the property, the probability of a backflow occurring, the degree of piping system complexity and the potential for piping system modification. Special consideration shall be given to the premises of the following types of water users:

- (a) Premises where substances harmful to health are handled under pressure in a manner which could permit their entry into the public water system. This includes chemical or biological process waters and water from public water supplies which have deteriorated in sanitary quality.
- (b) Premises having an auxiliary water supply, unless the auxiliary supply is accepted as an additional source by the water supplier and is approved by the health agency.
- (c) Premises that have internal cross-connections that are not abated to the satisfaction of the water supplier or the health agency
- (d) Premises where cross-connections are likely to occur and entry is restricted so that cross-connection inspections cannot be made with sufficient frequency or at sufficiently short notice to assure that cross-connections do not exist.
- (e) Premises having a repeated history of cross-connections being established or reestablished.

Note: Authority cited: Sections 208 and 4026, Health and Safety Code. Reference: Section 4026, Health and Safety Code.

Delete Section 7586 as follows:

Section 7586. User Supervisor.

The health agency and water supplier may, at their discretion, require an industrial water user to designate a user supervisor when the water user's premises has a multipiping system that convey various types of fluids, some of which may be hazardous and where changes in the piping system are frequently made. The user supervisor shall be responsible for the avoidance of cross-connections during the installation, operation and maintenance of the water user's pipelines and equipment.

Note: Authority cited: Sections 208 and 4026, Health and Safety Code. Reference: Section 4026, Health and Safety Code.

Article 2 – Protection of Water System

Delete Section 7601 as follows:

Section 7601. Approval of Backflow Preventers.

Backflow preventers required by this Chapter shall have passed laboratory and field evaluation tests performed by a recognized testing organization which has demonstrated their competency to perform such tests to the State Water Resources Control Board.

Note: Authority cited: Sections 116271 and 116375, Health and Safety Code. Reference: Section 116555, Health and Safety Code.

Delete Section 7602 as follows:

Section 7602. Construction of Backflow Preventers.

- (a) Air-gap Separation. An Air-gap separation (AG) shall be at least double the diameter of the supply pipe, measured vertically from the flood rim of the receiving vessel to the supply pipe; however, in no case shall this separation be less than one inch.
- (b) Double Check Valve Assembly. A required double check valve assembly (DC) shall, as a minimum, conform to the AWWA Standard C506-78 (R83) adopted on January 28, 1978 for Double Check Valve Type Backflow Preventive Devices which is herein incorporated by reference.
- (c) Reduced Pressure Principle Backflow Prevention Device. A required reduced pressure principle backflow prevention device (RP) shall, as a minimum, conform to the AWWA Standard C506-78 (R83) adopted on January 28, 1978 for Reduced Pressure Principle Type Backflow Prevention Devices which is herein incorporated by reference.

Note: Authority cited: Sections 208 and 4026, Health and Safety Code. Reference: Section 4026, Health and Safety Code.

Delete Section 7603 as follows:

Section 7603. Location of Backflow Preventers.

- (a) Air-gap Separation. An air-gap separation shall be located as close as practical to the user's connection and all piping between the user's connection and the receiving tank shall be entirely visible unless otherwise approved in writing by the water supplier and the health agency.
- (b) Double Check Valve Assembly. A double check valve assembly shall be located as close as practical to the user's connection and shall be installed above grade, if possible, and in a manner where it is readily accessible for testing and maintenance.
- (c) Reduced Pressure Principle Backflow Prevention Device. A reduced pressure principle backflow prevention device shall be located as close as practical to the user's connection and shall be installed a minimum of twelve inches (12") above grade and not more than thirty-six inches (36") above grade measured from the bottom of the device and with a minimum of twelve inches (12") side clearance.

Note: Authority cited: Sections 208 and 4026, Health and Safety Code. Reference: Section 4026, Health and Safety Code.

Delete Section 7604 as follows:

Section 7604. Type of Protection Required.

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

TABLE 1

TYPE OF BACKFLOW PROTECTION REQUIRED

Degree of Hazard	Minimum Type of Backflow Prevention
(a) Sewage and Hazardous Substances	
(1) Premises 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. A RP may be provided in lieu of an AG if approved by the health agency and water supplier.	AG
(2) Premises 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. A RP may be provided in lieu of an AG if approved by the health agency and water supplier.	AG
(3) Premises where there are irrigation systems into which fertilizers, herbicides, or pesticides are, or can be, injected.	RP
(b) Auxiliary Water Supplies	
(1) Premises where there is an unapproved auxiliary water supply which is interconnected with the public water system. A RP or DC may be provided in lieu of an AG if approved by the health agency and water supplier.	AG
(2) Premises where there is an unapproved auxiliary water supply and there are no interconnections with the public water system. A DC may be provided in lieu of a RP if approved by the health agency and water supplier.	RP
(c) Recycled Water	
(1) Premises where the public water system is used to supplement the recycled water supply.	AG
(2) Premises where recycled water is used, other than as allowed in paragraph (3), and there is no interconnection with the potable water system.	RP
(3) Residences using recycled water for landscape irrigation as part of an approved dual plumbed use area established pursuant to sections 60313 through 60316 unless the recycled water supplier obtains approval of the local public water supplier, or the State Water Resources Control Board if the water supplier is also the supplier of the recycled water, to utilize an alternative backflow protection plan that includes an annual inspection and annual	ĐC

shutdown test of the recycled water and potable water systems pursuant to subsection 60316(a).	
(d) Fire Protection Systems	
(1) Premises where the fire system is directly supplied from the public water system and there is an unapproved auxiliary water supply on or to the premises (not interconnected).	ĐC
(2) Premises where the fire system is supplied from the public water system and interconnected with an unapproved auxiliary water supply. A RP may be provided in lieu of an AG if approved by the health agency and water supplier.	AG
(3) Premises where the fire system is supplied from the public water system and where either elevated storage tanks or fire pumps which take suction from private reservoirs or tanks are used.	ĐC
(4) Buildings where the fire system is supplied from the public water system and where recycled water is used in a separate piping system within the same building.	ĐC
(e) Dockside Watering Points and Marine Facilities	
(1) Pier hydrants for supplying water to vessels for any purpose.	RP
(2) Premises where there are marine facilities.	RP
(f) Premises where entry is restricted so that inspections for cross- connections cannot be made with sufficient frequency or at sufficiently short notice to assure that they do not exist.	RP
(g) Premises where there is a repeated history of cross-connections being established or re-established.	RP

Note: Authority cited: Sections 116271 and 116375, Health and Safety Code; and Section 13521, Water Code. Reference: Section 116375, Health and Safety Code; and Sections 13520, 13521 and 13554(a)(3), Water Code.

Delete Section 7605 as follows:

Section 7605. Testing and Maintenance of Backflow Preventers.

- (a) The water supplier shall assure that adequate maintenance and periodic testing are provided by the water user to ensure their proper operation.
- (b) Backflow preventers shall be tested by persons who have demonstrated their competency in testing of these devices to the water supplier or health agency.
- (c) Backflow preventers shall be tested at least annually or more frequently if determined to be necessary by the health agency or water supplier. When devices are

found to be defective, they shall be repaired or replaced in accordance with the provisions of this Chapter.

- (d) Backflow preventers shall be tested immediately after they are installed, relocated or repaired and not placed in service unless they are functioning as required.
- (e) The water supplier shall notify the water user when testing of backflow preventers is needed. The notice shall contain the date when the test must be completed.
- (f) Reports of testing and maintenance shall be maintained by the water supplier for a minimum of three years.

Note: Authority cited: Sections 208 and 4026, Health and Safety Code. Reference: Section 4026, Health and Safety Code.

Title 22, CALIFORNIA CODE OF REGULATIONS

Division 4. Environmental Health, Chapter 3. Water Recycling Criteria

Article 1. Definitions

Adopt Section 60301.175 as follows:

<u>Section 60301.175. Cross-Connection Control Policy Handbook.</u>

"Cross-Connection Control Policy Handbook" or "CCCPH" means standards for backflow protection and cross-connection control contained in a policy handbook adopted by the State Board pursuant to section 116407 of the Health and Safety Code on December 19, 2023, and effective July 1, 2024, which is hereby incorporated by reference.

Note: Authority cited: Section 116271, Health and Safety Code; and Sections 13521 and 13521.2, Water Code. Reference: Sections 8117 and 8118, Health and Safety Code; and Sections 13520 and 13521, Water Code.

Article 4. Use Area Requirements

Amend Section 60310 as follows:

Section 60310. Use Area Requirements.

(a) No irrigation with disinfected tertiary recycled water shall take place within 50 feet of any domestic water supply well, unless all of the following conditions have been met:

- (1) A geological investigation demonstrates that an aquitard exists at the well between the uppermost aquifer being drawn from and the ground surface.
- (2) The well contains an annular seal that extends from the surface into the aquitard.
- (3) The well is housed to prevent any recycled water spray from coming into contact with the wellhead facilities.
- (4) The ground surface immediately around the wellhead is contoured to allow surface water to drain away from the well.
- (5) The owner of the well approves of the elimination of the buffer zone requirement.
- (b) No impoundment of disinfected tertiary recycled water shall occur within 100 feet of any domestic water supply well.
- (c) No irrigation with, or impoundment of, disinfected secondary-2.2 or disinfected secondary-23 recycled water shall take place within 100 feet of any domestic water supply well.
- (d) No irrigation with, or impoundment of, undisinfected secondary recycled water shall take place within 150 feet of any domestic water supply well.
 - (e) Any use of recycled water shall comply with the following:
 - (1) Any irrigation runoff shall be confined to the recycled water use area, unless the runoff does not pose a public health threat and is authorized by the regulatory agency.
 - (2) Spray, mist, or runoff shall not enter dwellings, designated outdoor eating areas, or food handling facilities.
 - (3) Drinking water fountains shall be protected against contact with recycled water spray, mist, or runoff.
- (f) No spray irrigation of any recycled water, other than disinfected tertiary recycled water, shall take place within 100 feet of a residence or a place where public exposure could be similar to that of a park, playground, or school yard.
- (g) All use areas where recycled water is used that are accessible to the public shall be posted with signs that are visible to the public, in a size no less than 4 inches high by 8 inches wide, that include the following wording: "RECYCLED WATER DO NOT DRINK". Each sign shall display an international symbol similar to that shown in figure 60310-A. The Department may accept alternative signage and wording, or an educational program, provided the applicant demonstrates to the Department that the alternative approach will assure an equivalent degree of public notification.
- (h) Except as allowed under section 7604 of title 17, California Code of Regulations the Cross-Connection Control Policy Handbook, no physical connection shall be made

or allowed to exist between any recycled water system and any separate system conveying potable water.

(i) Except for use in a cemetery that complies with the requirements of section 8118 of the Health and Safety Code, the portions of the recycled water piping system that are in areas subject to access by the general public shall not include any hose bibs. Only quick couplers that differ from those used on the potable water system shall be used on the portions of the recycled water piping system in areas subject to public access.



Note: Authority cited: Section 116271, Health and Safety Code; and Sections 13521 and 13521.2, Water Code. Reference: Sections 8117 and 8118, Health and Safety Code; and Sections 13520 and 13521, Water Code.

Article 5. Dual-Plumbed Recycled Water Systems.

Amend Section 60315, as follows:

Section 60315. Design Requirements.

The public water supply shall not be used as a backup or supplemental source of water for a dual-plumbed recycled water system unless the connection between the two systems is protected in a manner that by an air gap separation which complies with the requirements of sections 7602(a) and 7603(a) of title 17, California Code of Regulations the Cross-Connection Control Policy Handbook, and the approval of from the public water system has been obtained.

Note: Authority cited: <u>Section 116271, Health and Safety Code; and Sections 13521 and 13521.2</u>, Water Code. Reference: Sections 13521, 13523.1, 13553 and 13554, Water Code.

Amend Section 60316, as follows:

Section 60316. Operation Requirements.

- (a) Prior to the initial operation of the dual-plumbed recycled water system and annually thereafter, the Recycled Water Agency shall ensure that the dual_plumbed system within each facility and use area is inspected for possible cross_connections with the potable water system. The recycled water system shall also be tested for possible cross_connections at least once every four years. The testing shall be conducted in accordance with the method described in the report submitted pursuant to section 60314. The inspections and the testing shall be performed by a cross_connection control specialist certified by the California-Nevada section of the American Water Works Association or an organization with equivalent certification requirements. A written report documenting the result of the inspection or testing for the prior year shall be submitted to the department within 30 days following completion of the inspection or testing.
- (b) The recycled water agency shall notify the department of any incidence of backflow from the dual-plumbed recycled water system into the potable water system within 24 hours of the discovery of the incident.
- (c) Any backflow prevention device assembly installed to protect the public water system serving the dual-plumbed recycled water system shall be inspected and

maintained in accordance with the Cross-Connection Control Policy Handbook. section 7605 of Title 17, California Code of Regulations.

Note: Authority cited: <u>Section 116271, Health and Safety Code; and Sections 13521 and 13521.2</u>, Water Code. Reference: Sections 13521, 13553 and 13554, Water Code.

Division 4. Environmental Health, Chapter 17. Surface Water Treatment

Article 2. Treatment Technique Requirements, Watershed Protection Requirements, and Performance Standards

Amend Section 64654 as follows:

Section 64654. Disinfection.

- (a) All approved surface water utilized by a supplier shall be provided with continuous disinfection treatment sufficient to insure that the total treatment process provides inactivation of *Giardia lamblia* cysts and viruses, in conjunction with the removals obtained through filtration, to meet the reduction requirements specified in section 64652(a).
 - (b) Disinfection treatment shall comply with the following performance standards:
 - (1) Water delivered to the distribution system shall not contain a disinfectant residual of less than 0.2 mg/l for more than four hours in any 24 hour period.
 - (2) The residual disinfectant concentrations of samples collected from the distribution system shall be detectable in at least 95 percent of the samples taken each month that the system serves water to the public, except as provided in subsection (c). At any sample point in the distribution system, the presence of heterotrophic plate count (HPC) at concentrations less than or equal to 500 colony forming units per milliliter shall be considered equivalent to a detectable disinfectant residual.
- (c) Paragraph (b)(2) shall not apply to suppliers serving fewer than 500 persons provided:
 - (1) The system is in compliance with <u>17 CCR sections 7583 through 7605 the Cross-Connection Control Policy Handbook as defined in 22 CCR section 60301.175</u>, and with 22 CCR sections 64602, 64570(b), 64572, and 64580;
 - (2) The supplier has no means for having a sample transported and analyzed for HPC by a certified laboratory under the appropriate time and temperature conditions; and
 - (3) The supplier is providing adequate disinfection in the distribution system.

(d) No exemptions from the requirement in paragraph (b)(1) are permitted.

Note: Authority cited: Sections 100275, <u>116271</u>, 116350, 116375 and 131200, Health and Safety Code. Reference: Sections 116270, 116275, 116365, 116375, 116385, 116390, 116400, 116525, 116530, 116535, 116540, 116550, 116555, 116625, 116735, 116750 and 131051, Health and Safety Code.