WateReuse Inland Empire Chapter

Draft Cross Connection Control Policy Handbook Review

PRESENTED BY:

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CCCPH Driver

- Replace Title 17 Cross-Connections Control Regulations
- CCCPH has the force of law and can be enforced like regulations
- Must be adopted by State Water Board
- Allows easier Revision

Why is CCCPH Required (Part 1)

- **AB 1671 (2017)** REQUIRES STATE WATER BOARD TO ADOPT STANDARDS FOR BACKFLOW PROTECTION AND CROSS CONNECTION CONTROL
- **AB 1180 (2019)** REQUIRES STANDARDS INCLUDE PROVISIONS FOR THE USE OF A SWIVEL OR CHANGEOVER DEVICE TO SUPPLY POTABLE TO A DUAL PLUMBED SYSTEM DURING AN INTERRUPTION IN RECYCLED WATER SERVICE
- **STANDARDS ARE OUTDATED**. ADOPTED IN 1987 WITH MINOR CHANGES IN 2000 TO ADD RECYCLED WATER
- BACKFLOW INCIDENTS HAVE POTENTIAL TO **AFFECT MANY CONSUMERS**

Why is CCCPH Required (Part 2)

- **LACK OF DETAILS IN REQUIREMENTS OF CCC PROGRAMS** HAVE LED TO UNENFORCED PROGRAMS
- **INCIDENTS ARE UNDERREPORTED**. FROM 1981 TO 1998, EPA FOUND THAT ONLY 97 OF 309 INCIDENTS WERE REPORTED TO PUBLIC HEALTH AUTHORITIES
- NATIONAL ACADEMIES FOUND ON REDUCING RISKS TO PWS DISTRIBUTION
- "*BECAUSE OF LONG HISTORY OF RECOGNIZED HEALTH RISK POSED BY CROSS CONNECTIONS AND BACKFLOW, THE CLEAR EPIDEMIOLOGICAL AND SURVEILLANCE DATA, AND THE PROVEN TECHNOLOGIES TO PREVENT CROSS CONNECTION,* ***CROSS CONNECTION AND BACKFLOW EVENTS ARE RANKED BY THE COMMITTEE AS THE HIGHEST PRIORITY***"

Draft CCCPH - Outline

CURRENT REGULATIONS

1. Operating Rules and Ordinance
2. Conducting Surveys
3. Backflow Protection
4. One person trained in CCC
5. Establishment of testing procedure
6. Maintenance of Records

Draft CCCPH - Outline

CCCPH -TEN ELEMENTS

1. Operating Rules and Ordinance
2. Conducting Surveys (Hazard Assessments)
3. Backflow Protection
4. One person Trained in CCC (Coordinator)
5. Testing of Backflow Assemblies
6. Maintenance of Records
7. NEW –Use of certified testers and specialists
8. NEW –Backflow Incident Response
9. NEW –Public Outreach and Education
10. NEW –Local Entity Coordination

Comments on the CCCPH

1. Clarity Regarding the Public Water System(s) General Responsibility for Cross Connection Control.

   "3.1.2 Applicability

   (a) A public water system (PWS) must comply with the requirement of the CCCPH.

   (b) A PWS's responsibility under the CCCPH shall be to protect the public water supply. The PWS, however, shall not be responsible for identification or abatement of cross-connections which may exist within a water user's premise beyond the backflow protection necessary to protect the public water supply other than where a water user's premise has both potable and recycled water supplies.

   (c) The local health officer, consistent with Section 116800 of the California Health and Safety Code, may maintain programs for the identification and abatement of cross-connections which may exist within a user's premise beyond the backflow protection necessary to protect the public water supply."

2. Corrective Actions Required by Section 3.1.3(a)(1)
   2. Requested Change to Section 3.1.3.(a)(1)

Comments on the CCCPH

2. Corrective Actions Required by Section 3.1.3(a)(1).

"(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, testing, or maintenance of backflow prevention assemblies required pursuant to this Chapter. Such corrective actions must include the PWS ability to *undertake at least one of the following*:

(A) deny or discontinue water service to a water user,

(B) install, inspect, test, or maintain a backflow prevention assembly at a water user's premises, or

(C) otherwise address in a timely

Comments on the CCCPH

3. Treatment of Residential Properties

"Add a new subsection (i) which reads:

"(i) The requirements for initial and follow-up hazard assessments shall not apply to a residential premise unless the premise is served by an Alternative Water Supply or Auxiliary Water Supply."

4. Follow-up Hazard Assessment Triggers in Section 3.2.1(e)

"(e) Subsequent to the initial hazard assessment described in subsection (a), a community water system shall perform a follow-up hazard assessment *up to the point where the public water system protection is maintained* under the following criteria:

(1) if a user premises changes ~~ownership~~ *the account holder with the PWS*, excluding ~~single-family~~ residences;

(2) if a user premises is newly connected to the PWS;

(3) if evidence exists of potential changes in the activities or materials on a user's premises;

(4) if backflow from a user's premises occurs;

Comments on the CCCPH

4. Follow-up Hazard Assessment Triggers in Section 3.2.1(e)

"(e) Subsequent to the initial hazard assessment described in subsection (a), a community water system shall perform a follow-up hazard assessment *up to the point where the public water system protection is maintained* under the following criteria:

(5) periodically, as identified in the PWS's Cross-Connection Control Plan required pursuant to CCCPH section 3.1.4.;

(6) if the State Water Board requests a hazard assessment of a user's premises; and

(7) if the PWS concludes an existing hazard assessment may no longer be correct."

Comments on the CCCPH

5. Response Time for Cross-Connection Specialists (Section 3.1.3(c))

"(c) A PWS must have at least one cross-connection control specialist as a permanent or contracted employee of the PWS, and that specialist must be able to provide consultation within ~~one hour~~ four hours of being contacted, if:

(1) The PWS has 3,000 or more service connections, or

(2) the PWS has less than 3,000 service connections and is directed by the State Water Board based on hazard assessments conducted pursuant to CCCPH section 3.2.1. or the PWS's history of backflow incidents."

Comments on the CCCPH

6. Treatment of Internal Protection in Section 3.1.4(b)(5)

~~"(5) a description of the process and timeframe for ensuring each non-testable backflow preventer for internal protection that is under the PWS control is installed and maintained according to the California Plumbing Code;~~

7. Clarification on Follow-up Hazard Assessments

The Draft Handbook should be amended to state whether the follow-up hazard assessment requirement applies to high-hazard sites only or extends to low-hazard sites as well.

Comments on the CCCPH

8. Recognition that High-Hazard Assessments are a Point-in-Time Analysis

"(h) A PWS must ensure a cross-connection control specialist reviews the hazard assessments and makes a written finding that, in their judgment based on cross-connection control principles, the PWS's hazard assessment properly identified all hazards *at the time of the assessment*, the appropriate degree of hazards, and the corresponding backflow protection."

Comments on the CCCPH

8. Recognition that High-Hazard Assessments are a Point-in-Time Analysis

"(a) A PWS must ~~ensure~~ protect its distribution system ~~is protected~~ from backflow from identified hazards, ~~at all times~~, through the proper installation, continued operation, and testing of an approved backflow prevention assembly (see Article 3 for installation and approved backflow prevention assembly criteria), *hazard assessments, and quickly address threats to the distribution system once the PWS becomes aware of a threat."*

Comments on the CCCPH

9. Section 3.2.2(d)'s Provisions regarding Swivel-El

"(d) Except as otherwise allowed or prohibited in statute or in CCR Title 22, Division 4, Chapter 3, a swivel-ell assembly may be used instead of an AG for premises isolation protection when substituting interrupted tertiary recycled water use areas with potable water from a PWS if:

(1) approved by the State Water Board;

(2) the PWS has a cross-connection control program, required pursuant to CCCPH section 3.1.3, and the use and operation of the swivel-ell assembly is described in the Cross-Connection Control Plan required pursuant to CCCPH section 3.1.4;

(3) the design and construction-related requirements of the swivel-ell assembly adheres to the criteria in Appendix C;

(4) at least *every 12 months annually*, inspections are performed and documented confirming ongoing compliance with the design and construction-related requirements in Appendix C;

(5) the RP used in conjunction with the swivel-ell assembly is tested and found to be functioning properly:

Comments on the CCCPH

9. Section 3.2.2(d)'s Provisions regarding Swivel-El (Con't)

(A) *immediately prior to within 72 hours of* each switchover to potable water use, and

(B) at least *every 12 months annually while that* the use site is being supplemented with potable water; and

(6) there is a legally joint and binding agreement between the PWS and the entity supplying the recycled water, signed by those with relevant legal authority, that includes the following requirements:

(A) The State Water Board will be notified within *24 hours 72 hours* of all switchovers to or from potable water, will be given an estimate of the timeframe until the next switchover, and will be provided the results of the testing required in paragraph (5);

(B) a representative of the PWS is to be present to supervise each switchover; and

(C) within seven days of each switchover, if requested by the State Water Board, the PWS will submit a written report describing compliance with this subsection, as well as potable and recycled water usage information."

Comments on the CCCPH

10. RP Requirements for Fire Protection

    "(e) Except as noted below, a PWS must ensure its distribution system is protected with no less than DC protection for a premise with a fire protection system….

    (4) The requirement for no less than DC protection will be waived in cases where single-check (SC) assemblies exist. This waiver exists until the SC assembly requires replacement."

11. User Supervisor Requirements for Section 3.2.2(f)

    Section 3.2.2(f) should be amended to recognize the proper roles of the PWS and Local Health Officers.

Comments on the CCCPH

12. Air-Gaps

    The Draft Handbook should be amended to recognize the proper roles of the PWS and Local Health Officers.

13. Minimum Side Clearance for an RP or DC

    "(f) A RP or DC installed after the adoption of the CCCPH *shall have sufficient access and clearance to enable the required testing, maintenance and repair* must have a minimum side clearance of twelve inches, except that a minimum side clearance of twenty-four inches must be provided on the side of the assembly that contains the test cocks."

Comments on the CCCPH

14. Field Testing and Repair of Backflow Prevention Assemblies and Air-Gap Inspection

"(a) PWS must ensure that all backflow prevention assemblies installed pursuant to this Chapter are field tested following installation, repair, or relocation. PWS must receive passing field tests before providing service to a water user with a newly installed, repaired, or relocated backflow prevention assembly. All required field testing must be performed by backflow prevention assembly testers. *This section does not preclude the PWS from providing service for the testing of the backflow prevention assembly.*"

"(d) PWS must ensure that backflow prevention assemblies that fail the field test are repaired or replaced within *30 90* days."

"(e) PWS must require backflow prevention assembly testers to notify the PWS within one day if a backflow incident or cross-connection is observed during testing. PWS*, upon receiving notice,* must immediately conduct an investigation and discontinue service to the user premises if a backflow incident is confirmed, and water service must not be restored to that user premises until the PWS receives a confirmation of a passing backflow assembly test from a backflow prevention assembly tester and the assembly is protecting the PWS."

Comments on the CCCPH

15. Performance Exam Automatic Failure Criteria

"(a) PWS must ensure that all backflow prevention assemblies installed pursuant to this Chapter are field tested following installation, repair, or relocation. PWS must receive passing field tests before providing service to a water user with a newly installed, repaired, or relocated backflow prevention assembly. All required field testing must be performed by backflow prevention assembly testers. *This section does not preclude the PWS from providing service for the testing of the backflow prevention assembly.*"

"(d) PWS must ensure that backflow prevention assemblies that fail the field test are repaired or replaced within *30 90* days."

"(e) PWS must require backflow prevention assembly testers to notify the PWS within one day if a backflow incident or cross-connection is observed during testing. PWS*, upon receiving notice,* must immediately conduct an investigation and discontinue service to the user premises if a backflow incident is confirmed, and water service must not be restored to that user premises until the PWS receives a confirmation of a passing backflow assembly test from a backflow prevention assembly tester and the assembly is protecting the PWS."

Comments on the CCCPH

16. Performance Exam Automatic Failure Criteria (Con't)

    That Section 3.4.1(b)(2)(B)(2) be correct.

17. Appendix C Comments and Request

    We have several concerns about the requirements found in Appendix C.

    Regarding Item A- See comments under Section 3.2.2(d)(1) above.

    Regarding Item D- This requirement does not reflect what can be found at customer sites. There are recycled water customers that have multiple recycled water meters because they serve different uses. We recommend this requirement be removed.

Comments on the CCCPH

18. Appendix D Comments and Requests

Auxiliary Water Supply - In reading Appendix D and discussing the appendix with Regulatory Development Unit staff, it is unclear as to what “Auxiliary Water Supply” means. We ask that “Auxiliary Water Supply” be clarified to mean “Sites with Auxiliary Water Supplies”. We also ask it be clarified if those sites include or do not include non-dual plumbed, recycled water use sites.

Comments on the CCCPH

18. Appendix D Comments and Requests (Con't)

"+++"- The note listed as "+++" (found on page D-2) includes the requirement to conduct "…an annual shutdown test of the recycled water and potable water systems…in lieu of any backflow prevention assembly" at residences. First, we ask that the term residences should be clarified as meaning residential complexes such as an apartment or condominium properties. We also request that the requirement for a shutdown of the potable water system be removed and a one-way shutdown test of the recycled water supply be permitted instead. This would remove a deterrent to the expanded use of recycled water as a potable water system shutdown presents challenges in the coordination, especially at large apartment or condominium properties that can have hundreds of potable water services.

Comments on the CCCPH

18. Appendix D Comments and Requests (Con't)

Premises with Multiple Connections- We ask that the #9, "Premises with multiple connections to the PWS", be defined as referring to individual on-site systems that are served with more than one connection. This clarification avoids the issue of an apartment or condominium which can be served with multiple connections into separate on-site systems.

COMMENTS SHOULD BE SUBMITTED A COUPLE OF WAYS
BY EMAIL TO DDW-TECHOPS@WATERBOARDS.CA.GOV
OR BY MAIL, ADDRESSED TO:

REGULATORY DEVELOPMENT UNIT
DIVISION OF DRINKING WATER
STATE WATER RESOURCES CONTROL BOARD
1001 I STREET, 17TH FLOOR
P.O. BOX 100
SACRAMENTO, CA 95812-100

IF YOU WOULD LIKE TO WATCH USE:
HTTPS://VIDEO.CALEPA.CA.GOV/

•IF YOU WOULD LIKE TO PROVIDE PUBLIC COMMENT, THEN REGISTER BY:

•HTTPS://WATERBOARDS.ZOOM.US/J/93701171024?PWD=AUO2L3JKAZRZZTJKCVPXVFPBCLC0QT09

•OR AT HTTPS://ZOOM.US/JOIN USINGZOOM MEETING ID: 937 0117 1024