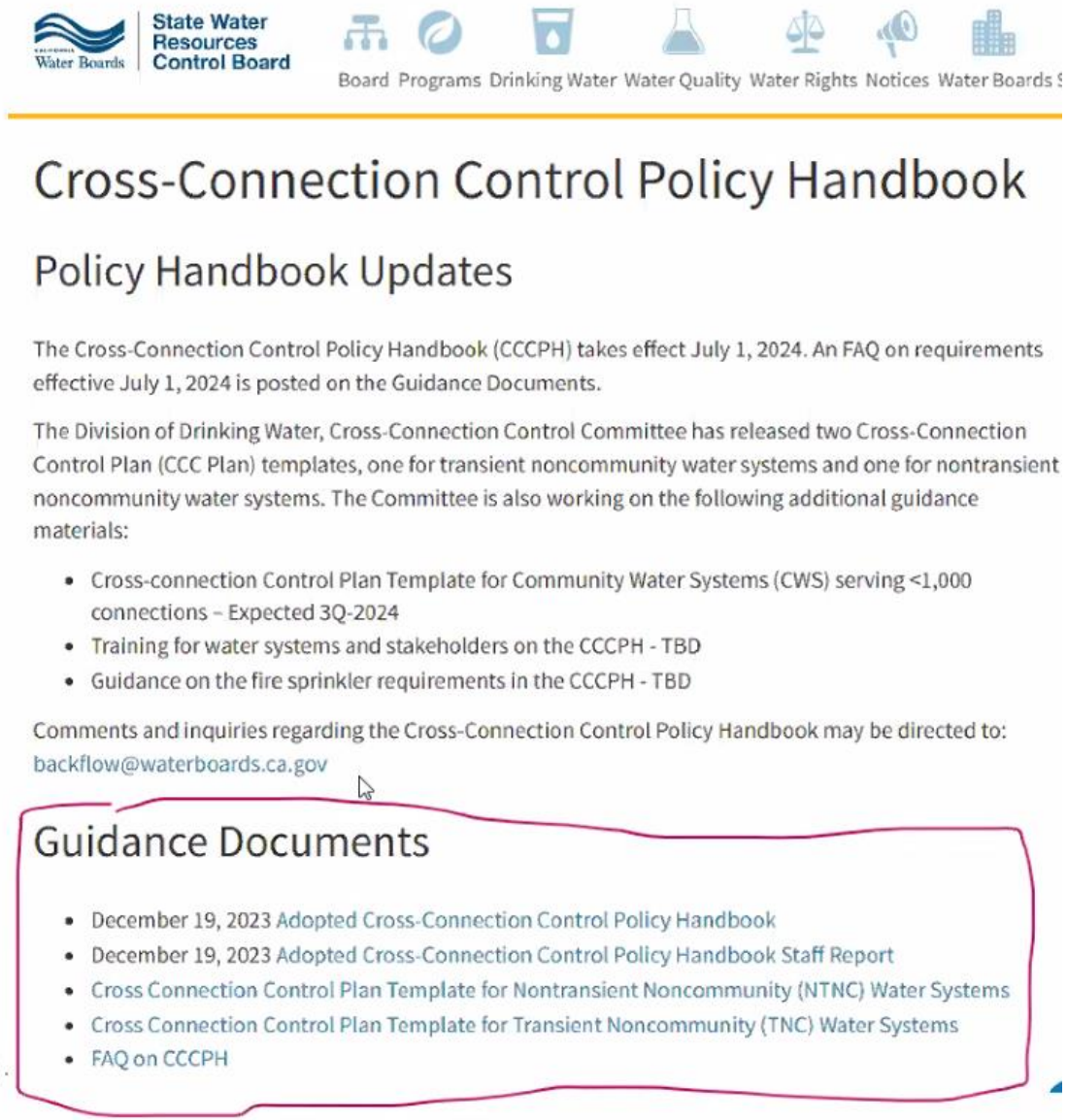
Cross-Connection Control Policy Handbook

- Google "Cross-Connection Control Policy Handbook"
- Scroll down to "Adopted Cross-Connection Policy Handbook"
- Staff Report – provides regulatory background
- Questions – email

  backflow@waterboards.ca.gov
- Templates available



State Water Resources Control Board

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Cross-Connection Control Policy Handbook

Policy Handbook Updates

The Cross-Connection Control Policy Handbook (CCCPH) takes effect July 1, 2024. An FAQ on requirements effective July 1, 2024 is posted on the Guidance Documents.

The Division of Drinking Water, Cross-Connection Control Committee has released two Cross-Connection Control Plan (CCC Plan) templates, one for transient noncommunity water systems and one for nontransient noncommunity water systems. The Committee is also working on the following additional guidance materials:

- Cross-connection Control Plan Template for Community Water Systems (CWS) serving <1,000 connections – Expected 3Q-2024
- Training for water systems and stakeholders on the CCCPH - TBD
- Guidance on the fire sprinkler requirements in the CCCPH - TBD

Comments and inquiries regarding the Cross-Connection Control Policy Handbook may be directed to: backflow@waterboards.ca.gov

Guidance Documents

- December 19, 2023 Adopted Cross-Connection Control Policy Handbook
- December 19, 2023 Adopted Cross-Connection Control Policy Handbook Staff Report
- Cross Connection Control Plan Template for Nontransient Noncommunity (NTNC) Water Systems
- Cross Connection Control Plan Template for Transient Noncommunity (TNC) Water Systems
- FAQ on CCCPH

Important Dates

- CCCPH Adoption Date: December 19, 2023
- **CCCPH Effective Date: July 1, 2024**
- **Cross-Connection Control Plan (CCCP) Due: July 1, 2025**

- Tester/Specialist Certifications – July 1, 2025
- ANSI-Accreditation for Certifying Organizations – July 1, 2027
- Non-community water systems initial hazard assessment – December 19, 2026

Cross-Connection Control Program Responsibility

- Each Water System must protect the public water supply through implementation and enforcement of a cross-connection control program
  - Program implemented through Cross-Connection Control Plan (CCCP)

Each Water System must comply with 10 required program elements per the CCCPH

Title 17 vs CCCPH
Required Program Elements

Title 17 Regulations

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

CCCPH

1. Operating Rules or Ordinances
2. Conducting Hazard Assessments
3. Backflow Prevention
4. CCC Program Coordinator
5. Establishment of testing procedure
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

Operating Rules or Ordinances

Title 17	CCCPH
Section 7584(a)	*Section 3.1.3(1)*
The adoption of operating rules or ordinances to implement the CCC Program	PWS is required to adopt operating rules or ordinances. Establishes the PWS authority to run a CCC Program Must include the authority to implement at least one corrective action

- Per CCCPH, corrective action must include 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.

CCCPH – Hazard Assessments

- Hazard assessments – identify degree of hazard (low, medium, high) of water user's premises
- Includes residential service connections

Title 17	CCCPH
Section 7585	*Section 3.2.1(a)*
Must consider: - Existence of cross-connections - Onsite materials - Likelihood of backflow occurring - Piping complexity and modifications - Pressurized systems - Auxiliary supply sources - History of cross-connections	Same as Title 17, plus: - Distribution system conditions that increase backflow likelihood - User premises accessibility - Existing backflow prevention devices - Criteria for re-assessment

CCCPH – Hazard Assessments

- Any previous hazard assessments count toward the initial
  - Are previous assessments still representative/current?

- Examples of high hazard premises in CCCPH (Appendix D)

- Hazard assessments must be reviewed by a certified cross-connection specialist

CCCPH – Program Coordinator

Water System Size	Program Coordinator Requirement	CCCPH Section Reference
Less than 1,000 service connections	Cross-Connection Control (CCC) Program Coordinator	3.1.3(a)(2)
1,000 – 3,000 service connections	CCC Program Coordinator in consultation with a Certified CCC Specialist	3.1.3(b)
Greater than 3,000 service connections	Certified CCC Specialist	3.1.3(c)

- CCC Program Coordinator - Involved in development of and be responsible for administrative duties
- CCC Specialists – must have a valid certification (3.4.2(a))

CCCPH – Certifications

- *Section 3.4.1 and 3.4.2*
- All backflow testers and cross-connection specialists must be certified
- ANSI-accreditation for certifying organizations is required by July 1, 2027.
  - Currently, only CA-NV AWWA is ANSI-accredited.
  - Other organizations (i.e. ASSE) are working on accreditation.

Backflow Preventer/BPA Testing

Title 17 – Backflow Preventer Testing Procedures	CCCPH – Backflow Prevention Assembly (BPA) Testing
Section 7605	*Section 3.3.3*
Backflow preventers must be tested annually	BPAs must be field tested annually. Air gaps must be inspected annually
Defective – repair or replace	Defective – repair or replace within 30 days of notification. Extensions may be allowed if included in CCCP.
Tester is a person "who have demonstrated their competency in testing"	Tester must be certified

- **Backflow Preventer or Device = Backflow Prevention Assembly (BPA)**
- Per CCCPH, if backflow or cross-connection is observed by tester, then the Water System must be notified and addressed.

CCCPH - Backflow Protection

- *Section 3.2.2*
- Backflow protection must be based on degree of hazard at user premises
- High Hazards (Appendix D) - Types of premises that require RP or AG protection
- Internal protection may be used in lieu of premises protection/containment
- Fire Protection (Sprinkler) Systems – DC or RP required *(3.2.2(e))*
- Water System facilities (i.e. well sites, treatment plants) must have adequate internal protection

CCCPH – Backflow Incident Response

- *Section 3.5.2*
- Requirements for Water System to investigate and respond to suspected backflow incidents including:
  - Consideration of complaints and water quality changes
  - Recording sampling and water pressures
  - Documentation of investigation and follow-up
- Water Systems need to notify the SWRCB (DDW) of incidents within 24 hrs of determination
  - Provide report if required. Template in Appendix F.

Cross-Connection Control Plan (CCCP)

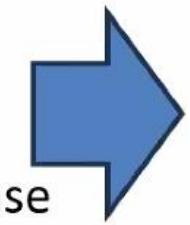
Cross-Connection Control Plan

- *Section 3.1.4(a)*
- Due 1 year after CCCPH is effective (July 1, 2025)

Cross-Connection Control Plan

CCC Program

1. Operating Rules and Ordinance
2. CCC Program Coordinator
3. Hazard Assessment (HA)
4. Backflow Prevention
5. Certifications
6. BPA Testing
7. Recordkeeping
8. Backflow Incident Response
9. Public Outreach
10. Local Entity Coordination



CCC Plan

Description of the following

1. How compliance will be maintained
2. Hazard assessment process/timeframe
3. Legal authority
4. BPA inspection/testing process
5. Internal protection at WS facilities
6. Tester certifications
7. Backflow incident response
8. Contact information
9. Record tracking system
10. Site user supervisors
11. Corrective actions
12. Public outreach and education
13. Coordination with other local entities

CCCP Item 1 - Compliance

- *Section 3.1.4(b)(1), 3.1.4(c)(1)*
- Description of how the water system will achieve and maintain compliance with Ch.3 of the CCCPH

CCCP Item 2 – Hazard Assessments

Section 3.2.1, CWS: 3.1.4(b)(2), NCWS: 3.1.4(c)(2)

Description of the Hazard Assessments (HA)

- Process – how hazard assessments are performed
  - Homeowner surveys, GIS tools, Building Permit reviews, onsite visits, etc.
- Personnel – Who will perform the hazard assessments?
  - Certified CCC specialist
  - Staff or contractor delegated by the certified CCC specialist
  - Hazard assessments must be signed off by the certified CCC specialist

CCCP Item 2 – Hazard Assessment Timeframes

Community Water Systems

- Timeframes for completing the initial hazard assessment *(Section 3.2.1(a))*
  - Prioritization based on potential hazards
  - CWS must propose timeframe for completion
  - Conditions/Triggers for ongoing hazard assessments

Non-community water systems

- Must conduct initial or follow-up hazard assessment by December 19, 2025 *(Section 3.2.1(f))*

CCCP Item 3 – Legal Authority

- *Section 3.1.3, CWS: 3.1.4(b)(3), NCWS: 3.1.4(c)(3)*
- Include a copy of the legal authority (i.e. ordinance, by-law/resolution, etc.)
- Legal authority should include the adoption date

  - Per CCCPH, corrective action must include 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.

CCCP Item 4 - BPA Testing

- *CWS: 3.1.4(b)(4), NCWS: 3.1.4(c)(4)*
- Who does the BPA testing?
  - Water system staff?
  - Contracted by customer/water user?
  - Contracted by water system?
- How often is testing performed?
  - Minimum annual, but can be more frequent
  - Adequate time buffer for repair and/or follow-up
  - Initial, at time of BPA installation
  - Any spot checking? (to verify questionable testers)

CCCP Item 5 – Non-Testable Devices

- *3.2.2(g), CWS: 3.1.4(b)(5), NCWS: 3.1.4(c)(5)*
- Does the water system have any of non-testable backflow preventers under their ownership (i.e. treatment plants)?
  - Survey water system facilities for internal protection
- Can they ensure compliance with the California Plumbing Code (CPC)?
  - Replace when faulty per CPC

CCCP Item 6 - Tester Qualifications

- *Section 3.4.1(a), CWS: 3.1.4(b)(6), NCWS: 3.1.4(c)(6)*
- Are the BPA testers certified?
  - How does the water system verify tester certifications?
  - Example – "Approved tester list"
- Are their field gages verified for accuracy?
  - Annual verification generally recommended
  - Gage Sticker or certificate of verification
- What information are the testers reporting to the water system?

CCCP Item 7 – Backflow Incidents

- *Section 3.5.2, CWS: 3.1.4(b)(7), NCWS: 3.1.4(c)(7)*
- Procedures and timeframes of activities for responding to backflow incidents:
  - DDW notification within 24 hrs
  - Customer notifications
  - Reporting of changes in water quality, complaints, sampling, pressure
  - Investigation documentation
  - Any other responses, follow-up activities
  - Water system can use the Backflow Incident Report Form (Appendix F)

CCCP Item 8 – Contact Information

- *CWS: 3.1.4(b)(8), NCWS: 3.1.4(c)(8)*
- CCCP must include contact information for:
  - Cross-connection control program coordinator or specialist
  - Any other cross-connection control personnel

CCCP Item 9 – Tracking System

- *Section 3.5.1, CWS: 3.1.4(b)(9), NCWS: 3.1.4(c)(9)*
- How are records maintained?
  - Water system needs to demonstrate how they know:
    - How many BPAs they have
    - How often are the BPAs tested
    - What are the associated hazards
    - Where are the BPAs located and type
    - Non-community water systems - location and type of non-testable devices
  - May have standardized form for information collection
  - Are they using a database? What type of database are they using?

CCCP Item 10 – User Supervisors

- *Section 3.2.2(f), CWS: 3.1.4(b)(10), NCWS: 3.1.4(c)(10)*
- Are any user supervisors required?
- A water user may be required to designate a user supervisor
  - Applies to multi-piped systems that convey various types of fluids and frequent piping maintenance
  - Recycled water use sites, breweries and wineries, industrial dischargers such as refineries, manufacturing, etc.

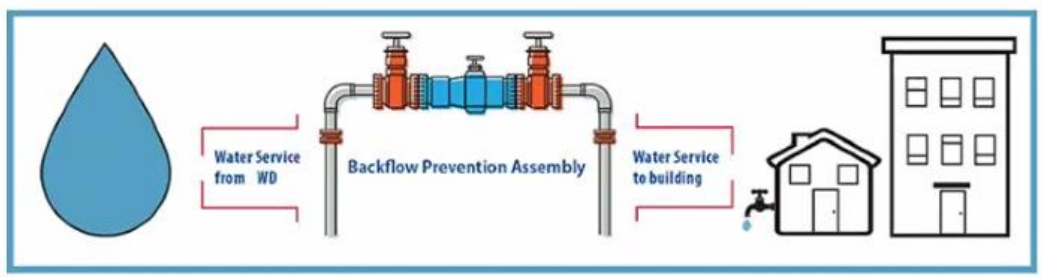
CCCP Item 11 – Corrective Actions

- *CWS: 3.1.4(b)(11), NCWS: 3.1.4(c)(11)*
- Corrective actions are needed:
  - When an unprotected cross-connection has been discovered
  - A BPA needs to be replaced or maintained
- For corrective actions:
  - Describe the corrective action
    - Enforcement of the ordinance/policy
    - Warning letters, fines, service disconnection
    - Or Water System can install BPA for the customer?
  - What is the timeframe for implementation?
    - Water system needs to propose

CCCP Item 12 – Public Outreach

- *Section 3.1.3(a)(9), CWS: 3.1.4(b)(12), NCWS: 3.1.4(c)(12)*
  - What media is the Water System using to educate customers and the community?
    - Examples – CCRs, bill inserts, webpage

Backflow / Cross Connection



Making Your Water Safer Through Backflow Prevention

The water provided by the District meets all primary drinking water standards, but once water is delivered through a customer's meter it is important to prevent water from flowing back into the system. This can occur when irrigation systems, pools, water softeners or even leaks create back pressure or back-siphonage issues, which is why a backflow assembly device is often required.

CCCP Item 13 – Local Coordination

- *CWS: 3.1.4(b)(13), NCWS: 3.1.4(c)(13)*
- What other local entities are involved and how interfacing occurs?
  - Examples – permitting, health departments, law enforcement, fire departments
    - Contact information
    - Types of shared documents
    - Information shared, e.g. County Health Dept. tells Water System about new water industrial user
    - Internal Devices – may be under purview of County Health Dept or Plumbing Code Authority

Questions?

Questions after this Training?
backflow@waterboards.ca.gov