



## REQUIRED ELEMENTS OF A CROSS-CONNECTION CONTROL PROGRAM

R309-105-12 requires that every public drinking water system establish and actively enforce a cross connection control program. An effective cross connection control program consists of components which when properly administrated are designed to prevent contamination from entering your water distribution system.

The FIVE components of an effective cross connection control system are:

### 1- LOCAL AUTHORITY:

This would consist of an ordinance, bylaw, or some other type of legal provision established by the council, board, or governing legal body, that would authorize the drinking water system to carry out a cross connection control program. Specific items to be covered in this ordinance would include: authority to require inspections or surveys; authority to require testing of assemblies and/or devices; authority to discontinue service to connections that refuse to comply; and individuals responsible for program and enforcement.

### 2 - PUBLIC AWARENESS:

A good public awareness program will provide information to the public concerning: what cross connections are; how they can be prevented; what types of protection are available; and the concerns associated with thermal expansion where protection is required.

### 3- TRAINED STAFF:

It is recommended, but not necessary, that at least one member of the water systems staff be trained as a backflow technician or specialist. It is imperative though that at least one member of the systems staff have some training in cross connection control. This training is being made available to managers and operators throughout the state through organizations such as the Rural Water Association of Utah and the Utah Chapter of the American Backflow Prevention Association. Division of Drinking Water staff are also available to provide training in cross connection control. **\*A certified CCC Program Administrator is required for Community water systems population 500 and above by December 31, 2020, and population below 500 by December 31, 2022.\***

### 4 - RECORD KEEPING:

Once a water system has an ordinance and has began to establish a program, an efficient and detailed record keeping program must be established and maintained. Records should be made and kept concerning the following: all surveys or inspections; locations of assemblies and high hazard air gaps with testing and inspection records; and any backflow incidents and corrective actions taken as well as any compliance actions.

### 5 - ON-GOING ENFORCEMENT PROGRAM:

The program will only be as effective as the individuals who are authorized to carry it out. Ideally this would extend to the building inspection and or plumbing inspection departments where possible but as a minimum someone in the water department should be authorized to administrate the program and take the necessary compliance actions. Testing and inspections may be done by system personnel or the responsibility for it may be delegated to the building or site ownership as is usually the case. Either way someone must be authorized to administrate the program and must have the time and necessary support to do so.

# CROSS CONNECTON CONTROL AND BACKFLOW PREVENTION

Starting and Maintaining a Program for your  
Water System

## DEVELOPING CCC PROGRAM



DRINKING WATER

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# LOCAL AUTHORITY

Lickin Creek Water Distric #04279  
CROSS CONNECTION CONTROL POLICY

A policy relating to "cross connection control and backflow-prevention control" at the Lickin Creek Water District.

**PART I:  
CROSS CONNECTION CONTROL AND BACKFLOW PREVENTION**

(1) It shall be against Lickin Creek Water District policy, at any connection supplied with water from the Lickin Creek Water District distribution system, to do any of the following:

- (a) To install or use any physical connection or arrangement of piping or fixtures, which may allow any fluid or substances unsuitable for human consumption to enter the potable water distribution system, as required by Section 608.1 through 608.5 of the International Plumbing Code.
- (b) To install any connection, arrangement, or fixtures without a Backflow Prevention Device or approved Assembly unless arranged otherwise by the Board Member over Water.
- (c) To incorrectly install any Backflow Prevention Device or Assembly required by Section 608.6 and 608.1 of the International Plumbing Code.

(2) Any person found in violation of this policy shall be subject to reprimand or other appropriate disciplinary action as determined by the Board Member over Water.

(3) Administration of this policy shall be referenced by "Cross Connection Control Program of Utah, November 2003". A copy of the manual shall be available at the office of the Lickin Creek Water District.

(4) Backflow prevention assemblies required by this policy will be required to be tested at least annually. The Board Member over Water shall prepare and maintain a Backflow Assembly Information sheet on all such devices and Test results shall be maintained for a period of no less than five (5) years.

**PART II:**

This policy shall take effect on January 1, 1999. A copy of the policy shall be placed in the office in the Water Board water system binder and will be reviewed for all new construction projects on a case by case basis.

Signed: *Michael H. Jones*

Date: December 15, 1998

Title: Owner



# LOCAL AUTHORITY

- Statement of Authority (Ordinance, Policy, By-law)
  - Established and approved by water system governing body
  - Require protection of all cross connections
  - Require periodic hazard assessment inspections
- Require notification of an installed assembly
  - Require testing of all installed assemblies
  - Identify and document enforcement methods
- Create, adopt and maintain by rule for the duration of the systems operation.
- Recommend review every 3 to 5 years and update as necessary.

# TRAINED STAFF



# TRAINED STAFF

- Documentation of training received at a State sponsored training class.
  - The water system management or operations staff member.
  - Time required is one half day or evening.
  - May take a refresher anytime to refocus for program needs.
- A trained person shall be maintained by rule for the duration of the systems operation.
- When staff or management changes, new person needs to be identified and trained.
- **\*A certified CCC Program Administrator is required for Community water systems population 500 and above by December 31, 2020, and population below 500 by December 31, 2022.\***

# Utah Water System Requirement for Cross Connection Control Program Administrator Certification

WATER SYSTEM	POPULATION	COMPLIANCE DATE
COMMUNITY	500 AND ABOVE	BY DEC 31, 2020
COMMUNITY	BELOW 500	BY DEC 31, 2022
ALL OTHER WATER SYSTEMS Non-Transient Non-Community & Transient Non-Community (If complex health risks are present)		AT DIRECTORS DISCRETION

**[Backflow.utah.gov](http://Backflow.utah.gov) for detailed information**



# TRAINED STAFF

- Should at a minimum:
  - Know the rules and regulations
  - Be able to identify a Cross Connection
  - Understand what backflow is and what causes it to occur.
  - Know how to protect a cross connection against backflow
  - Participate in continuing education to improve and keep updated on changes

# PUBLIC AWARENESS





# PUBLIC AWARENESS

- Documentation of providing information to consumers or employees
  - Required on an annual basis.
- What are cross connections?
  - How can they be prevented?
  - How can they be protected?
  - What is thermal expansion?
  - Is thermal expansion a concern?
- Document each flyer sent and/or record of meeting minutes.
- Recommend maintain records for a minimum period of 5 years.

# WRITTEN RECORDS





# RECORD KEEPING

- Record of hazards connected to the water system.
  - Recommend that these records be maintained for the duration of the systems operation.
- Record existing protection to cross connections found.
- Document test histories and inspections.
  - By rule maintain records for a minimum period of 5 years.
- Record all surveys and inspections in the water system.
- Document any backflow incidents.
  - Who, What, When, Where, Why and How
  - Recommend document and maintain these records for a minimum period of 5 years.
- Document all staff training

# ONGOING PROGRAM

# ON-GOING ENFORCEMENT PROGRAM

- Document annual information supplied to consumers and employees.
- Document annually a review of the water system for cross connections.
- Documentation that cross connections are protected.
- Document that backflow assemblies are tested annually, correctly and timely.
- Document annually all test report records and histories.
- Document any backflow incidents.
- Recommend that these records be maintained for a minimum period of 5 years.



# ON-GOING ENFORCEMENT

- The program will only be as effective as the individuals who are authorized to carry it out.
  - This should be extended out to those involved in building and plumbing inspection departments
  - At a minimum, water system personnel shall be authorized to administer the cross connection control program and take the necessary compliance actions.