

POLICY

Backflow Prevention and Cross-connection Control (BPCCC)

Town of Lyons, Colorado BPCCC Program

Purpose

This Backflow Prevention and Cross-connection Control Program outlines how the Town of Lyons implements its written BPCCC program and achieve compliance with CDPHE Regulation 11.

Other potentially applicable backflow prevention and cross-connection control requirements are specified in Article 1-114 and Article 1-114.1 of Title 25 of the Colorado Revised Statutes and in the Colorado Plumbing Code. The State Health Department has developed [Safe Drinking Water Program Policy 7](#) to assist public water systems achieve compliance with Regulation 11.

Public Water System Name & PWSID:		
Public Water System Owner:		
BPCCC Administrative Contact:		
Address:		
Email:		
Phone:		
Signatures of Owner or Administrative Contact:		
Effective Date	Name	Signature

Backflow Prevention and Cross-connection Control Program

- (i) Process for conducting surveys.

- (ii) Legal authority to perform a survey of a customer's property to determine whether a cross connection is present unless the supplier controls all non-single-family residential connections to the public water system with the most protective backflow prevention assembly or backflow prevention method.

Ordinance (Copy Attached)

- (iii) Process to select a backflow prevention assembly or backflow prevention method to control a cross connection.

- (iv) Legal authorities to install, maintain, test, and inspect backflow prevention assemblies and/or backflow prevention methods and/or require customers to install, maintain, test, and inspect backflow prevention assemblies and/or backflow prevention methods.

Ordinance (Copy Attached)

- (v) Process to track the installation, maintenance, testing, and inspection of all backflow prevention assemblies and backflow prevention methods used to control cross connections.

- (vi) The process the supplier will use to ensure backflow prevention assemblies are tested by a Certified Cross-Connection Control Technician.

Department Notification

If the CDPHE becomes aware of a suspected or confirmed backflow contamination event, the Town of Lyons must notify and consult with the State Health Department on any appropriate corrective measures no later than 24 hours after learning of the backflow contamination event. The notification should be made to the **24-hour Environmental Release and Incident Report Hotline at 1-877-518-5608**.

When reporting the event, please have available the as much of the following information as possible:

- Date and time of event;
- Location of event;
- Type of threat or event;
- Public Water System Name and Identification Number;
- Water supplier contact name and phone number;
- Method of discovery (consumer complaint, witness, perpetrator, employee report);
- Response actions taken (water quality parameter testing, isolation of affected water);

- Recovery actions taken;
- Notifications made (customers, law enforcement, news media, etc.);
- Assessment of threat, if possible.

Regulation 11.39(7) requires that we notify the Department within 48 hours in any instance the supplier becomes aware of any backflow prevention and cross-connection control violation and any backflow prevention and cross-connection control treatment technique violation specified in Regulation 11.39(6).

Such notifications to the Department can be written, verbal, or made by other means. The Department can be notified via telephone at 303.692.2000 and contacting the Department's Water Quality Control Division's backflow prevention and cross connection control specialist. The Department can also be notified via email at cdphe.wqenginfo@state.co.us sent to the attention of the backflow prevention and cross-connection control specialist.

Public Notice Requirements

Regulation 11.39(7) requires that suppliers distribute Tier 2 public notice as specified in Regulation 11.33 in any instance the supplier becomes aware of any backflow prevention and cross-connection control treatment technique violation.

Regulation 11.39(7) requires that suppliers distribute Tier 3 public notice as specified in Regulation 11.33 a in any instance the supplier becomes aware of any backflow prevention and cross-connection control violation.

Please contact your Department assigned compliance officer with any questions regarding to public notice.

**THE FOLLOW SECTIONS WILL BE REFERENCED FOR COMPLETING THE PROGRAM REQUIREMENTS
ABOVE AND THEN DELETED FROM THE FINAL POLICY**

(i) *Survey Process and Documentation*

The Town of Lyons must survey all non-single-family-residential connections to the public water system to determine if the connection is a cross connection. The supplier must also survey all connections within the supplier's waterworks to determine if there are any cross connections present which could contaminate the public water systems or the facilities water supply system.

The Town must identify the total number of non-single-family-residential connections to the public water system and connections within the supplier's waterworks. This number is the total number of connections to the public water distribution system that are not considered single - family connections. Acceptable survey process documentation includes the following: How the supplier will select service connections that need a survey; For example: Usage type - commercial, industrial, or multi-family; new or newly acquired connections; and/or questionnaire results.

Single-family means:

- A single dwelling which is occupied by a single family and is supplied by a separate service line;
- A single dwelling comprised of multiple living units where each living unit is supplied by a separate service line.
- If the Town has ownership and maintenance responsibilities of a service line up to a point of single-connections such connections may be considered a single-family-residential-connection even if this connection is to a multi-family dwelling unit. It is important to be aware that all other applicable parts of Regulation 11 will also apply to those new acquired waterworks (i.e. distribution system) and that any irrigation or other cross connections that are directly connected to the newly acquired service line would have to be controlled in accordance with Regulation 11.39.

Once the Town has identified the total number of non-single family residential connections, the Town must survey the connections to identify cross connections. The Town must document the process for conducting surveys. Surveys can be performed onsite by a person designated by public water system or can be of a questionnaire type. The Town's survey process should identify potential service connections and uses that when identified may trigger cross-connection control requirements. The Town's process should address how the Town will select individuals to perform the survey including experience and/or training or certification qualifications to perform a survey. Additionally the Town must survey any waterworks and the water supply systems associated with those facilities for cross connections.

If the Town uses questionnaires, various methods may be used to distribute the questionnaires: email surveys, web-based surveys, written surveys, or telephone surveys. Questionnaires should provide examples of common cross connections to the customer who completes the survey. Questionnaires should ask that the property-owner indicate that the information is accurate to the best of their knowledge. If the Town does not receive a response to a questionnaire or the results are inconclusive, the Town is required to perform an onsite survey for cross connections or control the connection with the most protective backflow prevention assembly or method.

The results of surveys should be kept in a manner that allows the supplier to demonstrate that a survey has been performed and if any action was required based on the result of the survey.

It is important that newly constructed and renovated buildings are constructed in accordance with the local plumbing code. The code is intended to protect the internal potable water system and its occupants from contamination that can be introduced via restrooms, kitchens, boilers, irrigation, HVAC

systems, etc. It is equally important that the water supplier protect their distribution system from contamination that can be introduced via car washes, auxiliary water sources, fire suppression systems, irrigation and many other sources. Water suppliers need to perform cross connection identification surveys to identify potential cross connections within their distribution system.

*** Describe in this section how the supplier complies with the regulation and its survey requirements

(ii & iv) Legal Authority

Refer to the attached Ordinance Number 2016-XX passed on 1st Reading on October XX, 2016 and 2nd Reading on October XX, 2016

- Installing an uncontrolled cross connection means modifications or additions to waterworks or water supply systems that create a cross connection. The Town is prohibited from intentionally performing any actions which would result in the creation of a cross connection.
- Permitting an uncontrolled cross connection in the context of Regulation 11.39 means the Town has allowed their users or customers to continue to have an uncontrolled cross connection past the regulatory-defined timelines. If the regulatory-defined timelines have elapsed and the Town has not taken any of following actions; control the cross connection, remove the cross connection or suspends service to the identified connection***, then the Town is allowing, or permitting, the cross connection to exist and is in violation of Regulation 11.

Before suspension of service can be considered appropriate action the Department expects that the supplier will confirm the following:

- The connection downstream of the valve used to suspend the service does not remain pressurized because the customer has access to an alternative source of water or a storage tank onsite
- If the cross connection is to a fire suppression system; suspension of service would not result in the building being inadequately protected from loss of life through fire. If there are service connections at the property separate from the fire suppression system causing the cross connection, a supplier may suspend service to one or all of those other service lines (e.g. domestic or irrigation) as an appropriate action.
- The Town may receive a Department approved alternative compliance schedule for identified cross connections that have not been controlled within 120 days. Department-approval of an alternative compliance schedule means either an email or other written communication from the Department. The Department has provided in [APPENDIX C - BPCCC Rule 120-Day Cross-connection Control Extension Application](#) for such request.
- The Town must specify the process that the water system will use to require the installation, maintenance, testing, and inspection of all backflow prevention assemblies and backflow prevention methods used to control cross connections. Refer to Ordinance 2016-XX.

(iii) Identification of Cross Connections and Backflow Prevention Assembly or Backflow Prevention Method Selection

If the Town discovers an uncontrolled cross connection and believes that a backflow contamination event has not occurred, the Town must: first determine the type of backflow prevention assembly or backflow prevention method needed to control the cross connection and second install and maintain or require the customer to install and maintain a backflow prevention assembly or backflow prevention method at the uncontrolled cross connection, suspend service to the customer, or remove the cross connection, no later than 120 days after its discovery.

***The Town should include in the written BPCCC program guidelines and criteria used to select the type of backflow prevention assembly or method used to control an identified cross connection. Guidelines and criteria should address examples of cross connections throughout the water systems distribution system along with the corresponding appropriate backflow prevention assembly and or

backflow prevention method used to control the identified cross connection. Part 4.3 of SDWP [Policy 7](#) provides various examples of backflow prevention assemblies and methods and when the use of such assemblies and methods may be appropriate.

(v & vi) *Tracking & Certified Tester Verification*

The Town must specify the tracking mechanism it will use to verify the installation, maintenance, testing, and inspection of all backflow prevention assemblies and backflow prevention methods used to control cross connections. This section may include the process the supplier will use to ensure backflow prevention assemblies are tested by a Certified Cross-Connection Control Technician

***Provide a tracking spreadsheet or description of program or other method which the supplier is using to verify performance and compliance with Regulation 11.

- i. To be considered adequate, test reports used to document compliance with Regulation 11 must include all of the following:

Assembly or method information:

- a. Assembly or method type;
- b. Assembly or method location;
- c. Assembly make, model and serial number;
- d. Assembly size;
- e. Test date; and,
- f. Test result (pass/fail).

Certified Cross-Connection Control Technician information:

- a. Certified Cross-Connection Control Technician certification agency;
- b. Certification number;
- c. Certification expiration date or statement that certification is current;
- d. As an alternative to a-c, The Town may provide documentation of an alternative validation process such as electronic login to reporting software where only current, certified cross-connection control technicians (or their companies) are given a login.