



# COLORADO

## Department of Public Health & Environment

### Backflow Prevention and Cross-connection Control

#### Meadow Mountain Water Supply Company BPCCC Program

##### Purpose

This Backflow Prevention and Cross-connection Control Program outlines how the supplier of water specified below will implement its written BPCCC program and achieve compliance with 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 Department has developed [Safe Drinking Water Program Policy 7](#) to assist public water systems achieve compliance with Regulation 11.

Public Water System Name & PWSID:	Meadow Mountain Water Supply Company	
Public Water System Owner:	Meadow Mountain Water Supply Company	
BPCCC Administrative Contact:	Rachel Barkworth	
Address:	<p>P.O. Box 354 Allenspark, CO 80510</p>	
Email:	<a href="mailto:RCBarkworth@yahoo.com">RCBarkworth@yahoo.com</a>	
Phone:	303-823-2318	
<b>Signatures of Owner or Administrative Contact:</b>		
Effective Date	Name	Signature
05/01/2016	RACHEL BARKWORTH	

This BPCCC program will include and specify information regarding how this supplier identifies cross connections, performs surveys, and controls identified cross connections. This BPCCC program also address how this supplier will require that backflow prevention assemblies and methods be tested and inspected annually, how this supplier will track the installation, maintenance, and testing of assemblies and methods and how this supplier will ensure that assemblies are tested by a *Certified Cross-Connection control Technician*(Regulation 11.37(1)(b)).

## Water Quality Control Division

4300.

Cherry Creek Drive South Denver, Colorado 80246

## Backflow Prevention and Cross-connection Control Program

(i) Process for conducting surveys.

Consumer Cross Connection Surveys will be sent to residents through email. A reminder email will be sent once every four years to request if any circumstances have changed in their house since the prior survey.

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(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 (attach copy) { } User Agreements (attach copy) {X} Other - explain below

As part of our bylaws if we need access to a premises we would request access through email or telephone, resorting to paper mail if neither of the prior two procedures worked.

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

All residences should be fitted with standard backflow prevention devices/controls per the local building codes that do not require special annual testing.

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(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 (attach copy) { } User Agreements (attach copy) {X} Other - explain below

Not required as backflow devices that are installed in residences will not be of the type that require annual testing.

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

Not required because no devices will be installed that require annual testing.

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

Not applicable as we will not allow these types of devices to be installed.

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## **Backflow Prevention and Cross-connection Control Program**

### **Department Notification**

If we become aware of a suspected or confirmed backflow contamination event, MMWSC must notify and consult with the 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](mailto: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.

## **Backflow Prevention and Cross-connection Control Program**

### *(i) Survey Process and Documentation*

MMWSC must survey all non-single-family-residential connections to the public water system to determine if the connection is a cross connection - there are no residences of this type therefore no surveys are required. MMWSC must also survey all connections within the waterworks to determine if there are any cross connections present that could contaminate the public water systems or the facilities water supply system.

MMWSC has identified the following cross connections in the Water Treatment Plant:

1. Cross connection from the day tank used to store chlorine for disinfection purposes. The day tank is filled using a standard hose-pipe connection from a supply tap into the day tank. This standard hose-pipe is only connected to the supply tap when it is required to fill the day tank to dilute the chlorine solution. The cross connection control is an air gap. The only time there is a potential for a cross connection to occur is when the day tank is being manually filled.
2. The second cross connection is the backwash effluent and that is a pipe that is suspended over the drain in the floor. The drain area is approximately 3 feet square by four feet deep and the cross connection control is an air gap. This cross connection is checked each day to ensure that the drain is not plugged and therefore causing a cross connection situation.
3. Any new dwellings that are built in our area will only be single family service connections and all will be asked to comply with local building codes to ensure that backflow prevention devices that are installed conform to the devices that do not require annual checking.

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 a water supplier 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.

There are no non-single family residential connections so surveys are not required. If there are connections in the future that require surveying, an email will be sent to the owners to request the

required information. A copy of the survey will be posted on the company website and all results will be stored in the secure area on the website.

## Backflow Prevention and Cross-connection Control Program

### *(ii & iv) Legal Authority*

The supplier must have a legally-enforceable mechanism that implements its written backflow prevention and cross connection control program as described in 11.39(2). The Department recommends that the legally-enforceable mechanisms include specific provisions identifying customer requirements under 11.39(2)(a)(ii, iv) and the associated remedies that the supplier may utilize for failure of customer(s) to comply. If the supplier does not have a legally-enforceable mechanism in place, the Department expects the supplier to perform the actions necessary to complete the indicated requirements in the regulation.

\*\*\*Note to supplier. Provide a copy of the ordinance or user agreement in this section or discuss how the supplier implements the actions necessary to complete the indicated requirements in the regulation. As a reminder suppliers are prohibited from installing or permitting any uncontrolled cross connection to the distribution system or within the supplier's waterworks.

- Installing an uncontrolled cross connection means modifications or additions to waterworks or water supply systems that create a cross connection. The supplier 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 supplier 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 supplier has not taken any of following actions; control the cross connection, remove the cross connection or suspends service to the identified connection\*\*\*, then the supplier is allowing, or permitting, the cross connection to exist and is in violation of Regulation 11.

\*\*\* Note to supplier. 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 supplier 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.

- Suppliers 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. Generally, this is specified in one of the following: local government ordinances, user agreements or the public water system assumes full responsibility.

## Sample Backflow Prevention and Cross-connection Control Program

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

If the supplier discovers an uncontrolled cross connection and believes that a backflow contamination event has not occurred, the supplier 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.

\*\*\*Note to supplier. Suppliers 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***

Suppliers 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

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

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

Assembly or method information:

- Assembly or method type;
- Assembly or method location;
- Assembly make, model and serial number;
- Assembly size;
- Test date; and,
- 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, suppliers 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.