



**APPENDIX A: Backflow Prevention and Cross-connection Control
 Town of Hot Sulphur Springs 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:	Hot Sulphur Springs CO125352	
Public Water System Owner:	Robert Mcvay	
BPCCC Administrative Contact:	Oakley Ellis	
Address:	400 Maple St	
	Hot Sulphur Springs, CO 80451	
Email:	Oakleytohss@gmail.com	
Phone:	970-531-7305	
Signatures of Owner or Administrative Contact:		
Effective Date	Name	Signature
02.14.18	Oakley Ellis	

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))*.

****This program must be kept on file for review by the Department. It can be revised by the Department as necessary.

Water Quality Control Division

4300 Cherry Creek Drive South Denver, Colorado 80246

Backflow Prevention and Cross-connection Control Program

Process for conducting surveys.

The commercial and industrial survey questionnaire is used to determine backflow requirements at non-residential properties. The town will utilize these questionnaires to identify the total number of non-single-family-residential connections. Upon return of the questionnaires, town staff will determine the needed follow up requirement for each facility. Additional information regarding backflow prevention and cross control will be delivered to the property owner to initiate further requirements.

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

Once the supplier has identified the total number of non-single family residential connections, the supplier must survey the connections to identify cross connections. The supplier 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 supplier's survey process should identify potential service connections and uses that when identified may trigger cross-connection control requirements.

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.

Method and Selection

The “Colorado Cross-Connection Control Manual” is referenced as the source for selection of backflow devices.

The certified technicians hired by the property owner will select the appropriate device and method of cross connection control.

11.39(3) Treatment Technique Requirements for the Control of Cross Connections

(a) If the supplier learns of a suspected or confirmed backflow contamination event, the supplier must notify and consult with the Department on any appropriate corrective measures no later than 24 hours after learning of the backflow contamination event.

(b) The supplier is prohibited from installing or permitting any uncontrolled cross connection to the distribution system or within the supplier’s waterworks.

(c) The supplier must survey all non-single-family-residential connections to the public water system to determine if the connection is a cross connection unless the supplier controls that connection with the most protective backflow prevention assembly or backflow prevention method. The supplier must survey all connections within the supplier’s waterworks to determine if the connection is a cross connection.

(i) If the supplier identifies a cross connection during a survey, the supplier must determine the type of backflow prevention assembly or backflow prevention method to control the cross connection.

(ii) If the supplier becomes aware of a single-family-residential connection to the public water system that is a cross connection, the supplier must determine the type of backflow prevention assembly or backflow prevention method to control the cross connection.

(iii) The supplier must achieve the survey compliance ratios as specified in Table 11.39-I.

d) If the supplier discovers an uncontrolled cross connection and a suspected or confirmed backflow contamination event has not occurred, the supplier must:

(i) No later than 120 days after its discovery, 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.

(A) If the supplier is unable to meet the 120-day deadline, the supplier must consult with the Department and the Department may approve an alternative schedule.

(B) The supplier can either control cross connections discovered within a customer’s water system by containment or containment by isolation.

(I) “CONTAINMENT” means the installation of a backflow prevention assembly or a backflow prevention method at any connection to the public water system that supplies an auxiliary water system, location, facility, or area such that backflow from a cross connection into the public water system is prevented.

(II) “CONTAINMENT BY ISOLATION” means the installation of backflow prevention assemblies or backflow prevention methods at all cross connections identified within a customer’s water system such that backflow from a cross connection into the public water system is prevented.

(C) The supplier must ensure that all installed backflow prevention assemblies used to control cross connections are tested by a Certified Cross-Connection Control Technician upon installation.

(D) The supplier must ensure that all installed backflow prevention methods used to control cross connections are inspected by the supplier or a Certified Cross-Connection Control Technician upon installation.

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.

Monitor and Track

Aqua Backflow is contracted to provide tracking and notification to property owners with backflow devices.

Notifications of inspections due are sent to each of the identified cross connection controls. Certified inspectors are listed on the web site for the property owners' to contact and coordinate the annual inspections.

Inspection reports are provided by the inspectors to Aqua Backflow for input to the database. Reports are saved by Aqua Backflow and accessible for the web. Inspectors will enter the inspection report results using the Aqua Backflow provided web access.

Public Works administration also maintains copies of inspection reports. When reports are sent to the city, staff will coordinate and share with Aqua Backflow.

Property owners are responsible for the costs of inspections and repairs of all backflow devices in their facilities.

(e) The supplier must ensure that backflow prevention assemblies used to control cross connections are tested annually by a Certified Cross-Connection Control Technician and maintained. The supplier must achieve the backflow prevention assembly annual testing compliance ratios as specified in Table 11.39-II

***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.

- 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, 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.

Legal Authorities

ORDINANCE NO. 2017-6-1-398

Annual Report

11.39(4) Backflow Prevention and Cross-Connection Control Program Annual Written Report

A written backflow prevention and cross-connection control program report for the previous calendar year will be prepared that includes all of the following information:

- (i) Total number of non-single-family-residential connections to the public water system and connections within the supplier's waterworks.
 - (A) The supplier is not required to include any non-single-family-residential connections identified after October 31 of the calendar year in the total number of non-single-family-residential connections to the public water system until the following calendar year.
- (ii) Total number of connections surveyed to determine if cross connections are present.
- (iii) Survey compliance ratio.
- (iv) Total number of identified cross connections.
- (v) Number of uncontrolled cross connections identified during the calendar year.
 - (A) Number of identified uncontrolled cross connections that were controlled within 120 days of discovery.
 - (B) Number of identified uncontrolled cross connections that were not controlled within 120 days of discovery.
- (vi) Number of backflow prevention assemblies installed at cross connections that were used during the calendar year.
- (vii) Number of backflow prevention methods installed at cross connections that were used during the calendar year.
- (viii) Number of connections where service was suspended as specified in 11.39(3) during the calendar year.
- (ix) Number of backflow prevention assemblies used to control cross connections that were tested by a Certified Cross Connection Control Technician during the calendar year.
- (x) Backflow prevention assembly annual testing compliance ratio.
- (xi) Beginning January 1, 2021, the number and location of backflow prevention assemblies not tested during the calendar year covered by the report.
- (xii) Number of backflow prevention methods used to control cross connections that were inspected during the calendar year.
- (xiii) Backflow prevention method annual inspection compliance ratio.
- (xiv) The number and location of backflow prevention methods not inspected during the calendar year covered by the report.

Department Notification

If we become aware of a suspected or confirmed backflow contamination event, the supplier 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 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.

References

“Colorado Cross-Connection Control Manual”, Colorado Department of Public Health and Environment Water Quality Control Division / Backflow Prevention Education Council of Colorado, Fifth Edition February 2006.

“Regulation No. 11, Colorado Primary Drinking Water Regulations (5 CCR 1002-11)”, Colorado Department of Public Health and Environment, Water Quality Control Commission.

“Regulation 11.39 Backflow Prevention and Cross-connection Control Guidance”, Water Quality Control Commission, October 15, 2015.

“Safe Drinking Water Program Policy – Backflow Prevention and Cross-connection Control Rule Implementation Policy”, Water Quality Control Division, May 28, 2015.