



**Backflow Prevention and Cross-
Connection Control Program**

March 2022

Table of Contents

1.0 GENERAL PROVISIONS	1
2.0 BACKFLOW PREVENTION AND CROSS-CONNECTION PROGRAM	1
2.1. Survey Process and Documentation	1
2.2. Legal Authority to Survey Customer’s Property to Determine Whether a Cross-Connection is Present	2
2.3. Backflow Prevention Assembly or Method to Control a Cross-Connection	2
2.4. Legal Authority to Install, Maintain, Test, and Inspect Backflow Prevention to Control a Cross-Connection.....	2
2.5. Process to Track Installation, Maintenance, Testing, and Inspection of Backflow Prevention Assemblies and Methods used to Control Cross-Connections	2
2.6. Process to Ensure Backflow Prevention Assemblies are Tested by a Certified Cross-Connection Control Technician	3
2.7. CDPHE Notification and Reporting of a Backflow Contamination Event.....	3
2.7.1. Public Notice Requirements	4
2.8. Annual Report	4
3.0 Description of Containment and Isolation Assemblies to Prevent Backflow, Back Siphonage, and Control Connections	5

Attachment A – Annual Reports

1. GENERAL PROVISIONS

The purpose of this Backflow Prevention and Cross-Connection Control (BPCCC) Program for North Washington Street Water and Sanitation District (Supplier) outlines how the supplier of water will implement its written BPCCC Program and achieve compliance with Colorado Department of Public Health and Environment (CDPHE) Regulation No. 11.39. The BPCCC administrative contact will provide updates to this document per regulation changes or to clarify program requirements.

Public Water System Name & PWSID:	North Washington Street Water and Sanitation District / PWSID # 101105	
Public Water System Owner:	North Washington Street Water and Sanitation District	
BPCCC Administrative Contact:	Mike DeMattee	
Address:	3172 E. 78th Avenue	
	Denver, CO 80229	
Email:	mdemattee@nwsbsd.com	
Phone:	(303) 288-6664	
Signatures of Owner or Administrative Contact:		
Effective Date	Name	Signature
3/1/2022	Mike DeMattee	

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)*.

2. BACKFLOW PREVENTION AND CROSS-CONNECTION PROGRAM

2.1. Survey Process and Documentation

The process of conducting surveys is to identify any non-single family home and duplexes and survey the properties from any uncontrolled cross connections. Once properties are identified, the supplier will inspect the property for any way each property is utilizing water from the water meter to the last flowing fixture. The supplier will allow containment by isolation on individual fixtures and if that is not possible then the supplier will have customer install a containment assembly.

2.2. Legal Authority to Survey Customer's Property to Determine Whether a Cross-Connection is Present

Through the supplier's Cross-Connection Control program, the supplier will only contain a consumer's plumbing system at the water meter. In other words, if an accident should occur, the supplier's water supply will be protected from anything that may flow backwards through the internal plumbing systems pipe into the supplier's main water pipeline. It is very important for the customer, the owner of the customer's plumbing system, to take necessary precautions for protecting the customer's internal plumbing system. This type of protection is called isolation protection. The isolation protection program will not be regulated by the supplier.

2.3. Backflow Prevention Assembly or Method to Control a Cross-Connection

Through the supplier's Cross-Connection Control Program, the supplier's staff will determine if a cross-connection assembly is required. The supplier will provide the customer with specifications for installation and testing. Once the customer's backflow prevention assembly is installed, it will be necessary to periodically test and maintain the unit to make sure it is functioning properly. The supplier will inform when such a test will be needed.

The supplier's process is to allow a Double Check Valve Assembly (DCVA) on any fire line that does not contain any chemicals. Outside of that variation, the supplier accepts a Reduced Pressure Principal Assembly (RP) or Air Gap on Containment or Containment by Isolation applications. The supplier no longer accepts PVB's on irrigation lines due to the overwhelming interest in raised garden beds and the altering of downstream piping.

2.4. Legal Authority to Install, Maintain, Test, and Inspect Backflow Prevention to Control a Cross-Connection

A backflow prevention assembly must be installed by a licensed plumber. A certified Backflow Assembly Tester must be used to test, maintain or repair assembly. A certified Backflow Assembly Tester may also perform Air Gap measurements to assure the proper air gap is obtained.

2.5. Process to Track Installation, Maintenance, Testing, and Inspection of Backflow Prevention Assemblies and Methods used to Control Cross-Connections

Effective March 1, 2022, the supplier will be using Swift Comply software to track all their assemblies as well as tester certifications and gauge calibrations. The supplier will track and maintain all the supplier's current cross-connections and methods. North Washington Street Water & Sanitation District's staff going forward will complete all site surveys.

At a minimum, test reports will include the following:

- a. Assembly or method type;
- b. Assembly or method location;
- c. Assembly make, model and serial number;
- d. Assembly size;

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- e. Test date; and,
 - f. Test result (pass/fail).

2.6. Process to Ensure Backflow Prevention Assemblies are Tested by a Certified Cross-Connection Control Technician

Effective March 1, 2022, the supplier will be using Swift Comply software to track all tester certifications. The Certified Cross-Connection Control Technician information that will be tracked includes the following:

- a. Certified Cross-Connection Control Technician certification agency
- b. Certification number
- c. Certification expiration date or statement that certification is current

2.7. CDPHE Notification and Reporting of a Backflow Contamination Event

In the event of a suspected or confirmed backflow contamination, the supplier will notify and consult with the CDPHE Water Quality Control Division (department) on any appropriate corrective measures no later than 24 hours after learning of the backflow contamination event. The notification will be made to the 24-hour Environmental Release and Incident Report Hotline at 1-877-518-5608.

When reporting the event, the supplier will have available 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 the supplier 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 the Drinking Water Portal sent to the attention of the backflow prevention and cross-connection control specialist. The Drinking Water Portal can be found online at: <https://wqcdcompliance.com/login>

2.7.1. 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 11.33a 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 public notice.

2.8. Annual Report

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

- (i) Total number of non-single family home and duplex connections to the supplier water system.
- (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) 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.

The annual reports will be maintained in Appendix A of this document.

3.0 Description of Containment and Isolation Assemblies to Prevent Backflow, Back Siphonage, and Control Connections

Air Gap (AG) - This backflow preventer is a physical break between the water supply piping and a receiving container. This type of backflow prevention may require additional plumbing fixtures for the system to operate properly.

Reduced Pressure Principle Assembly (RP) - As a potential **high hazard** protection assembly, the RP is designed to prevent any material from flowing into the water supply. This assembly will provide protection from all types of backflow for low and high hazard conditions.

Double Check Valve Assembly (DC) - This is a potential **low hazard** protection assembly. The DC will provide protection from all types of back-flow for low hazard conditions.

Atmosphere Vacuum Breaker (AVB)

This is a potential high hazard protection device. The AVB is used to protect the water system from siphonage **may not** be used with continuous pressure.

Pressure Vacuum Breaker Assembly (PVB) - This assembly provides protection against potentially high hazard situations. The PVB is designed to protect the water system from siphoning material into the water supply, and **may be** used under continuous pressure.

ATTACHMENT A

**North Washington Street Water and Sanitation District Cross-Connection
Control Program for Customers**

ATTACHMENT B

Annual Reports