BACKFLOW PREVENTION AND CROSS CONNECTION CONTROL (BPCCC) PROGRAM

PURPOSE

The purpose of the Copper Mountain Consolidated Metropolitan District's (District) BPCCC Program is to promote and sustain the high quality of drinking water furnished to the District's water customers; to protect the District's public potable water supply system from the possibility of contamination or pollution by backflow, back siphonage or back pressure from a customer's water supply system through the service connection; to promote the elimination or control of existing cross-connections, actual or potential; and to provide for the maintenance of a continuing backflow prevention and cross-connection control program.

AUTHORITY

The authority to implement this program is contained in the following statute, legislation and regulations and acts:

a. Article 1-114 and Article 1-114.1 of Title 25 of the Colorado Revised Statutes (CRS)
b. Section 39 of 5 CCR 1002-11, Colorado Primary Drinking Water Regulations (Reg. 11)
c. All Current State and Local Building and Plumbing Codes, whichever is more stringent

GENERAL REQUIREMENTS

1. The District requires all service connections to the District's system, that meet the definition of cross-connection per Reg. 11, be controlled with a Reduced Pressure Zone (RPZ) backflow prevention assembly.
2. The District requires all new single-family-residential living units install, at minimum, a dual check backflow prevention device immediately downstream of the water meter. The District encourages existing single-family-residential living unit customers to make upgrades to include this device. The customer is responsible for having a device properly installed and protecting the units water system from thermal expansion.
3. Backflow prevention valves are not to be used as system shut-off valves and are for the sole purpose of testing the assembly. Backflow preventer test cocks should never be used as supply connections and should be plugged except when testing the assembly.
4. All backflow prevention assemblies shall be tested at the time of installation and on an annual schedule thereafter. Such tests must be conducted by a Certified Cross-Connection Control Technician.
5. All costs for design, installation, maintenance, testing and, as needed, repair and replacement are to be borne by the customer.
6. No grandfather clause exists. All laws and regulations apply regardless of the age of the facility.
7. All assemblies and methods shall be protected to prevent freezing. Those assemblies and methods used for seasonal services may be removed in lieu of being protected from freezing. The assemblies and methods must be reinstalled and then tested by a certified cross-connection control technician upon reinstallation.

INSTALLATION OR MODIFICATION

- For new buildings and major renovations, all building plans must be submitted to the District for review and approval prior to issuance of a Summit County building permit. Building plans must show:
    a. Water service size, type, and location
    b. Meter size and location
    c. Backflow prevention assembly size, type, and location
    d. Fire sprinkling system(s) service line, size, and type of backflow prevention device
- All backflow prevention assemblies and methods shall be installed in accordance with and meet the requirements of the current 5 CCR 1002-11 Colorado Primary Drinking Water Regulations (Regulation 11), the District's Backflow and Cross Connection Control Program, local building codes and standards, and local plumbing codes, whichever is more stringent.
- Before installing the backflow prevention assembly or method, pipelines should be thoroughly flushed to remove foreign material.
- All backflow prevention assemblies and methods shall be installed immediately downstream of the water meter after providing the required length of straight pipe. In no case will it be permissible to have connections or tees between the meter and service line backflow prevention assembly or method.
- All backflow prevention assemblies installed on fire suppression systems shall be installed upstream of the fire department connection (FDC), if such connection is provided.
- No bypass piping shall be installed around the backflow prevention assembly or method unless approved in writing by the District. If approved, the bypass must have the same type of backflow prevention assembly or method installed.
- Backflow prevention assemblies and methods shall be installed in an accessible location to facilitate maintenance, testing, and repair or replacement. The installations shall be protected from thermal expansion, excessive heat, freezing, backpressure, and flooding.
- Reduced pressure zone backflow preventers shall be installed above ground. The unit should be placed at least twelve (12) inches above the finish grade to allow clearance for repair work. The District requires the installation of a concrete slab at finished grade and protection by means of an irrigation cage or approved equal. Proper drainage should be provided for the relief valve and may be piped away from the location, provided it is readily visible from above grade and the relief valve is separated from the drain line by a minimum of double the diameter of the supply line. Vault installations are strictly prohibited.
- Reduced pressure zone backflow preventer may be installed in a basement provided the assembly is equipped with an adequate drain with an effective opening of twice the diameter of the assembly.
- In no case is it permissible to connect the relief valve discharge on reduced pressure zone backflow preventers into a sump, sewer, drainage ditch, etc..
- All backflow prevention assemblies shall be installed in the horizontal position. Vertical installation may be acceptable when approved by the assembly manufacturer and applicable standards and codes. Variance may be granted by review and written approval from the District.
- Backflow prevention assembly installations shall be inspected and approved for use by Copper Mountain Consolidated Metropolitan District. Inspections shall be scheduled by calling (970) 968-2537 or by emailing backflow@coppermetro.org at least 48 hours in advance of the desired inspection time.
- Final inspections on new or retrofit installations will be performed only after the backflow assembly has been tested. The test results, plumbing permit, and test permit number must be supplied at the time an inspection is scheduled. Inspection shall be scheduled by phone 48 hours in advance of the desired inspection time. Access arrangements shall be made for and provided to the District.

TESTING AND MAINTENANCE

It is the responsibility of the customer at any premises with installed backflow prevention assemblies to ensure certified inspections and operational tests are performed at least annually. Backflow test reports must be submitted to the Copper Mountain Consolidated Metropolitan District (District) following the inspection. For high-risk situations, the District may require more frequent inspections. All inspections and testing must be conducted by a Certified Cross-Connection Control Technician at the water customer's expense.

To be considered adequate, test reports must include:

Assembly or method information:

- Assembly or method type and location
- Assembly make, model, serial number, and size
- Test date and results (including pass/fail outcomes)

Certified Cross-Connection Control Technician information:

- Certification details of the technician (agency, certification number, and expiration)
- Test kit manufacturer, model, serial number, and calibration details
- Any additional required information to maintain compliance with Colorado Department of Public Health and Environment (CDPHE) regulations.

Assemblies must be tagged or sealed by the technician at the completion of testing. Testing gauges should be checked annually for accuracy.

Contact Information:
All test, repair, and replacement records shall be submitted to:

- Email:
  backflow@coppermetro.org
- Physical:
  Copper Mountain Consolidated Metropolitan District
  0477 Copper Road
  Copper Mountain, CO 80443
- Mail:
  Copper Mountain Consolidated Metropolitan District
  0800 Copper Road Box 3002
  Copper Mountain, CO 80443

Annual Backflow Test Reporting Deadlines:

- July 1st – Irrigation system assemblies
- September 1st – All other system assemblies

Backflow assemblies for systems that are removed and/or seasonally decommissioned shall be tested immediately after being reinstalled and/or turned on each season.

If the reports are not received by December 1st, water service will be discontinued until the reports are submitted.

Failed Tests or Uncontrolled Cross-Connections Reporting Requirement:

- Within 10 days of discovery

If a backflow assembly test fails or an uncontrolled cross-connection is discovered, the technician and/or owner must notify the District within 10 days of discovery.

Repair or Replacement Deadlines:
The faulty backflow assembly must be repaired or replaced within:

- 60 days of a failed test or discovery of a fault

If not corrected within 120 days, service will be discontinued.

RIGHT OF ENTRY

A Copper Mountain Consolidated Metropolitan District representative, upon prior arrangement and presentation of proper credentials, shall have the right of entry to inspect any and all buildings and premises for the potential presence of cross-connections and for determining compliance with this program. This right of entry is a condition of water service and aims to protect the health and safety of the distribution system.

VIOLATIONS

Failure to cooperate with the installation, maintenance, testing, or inspection requirements of backflow prevention assemblies shall be considered a Backflow Program Non-Compliance violation and subject to a penalty fee per violation per month as set forth in the District's Rules and Regulations, Fourth Edition, Appendix A – Rate & Fee Schedules and Rate Structure. Additionally, if reporting, repair and/or replacement deadlines continue to be missed as outlined above water service will be discontinued.

Specific violations include:

- Failure to install a backflow assembly or method as required.
- Failure to test a backflow assembly and submit the annual backflow testing report by the deadline. For irrigation system assemblies, if reports are not received by July 31st, water service will be discontinued until the reports are submitted. For all other system assemblies, if reports are not received by December 1st, water service will be discontinued until the reports are submitted.
- Failure to notify the District within 10 days of a failed test or discovery of an uncontrolled cross-connection.
- Failure to repair or replace a faulty backflow assembly within 60 days. Continued failure beyond 120 days will result in discontinuation of service.

The District retains the right to discontinue service if a backflow assembly is defective, removed, or bypassed, or if unprotected cross-connections exist. Service may be resumed only after the conditions are corrected.