

## **ORDINANCE NO. 1 (Series 2018)**

AN ORDINANCE OF THE CITY OF OURAY, COLORADO, AMENDING CHAPTER NINE OF THE OURAY MUNICIPAL CODE BY THE ADDITION OF A NEW SECTION 9-19 CONCERNING BACKFLOW AND CROSS CONNECTIONS AND PROVIDING PENALTIES FOR THE VIOLATION THEREOF.

Whereas, this Ordinance is intended to protect the City of Ouray water system from contaminants or pollutants that could enter the water distribution system by backflow from a customer's water supply system through the service connection.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF OURAY, COLORADO, as follows:

### SECTION 1.

Chapter 9 of the Ouray Municipal Code is hereby amended by the addition of Section 9-19, as follows.

#### **9-19 Back-Flow and Cross Connections.**

- A. **Applicability.** This Section applies to all connections to the City of Ouray water distribution system whether within the City of Ouray or outside the City. This Section does not apply to single-family (as defined herein) residential service connections unless the City becomes aware of a cross connection at the single-family connection.
  
- B. **Definitions.**
  - 1. "Backflow" means the undesirable reversal of flow of water or mixtures of water and other liquids, gases, or other substances into the City of Ouray water distribution system from any source or sources other than its intended source.
  
  - 2. "Backflow contamination event" means backflow into the City of Ouray water system from an uncontrolled cross connection such that the water quality no longer meets the Colorado Primary Drinking Water Regulations or presents an immediate health or safety risk to the public.
  
  - 3. "Backflow prevention assembly" means any mechanical assembly installed at a water service line or at a plumbing fixture to prevent a backflow contamination event, provided that the mechanical assembly is appropriate

for the identified contaminant at the cross connection and is an in-line field-testable assembly.

4. “Backflow prevention method” means any method and/or non-testable device installed at a water service line or at a plumbing fixture to prevent a backflow contamination event, provided that the method or non-testable device is appropriate for the identified contaminant at the cross connection.
5. “Certified cross-connection control technician” means a person who possesses a current valid Backflow Prevention Assembly Tester certification from one of the following approved organizations: American Society of Sanitary Engineering (ASSE) or the American Backflow Prevention Association (ABPA).
6. “Containment” means the installation of a backflow prevention assembly or a backflow prevention method at any connection to the City of Ouray water system that supplies an auxiliary water system, location, facility, or area such that backflow from a cross connection into the City of Ouray water system is prevented.
7. “Cross connection” means any connection that could allow any water, fluid, or gas to flow from any pipe, plumbing fixture, or a customer’s water system into a the City of Ouray water distribution system or any other part of the City of Ouray water system through backflow.
8. “Customer” means the owner of real property that is connected to the City water distribution system and the agent or tenant of such owner.
9. “Multi-family,” as used in this Section, means a single residential connection to the City of Ouray water distribution system from which two or more separate dwelling units are supplied water.
10. “Owner” means the person or persons identified as the owner of real property in the records of the Ouray County Assessor.
11. “Single-family,” as used in this Section, means:
  - a. A dwelling designed exclusively for and occupied exclusively by one (1) family and supplied by a separate service line; or
  - b. A building comprised of multiple dwelling units where each dwelling unit is supplied by a separate service line.
12. “Uncontrolled” means not having a properly installed and maintained and tested or inspected backflow prevention assembly or backflow prevention

method, or the backflow prevention assembly or backflow prevention method does not prevent backflow through a cross connection.

13. "Water supply system" means a water distribution system, piping, connection fittings, valves and appurtenances within a building, structure, or premises. Water supply systems are also referred to commonly as premise plumbing systems.

C. Requirements.

1. Commercial, industrial, and multi-family service connections shall be subject to a survey for cross connections. If a cross connection has been identified an appropriate backflow prevention assembly or method shall be installed at the customer's water service connection within one-hundred-twenty (120) days of its discovery. The assembly shall be installed downstream of the water meter or as close to that location as deemed practical by the City of Ouray. If the assembly or method cannot be installed within one-hundred-twenty (120) days, the City of Ouray shall take action to control or remove the cross connection, suspended service to the cross connection, or receive an alternative compliance schedule from the Colorado Department of Public Health and Environment.
2. In no case shall it be permissible to have connections or tees between the meter and the containment backflow prevention assembly.
3. In instances where a reduced pressure principle backflow preventer cannot be installed, the customer must install approved backflow prevention devices or methods at all cross-connections within the customer's plumbing system.
4. Backflow prevention assemblies and methods shall be installed in a location that provides access for maintenance, testing, and repair.
5. Reduced pressure principle backflow preventers shall not be installed in a manner subject to flooding.
6. Provisions shall be made to provide adequate drainage from the discharge of water from reduced pressure principle backflow prevention assemblies. Such discharge shall be conveyed in a manner that does not impact waters of the State of Colorado.
7. All assemblies and devices shall be protected to prevent freezing. Those assemblies and methods used for seasonal services may be removed in lieu of being protected from freezing. Devices must be reinstalled and then

tested by a certified cross-connection control technician prior to the service being activated.

8. Where a backflow prevention assembly or method is installed on a water supply system using storage water heating equipment such that thermal expansion causes an increase in pressure, a device for controlling pressure shall be installed.
9. 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.
10. All backflow prevention assemblies and methods, and all required installations within the customer's plumbing system in the cases where containment assemblies and or methods cannot be installed, shall be subject to inspection testing, maintenance, and, as needed, repair and replacement.
11. The cost for design, installation, maintenance, testing, and as needed repair and replacement, shall be borne by the customer.
12. No existing nonconforming cross connection shall be permitted except for fire sprinkler systems where the installation of a backflow prevention assembly or method would compromise the integrity of the fire sprinkler system.
13. For new buildings, all building plans must be submitted to the City of Ouray and approved prior to connection to the water distribution system. Building plans must show:
  - a. Water service type, size and location;
  - b. Meter size and location; and
  - c. Backflow prevention assembly size, type and location.
14. All fire sprinkling lines shall have a minimum protection of an approved double check valve assembly for containment of the system.
15. All glycol (ethylene or propylene), or antifreeze systems shall have an approved reduced pressure principle backflow preventer for containment.
16. Dry fire systems shall have an approved double check valve assembly installed upstream of the air pressure valve.
17. In cases where the installation of a backflow prevention assembly or method would compromise the integrity of the fire sprinkler system the City of

Ouray water system will not require the backflow protection. The City of Ouray will measure chlorine residual at the service connection once a month and perform periodic bacteriological testing at the site. If the City of Ouray determines that water quality issues exist it may require that the fire sprinkler system be flushed periodically.

D. Inspection, Testing, and Repair.

1. Backflow prevention devices or methods shall be tested by a certified cross-connection control technician upon installation and tested at least annually thereafter. Tests shall be made at the expense of the customer.
2. Backflow prevention devices, or methods that are non-testable, shall be inspected at least once annually by a certified cross-connection control technician. Inspections shall be made at the expense of the customer.
3. As necessary, backflow prevention devices shall be repaired and retested or replaced and tested, at the expense of the customer whenever the devices are found to be defective.
4. Testing gauges shall be tested and calibrated for accuracy at least once annually.

E. Reporting and Recordkeeping.

1. Copies of records of test reports, repairs and retests, or replacements shall be kept by the customer for a minimum of three (3) years.
2. Copies of records of test reports, repairs and retests shall be submitted to the City of Ouray by mail, facsimile or electronic mail by the testing company or testing technician.
3. Information on test reports shall include, at a minimum, the following:
  - a. Assembly or method type;
  - b. Assembly or method location;
  - c. Assembly manufacturer, model and serial number;
  - d. Assembly size;
  - e. Test date;
  - f. Test results including all results that would justify a pass or fail outcome;



Officer shall have the power to issue warning notices or a summons and complaint to any person in violation of this Section.

- I. Conflict with Other Law. In the event of any conflict between the provisions of this Section and any state or federal law, rule or regulation, or other City ordinances or regulations, the more stringent shall apply.

SECTION 2: EFFECTIVE DATE

The provisions of this Ordinance shall become effective April 21, 2018.

SECTION 4: SEVERABILITY

If any clause, sentence, paragraph, or part of this ordinance or the application thereof to any person or circumstances shall for any reason be adjudged by a court of competent jurisdiction invalid, such judgment shall not affect application to other persons or circumstances.

INTRODUCED, READ, APPROVED AS INTRODUCED, AND ORDERED PUBLISHED on first reading by unanimous vote of the Ouray City Council this 16<sup>th</sup> day of January, 2018.

CITY OF OURAY, COLORADO

By Pamela J. Larson  
Pamela J. Larson, Mayor

ATTEST:

Beverly Martensen  
Beverly Martensen, Deputy City Clerk

INTRODUCED, READ AND ADOPTED on second reading by \_\_\_\_\_ vote of the Ouray City Council this 19<sup>th</sup> day of March, 2018.

CITY OF OURAY, COLORADO

By *Pamela J. Larson*  
Pamela J. Larson, Mayor

ATTEST:

*Beverly Martensen*  
Beverly Martensen, Deputy City Clerk

**CERTIFICATE OF ATTESTATION**

I, Melissa M. Drake, Ouray City Clerk, hereby certify that Ordinance No.1 (Series No. 2018), was introduced, read and passed by the Ouray City Council on first reading on January 16, 2018. The Ordinance was published, in summary, in the Ouray County Plaindealer on March 1, 2018, and thereafter introduced, read and adopted by the Ouray City Council on March 19, 2018, and thereafter published in the Ouray County Plaindealer, as required by law.

*Beverly Martensen*  
Beverly Martensen, Deputy City Clerk