

ORDINANCE NO. 3

SERIES 2016

**AN ORDINANCE OF THE CRESTED BUTTE TOWN COUNCIL
AMENDING CHAPTER 13, ARTICLE 3 OF THE CRESTED
BUTTE MUNICIPAL CODE TO INCLUDE REGULATIONS FOR
THE INSTALLATION OF BACKFLOW PREVENTION
ASSEMBLIES ON WATER SUPPLY SYSTEMS**

WHEREAS, the Town of Crested Butte, Colorado (the "Town") is a home rule municipality duly and regularly organized and validly existing as a body corporate and politic under and by virtue of the Constitution and laws of the State of Colorado;

WHEREAS, the State of Colorado Department of Public Health and Environment, Water Quality Control Commission (WQCC) has adopted standards in the Colorado Primary Drinking Water Regulations, Section 39 of 5 CCR 1002-11 (the "WQCC Regulations"), for backflow prevention and cross-connection control applicable to all public water systems;

WHEREAS, pursuant to the WQCC Regulations, the Town is required to develop and implement a backflow prevention and cross-connection control program;

WHEREAS, the Town staff has recommended that the Town Council amend the Crested Butte Municipal Code (the "Code") to include regulations developing and implementing a program for backflow prevention and cross-connection control as contemplated in the WQCC Regulations;

WHEREAS, the Town Council has received a Town staff report dated May 2, 2016 recommending that, in order to be in compliance with the WQCC Regulations, the Town Council amend the Town Code as contemplated in this ordinance to include regulations developing and implementing a program for backflow prevention and cross-connection control as contemplated in the WQCC Regulations; and

WHEREAS, the Town Council has determined that the below amendments to the Town Code as proposed by Town staff in this ordinance to include regulations developing and implementing a program for backflow prevention and cross-connection control will bring the Town into compliance with the WQCC Regulations and are, accordingly, in the best interest of the health, safety and general welfare of the residents and visitors of Crested Butte.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF CRESTED BUTTE, COLORADO, THAT,

Section 1. Amending Chapter 13, Article 3. Chapter 13, Article 3 of the Code is hereby amended to add the following new provisions:

**"ARTICLE 3 -
Backflow Prevention and Cross Connection Control Regulations**

Section 13-3-10. Purpose.

The purpose of these regulations is to protect the Town's water system from contaminants or pollutants that could enter the distribution system by backflow from a customer's water supply system through the service connection.

Section 13-3-20. Applicability.

These regulations apply to all commercial, industrial and multi-family residential service connections within the Town and to any persons outside the Town who are, by contract or agreement with the Town, users of the Town's water system. Such persons shall install an appropriate backflow prevention assembly. These regulations do not apply to single-family-residential service connections unless the Town becomes aware of a cross-connection at the single-family connection.

Section 13-3-30. Authority.

The Town shall have the authority to survey all service connections within the water supply system to determine if the connection is a cross-connection. The Town shall have the authority to control all service connections within the water supply system if the connection is a cross-connection. The Town may control any service connections within the water supply system in lieu of a survey as long as the service connection is controlled with an air gap or reduced pressure zone backflow prevention assembly. The Town may collect fees for the administration of this program. The Town shall maintain records of cross-connection surveys and the installation, testing and repair of all backflow prevention assemblies installed for containment and containment by isolation purposes. The Town Manager shall administer, implement and enforce the provisions of these regulations.

Section 13-3-40. Definitions.

The following terms shall have meanings ascribed thereto:

Active date means the first day that a backflow prevention assembly or backflow prevention method is used to control a cross-connection in each calendar year.

Air gap is a physical separation between the free flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel installed in accordance with standard AMSE A112.1.2.

Backflow means the undesirable reversal of flow of water or mixtures of water and other liquids, gases or other substances into the public water systems distribution system from any source or sources other than its intended source.

Backflow containment event means backflow into a public 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 and/or safety risk to the public.

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.

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.

Certified cross-connection control technician means a person who possesses a 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). If a certification has expired, the certification is invalid.

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.

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.

Controlled means having a properly installed, maintained, and tested or inspected backflow prevention assembly or backflow prevention method that prevents backflow through a cross-connection.

Cross-connection means any connection that could allow any water, fluid, or gas such that the water quality could present an unacceptable health and/or safety risk to the public, to flow from any pipe, plumbing fixture, or a customer's water system into a public water system's distribution system or any other part of the public water system through backflow.

Multi-family means a single residential connection to the public water system's distribution system from which two or more separate dwelling units are supplied water.

Single-family means and single dwelling which is: (i) occupied by a single family and is supplied by a separate service line; or (ii) comprised of multiple living units where each living unit is supplied by a separate service line.

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.

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.

Section 13-3-50. Requirements.

(a) 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 and or method shall be installed at the customer's water service connection within 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 Town. If the assembly or method cannot be installed within 120 days the Town will 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.

(b) In no case shall it be permissible to have connections or tees between the meter and the containment backflow prevention assembly. In instances where a reduced pressure principle backflow preventer cannot be installed, the owner must install approved backflow prevention devices or methods at all cross-connections within the owner's plumbing system.

(c) Backflow prevention assemblies and methods shall be installed in a location which provides access for maintenance, testing and repair.

(d) Reduced pressure principle backflow preventers shall not be installed in manner subject to flooding.

(e) 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.

(f) 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. The devices must be reinstalled and then tested by a certified cross-connection control technician prior to the service being activated.

(g) 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.

(h) 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. The Town may, at its election, undertake inspection testing and/or repair of backflow prevention assemblies in its sole discretion. The Town's election to inspect or repair such assemblies shall not limit the owner's responsibilities within this section.

(i) The Town shall require inspection testing, maintenance and as needed repairs and replacement of all backflow prevention assemblies and methods, and of all required installations within the owner's plumbing system in the cases where containment assemblies and or methods cannot be installed.

(j) All costs for design, installation, maintenance, testing and as needed repair and replacement are to be borne by the customer.

(k) No grandfathering is permitted except for fire sprinkler systems where the installation of a backflow prevention assembly or method will comprise the integrity of the fire sprinkler system.

(l) For new buildings, all building plans must be submitted to Town and approved prior to the issuance of water service. Plans must depict:

- i. Water service type, size and location.
- ii. Meter size and location.
- iii. Backflow prevention assembly size, type and location.
- iv. Fire sprinkler system(s) service line, size and type of backflow prevention assembly.
 - a. All fire sprinkling lines shall have a minimum protection of an approved double check valve assembly for containment of the system.
 - b. All glycol (ethylene or propylene), or antifreeze systems shall have an approved reduced pressure principle backflow preventer for containment.
 - c. Dry fire systems shall have an approved double check valve assembly installed upstream of the air pressure valve.
 - d. In cases where the installation of a backflow prevention assembly or method will comprise the integrity of the fire sprinkler system the Town will not require the backflow protection. The Town will measure chlorine residual at the service connection once a month and perform periodic bacteriological testing at the site. If the Town suspects water quality issues the public water system will evaluate the practicability of requiring that the fire sprinkler system be flushed periodically.

Section 13-3-60. Inspection, Testing and Repair.

(a) 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. Any backflow prevention devices or methods that are un-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.

(b) 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.

- (c) Testing gauges shall be tested and calibrated for accuracy at least once annually.

Section 13-3-70. Reporting and Recordkeeping.

(a) Copies of records of test reports, repairs and retests or replacements shall be kept by the customer for a minimum of three (3) years.

(b) Copies of records of test reports, repairs and retests shall be submitted to the Town by mail, facsimile or E-mail by the testing company or testing technician.

(c) Information on test reports shall include, but may not be limited to,

- i. Assembly or method type
- ii. Assembly or method location
- iii. Assembly make, model and serial number
- iv. Assembly size
- v. Test date
- vi. Test results including all results that would justify a pass or fail outcome
- vii. Certified cross-connection control technician certification agency
- viii. Technician's certification number
- ix. Technician's certification expiration date
- x. Test kit manufacturer, model and serial number
- xi. Test kit calibration date

Section 13-3-80. Right-of-entry.

A properly credentialed representative of the Town shall have the right of entry to survey any and all buildings and premises for the presence of cross-connections for possible contamination risk to and for determining compliance with this Article. This right of entry shall be a condition of water service in order to protect the health, safety and welfare of customers throughout the Town's water distribution system.

Section 13-3-90. Compliance.

(a) Customers shall cooperate with the installation, inspection, testing, maintenance, and as needed repair and replacement of backflow prevention assemblies and with the survey process. For any identified uncontrolled cross-connections, the Town shall complete one or more of the following actions within 120 days of its discovery:

- i. Control the cross-connection
- ii. Remove the cross-connection
- iii. Suspend service to the cross-connection
- iv. Charge a monthly water service charge in the amount of four (4) times the EQR base charge for the use, and shall be in violation, subjecting Customer to penalties set forth in the Town Code.

(b) The Town shall give notice in writing to any owner whose plumbing system has been found to present a risk to the Town water distribution system through an uncontrolled cross-connection. The notice and order shall state that the owner must install a backflow prevention assembly or method at each service connection to the owner's premises to contain the water service. The notice and order will give a date by which the owner must comply with the order.

(c) In instances where a backflow prevention assembly or method cannot be installed, the owner must install approved backflow prevention devices or methods at all cross-connections within the owner's water supply system. The notice and order will give a date by which the owner must comply with the order.

Section 13-3-100. Conflict.

If a dispute or conflict arises between any plumbing, mechanical, building, electrical, fire or other code adopted by the Town, then the most stringent provisions of each respective code shall prevail.

Section 13-3-110. Violations and Penalties.

(a) Any person who violates any of the provisions of this Article shall be fined in accordance with the provisions of Section 1-4-20 of this Code.

(b) The use of any land, building or structure, which such use or activity is continued, operated or maintained contrary to any provision of this Article shall be unlawful. The Town may institute injunction, abatement or any other appropriate action to prevent, enjoin, abate or remove such violation. Such action may also be maintained and instituted by any property owner who is damaged by a violation of this Article.

(c) The remedies herein provided shall be cumulative and not exclusive and shall be in addition to any other remedies provided by law."

Section 2. Amending Section 13-1-250. – Construction Standards. Section 13-1-250(a)(8) is hereby deleted in its entirety and replaced with the following new subsection:

"(8) No more than one (1) residential unit shall be allowed to use a single service line or tap-in, and each separate building on each property shall be tapped into the Town water supply system using a separate and individual service line and tap. The above provisions may be waived in writing at the sole discretion of and by the Town Manager for good cause shown."

Section 3. Severability. If any section, sentence, clause, phrase, word or other provision of this ordinance is for any reason held to be unconstitutional or otherwise invalid, such holding shall not affect the validity of the remaining sections, sentences, clauses, phrases, words or other provisions of this ordinance, or the validity of this ordinance as an entirety, it being the legislative intent that this ordinance shall stand notwithstanding the invalidity of any section, sentence, clause, phrase, word or other provision.

Section 4. Savings Clause. Except as amended hereby, the Crested Butte Municipal Code, as amended, shall remain valid and in full force and effect. Any provision of any ordinance previously adopted by the Town which is in conflict with this ordinance is hereby repealed as of the enforcement date hereof.

INTRODUCED, READ AND SET FOR PUBLIC HEARING THIS 2nd DAY OF May, 2016.

ADOPTED BY THE TOWN COUNCIL UPON SECOND READING IN PUBLIC HEARING THIS 16th DAY OF May, 2016.

TOWN OF CRESTED BUTTE, COLORADO

By: Glenn Michel
Glenn Michel, Mayor

ATTEST:

Lynelle Stanford
Lynelle Stanford, Town Clerk

(SEAL)

