

Ordinance NO. 19-18

AN ORDINANCE AMENDING CHAPTER 13 OF THE TOWN OF ELIZABETH MUNICIPAL CODE BY THE ADDITION THERETO OF A NEW ARTICLE VII TO CHAPTER 13 ADOPTING A CROSS-CONNECTION CONTROL PROGRAM TO IMPLEMENT REGULATION 11 ARTICLES 11.37 AND 11.39 OF THE COLORADO PRIMARY DRINKING WATER REGULATIONS

WHEREAS, Regulation 11 (5CCR 1002-11) Article 11.37 and 11.39 Colorado Primary Drinking Water Regulations state that a public water supply system shall have no uncontrolled cross-connection to a pipe, fixture, or supply, any of which contain water not meeting provisions of the drinking water regulations;

WHEREAS, the Town of Elizabeth has the authority to implement and maintain a cross-connection control program as contained in this ordinance; and

WHEREAS, the Board of Trustees of the Town of Elizabeth, Colorado has determined that it is in the best interest of the Town to amend the Municipal Code of the Town of Elizabeth, Colorado by the adoption of this ordinance.

NOW, THEREFORE, IT BE ORDAINED BY THE BOARD OF TRUSTEES OF THE TOWN OF ELIZABETH, COLORADO:

Section 1: The Elizabeth Municipal Code is amended by the addition thereto of a new Article VII of Chapter 13, entitled: "CROSS-CONNECTION CONTROL PROGRAM" which is to read as follows.

ARTICLE VII

Cross-Connection Control Program

Sec. 13-7-10. Purpose.

(1) Protect the public potable water supply system of the Town of Elizabeth from the possibility of contamination or pollution by isolating or containing within the consumer's internal distribution system(s) or the consumer's private water system(s) such contaminants or pollutants that could backflow into the public water system;

(2) To promote the elimination or control of existing cross-connections, actual or potential, between the consumer's in-plant/in-house potable water system(s) and non-potable water system(s), plumbing fixtures, be it residential, commercial, or industrial system; and

(3) To provide for the maintenance of a continuing cross-connection control program that will systematically and effectively prevent the contamination or pollution of all potable water systems.

Sec. 13-7-20. Authority.

(1) The authority to implement this program is contained in the following regulatory provisions:

- a. Article 1-114 and Article 1-114.1 of Title 25 of the Colorado Revised Statutes (CRS);
- b. Regulation 11 (5CCR 1002-11) Article 11.37 and 11.39 of Colorado Primary Drinking Water Regulations; and
- c. Colorado Plumbing Code.

(2) The Town of Elizabeth shall have the authority to survey all service connections within the distribution system to determine if the connection is a cross-connection.

(3) The Town of Elizabeth shall have the authority to control all service connections within the distribution system if the connection is a cross-connection.

(4) The Town of Elizabeth may control any service connections within the distribution system in lieu of a survey, as long as service connection is controlled with an air gap or reduced pressure zone backflow prevention assembly.

(5) The Town of Elizabeth may collect fees for the administration of this program.

(6) The Town of Elizabeth shall maintain records of cross-connection surveys and installation, testing and repair of all backflow prevention assemblies installed for containment and containment by isolation purposes.

(7) Except as otherwise provided herein, the Town of Elizabeth shall administer, implement and enforce the provisions of this ordinance.

(8) The Town of Elizabeth shall be responsible for the protection of the Town's potable water supply distribution system from contamination or pollution due to the backflow of contaminants or pollutants through the water service connection. If, in the judgement of the Town of Elizabeth, an approved backflow prevention assembly is required at the consumer's water service connection; or within the consumer's private water system for the safety of the Town water supply system, the Town of Elizabeth shall give written notice to said consumer to install such an approved backflow prevention assembly(s) at specific location(s) on his or her premises. The consumer shall install such approved assembly(s) within the time frame set forth in the written notice and at his or her own expense; and, failure, refusal, or inability of the consumer to install, have tested, and maintain said assembly(s) shall constitute grounds for discontinuing water service to the premises until requirements have been satisfactorily fulfilled.

Sec. 13-7-30 Applicability.

This ordinance applies to all commercial, industrial, multi-family and single-family residential service connections within the Town public water system and to any persons outside the Town who are, by contract or agreement with the Town public water system, users of the Town public water system.

Sec. 13-7-40 Definitions.

"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 CONTAMINATION 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 the 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 (2) or more separate dwelling units are supplied water.

"SINGLE-FAMILY" means:

- a. A single dwelling which is occupied by a single family and is supplied by a separate service line; or
- b. A single dwelling 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.

Sec. 13-7-50. Requirements.

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 public water system. If the assembly or method cannot be installed within 120 days, the public water system must 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.

(1) In no case shall it be permissible to have connections or tees between the meter and the containment backflow prevention assembly.

- a. 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.
- b. Backflow prevention assemblies and methods shall be installed in a location which provides access for maintenance, testing and repair.
- c. Reduced pressure principle backflow preventers shall not be installed in a manner subject to flooding.
- d. 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 which does not impact waters of the state.
- e. 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.
- f. Where 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.
- g. All backflow prevention assemblies shall be tested at the time of installation and on an annual schedule of June 15th thereafter. Such tests must be conducted by a Certified Cross-Connection Control Technician.
- h. The public water system 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.
- i. All costs for design, installation, maintenance, testing and as needed repair and replacement are to be borne by the customer.
- j. No "grandfather" clauses exist except for fire sprinkler systems where the installation of backflow prevention assembly or method will compromise the integrity or the fire sprinkler system.
- k. For new buildings, all building plans must be submitted to the public water system and approved prior to the issuance of water service. Building plans must show:
 - i. Water service type, size and location;
 - ii. Meter size and location;

- iii. Backflow prevention assembly size, type and location; and
- 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 backflow prevention assembly or method will compromise the integrity of the fire sprinkler system the public water system can choose to not require the backflow protection. The public water system will measure chlorine residual at location representative of the service connection once a month and perform periodic bacteriological testing at the site. If the public water system suspects water quality issues, the public water system will evaluate the practicability of requiring that the fire sprinkler system be flushed periodically.

Sec. 13-7-60. Inspection, Testing and Repair.

(1) Backflow prevention assemblies or methods shall be tested by a Certified Cross-Connection Control Technician upon installation and tested at least annually, thereafter. The tests shall be made at the expense of the customer.

(2) Any backflow prevention assemblies or methods that are non-testable, shall be inspected at least once annually on or before June 15th by a certified cross-connection control technician. The inspections shall be made at the expense of the customer.

(3) As necessary, backflow prevention assemblies or methods shall be repaired and retested or replaced and tested at the expense of the customer whenever the assemblies or methods are found to be defective.

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

Sec. 13-7-70. 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 public by mail, facsimile or e-mail by the testing company or testing technician.

- (3) Information on test reports shall include, but may not be limited to:
 - a. Assembly or method type;
 - b. Assembly or method location;
 - c. Assembly make, model and serial number;
 - d. Assembly size;
 - e. Test date;
 - f. Test results including all results that would justify a pass or fail outcome;
 - g. Certified cross-connection control technician certification agency;
 - h. Technician's certification number;
 - i. Technician's certification expiration date;
 - j. Test kit manufacturer, model and serial number; and
 - k. Test kit calibration date.

Sec. 13-7-80. Right of Entry.

(1) The Town representative and/or his designee assigned to inspect premises relative to possible hazards shall carry proper credentials of his or her office and, upon exhibit of which, said representative shall have the right of entry to inspect any and all buildings and premises for cross-connections, meter inspections, and meter repairs in the performance of his or her duties. If such entry is refused, the Town administrative authority or the designated authorized representative thereof shall have recourse to every remedy provided by law to secure entry, including disconnecting/shut-off water service until entry is allowed.

(2) This right of entry shall be a condition of water service in order to provide assurance that the health, safety and welfare of the people throughout the Town public water distribution system are maintained. Where building security is required, the backflow, backflow assemblies and meters should be located in an area not subject to security. Questions regarding proper credentials should be directed to the Town of Elizabeth Public Works Director.

Sec. 13-7-90. Compliance.

(1) Customers shall cooperate in the installation, maintenance, testing, and reporting of backflow prevention assemblies, water meters, cross-connection survey's and water sampling that is deemed needed by the Town of Elizabeth. Failure to comply with any such requests shall be grounds for water service discontinuation or separation from public water supply.

(2) Service of water to any premises may be discontinued by the Town of Elizabeth if unprotected cross-connections exist on the premises, if any defect is found in an installed backflow prevention assembly or if a backflow prevention

assembly has been removed or bypassed. Services shall not be restored until such conditions or defects are corrected to the satisfaction of the licensed public water supply Operator in Responsible Charge of the Town water supply system.

(3) Discontinuance of service may be immediate and without written notice whenever, in the judgement of the Town Administrator or the designated representative thereof, upon the recommendation from the Operator in Responsible Charge of the Town water supply system or a registered certified cross-connection control program technician deems such action necessary to protect the purity of the Town public water supply system or any parts thereof.

(4) The Town reserves the right to have non-compliant property tested by a certified tester and back charged through the water utility billing.

Sec. 13-7-100. Requirements of the Consumer.

(1) Cross-Connections(s). The consumer shall be responsible for the elimination or protection of all cross-connections (known or unknown by the water Department) on his/her premises by an approved backflow device at his/her expense. Such backflow device expenses shall include installation, maintenance, protection, testing, repair, removal or replacement of said device(s) as required by the Water Department as a condition of service.

(2) Back-flow Assembly. The consumer or those occupying any premise shall not bypass disable, remove, or modify any backflow device without written consent by the Water Department. Any such modifications shall result in termination of service.

(3) Fire Suppression System Design and Installation. The consumer or those designated by him or her will comply with current N.F.P.A. standards and/or the current Water Department Water Specifications, as amended, when designing, installing and maintaining any fire suppression system as a condition of service. The consumer and/or those whom are designated for the design and installation of the system will need to provide verification of approval by the Elizabeth Fire District.

Sec. 13-7-110. Plan approval.

(1) All building and/or construction plans involving water/sewer service, plumbing plans for additions or alterations to existing plumbing systems, and/or irrigation system installation submitted to the Town shall be reviewed by the Water Department and/or its designee and approved prior to issuance of a permit. Two (2) submitted plans must show:

- a. The service address and/or legal description of property being served;
- b. The water service type, size and location;
- c. Meter type, size and location;
- d. Types of water use during occurring at the property; and

- e. Sizes, types, manufacturer, model, and locations of all containment and isolation backflow prevention assemblies.

Sec. 13-7-120. Fees.

The Board of Trustees may establish and adopt a schedule of fees to be paid by the developer/builder to defray the expenses of the Town in reviewing plans and/or inspecting work. Further, the Town may charge a reasonable fee for copies of any documents.

Sec. 13-7-130. Penalties.

Any person, whether as principal, agent, employee or otherwise, who violates any of the provisions of Article VII of this Chapter shall be subject to the general penalties as set forth in Section 1-4-20 of this Code.

Sec. 13-7-140. Conflict with other Codes.

If a dispute or conflict arises between the Colorado Plumbing Code as adopted herein, and any plumbing, mechanical, building, electrical, fire or other code adopted by the State, the most stringent provisions of each perspective code shall prevail.

Section 2. Severability. If any section, paragraph clause, or provision of this Ordinance shall for any reason be held to be invalid or unenforceable, the invalidity or enforceability of such section, paragraph, clause or provision shall not affect any of the remaining provisions of this Ordinance, the intent being that the same are severable.

Section 3. The Board of Trustees hereby finds, determines and declares that this Ordinance is promulgated under the general police power of the Town, that it is promulgated for the health, safety, and welfare of the public. And that this Ordinance is necessary for the preservation of health and safety and for the protection of the public convenience and welfare. The Board of Trustees further determines that the Ordinance bears a rational relation to the proper legislative object sought to be attained.

Section 4. This Ordinance shall become effective thirty (30) days after its publication.

Read and approved at a meeting of the Board of Trustees of the Town of Elizabeth, Colorado, this _____ day of _____, 2019.

Passed by a vote of _____ for and _____ against and ordered published.

Megan Vasquez, Mayor

ATTEST:

Michelle M. Oeser, Town Clerk