

Sec. 25.16.035. Backflow prevention and cross-connection control.

(a) The purpose of this backflow prevention and cross-connection control program is to protect the City'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. As a supplier of public drinking water, the City of Aspen has the authority to survey all service connections within the City's water distribution system to determine whether any connection is a cross-connection; to control all service connections within the distribution system that are cross-connections; to charge a fee for the administration of the cross-connection control program; to maintain records of surveys and the installation, testing and repair of all backflow prevention assemblies permitted or required under this program; and to administer, implement and enforce the provisions of this cross-connection control program.

(b) The provisions of this section apply to all commercial, industrial, multi-family, and single family residential service connections with the City's potable water system.

(c) Definitions:

(1) "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.

(2) "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.

(3) "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.

(4) "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.

(5) "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 or pollutant at the cross connection and is an in-line field-testable assembly.

(6) "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 or pollutant at the cross connection.

(7) "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.

(8) “CONTAINMENT” means the installation of a backflow prevention assembly or a backflow prevention method at any connection to the City’s water system that supplies an auxiliary water system, location, facility, or area such that backflow from a cross connection into the City’s water system is prevented.

(9) “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 City’s water system is prevented.

(10) “CONTROLLED” means having an appropriate and properly installed, maintained, and tested or inspected backflow prevention assembly or backflow prevention method that prevents backflow through a cross connection.

(11) “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

(12) “MULTI-FAMILY” means a single residential connection to the City water system’s distribution system from which two or more separate dwelling units are supplied water.

(13) “SERVICE CONNECTION” – means any connection of a water supply or premises plumbing system to the City of Aspen’s water distribution or system.

(14) “SINGLE-FAMILY” means:

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

(15) “UNCONTROLLED” means not having an appropriate and/or 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.

(16) “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 premises plumbing systems.

(d) Requirements:

(1) Commercial, industrial, multi-family, and single 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 ninety (90) 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 ninety (90) days, the Utilities Department shall take action to control or remove the cross connection, suspend service to the cross connection, and/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, unless such connections or tees are adequately controlled to achieve containment by isolation.

- i. In instances in which an appropriate backflow preventer cannot be installed to achieve containment, the property owner must install approved backflow prevention devices or methods at all cross-connections within the premises plumbing system to achieve containment by isolation.

(3) Backflow prevention assemblies and methods shall be installed in a location which provides access for maintenance, testing and repair, and in accordance with the guidelines and requirements set forth in the Plumbing Code currently observed by the City of Aspen.

(4) Reduced pressure principle backflow preventers shall not be installed in a manner or location that is subject to flooding.

(5) 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.

(6) All assemblies and methods shall be protected to prevent freezing. Those assemblies and methods used for seasonal services may be removed upon cessation of those seasonal services in lieu of being protected from freezing. Any and all assemblies and methods that are removed from seasonal points of service in lieu of being protected from freezing must be reinstalled and tested by a certified cross connection control technician prior to recommencing seasonal service.

(7) 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, an approved, listed, and adequately sized expansion tank or other approved device having a similar function to control thermal expansion shall be installed.

(8) All backflow prevention assemblies shall be inspected and tested at the time of installation, and inspected and tested at least once annually thereafter. Such tests must be conducted by a Certified Cross-Connection Control Technician.

(9) The City Utilities Department shall require inspection, testing, maintenance and as needed repairs and replacement of all backflow prevention assemblies and methods, and of all required installations within a customer's premises plumbing system in the cases where containment assemblies and or methods cannot be installed.

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

(11) No grandfather clauses exist except for fire sprinkler systems in which the installation of a backflow prevention assembly or method will compromise the integrity of the fire sprinkler system.

(12) All building plans for new buildings must be submitted to the City of Aspen Water and Engineering Departments for review, and must be approved by both Departments prior to the provision of water service. Building plans must show:

- i. Water service type, service line size, and location;
- ii. Water meter size and location;
- iii. Backflow prevention assembly size, type, and location;
- iv. Fire sprinkler system type, line size, location, and type of backflow prevention assembly.

(13) All fire sprinkler lines shall have a minimum protection of an approved double check valve assembly for containment of the system.

(14) All glycol (ethylene or propylene), or antifreeze systems shall have an approved reduced pressure principle backflow preventer for containment.

(15) Dry fire systems shall have an approved double check valve assembly installed upstream of the air pressure valve.

(16) In cases wherein the installation of a backflow prevention assembly or method will compromise the integrity of the fire sprinkler system, the City Utilities Department can choose to not require the backflow protection. In such cases, the City Utilities Department will measure chlorine residual at a location representative of the service connection once a month and perform periodic bacteriological testing at the site. If the City Utilities Department suspects water quality issues, the Department will evaluate the practicability of requiring that the fire sprinkler system be flushed periodically and require such flushing where practicable.

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

(1) Any backflow prevention assemblies or methods that are non-testable shall be inspected at least once annually by a certified cross-connection control technician and replaced at least every five years by a master plumber. The inspections and replacements shall be made at the expense of the customer.

(2) 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.

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

(f) 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 Utilities Department by mail, e-mail, or hand-delivery by the testing company or testing technician.

(3) 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; and
- 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

(4) The Utilities Department must notify the Colorado Department of Public Health and Environment's Water Quality Control Division ("CDPHE") of any suspected or confirmed backflow contamination event and consult with the CDPHE on any appropriate corrective measures no later than 24 hours after learning of the backflow contamination event. The Utilities Department shall notify the CDPHE within 48 hours after it becomes aware of any backflow prevention and cross-connection control violation or any backflow prevention and cross-connection control treatment technique violation. The CDPHE shall distribute public notice of violations as specified in and required by Colorado Primary Drinking Water Regulation 11.

(g) A properly credentialed representative of the City Utilities Department shall have the right of entry to survey any and all buildings and premises for the presence of cross-connections and/or possible contamination risks or hazards, and for determining compliance with this section. This right of entry shall be a condition of water service from the City in order to protect the health, safety, and welfare of customers throughout the City's water distribution system.

(h) Compliance:

(1) 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 Utilities Department shall complete one of the following actions within ninety (90) days of its discovery:

- i. Control the cross connection
- ii. Remove the cross connection
- iii. Suspend service to the cross connection

(2) The Utilities Department shall give notice of violation in writing to any owner whose plumbing system has been found to present a risk to the City's water distribution system through any uncontrolled cross connection(s). The notice shall state that the owner must install a backflow prevention assembly or method at each service connection to the owner's premises to achieve containment, or that the owner must install a backflow prevention assembly on each cross-connection hazard on the premises plumbing system to achieve containment by isolation. The notice of violation will give a date by which the owner must comply.

- i. In instances in which a backflow prevention assembly or method cannot be installed to achieve containment, the owner must install approved backflow prevention assemblies or methods at all cross-connections within the owner's water supply system to achieve containment by isolation. The notice of violation will give a date by which the owner must comply.

(3) On or before May 1, 2017, and on or before May 1 of each year thereafter, the Utilities Department shall develop and submit to the Colorado Department of Public Health and Environment its written backflow prevention and cross-connection control annual report for the prior calendar year, as required by Colorado Primary Drinking Water Regulation 11.

(i) Violations and Penalties:

(1) It shall be unlawful for any City water customer to operate the customer's premises plumbing system or water supply system contrary to or in violation of any of the provisions of this Code.

(2) A violation of any of the provisions of the Code shall constitute a misdemeanor, punishable upon conviction by a fine, imprisonment, or both a fine and improvement, as set forth in Section 1.04.080 of this Code. A separate offense shall be deemed committed on each day or portion thereof that the violation of any of the provisions of this Code occurs or continues unabated after the time limit set for abatement of the violation.

(3) Failure to comply with the terms of this Article, including but not limited to failure to pay the necessary fees, charges and taxes, and failure to otherwise comply with the terms of this Article shall constitute an offense and a violation thereof. Every person violating this

Article shall be punished, upon conviction, by a fine of not less than Fifty Dollars (\$50.00) nor more than Five Hundred Dollars (\$500.00), or by imprisonment for not more than ten (10) days, or both such fine and imprisonment for each offense. Delinquency for each calendar month shall constitute a separate offense. (Ord. No. 38-2016)

Sec. 25.16.040. Receipts.

On payment of any water rates or charges, the Finance Department shall issue a receipt therefor stating the date of payment, the amount of money received, from whom received and on what premises the water was used. (Code 1971, § 23-105; Ord. No. 27-1985, § 1; Ord. No. 30-2012 §31)

Sec. 25.16.050. Liability for payment; lien and court action for nonpayment.

(a) The Water Department shall disconnect the water service to any consumer who fails to pay any water service charges, utility investment charges, or utilities review fees fifteen (15) days after their due date.

(b) All the rates and charges specified in this Chapter shall be paid by the owner of the premises on which the water is used. All such water rates and charges from the time such shall be due and chargeable shall become and remain a lien upon the premises until such rates or charges shall be paid. Water rates and charges may be collected against any owner by suit, such action to be in the name of the City in any court having jurisdiction thereof and to be prosecuted as an action at law personally against such owner or by a suit in equity for the enforcement of such lien.

(c) Any lien for unpaid water rates and charges against any premises may also be collected as provided by the statutes of the State for the collection of taxes and other liens and assessments against real estate. (Code 1971, § 23-106; Ord. No. 27-1985, § 1; Ord. No. 30-2012 §32, Ord. No. 38-2016.)

Sec. 25.16.060. Water service connect and disconnect charges.

A service charge of forty dollars (\$40.00) is hereby established for each new account that is setup for water service. If a disconnection is made in accordance with Section 25.16.050 above because of nonpayment of water service charges, utility investment charges or utilities review fees, the disconnect charge of sixty dollars (\$60.00) shall be due prior to reconnection of water service. (Code 1971, § 23-107; Ord. No. 27-1985, § 1; Ord. No. 53-1992, § 1; Ord. No. 68-1994, § 13; Ord. No. 45-1999, § 16 [part]; Ord. No. 30-2012 §33; Ord. No 38-2014, §9, Ord. No. 38-2016)

Section 25.16.061. Discontinuance of service.

(a) Grounds for discontinuance. If any utility service charges remain unpaid for fifteen (15) days after their due date, the City may terminate service for the type of utility service for which payment has not been made. In addition, the City may terminate a utility service for violation of any rule or regulation concerning such utility as set forth in this Title.

(b) Notice of termination. In order to terminate any services the City shall send a notice of termination by first class mail or, at the City's option, by certified mail, return receipt requested, or by posting in a conspicuous place at or near the main entrance to the premises served by such utility service to the customer listed on the City records and, at the City's option, to the occupant of the premises served and/or the owner of the premises served.