

ORDINANCE NO. 211
SERIES 2017

AN ORDINANCE REQUIRING CROSS SECTIONS AND BACKFLOW PREVENTIONS

WHEREAS, it is necessary for the Town of Dove Creek to control cross connections within the Town's water system as a matter of State Law and rules and regulations; and,

WHEREAS, this is a matter of immediate concern for the health, safety and welfare of the Town's citizen's and is adapted on an emergency basis.

NOW THEREFORE, be it ordained by the Town Board of Trustees of the Town of Dove Creek, Colorado the following ordinance at 1st reading with a public hearing at that time.

Cross-Connection Control

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1. General Policy

This policy addresses Article 12 of the Colorado Primary Drinking Water Regulations that states a public water system shall have no uncontrolled cross-connections to a pipe, fixture or supply, any of which contain water not meeting provisions of the drinking water regulations. A cross-connection is any point in a water distribution system where chemical, biological or radiological contaminants may come into contact with potable water. During a backflow event, these contaminants can be drawn or pushed back into the potable water system. A backflow

prevention device installed at every point of cross-connection prevents contaminated water from entering the potable water distribution system. Any hazardous cross-connection discovered to be uncontrolled will be corrected within ten (10) days, or the water service will be shut off. The Colorado Department of Public Health and Environment will be informed of the hazardous cross-connection and corrective action being taken.

2. Public Education

(a) The Town will educate system users about the potential health risk that cross-connections pose, with an emphasis on cross-connections at or within homes and other residences.

(b) A copy of the Colorado Cross-Connection Control Manual will be available for review during normal business hours at the Town Hall.

3. Purpose

The purpose of this Article is to:

(1) Protect the public potable water supply from contamination or pollution by containing, within the consumer's internal distribution system or private water system, contaminants or pollutants which could backflow through the service connection into the public potable water supply system.

(2) Promote the elimination, containment, isolation or control of existing cross-connections, actual or potential, between the public or consumer's potable water system and nonpotable water systems, plumbing fixtures and industrial process systems.

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

4. Application

This Article shall apply to all premises served by the public potable water system of the Town. No grandfather clause exists. All laws and regulations apply regardless of the age of the facility.

5. Interpretation

(a) The water purveyor will reasonably interpret this Article. It is the water purveyor's intent to recognize the varying degrees of hazard and to apply the principle that the degree of protection shall be commensurate with the degree of hazard.

(b) The water purveyor shall be primarily responsible for protection of the public potable water distribution system from contamination or pollution due to backflow of contaminants or pollutants through the water service connection. The cooperation of all consumers is required to implement and maintain the program to control cross-connections. The water purveyor and consumer are jointly responsible for preventing contamination of the water system.

(c) If, in the judgment of the water purveyor or his authorized representative, cross-connection

protection is required through either piping modification or installation of an approved backflow prevention device, due notice shall be given to the consumer. The consumer shall immediately comply by providing the required protection at his own expense, and failure, refusal or inability on the part of the consumer to provide such protection shall constitute grounds for discontinuing water service to the premises until such protection has been provided.

6. Definitions

The definitions listed below shall apply in the interpretation and enforcement of this Article.

Air gap separation means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture or other device and the overflow level rim of the receptacle, and shall be at least double the diameter of the supply pipe measured vertically above the flood level rim of the vessel, but in no case less than one (1) inch.

Auxiliary water supply means any water source or system, other than the public water supply, that may be available to the building or premises.

Backflow means the flow, other than the intended direction of flow, of any foreign liquids, gases or substances into the distribution system of a public water supply.

Backflow prevention assembly means any double-check valve or reduced-pressure principal backflow preventer having resilient-seated shut-off valves on both the upstream and downstream ends and the necessary test cocks as integral parts of the assembly.

Consumer means the owner or person in control of any premises supplied by or in any manner connected to a public water system.

Containment means protection of the public water supply by installing a backflow prevention assembly or air gap separation on the main service line to a facility.

Contamination means an impairment of the quality of the water by sewage, process fluids or other wastes to a degree that could create an actual hazard to the public health through poisoning or through spread of disease by exposure.

Cross-connection means any physical link between a potable water supply and any other substance, fluid or source which makes possible contamination of the potable water supply due to the reversal of flow of the water in the piping or distribution system.

Hazard, degree of means an evaluation of the potential risk to public health and the adverse effect of the hazard upon the potable water system.

Hazard, health means any condition, device or practice in the water supply system and its operation which could create a danger to the health and well-being of the water consumer.

Hazard, plumbing means a plumbing-type cross-connection in a consumer's potable water system that has not been properly protected by a vacuum breaker, air gap separation or backflow prevention assembly.

Hazard, pollutional means an actual or potential threat to the physical properties of the water system or to the potability of the public or the consumer's potable water system, which would constitute a nuisance or be aesthetically objectionable or could cause damage to the system or its appurtenances, but would not be dangerous to health.

Hazard, system means an actual or potential threat of severe damage to the physical properties of the public potable water system or the consumer's potable water system, or of a pollution or contamination which would have a protracted effect on the quality of the potable water in the system.

Industrial process system means any system containing a fluid or solution, which may be chemically, biologically or otherwise contaminated or polluted in a form or concentration such as would constitute a health, system, pollutional or plumbing hazard if introduced into a potable water supply.

Isolation means protection of a facility's internal plumbing system by installing a backflow prevention assembly, air gap separation or other backflow prevention device on an individual fixture, appurtenance or system.

Pollution means the presence of any foreign substance (organic, inorganic or biological) in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness of the water to a degree which does not create an actual hazard to the public health but which does adversely and unreasonably affect such water for domestic use.

Public potable water system means any publicly or privately owned water system supplying water to the general public, which is satisfactory for drinking, culinary and domestic purposes and meets the requirements of the Colorado Department of Public Health and Environment.

Service connection means the terminal end of a service line from the public water system. If a meter is installed at the end of the service, then the *service connection* means the downstream end of the meter.

Water purveyor means the owner, operator or individual in responsible charge of a public water system.

7. Cross-Connections Prohibited

(a) No water service connection shall be installed or maintained on any premises where actual or potential cross-connections to the public potable or consumer's water system may exist, unless such actual or potential cross-connections are abated or controlled to the satisfaction of the water purveyor, and as required by the laws and regulations of the Colorado Department of Public Health and Environment.

(b) No connection shall be installed or maintained whereby an auxiliary water supply may enter a public potable or consumer's water system, unless the water purveyor and the Colorado Department of Public Health and Environment have approved such auxiliary water supply and the method of connection and use of such supply.

(c) No water service connection shall be installed or maintained on any premises in which the plumbing system, facilities and fixtures have not been constructed and installed using acceptable plumbing practices considered by the water purveyor as necessary for the protection of health and safety.

8. Survey, Investigations and Right of Entry

(a) A representative of the Town will carry proper credentials of his office. By previously arranged appointment and upon presentation of proper credentials, the representative shall have the right of entry to inspect any and all buildings and premises for cross-connections

relative to possible hazards. This right of entry shall be a condition of water service in order to protect the health, safety and welfare of the customers throughout the Town's distribution system. Where building security is required, the backflow assembly should be located in an area not subject to security. Questions regarding proper credentials should be directed to the Department of Public Works.

(b) The Department of Public Works may request an administrative search warrant for the purposes of inspecting buildings and premises for cross-connections relative to possible hazards. Application shall be made to the Municipal Court, which, upon proper showing, may grant a search warrant to the Department of Public Works for the purposes of inspection.

(c) On request by the water purveyor or his authorized representative, the consumer shall furnish information on water use practices within his premises.

(d) It shall be the responsibility of the water consumer to conduct periodic surveys of water use practices on his premises to determine whether there are actual or potential cross-connections to his water system through which contaminants or pollutants could backflow into his or the public potable water system.

9. Type of Protection Required

The type of protection required by this Article shall depend on the degree of hazard which exists, as follows:

(1) An approved air gap separation shall be installed where the public potable water system may be contaminated with substances that could cause a severe health hazard.

(2) An approved air gap separation or an approved reduced-pressure principal backflow prevention assembly shall be installed where the public potable water system may be contaminated with a substance that could cause a system or health hazard.

(3) An approved air gap separation or an approved reduced-pressure principal backflow prevention assembly or an approved double-check valve assembly shall be installed where the public potable water system may be polluted with substances that could cause a pollution hazard that is not dangerous to health.

10. Where Protection Required

(a) An approved backflow prevention assembly shall be installed on each service line to a consumer's water system serving premises where, in the judgment of the water purveyor or the Colorado Department of Public Health and Environment, actual or potential hazards to the public potable water system exist. The type and degree of protection required shall be commensurate with the degree of hazard.

(b) An approved air gap separation or reduced-pressure principal backflow prevention assembly shall be installed at the service connection or within any premises where, in the judgment of the water purveyor or the Colorado Department of Public Health and Environment, the nature and extent of activities on the premises, or the materials used in connection with the activities or materials stored on the premises, would present an immediate and dangerous hazard to health should a cross-connection occur, even though such cross-connection may not exist at the time the backflow prevention device is required to

be installed. This includes, but is not limited to, the following situations:

- (1) Premises having an auxiliary water supply, unless the quality of the auxiliary supply is acceptable to the water purveyor and the Colorado Department of Public Health and Environment.
- (2) Premises having internal cross-connections that are not correctable or intricate plumbing arrangements which make it impractical to ascertain whether or not cross-connections exist.
- (3) Premises where entry is restricted so that inspections for cross-connections cannot be made with sufficient frequency or at sufficiently short notice to assure that the cross-connections do not exist.
- (4) Premises having a repeated history of cross-connections being established or reestablished.
- (5) Premises which, due to the nature of the enterprise therein, are subject to recurring modification or expansion.
- (6) Premises on which any substance is handled under pressure so as to permit entry into the public water supply or where a cross-connection could reasonably be expected to occur. This shall include the handling of process waters and cooling waters.
- (7) Premises where materials of a toxic or hazardous nature are handled such that, if back siphonage or backpressure should occur, a serious health hazard may result.

(c) The types of facilities listed in Section 13-3-120 below fall into one (1) or more of the categories of premises where an approved air gap separation or reduced-pressure principal backflow prevention assembly is required by the water purveyor and the Colorado Department of Public Health and Environment to protect the public water supply and must be installed at these facilities, unless all hazardous or potentially hazardous conditions have been eliminated or corrected by other methods to the satisfaction of the water purveyor and the Colorado Department of Public Health and Environment.

11. Backflow Prevention Assemblies

(a) Any cross-connection or backflow prevention assembly required to protect the facilities listed in Section 13-3-120 below or other facilities recognized and designated by the inspecting official shall be of a model or construction approved by the water purveyor and the Colorado Department of Public Health and Environment.

- (1) Air gap separation to be approved shall be at least twice the diameter of the supply pipe, measured vertically above the top rim of the vessel, but in no case less than one (1) inch.
- (2) A double-check valve assembly or a reduced-pressure principal backflow prevention assembly shall be approved by the water purveyor and shall appear on the current list of approved backflow prevention assemblies established by the Colorado Department of Public Health and Environment. The Colorado Department of Public Health and Environment accepts the use of backflow prevention devices that have received approval by either the University of Southern California Foundation of Cross-Connection Control and Hydraulic Research or the American Society of Sanitary Engineers.

(b) Existing backflow prevention assemblies approved by the water purveyor at the time of installation and properly maintained shall, except for inspection and maintenance requirements, be excluded from the requirements of this Article so long as the water purveyor is assured that they will satisfactorily protect the water system. Whenever the existing assembly is moved from its present location or requires more than minimum maintenance, or when the water purveyor finds that the maintenance constitutes a hazard to health, the unit shall be replaced by a backflow prevention assembly meeting the requirements of this Article.

12. Facilities Representing Cross-Connection Hazards

The following are types of facilities which represent cross-connection hazards:

- (1) Automotive repair businesses, including those plants which repair motorcycles, automobiles, trucks, recreational vehicles and construction and agricultural equipment.
- (2) Potable water-dispensing stations which are served by a public water system.
- (3) Portable tanks for transporting water taken from a public water system.
- (4) Beverage bottling plants, including dairies and breweries.
- (5) Canneries, packing houses and plants.
- (6) Car washes.
- (7) Chemical, biological and radiological laboratories, including those in high schools, trade schools, colleges, universities and research institutions.
- (8) Hospitals, clinics, medical buildings, autopsy facilities, morgues, mortuaries and other medical facilities.
- (9) Metal or plastic manufacturing, fabrication, cleaning, plating or processing facilities.
- (10) Plants manufacturing wood, paper and paper products.
- (11) Plants manufacturing, refining, compounding or processing fertilizer, film, herbicides, natural or synthetic rubber, pesticides, petroleum or petroleum products, pharmaceuticals, radiological materials or any chemical which would be a contaminant to the public water system.
- (12) Commercial facilities that use herbicides, pesticides, fertilizers or any chemical which would be a contaminant to the public water system.
- (13) Commercial laundries.
- (14) Sewage, stormwater and industrial waste treatment plants and pumping stations.
- (15) Industrial facilities which recycle water.
- (16) Restricted or classified facilities or other facilities closed to the supplier of water or the Department.
- (17) Fire sprinkler systems using any chemical additives.
- (18) Auxiliary water systems, including any type of irrigation system.
- (19) Any hose spigot or bib not protected by a self-contained manufactured vacuum breaker.
- (20) Irrigation systems with facilities for injection of pesticides, herbicides or other

chemicals or with provisions for creating backpressure.

(21) Facilities which have pumped or repressurized cooling or heating systems that are served by a public water system, including all boiler systems.

13. Installation

(a) Backflow prevention assemblies required by this Article shall be installed at a location and in a manner approved by the water purveyor and shall be installed at the expense of the water consumer.

(b) Backflow prevention assemblies installed on the service line to the consumer's water system shall be located on the consumer's side of the water meter, as close to the meter as is reasonably practical, and shall be installed prior to any other connection.

(c) Backflow prevention assemblies shall be located so as to be readily accessible for maintenance and testing, protected from freezing. No reduced-pressure principal backflow prevention assembly shall be located where it will be submerged or subject to flooding by any fluid.

14. Inspection and Maintenance

(a) It shall be the duty of the consumer at any premises on which backflow prevention assemblies required by this Article are installed to have inspection, tests and overhauls made in accordance with the following schedule, or more often where inspections indicate a need.

(1) Air gap separations shall be inspected at the time of installation and at least every twelve (12) months thereafter.

(2) Double-check valve assemblies shall be inspected and tested for tightness at the time of installation and at least every twelve (12) months thereafter.

(3) Reduced-pressure principal backflow prevention assemblies shall be inspected and tested for tightness at the time of installation and at least every twelve (12) months thereafter.

(b) Inspections, tests and overhauls of backflow prevention assemblies shall be made at the expense of the water consumer and shall be performed by a state-certified backflow prevention assembly tester.

(c) Whenever backflow prevention assemblies required by this Article are found to be defective, they shall be repaired or replaced at the expense of the consumer without delay.

(d) The water consumer and water purveyor must maintain a complete record of each backflow prevention assembly for a period of three (3) years. This shall include a comprehensive listing of all tests, inspections and repairs. Records of inspections, tests, repairs and overhauls shall be made available to the water purveyor upon request.

(e) Backflow prevention assemblies shall not be bypassed, made inoperative, removed or otherwise made ineffective.

15. Violations

(a) The water purveyor shall deny or discontinue, after reasonable notice to the occupants thereof, the water service to any premises wherein any backflow prevention assembly required by this Article is not installed, tested and maintained in a manner acceptable to the water purveyor, or if it is found that the backflow prevention assembly has been removed or bypassed or if an unprotected cross-connection exists on the premises.

(b) Water service to such premises shall not be restored until the consumer has corrected or eliminated such conditions or defects in conformance with this Article to the satisfaction of the water purveyor.

Comment [1]: <!--EndFragment-->

Repealer. All orders, bylaws, ordinances, and resolutions of the Town, or parts thereof, inconsistent or in conflict with this Ordinance, are hereby repealed to the extent only of such inconsistency or conflict.

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 unenforceability 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.

Recording and Authentication. Upon adoption hereof, this Ordinance shall be recorded in a book kept for that purpose and shall be authenticated by the signatures of the Mayor and the Town Clerk.

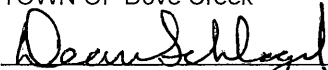
PUBLIC HEARING. This ordinance shall be considered for second or final reading on the ___ day of _____, 2017 at the hour of _____ p.m. in the Town Board Chambers in Town Hall, Dove Creek Colorado, at which time and place all persons may appear and be heard concerning the same.

PASSED, ADOPTED AND APPROVED ON FIRST READING THIS 19th DAY OF January, 2017.

ATTEST:


ROLAYNE RANDOLPH, Town Clerk

TOWN OF Dove Creek


DEAN SCHLEGEL, Mayor

PASSED, ADOPTED AND APPROVED ON SECOND AND FINAL READING THIS 16th DAY OF FEBRUARY, 2017.

TOWN OF Dove Creek

ATTEST:

Rolayne M. Randolph
ROLAYMNE RANDOLPH, Town Clerk

Dean Schlegel
DEAN SCHLEGEL, Mayor

APPROVED AS TO FORM:

Michael F. Green
MICHAEL F. GREEN, Town Attorney

