

RESOLUTION NO. 2016-1

At a regular meeting of the Board of Directors (the "Board") of the San Juan River Village Metropolitan District (the "District") held on the 13th day of October, 2016, the Board adopted the following Resolution:

RECITALS

A. The District is a special district created and existing under the Colorado Special District Act, *C.R.S. § 32-1-101, et seq.* The District is a political subdivision of the State of Colorado.

B. The purposes, powers and authority provided in the Act serve a public use and promote the health, safety, prosperity, security, and general welfare of the inhabitants of the District and of the people of the State of Colorado. *C.R.S. § 32-1-102(1).*

C. The Board, on behalf of the District, has the power to enter into contracts and agreements affecting the affairs of the District, to manage, control and supervise the business and affairs of the District and all construction, installation, operation and maintenance of District improvements, and to exercise all rights and powers necessary or incidental to or implied from the specific powers granted by the Act. *C.R.S. § 32-1-1001(1)(d)(I), (1)(h), (1)(n).*

D. The purposes of the District are served through improving water quality for the inhabitants of the District.

E. It is unlawful for any person, association, or corporation, and the officers thereof to make, install, maintain, or permit any cross-connection between any water system supplying drinking water to the public and any pipe, plumbing fixture, or water system which contains water of a quality below the minimum general sanitary standards as to the quality of drinking water supplied to the public or to fail to remove such connection within ten days after being ordered in writing by the department to remove the same. For the purposes of this paragraph (h), "cross-connection" means any connection which would allow water to flow from any pipe, plumbing fixture, or water system into a water system supplying drinking water to the public. *C.R.S. § 25-1-114(1)(h).*

F. The purpose of a cross-connection control rule is to protect the District's public 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.

G. In order to comply with its requirements, the District wishes to adopt a cross-connection control rule to ensure that the District meets public water supply standards and

comports with the District's cross-connection obligations pursuant to *C.R.S. § 25-1-114(1)(h)*, *Code of Colorado Regulations (5 CCR 1002-11, Section 39)*, and *Colorado Plumbing Code*.

H. The cross-connection control rule will serve the public use and will promote the health, safety, prosperity, security and general welfare of the inhabitants of the District.

NOW THEREFORE, the Board of Directors of the District resolves as follows:

1. The San Juan River Village Metropolitan District hereby adopts the Cross-Connection Control Rule which is attached hereto and made a part hereof by reference.

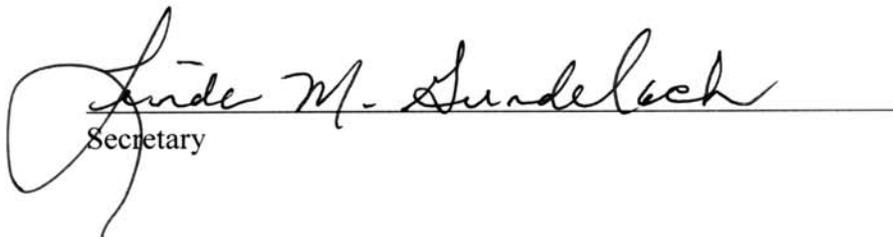
THIS RESOLUTION has been passed, approved and adopted as of the date set forth above.

SAN JUAN RIVER VILLAGE METROPOLITAN DISTRICT



President, Board of Directors

Attest:



Secretary

**CROSS-CONNECTION CONTROL RULE
FOR
SAN JUAN RIVER VILLAGE METROPOLITAN DISTRICT**

(1) Purpose.

The purpose of this Cross-Connection Control Rule (“Rule”) is to protect the San Juan River Village Metropolitan District (“SJRVM”) public 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.

(2) Authority.

The authority to implement this program is contained in the following statute, legislation and regulations and acts:

- a. Article 1-114 and Article 1-114.1 of Title 25 of the Colorado Revised Statutes (CRS).
- b. Section 39 of 5 CCR 1002-11, Colorado Primary Drinking Water Regulations.
- c. Colorado Plumbing Code.

The SJRVMD shall have the authority to survey all service connections within the distribution system to determine if the connection is a cross-connection.

The SJRVMD shall have the authority to control all service connections within the distribution system if the connection is a cross-connection.

The SJRVMD may control any service connections within the distribution 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 SJRVMD may collect fees for the administration of this program.

The SJRVMD 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.

Except as otherwise provided herein, the SJRVMD shall administer, implement and enforce the provisions of this Rule.

(3) Applicability.

This Rule applies to all commercial, industrial and multi-family residential service connections within the SJRVMD public water system and to any persons outside the

District who are, by contract or agreement with the SJRVMD, users of the public water system. This Rule does not apply to single-family-residential service connections unless the SJRVMD becomes aware of a cross-connection at the single family connection.

(4) Definitions.

- a. "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.
- b. "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.
- c. "BACKFLOW" means the undesirable reversal of flow of water or mixtures of water and other liquids, gases or other substances into the SJRVMD public water system from any source or sources other than its intended source.
- d. "BACKFLOW CONTAMINATION EVENT" means backflow into the SJRVMD 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.
- e. "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.
- f. "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.
- g. "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.
- h. "CONTAINMENT" means the installation of a backflow prevention assembly or a backflow prevention method at any connection to the SJRVMD public water system that supplies an auxiliary water system, location, facility, or area such that

backflow from a cross-connection into the SJRVMD public water system is prevented.

- i. “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 SJRVMD public water system is prevented.
- j. “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.
- k. “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 SJRVMD public water system through backflow.
- l. “MULTI-FAMILY” means a single residential connection to the SJRVMD public water system from which two or more separate dwelling units are supplied water.
- m. “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.
- n. “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.
- o. “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.

(5) 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 SJRVMD. If the assembly or method cannot be installed within 120 days, the SJRVMD 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. The SJRVMD requires an RPZ type device at a minimum regardless of the hazard identification.

- b. In no case shall it be permissible to have connections or tees between the meter and the containment backflow prevention assembly.
 - i. 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 a 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 which does not impact waters of the state.
- f. 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.
- 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.
- i. The SJRVMD 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 grandfather clauses exist except for fire sprinkler systems where the installation of a backflow prevention assembly or method will compromise the integrity of the fire sprinkler system.
- l. For new buildings, all building plans must be submitted to the SJRVMD 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.
 - iv. Fire sprinkler system(s) service line, size and type of backflow prevention assembly.
 - i. All fire sprinkling lines shall have a minimum protection of an approved double check valve assembly for containment of the system.
 - ii. All glycol (ethylene or propylene), or antifreeze systems shall have an approved reduced pressure principle backflow preventer for containment.
 - iii. Dry fire systems shall have an approved double check valve assembly installed upstream of the air pressure valve.
 - iv. In cases where the installation of a backflow prevention assembly or method will compromise the integrity of the fire sprinkler system, the SJRVMD can chose to not require the backflow protection. The SJRVMD 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 SJRVMD suspects water quality issues, the SJRVMD will evaluate the practicability of requiring that the fire sprinkler system be flushed periodically.

(6) Inspection, Testing and Repair.

- a. 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.

- i. Any backflow prevention assemblies or methods that are non-testable, shall be inspected at least once annually by a certified cross-connection control technician. The inspections shall be made at the expense of the customer.
 - b. 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.
 - c. Testing gauges shall be tested and calibrated for accuracy at least once annually.
- (7) 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 SJRVMD 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; 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; and
 - xi. Test kit calibration date.
- (8) Right of entry.
 - a. A properly credentialed representative of the SJRVMD shall have the right of entry to survey any and all buildings and premises for the presence of cross-

connections for possible contamination risk and to determining compliance with this section. This right of entry shall be a condition of water service in order to protect the health, safety and welfare of customers throughout the SJRVMD public water system.

(9) 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 SJRVMD shall complete one of the following actions within 120 days of its discovery:
 - i. Control the cross-connection;
 - ii. Remove the cross-connection; or
 - iii. Suspend service to the cross-connection.
- b. The SJRVMD shall give notice in writing to any owner whose plumbing system has been found to present a risk to the SJRVMD public 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.
 - i. In instances where a backflow prevention assembly or method cannot be installed, the owner must install approved backflow prevention assemblies 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.

(9) Violations and Penalties.

- a. Any violation of the provisions of this resolution, shall be punishable as provided in all applicable statues, laws, and regulations.

(10) Conflict with other codes.

- a. 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, then the most stringent provisions of each respective code shall prevail.