



City of South Daytona Department of Public Works

1770 Segrave Street • South Daytona, FL 32119 • 386/322-3080

MEMORANDUM

To: James L. Gillis, Jr., City Manager

From: Steve Danskine, P.E., Public Works Director

Re: Consideration of approving Resolution No. 2023-10, modifying the Cross-Connection Control Plan to allow for the City to hire a certified professional to test and or repair Cross-Connection Control devices if the property owner is delinquent.

Date: May 3, 2023

In accordance with Florida State Statute, the City of South Daytona has a cross-connection control plan to provide protection of the public drinking water supply from the potential of contamination from backflow into the public water system by isolating the customer's domestic or fire suppression service.

Section 20-133 of the City Code allows the City Council, by resolution, to periodically revise the Cross-Connection Control Plan as may be deemed necessary for the public health, safety and welfare of the users of the city water system or for the protection of the utility system, and to effect cost-effective implementation of the provisions of the Plan.

The City is responsible for overseeing that all Cross-Connection Control devices are tested and maintained as prescribed. This resolution seeks to address instances where property owners fail to test or maintain their Cross-Connection Control devices. In such cases, the City would have the authority to hire a certified professional to perform said tests and/or make repairs, and record the results. The costs associated with this service, plus a \$125.00 administrative fee could then be added to the corresponding Utility Bill.

Staff recommends the City Council approve Resolution No. 2023-10, modifying the Cross-Connection Control Plan to allow for the City to hire a certified professional to test and or repair Cross-Connection Control devices if the property owner is delinquent.

RESOLUTION NO. 2023-10

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SOUTH DAYTONA, FLORIDA, REVISING SECTION 9 ENFORCEMENT OF THE CROSS-CONNECTION CONTROL PLAN AS PROVIDED IN SEC. 20-133 OF THE CITY CODE OF ORDINANCES; AND PROVIDING FOR SEVERABILITY, CONFLICTS, AND AN EFFECTIVE DATE.

WHEREAS, the City has adopted the appropriate regulations for cross connections, which included adopting Volusia County's cross connection manual; and

WHEREAS, in 2015, the City adopted by reference the City of South Daytona's Cross Connection Control Plan; and

WHEREAS, Section 20-133 of the City Code allows the City Council, by resolution, to periodically revise the Cross-Connection Control Plan as may be deemed necessary for the public health, safety and welfare of the users of the city water system or for the protection of the utility system, and to effect cost-effective implementation of the provisions of the Plan; and

WHEREAS, the City is responsible for overseeing that all Cross-Connection Control devices are tested and maintained as prescribed. When property owners fail to test or maintain their Cross-Connection Control devices they put the City's water supply in danger of contamination from a backflow event; and

WHEREAS, the City Council of the City of South Daytona finds it in the best interest of its citizens to revise the Cross-Connection Control Plan.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SOUTH DAYTONA, FLORIDA:

Section 1. The City Council hereby revises the Cross-Connection Control Plan, Section 9, Enforcement as follows (underlined type shall constitute additions to the original text, *** shall constitute ellipses to the original text and ~~striketrough~~ shall constitute deletions to the original text).

SECTION 9 **Enforcement**

- A.** Enforcement of these policies and procedures shall be through the City of South Daytona's Public Works and Community Development Departments. Alternatively, any person violating these provisions may be punished as provided in Section 1-9 of the City of South Daytona's Code of Ordinances. Fees may be assessed for applicable actions taken by the City. In addition, water service may be refused to any customer not fully complying with these policies and procedures.
- B.** The City of South Daytona reserves the right to immediately refuse water service to any customer if a potential or actual cross connection is found which, in the opinion of the Public Works Director and/or the Chief Building Official, poses a direct threat to the safety

of the South Daytona drinking water system and/or its customers. Water service shall not be restored until the danger has been eliminated and it can be ascertained by the Public Works Director and/or the Chief Building Official that the cross connection has been properly controlled.

- C. The City of South Daytona reserves the right to immediately refuse water service to any customer that fails to have required testing and/or maintenance and/or repairs performed on an annual basis.

D. Alternatively, the City of South Daytona may hire a certified professional to perform said tests and/or make repairs, and record the results. Any and all costs for these actions, along with a \$125.00 Administrative Fee will be added to the corresponding Utility Bill.

Section 2. If any section, subsection, sentence, clause, phrase, or portion of this Resolution, or application hereof, is for any reason held invalid or unconstitutional by any Court, such portion or application shall be deemed a separate, distinct, and independent provision, and such holding shall not the validity of the remaining portions or application hereof.

Section 4. That all resolutions made in conflict with this Resolution are hereby repealed.

Section 5. That this Resolution shall become effective immediately upon its adoption.

THIS RESOLUTION APPROVED ON FIRST AND ONLY READING this 9th day of May 2023 by the City Council of the City of South Daytona, Florida.

CITY OF SOUTH DAYTONA, FLORIDA

William C. Hall, Mayor

ATTEST: _____
James L. Gillis Jr, City Manager

APPROVED AS TO FORM AND LEGALITY:

Wade C. Vose, City Attorney



CITY OF SOUTH DAYTONA'S CROSS CONNECTION CONTROL PLAN



Adopted October 2015, via Ordinance 2015-08
Revised May 2023, via Resolution 2023-xx

SECTION 1

Intent and Purpose

- A. To protect the public drinking water supply of the City of South Daytona from the possibility of contamination by isolating the customer's internal distribution system to prevent backflow into the public water system; and,
- B. To provide for the elimination or control of existing cross connections, actual or potential, between the customer's water system, plumbing fixtures, irrigation and industrial piping systems; and,
- C. To provide for the maintenance of a continuing program of cross connection control that will systematically and effectively prevent the contamination or pollution of all drinking water systems by:
1. Educating the public concerning the hazards associated with cross connections.
 2. Discovering and controlling cross connections through a program of inspections, installation of appropriate control devices and testing of these devices as well as training field personnel to identify cross connections during routine work schedules.
 3. Requiring at a minimum, control devices be installed at the property line of each customer served by reuse water and at those specific facilities with conditions referenced in Section 4 B.
- D. The following Statement of Policy on Water Supply Matters adopted by the American Water Works Association (AWWA) is supported by the City of South Daytona and hereby incorporated into this plan:

"The American Water Works Association recognizes that the Water Purveyor has a responsibility to provide its customers at the service connection with water that is safe under all foreseeable circumstances. Thus, in the exercise of this responsibility, the Water Purveyor must take reasonable precautions to protect the community distribution system from hazards originating on the premises of its Customers that may degrade the water in the community distribution system.

Cross connection control and plumbing inspections on premises of water Customers are regulatory in nature and should be handled through the rules, regulations and recommendations of the health authority and the plumbing code enforcement agencies having jurisdiction. The Water Purveyor, however, should be aware of any situation requiring inspections and/or re-inspection necessary to detect hazardous conditions resulting from cross connections. If, in the opinion of the Utility, effective measures consistent with the degree of hazard have not been taken by the regulatory agency, the Water Purveyor should take such measures as they may deem necessary to ensure that the community distribution system is protected from contamination. Such action would include the installation of a back/low prevention assembly, consistent with the degree of hazard at the service connection or discontinuance of the service.

In addition, customer use of water from the community distribution system for cooling or other purposes within the customer's system and later return of the water to the community distribution system is not acceptable and is opposed by the AWWA."

SECTION 2

Legal Authority

- A. Florida Building Code as referenced in F.S. 553.73. The Florida Building Code was adopted in its entirety by the City of South Daytona into its Land Development Code and therefore is legally enforceable by the City of South Daytona.
- B. FL DEP Chapter 62-550.200- Cross connection means any physical arrangement whereby a public water supply is connected, directly or indirectly, with any other water supply system, sewer, drain, conduit, pool, storage reservoir, plumbing fixture or other device which contains or may contain contaminated water, sewage or other waste, or liquid of unknown or unsafe quality which may be capable of imparting contamination to the public water supply as a result of backflow. By-pass arrangements, jumper connections, removable sections, swivel or changeable devices and other temporary or permanent devices through which or because of which backflow could occur are considered to be cross connections.
- C. FL DEP Chapter 62-555.360- Cross Connection Control for Public Water Systems. Section (1) Prohibition of cross connections as defined in 62-550.200, Section (2) Requirement for the establishment of a routine cross connection control program for water systems as described in Recommended Practice for Backflow Prevention and Cross Connection Control, AWWA Manual M14, as incorporated into Rule 62-555.360, F.A.C. Section (3) List of approved devices and appropriate application of same.
- D. FL DEP Chapter 62-610.469 - Prohibiting cross connections to potable water systems and establishing the requirement of a cross connection control and inspection program, pursuant to Rule 62-555.360, F.A.C.
- E. Chapter 20, Article XI, City of South Daytona Code of Ordinances - Reclaimed Water.
- F. Chapter 20, Article IX, City of South Daytona Code of Ordinances - Cross Connection Control.
- G. Florida Statutes Title XXXVII Insurance, Chapter 633 Fire Prevention and Control. A statute defining the required certification for maintenance and/or repair of fire sprinkler systems.

SECTION 3

Responsibilities

- A. The City of South Daytona Public Works Department:

The Public Works Director shall be responsible for the protection of the public drinking water distribution system from contamination or pollution due to the backflow through the water service connection. If, in the judgement of the Public Works Director an approved backflow prevention assembly is required at the customer's water service connection for the safety of the water system, the Public Works Director shall give notice in writing to the customer and shall specify the location where such an assembly shall be installed. The customer shall immediately install such an approved assembly at his/her own expense and failure, refusal or inability on the part of the customer to install, have tested and maintain said assembly shall constitute grounds for discontinuing water service to the premises until such requirements have been satisfactorily met.

B. The City of South Daytona Community Development Department:

The Chief Building Official is primarily responsible for administering the plumbing codes as adopted by ordinance by the City of South Daytona and referenced in Section 2. Such responsibility begins at the service connection to each customer and extends to the extremities of the Customer's water system. When reviewing site and building plans, the Chief Building Official has the authority under the Florida Building Code to require that potential cross connections be eliminated and/or the water service be protected by the installation of an approved backflow prevention device, the selection of which will depend on the degree of hazard.

C. The Customer:

The customer has the responsibility to comply with the Florida Building Code by preventing the introduction of contaminants into the drinking water system through uncontrolled cross connections. When required, the customer shall install, maintain and repair as necessary, approved backflow prevention devices as directed by the Chief Building Official and/or the Public Works Director. The customer must keep accurate and up to date records on all backflow prevention devices. These records of testing and certification are to be submitted to the Community Development Department annually indicating any testing or repairs performed the previous year by certified, licensed professionals. If repairs are performed, retesting and recertification shall be required by a licensed backflow repair technician. For residential backflow prevention devices, the testing schedule shall be performed as per the time stipulated in the most recent Florida Department of Environmental Protection rules regarding cross connection control.

SECTION 4

Implementation of the Cross Connection Control Plan

- A. These policies and procedures shall be implemented and in effect immediately in conjunction with those specified in Section 2 and shall apply to all new and existing potable water, fire protection and irrigation systems. Priorities shall be established for inspection of cross connection hazards and requirement of installation of cross connection control devices at the service connection. Priorities will be arranged based on the highest degree of actual or potential threat to the potable water system.
- B. An approved backflow prevention assembly shall be installed on each service line to a customer's water system at or near the property line or immediately inside the building being served; but in all cases, before the first branch line leading off the service line wherever the following conditions exist:
 - 1. In the case of a premises having an auxiliary water supply (excluding residential groundwater wells for irrigation), the public water system shall be protected against backflow from the premises by installing an approved backflow prevention assembly in the drinking water service line, appropriate to the degree of hazard.
 - 2. In the case of a premises on which any industrial fluids or any other objectionable substances are handled in such fashion as to create an actual or potential hazard to the public water system, the public water system shall be protected against backflow from the premises by installing an approved backflow prevention assembly in the drinking water

service line, appropriate to the degree of hazard. This shall include the handling of process waters and waters originating from the utility system that have been subject to deterioration of quality.

3. In the case of a premises having (a) internal cross connections that cannot be permanently corrected and controlled, or (b) intricate plumbing and piping arrangements or where entry to all portions of the premises is not readily accessible for inspection purposes, making it impractical or impossible to ascertain whether or not dangerous cross connections exist, the public water system shall be protected against backflow from the premises by installing an approved backflow prevention assembly in the service line.
4. Any condition which the Public Works Director and/or the Chief Building Official, in their best professional judgment, believes there is sufficient hazard to require backflow prevention.
5. All commercial accounts may be required to install/inspect backflow prevention devices. The following includes a list of facilities where backflow prevention is appropriate:

Buildings with two or more stories	Mobile Home Parks
Dental and medical practices including veterinary	Morgues/ Mortuaries/ Funeral Homes
Exterminators/ Pest Control	Nursing Facilities/ Assisted Living Facilities
Facilities with chemical injectors/ ejectors	Recreation/ Park Facilities
Facilities with auxiliary water sources (e.g. wells, reuse, etc.)	Personal Service (Hair Salons, Nail Salons, Barbers, Spas, etc.)
Facilities using chemical conditioners for steam boiler or water cooling/ heating	Petroleum processing/ storage/ sales (gas stations or convenience stores selling gas)
Facilities using water storage tanks, reservoirs or ponds or where condensate could back siphon	Pharmacies
Film processing/ photo laboratory	Pharmaceutical/ Cosmetic Manufacturing
Any facility performing food and beverage processing including daycares and religious facilities	Piers/ Docks/ Marinas/ Waterfront Facilities
Food Service (restaurants, groceries)	Power Plants
Car washes	Printing
Hospital/ Clinics/ Doctor's Offices	Sand/ Gravel/ Concrete Plants
Hotels/ Motels	Schools
Industries	Swimming Pools
Laboratories (chemical and medical)	Sewage Plants/ Pump Stations/ Lift Stations
Laundries/ Laundromats	Stormwater Pumping Stations
Any property with a master meter service three or more units regardless of use	Facilities with Irrigation Lines or Fire Protection Systems
Resident Detention/ Treatment / Rehab Facilities	Dry Cleaners
Manufacturing Facilities	Vehicle/ Automotive Repair, storage or sales
Multiresidence as defined in the LDC (three or more units)	Chemical processing, storage or distribution

This list shall not be considered all inclusive. The City of South Daytona reserves the right to determine when a specific facility requires a backflow prevention assembly, as well as the type needed, to ensure the safety of the public drinking water supply.

SECTION 5

Inspection of Facilities

- A. As a condition of connection, the customer shall permit the Public Works Director and/or the Chief Building Official to enter all properties. These City officials there to inspect the water system shall have no authority to inquire into any information other than that having direct bearing on the protection of the potable water system from cross connections. If the premises are classified as restricted or high security with no admittance, maximum (RPZ) protection at the service connection shall be required.
- B. While performing the necessary work on private properties referred to above, duly authorized employees of the City shall observe all safety rules applicable to the premises established by the customer and the customer shall be held harmless for injury or death to the city employees and the City shall indemnify the customer against loss or damage to property by city employees and against liability claims and demand for personal injury or property damage asserted against the customer and growing out of the inspection activities. Except, as such may be caused by negligence or failure of the customer to maintain safe conditions.
- C. Nothing herein shall relieve the customer of the responsibility for conducting, or causing to be conducted, periodic surveys of water use practices on his/her premises to determine whether there are actual or potential uncontrolled cross connections within the customer's water system through which contaminants or pollutants could flow back into the public water system.
- D. If, upon inspection, full compliance with the Florida Building Code is not found, maximum (RPZ) protection shall be required at the customer's service connection. If the customer brings the system into full compliance within a 90 day period, minimum protection may be allowed at the service connection, provided potential hazards within the premises are isolated.
- E. It is recognized that new cross connections may be made due to changes in plumbing as buildings are refurbished, expanded or otherwise modified. Therefore, re-inspection of facilities is especially important to this program.

SECTION 6

Prohibition of Dual Water Sources

- A. Where any customer of the City of South Daytona has a water source in addition to the drinking water system such as, but not limited to irrigation wells, surface water ponds, reuse or other water storage, any physical connection between the alternate water source and the drinking water system is expressly prohibited.
- B. Upon discovery of any connection between the drinking water system and any alternate water source, the owner of the property where the connection was found shall be notified that the interconnection must be removed immediately and that the drinking water service will be temporarily terminated until such correction is made.

SECTION 7

Approved Protective Devices and Their Use

- A. All backflow prevention devices used in accordance with the provisions of these policies and procedures shall be approved under the applicable standard of the American Water Works Associations (AWWA), The American National Standards Institute (ANSI) and the Florida Building Code.
- B. The type of protective assembly required under subsection 4.8 shall depend upon the degree of hazard that exists as follows:
 - 1. In the case of any premise where there is an auxiliary water supply as stated in section 4.8.1 and is not subject to any of the following rules, the public drinking water system shall be protected by an approved air gap separation, approved double check valve assembly or an approved reduced pressure principle backflow prevention assembly depending on the hazard.
 - 2. In the case of any premises where there is water or substance that would be objectionable but not hazardous to health if introduced into the public drinking water system, an approved double check valve assembly shall protect the public drinking water system.
 - 3. In the case of any premises where there is any material dangerous to health that is handled in such as fashion as to create an actual or potential hazard to the public drinking water system, the public drinking water system shall be protected by an approved air gap separation or an approved reduced pressure principle backflow prevention assembly. Examples of premises where these conditions will exist include sewage treatment plants, sewage pumping stations, chemical manufacturing plants, hospitals, mortuaries and plating plants.
 - 4. In the case of any premises where there are "uncontrolled" cross connections, either actual or potential, the public drinking water system shall be protected by an approved air gap separation or an approved reduced pressure principle backflow prevention assembly at the service connection.
 - 5. In the case of any premises where, in the opinion of the Public Works Director and/or the Chief Building Official, an undue health threat is posed because of the presence of extremely toxic substances, the Public Works Director and/or the Chief Building official may require an air gap at the service connection to protect the public drinking water system. This requirement will be at the discretion of the Public Works Director and/or the Chief Building Official and is dependent on the degree of hazard.
- C. Bypass lines around backflow prevention devices are expressly prohibited unless also protected by an approved backflow prevention device.

SECTION 8

Installation, Maintenance and Repair of Devices

- A. In order to effectively protect the drinking water system, all backflow prevention devices must be maintained in a safe and reliable operating condition. The customer shall be responsible for the continued maintenance of all backflow prevention devices on his/her premises.
- B. Installation, maintenance, testing and repairs shall be performed by one of the following:

1. A qualified specialist trained and certified by the University of Florida T.R.E.E.O. Center Backflow Prevention Technician Training Institute or FWPCOA certified.
 2. A manufacturer's representative.
 3. A City of South Daytona Public Works Department employee.
- C. Installation, maintenance and repair of all backflow prevention devices affecting automated fire sprinkler systems must be performed by a specialist qualified to work on said fire systems.
- D. Test, maintenance and repairs of backflow prevention devices shall be conducted on the following backflow prevention devices:
1. Double Check Valve Backflow Prevention Device - A double check valve backflow prevention device (as distinguished from a dual check valve"} shall be inspected and tested initially upon installation and thereafter at least annually.
 2. Reduced Pressure Zone (RPZ) Backflow Prevention Device - This device shall be tested and inspected at the time of installation and at least annually thereafter. In addition, the bottom of differential relief valve must be at least 18 inches above the 100 year flood level. Because of this latter requirement and the potential for damage to the device due to possible accident, tampering or freezing weather, consideration should be given to locating the RPZ inside of protective structure or buildings.
 3. Synthetic Components Within a Device - These should be replaced according to a schedule recommended by the manufacturer of the backflow device. Generally, components should be replaced every five years or sooner.
- E. Records of the initial installation, subsequent repairs and maintenance (including regularly scheduled testing) shall be maintained by the customer for a minimum of three years preceding the current year. Records of installations, annual testing and maintenance are to be submitted to the Chief Building Official for review and a second copy furnished to the Public Works Director. If records are not made available upon request or are found to be substantially incomplete, the customer shall be required to immediately have the device serviced and tested by a qualified technician and a record of such test submitted to the Chief Building Official and Public Works Director.
- F. All backflow prevention devices and maintenance records shall be subject to periodic inspection by the Chief Building Official and the Public Works Director. If a device is found to be inoperative or malfunctioning, the customer will be given 30 days to complete the corrections required. If at the end of the allotted time, satisfactory corrections have not been made, notice will be given that the water service will be terminated after seven days from receipt unless the customer completed the corrections. At the end of that seven day period the water service will be terminated if satisfactory corrections have not been completed.

SECTION 9 Enforcement

- A. Enforcement of these policies and procedures shall be through the City of South Daytona's Public Works and Community Development Departments. Alternatively, any person violating these provisions may be punished as provided in Section 1-9 of the City of South Daytona's Code of Ordinances. Fees may be assessed for applicable actions taken by the City. In addition, water service may be refused to any customer not fully complying with these policies and procedures.

- B. The City of South Daytona reserves the right to immediately refuse water service to any customer if a potential or actual cross connection is found which, in the opinion of the Public Works Director and/or the Chief Building Official, poses a direct threat to the safety of the South Daytona drinking water system and/or its customers. Water service shall not be restored until the danger has been eliminated and it can be ascertained by the Public Works Director and/or the Chief Building Official that the cross connection has been properly controlled.
- C. The City of South Daytona reserves the right to immediately refuse water service to any customer that fails to have required testing and/or maintenance and/or repairs performed on an annual basis.
- D. Alternatively, the City of South Daytona may hire a certified professional to perform said tests and/or make repairs, and record the results. Any and all costs for these actions, along with a \$125.00 Administrative Fee will be added to the corresponding Utility Bill.

SECTION 10

Backflow Prevention Device Installers

- A. Installation, maintenance and repair of backflow prevention devices shall be made by a qualified installer and in accordance with the manufacturer's instructions. The installer is also responsible for conducting initial testing of the device and initiating record keeping on the device. At a minimum, records shall include the following:
 - 1. Address where the device is located. This is to include a physical location of the device at the address indicated.
 - 2. Owner of the device
 - 3. Date of installation
 - 4. Type of device
 - 5. Manufacturer
 - 6. Serial Number
 - 7. Test results

SECTION 11

New Construction

- A. All new construction plans and specifications for industrial or commercial facilities shall be reviewed by the Chief Building Official and/or Public Works Director to determine the degree of possible cross connection hazard.
- B. Evaluation as to the degree of hazard shall include the proper location and application of the approved backflow prevention device as necessary.
- C. This review process shall be completed prior to the connection of the proposed facility to the drinking water system.

SECTION 12

Definitions

Auxiliary Water Supply: Any water supply on or available to the premises other than the City of South Daytona's drinking water supply. These auxiliary waters may include water from another city's public water supply or any natural source such as a well, spring, river, stream, harbor and so forth; used waters; or industrial fluids. These waters may be contaminated or polluted, or they may be objectionable and constitute an unacceptable water source over which the City of South Daytona does not have sanitary control.

Back Pressure: Any elevation of pressure in the downstream piping system (by pump, elevation of piping, or stream and/or air pressure) above the supply pressure at the point of consideration which would cause or tend to cause a reversal of the normal direction of flow through the backflow prevention device.

Back Siphonage: A form of backflow due to the reduction in system pressure which causes a negative or sub-atmospheric pressure to exist at a site in the water system.

Backflow: The undesirable reversal of flow in a potable water distribution system as a result of a cross connection.

Backflow Prevention Device: A device, assembly or means designed to prevent backflow. Common types of backflow prevention devices are:

1. **Air Gap.** The unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet conveying water or waste to a tank, plumbing fixture, receptor or other assembly and the flood level rim of the receptacle. These vertical, physical separations must be at least twice the diameter of the water supply outlet, never less than one inch.
2. **Reduced Pressure Backflow Prevention Assembly (RPZ).** This device consists of two independently acting approved check valves together with a hydraulically operating, mechanically independent pressure differential relief valve located between the check valves and below the first check valve. These units are located between two tightly closing resilient seated shutoff valves as an assembly and equipped with properly located resilient seated test cocks.
3. **Double Check Valve Assembly.** This device consists of two internally loaded check valves, either spring loaded or internally weighted, installed as a unit between two tightly closing resilient seated shutoff valves and fittings with properly loaded resilient seated test cocks. This assembly shall only be used to protect against a non-health hazard.
4. **Dual Check Valve.** A device designed for use under continuous or intermittent pressure situations consisting of two check valves in series.

Chief Building Official: The person responsible for administering and enforcing building and related codes, or their authorized deputy, agent or representative.

Contamination: Impairment of a potable water supply by the introduction or admission of any foreign substance that degrades the quality or creates a health hazard.

Cross Connection: A connection or potential connection between any part of a potable water system and any other environment containing other substances in a manner that, under any circumstances would

allow such substances to enter the drinking water system. Other substances may be gases, liquids or solids such as chemicals, waste products, steam, and water from other sources or any matter that may change the color to the water.

Cross Connection Control: A connection between a drinking or potable water system and a non-potable water system with an approved backflow prevention device properly installed and maintained so that it will continuously afford the protection commensurate with the degree of hazard.

Degree of Hazard: The term derived from an evaluation of the potential risk to public health and the adverse effect of the hazard upon the drinking water system.

1. **Health Hazard.** A cross connection or potential cross connection involving any substance that could, if introduced into the drinking water supply, cause illness or death, spread disease or has a high probability of causing such effects.
2. **Plumbing Hazard.** A cross connection in a customer's drinking water system that has not been properly protected by an approved air gap or backflow prevention device.
3. **Non Health Hazard.** A cross connection or potential cross connection involving any substance that generally would not be a health hazard but would constitute a nuisance or be aesthetically objectionable if introduced into the drinking water supply.
4. **System Hazard.** An actual or potential threat of severe damage to the physical properties of the public drinking water system or the customer's drinking water system or of a pollution or contamination that would have a protracted effect on the quality of the drinking water in the system.

Industrial Fluids: Any fluids or solutions that would constitute a health, system, pollution or plumbing hazard if introduced into a water supply. This may include, but not be limited to, polluted or contaminated waters; all types of process waters and used waters originating from the public drinking water system that may have deteriorated in sanitary quality; chemicals in fluid form; plating acids and alkalies; circulating cooling waters connected to an open cooling tower; and/or cooling towers that are chemically or biologically treated or stabilized with toxic substances; contaminated natural waters, such as wells, springs, streams, rivers, bays, harbors, seas, irrigation canals or systems, and so forth; oils, gases, glycerin, paraffins, caustic and acid solutions and other liquid and gaseous fluids used in industrial or other purposes for firefighting.

Pollution: The presence of any foreign substance in water that tends to degrade its quality so as to constitute a non-health hazard or impair the usefulness of the water.

Public Works Director: The person in charge of the public drinking water system and invested with the authority and responsibility for implementation of an effective cross connection control program and for enforcement of the provisions of this article, or their authorized deputy, agent or representative.

Reuse: Water that is not safe for human consumption which is highly treated effluent from a wastewater treatment plant. Reuse water is generally used for irrigation purposes as a substitute for potable water.

Potable Water: Water that is safe for human consumption as described by the public health authority.

Non Potable Water: Water that is not safe for human consumption or that is of questionable quality.

Service Connection: The terminal end of a service connection from the public drinking water system, that is, where the City loses jurisdiction and sanitary control over the water at its point of delivery to the customer's water system. If a meter is installed at the end of the service connection, then the service connection shall mean the downstream end of the meter. There should be no unprotected takeoffs for the service line ahead of any meter or backflow prevention device located at the point of delivery to the customer's water system. Service connection shall also include water service connection from a fire hydrant and all other temporary or emergency water service connections from the public drinking water system.