ORDINANCE NO. 2022-22

AN ORDINANCE AMENDING THE CITY OF BOERNE, TEXAS, CODE OF ORDINANCES, CHAPTER 22, UTILITIES, BY REPEALING AND REPLACING DIVISION 3. CROSS-CONNECTION CONTROL AND BACKFLOW PREVENTION PROGRAM, SECTIONS 22-62 THROUGH SECTION 22-84, AND ESTABLISHING A CROSS CONNECTION CONTROL AND BACKFLOW PREVENTION PROGRAM FOR THE CITY OF BOERNE POTABLE WATER AND RECLAIMED WATER DISTRIBUTION SYSTEM; PROVIDING FOR A MAXIMUM PENALTY OF $2,000 FOR EACH VIOLATION OF THIS ORDINANCE

WHEREAS, the City of Boerne (the City) seeks to protect the public potable water distribution system from contamination or pollution due to the backflow of contaminants or pollutants through water service connections; and

WHEREAS, the State of Texas, through its statutes and regulations and rules of the Texas Commission on Environmental Quality ("TCEQ"), requires the protection of the public water supply through appropriate cross connection control measures and local administration of a backflow prevention device testing program; and

WHEREAS, the City Council approved Ordinance No. 2001-38, adopting a Cross Connection Control and Backflow Prevention Program on November 27, 2001; and

WHEREAS, the City Council of the City of Boerne finds and determines that it is in the best interest of the health, safety and welfare of the citizens of Boerne to make the following amendments to Chapter 22. Utilities, Article II. Water System, Division 3. Cross-Connection Control and Backflow Prevention Program of the Code of Ordinances of the City of Boerne.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOERNE, TEXAS:

That the Code of Ordinances, City of Boerne, Texas, Chapter 22, Utilities, Article II. Water System, Division 3. Cross-Connection Control and Backflow Prevention Program of the Code of Ordinances of the City of Boerne are hereby amended to read as follows:

Section 22-62. Scope

The City of Boerne, Texas Cross Connection Control and Backflow Prevention Ordinance is implemented to meet the requirements of the Texas Commission on Environmental Quality “Rules and Regulations for Public Water Systems, § 30 TAC 290.38 et. seq., as amended, the Texas Health and Safety code, §§ 341.031 et. seq., as amended, and the Federal Safe Drinking Water Act, 42 USCA § 300f et. seq., as amended.
Section. 22-63. Purpose

The purpose of this ordinance is to:

A. Protect the public potable water supply of Boerne, Texas from the possibility of contamination or pollution by isolating within the customer's internal distribution system(s) or the customer's private water system(s) such contaminants or pollutants that could backflow into the public water system; and,

B. Promote the elimination or control of existing cross connections, actual or potential, between the customer's water system(s) and non-potable water system(s), plumbing fixtures, and industrial piping systems; and,

C. Provide for the maintenance of a continuing program of cross-connection control by requiring the installation of approved backflow prevention assemblies and require the certification and operational testing of all testable backflow prevention assemblies.

Section 22-64. Applicability

This ordinance applies to all connections to the City's potable water system, regardless of whether the connection or assembly is for retail, wholesale, or other customer or user of the City's water supply system. There are no grand-father clauses that apply to cross-connection control and backflow prevention.

Section 22-65. Definitions

Air gap - the unobstructed vertical distance through the free atmosphere between the lowest effective opening from any pipe or faucet conveying water to a tank, plumbing fixture, receptor, sink, 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, but never less than 1 inch.

American Water Works Association (AWWA) standards – The latest edition of the applicable standards as approved and published by the AWWA.

Approved Assembly – A backflow prevention assembly that has been manufactured, tested, and approved in accordance with the standards adopted by the AWWA, or approved and listed by the University of Southern California Foundation for Cross Connection Control and Hydraulic Research, and has also been approved by the regulatory authority.

Atmospheric Vacuum Breaker (AVB) - An assembly containing an air inlet valve, a check seat, and an air-inlet port. The flow of water into the body causes the inlet valve to close the air inlet port. When the flow of water stops, the air inlet valve falls and forms a check against back-siphonage. At the same time, it opens the air inlet port allowing air to enter.
and satisfy the vacuum. Also known as an Atmospheric Vacuum Breaker Back-Siphonage Prevention Assembly. This device cannot be tested and cannot prevent back-pressure backflow.

Auxiliary water supply - Any water supply on or available to the premises other than the water purveyor’s potable water supply. These auxiliary waters may include another water purveyor’s potable water supply or any natural resource(s), such as a well, lake, spring, river, stream, harbor, and so forth; used waters, captured rainwater, reclaimed waters, recycled waters, or industrial fluids. These waters may be contaminated or polluted, or they may be questionable and constitute an unacceptable water source over which the water purveyor does not have sanitary control.

Backflow – Pressure created by any means in the water distribution system, which by being in excess of the pressure in the water supply mains causes a potential backflow condition.

Backflow prevention assembly - Any assembly used to prevent backflow into a potable water system. The type of assembly used is based on the existing potential degree of health hazard and backflow condition.

Backflow Prevention Assembly Tester (BPAT) – A state certified and licensed backflow tester who is qualified to test backflow prevention assemblies on any domestic, commercial, industrial, or irrigation service, except fire lines.

Back-pressure - A pressure, higher than the supply pressure, caused by a pump, elevated tank, boiler, air-steam pressure, or any other means that may cause backflow.

Back-siphonage - A type of backflow where the upstream pressure to a piping system is reduced to a sub atmospheric pressure.

City - the City of Boerne or its designated representative.

Commercial establishment - property or location which is used primarily for the manufacture, production, storage, wholesaling or retailing of services which is, or may be placed, in the flow of commerce or any property or location which is used primarily for the provision of any service.

Contamination – the presence of any foreign material substance (organic, inorganic, radiological or biological) in water which tends to degrade its quality so as to constitute a health hazard or impair the usefulness of the water.

Cross-connection - An actual or potential connection between any part of a potable water supply system and any other environment containing other substances in a manner that, under any circumstances would allow such substances to enter the potable water system. Other substances may be gases, liquids, or solids, such as chemicals, waste products, steam, water from other sources (potable or non-potable), or any matter that may change the color or add odor to the water.
Customer Service Inspection - an inspection designed to identify the presence of potential sources of contamination or illegal lead plumbing materials.

Degree of hazard - the term is derived from an evaluation of the potential risk to public health and the adverse effect of the hazard upon the potable water system.

a. Health hazard – a cross connection, potential contamination hazard, or other situation involving any substance that can cause death, illness, spread of disease, or has a high probability of causing such effects if introduced into the potable drinking water supply.

b. High hazard – a cross-connection or potential cross-connection involving any substance that may cause illness or death if introduced to backflow into the potable water supply.

c. Low 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 potable water supply.

d. Pollution hazard - an actual or potential threat to the physical properties of the water system or the potability of the public or the consumer's potable water system, but which would not constitute a health or system hazard, as defined. Maximum degree of intensity of pollution which the potable water system could be degraded under this definition would cause a nuisance or be aesthetically objectionable or could cause damage to the system or its appurtenances.

e. System hazard - an actual or potential threat of severe danger to the physical properties of the public or consumer's potable water supply or of a pollution or contamination that would have a detrimental effect on the quality of the potable water in the system.

Double Check Detector Assembly - (DCDA) a specially designed backflow assembly composed of a line-size-approved double check valve assembly with a bypass containing a specific water meter and an approved double check valve assembly. The meter shall register accurately for only very low rates of flow up to 3 gpm and shall show a registration for all rates of flow. This assembly shall only be used to protect against a non-health hazard (i.e., a pollutant).
Double Check Assembly - (DCA) a complete assembly consisting of two internally loaded, independently operating check valves, located between two tightly closing resilient-seated shutoff valves with four properly placed resilient-seated test cocks. This assembly shall only be used to protect against a non-health hazard (i.e., a pollutant).

Fire line tester - a BPAT tester who is permanently employed by a state approved fire line contractor and is licensed to test backflow prevention assemblies on fire lines.


Mobile unit - any operation which may have the potential to introduce contaminants into a potable water system from a mobile source. These include, but are limited to; carpet cleaning vehicles, water-hauling vehicles, street-cleaning vehicles, liquid-waste vehicles, power-wash operations, and pest control vehicles.

Non-residential use - water used by any person other than a residential customer of the water supply and includes all uses not specifically included in "residential uses".

Person - any individual, partnership, association, corporation, firm, club, trustee, receiver, and bodies political and corporate.

Point-of-use isolation - the appropriate backflow prevention within the consumer's water system at the point at which the actual or potential cross-connection exists.

Potable water supply - any water supply intended or used for human consumption or other domestic use.

Premises - any piece of property to which water is provided, including all improvements, mobile structures, and structures located on it.

Premises isolation - Preventing backflow into a public water system from a user’s premises by installing a suitable backflow preventer at all the user’s potable water connections (see Service protection).

Pressure Vacuum Breaker (PVB) - an assembly consisting of an independently operating, internally loaded check valve, an independently operating, loaded air-inlet valve located on the discharge side of the check valve, with properly located resilient-seated test cocks and tightly closing resilient-seated shutoff valves attached at each end of the assembly designed to be operated under pressure for prolonged periods of time to prevent back siphonage. The pressure vacuum breaker may not be subjected to any backpressure.

Public water system or system - any public or privately owned water system, which supplies water for public domestic use. The system includes all services, reservoirs, facilities, and
any equipment used in the process of producing, treating, storing, or conveying water for public consumption.

Reclaimed water – water that, as a result of treatment of wastewater, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is not safe for human consumption.

Reduced Pressure Principle Assembly (RP) - an assembly containing two independently acting approved check valves together with a hydraulically operated, mechanically independent pressure differential relief valve located between the check valves and at the same time below the first check valve. The assembly shall include properly located resilient seated test cocks and a tightly closing resilient seated shutoff valve at each end of the assembly.

Reduced Pressure Principle Detector Assembly (RPDA) - an assembly composed of a line-size approved reduced pressure principle assembly with a bypass containing a specific water meter and an approved reduced pressure principle backflow prevention assembly. The meter shall register accurately for very low rates of flow.

Regulatory authority - any municipal officer or department of the City of Boerne, to include the Utilities Director and his/her appointees, to administer this ordinance and to perform cross-connection control duties that shall include, but are not limited to, cross-connection inspection and water use surveys.

Residential use - water used by any residential customer of the water supply, including single family dwellings, duplexes, multiplexes, housing and apartments where the individual units are each on a separate meter or in cases where two or more units are served by one meter; the units are full-time dwellings.

Rights-of-Way – the area on, below, above, or adjacent to a public roadway, highway, street, alley, sidewalk, waterway, or easement (utility, drainage, etc.) in which the City has an interest.

Service connection - a piping connection between the water purveyor’s main and a user’s system.

Service protection - Containment protection or secondary protection refers to the backflow protection installed on the water supply line to a premises as close to the service connection to the public water system as possible (see Premises isolation).

Single check valve - Single-check valves are not backflow prevention assemblies, and they cannot be tested.

Spill-resistant Pressure Vacuum Breaker (SPVB) – a backflow assembly containing an independently operating, internally loaded check valve and independently operating, loaded air inlet valve located on the discharge side of the check valve. This assembly is to be
equipped with a properly located resilient seated test cock, a properly located bleed/vent valve, and tightly closing resilient seated shutoff valves attached at each end of the assembly. This assembly is designed to protect against a non-health hazard (i.e., a pollutant) or a health hazard (i.e., a contaminant) under back siphonage condition only.

TCEQ means the Texas Commission on Environmental Quality or its predecessor or successor agencies.

Thermal expansion - heated water that does not have the space to expand.

Used water - water supplied by a water purveyor from a public water system to a consumer's system after it has passed through the point of delivery and is no longer under the sanitary control of the water purveyor.

Utilities Director – The Utilities Director or his designee who is vested with the authority and responsibility for the implementation of an effective cross-connection control program and for the enforcement of the provisions of this ordinance.

Water use survey - a survey conducted or caused to be conducted by the local authority designed to identify possible sources of pollution and/or contamination of the potable water supply.

Section 22-66. Responsibilities

A. The Regulatory Authority shall be responsible for the protection of the public potable water distribution system from contamination or pollution due to the backflow of contaminants or pollution through any water service connection. If in the judgement of the Regulatory Authority, an approved backflow prevention assembly is required (at the customer's water service connection; or within the customer's private water system) for the safety of the public water system, the Regulatory Authority shall give notice in writing to said customer to install such an approved backflow prevention assembly at specific locations on his/her premises. 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. Property Owner - It is the responsibility of all property owners and/or persons in charge of any premises to abide by the conditions of this article and to comply with the following:

1. Payment of all costs associated with this ordinance and the purchase, installation, testing and repair of backflow prevention assemblies.

2. To install and maintain all backflow prevention assemblies in accordance with this article and acceptable industry practice.
3. All commercial establishments shall cause to have all backflow prevention assemblies on their premises tested annually. A certified tester who is registered with the City must conduct such testing.

4. Maintain all backflow prevention assemblies in proper working order at all times, including repairs as required.

5. Maintain all backflow prevention assemblies in a manner that allows them to be tested by a method that has been approved by the regulatory authority.

6. All records related to backflow prevention assembly installation testing and repair shall be maintained on the premises for a minimum of three (3) years.

7. The use of a backflow prevention assembly at the service connection shall be considered as additional backflow and shall not negate the requirement to use backflow protection on internal hazards as outlined and enforced by local plumbing codes.

C. Certified backflow prevention assembly testers (BPATs) shall comply with the following requirements:

1. Annually register with the regulatory authority and pay the required fee.

2. Maintain testing equipment in proper work condition/calibration.

3. Maintain the design or operation characteristics of an assembly.

4. Ensure that assemblies are tested according to accepted industry practice and TCEQ rules and regulations.

5. Enter required testing data, including test gauge serial numbers, on Backflow Prevention test and maintenance report forms that have been approved by the regulatory authority.

6. Report test results to the regulatory authority within ten (10) days of testing.

7. Provide a copy of the completed test report to the property owners and/or persons in charge of any premises.

8. Maintain testing and/or repair records for a minimum of three (3) years.

Section 22-67. Containment Programs and Internal Cross Connection Control Programs
A. Containment programs have backflow prevention at the main water connection to the facility (at the meter).

B. Internal cross connection control programs are located within a facility that has actual or potential contamination hazards connected to the internal potable-water distribution system.
   1. Internal hazards are identified during a customer service inspection
   2. Backflow preventions are in specific locations within a facility where hazards are located
   3. Backflow prevention at the meter is not required if an adequate internal cross connection program is in effect

C. Adequacy of the program is determined through periodic customer service inspections.

D. All backflow prevention assemblies used for health hazard protection must be inspected and tested annually by a licensed backflow prevention assembly tester

Section 22-68. Protection Required Installation

A. The backflow prevention assembly protection, which is required under this ordinance, shall be any of the University of Southern California Foundation for Cross-Connection Control Hydraulic Research (USC FCCCHR) recognized and approved backflow prevention assemblies, or others as approved by the regulatory authority. Prior to installation, the regulatory authority must approve each backflow assembly. Failure to obtain such approval prior to installation of the backflow prevention assembly may result in the backflow prevention assembly failing to meet final approval by the regulatory authority. The regulatory authority shall determine the location and type of backflow assembly to be installed within the area served by the City of Boerne. An assembly will be required in each of the following circumstances, but the customer is in no way limited to the following circumstances:

   1. The nature and extent of any activity of the premises, or the materials used in connection with any activity of the premises, or materials stored on the premises, if said activity or material could contaminate or pollute the potable water supply.

   2. Premises having one or more cross-connections that are identified as present.

   3. Premises having one or more cross-connections, and the cross-connection(s) are protected by an atmospheric vacuum breaker device (AVB).
4. Internal cross-connections are present that are not correctable.

5. Intricate plumbing arrangements are present which make it impractical to ascertain whether cross-connections exist.

6. There is a repeated history of cross-connections being established and reestablished.

7. There is unduly restricted entry so that inspections for cross-connections cannot be made with sufficient frequency to assure that cross-connections do not exist.

8. Materials are being used such that if backflow should occur a health hazard could result.

9. Installation of an approved backflow prevention assembly is deemed to be necessary to accomplish the purpose of these regulations in the judgment of the City.

10. An appropriate cross-connection survey report form has not been filed with the Utilities Department of the City of Boerne upon request of the City.

11. A fire protection system that is connected to the City’s water system.

12. All new construction, if deemed necessary in the customer service inspection. The type of assembly required will be determined by the degree of hazard.

13. When a building is constructed on commercial premises, and the end use of such building is not determined or could change, a reduced pressure principle backflow prevention assembly may be installed at the service connection that supplies water for public domestic use.

14. Any used water return system.

15. In the event a point-of-use assembly has not had the testing or repair done as required by this ordinance, a premises isolation assembly will be required.

16. If it is determined that additions or alterations have been made to the plumbing system without obtaining proper permits, premises isolation may be required.

17. All multistory buildings or any building with a booster pump or elevated storage tank.
18. Retrofitting will be required on all high hazard connections and wherever else the City deems necessary to meet the intent of this ordinance.

B. All backflow prevention assemblies installed after the effective date of this ordinance shall be installed in a manner designed to facilitate ease of inspection and testing by the regulatory authority of the City or its chosen representative. Any current installed backflow prevention assemblies, which are located in inaccessible locations or where the tester is subject to physical danger, shall be relocated to approved locations.

Section 22-69. Installation Guidelines and Requirements

A. General: To ensure proper operation and accessibility of all backflow prevention assemblies, the following shall be required:

1. Backflow prevention assemblies shall be installed in accordance with current TCEQ rules and regulations and most recent edition AWWA Manual of water supply practices M-14. The assembly installer must obtain the required plumbing permits and have the installation inspected by a representative of the regulatory authority.

2. At those facilities where the regulatory authority requires a backflow prevention assembly be installed at the point of delivery of the water supply, such installation of the assembly must be before any branch in the line and on private property located just inside the boundary between the City right-of-way and the landowner=s property and on the service line side of the City meter. The regulatory authority may specify other areas for installation of the assembly. Assemblies that must be installed or are located on City rights-of-way are the responsibility of the business or entity that the water line is serving.

3. The assembly must be protected from freezing and other severe weather conditions.

4. All premises that require continuous, uninterrupted water service and are required to have a backflow assembly must make provisions for the parallel installation of assemblies of the same type so that testing, repair and maintenance can be performed. If, in a parallel installation, water flows through only one backflow preventer and the second is only there to be used during testing, then the second should at least be pressurized to close the relief valve and prevent entry of contaminants.

5. All backflow prevention assemblies shall be of a type and model
approved by the regulatory authority.

6. All vertical installations of backflow assemblies must have prior approval by the regulatory authority.

7. The property owner assumes all responsibility for any damage resulting from installation, operations, and/or maintenance of a backflow assembly. The owner shall be responsible for keeping all backflow prevention assembly vaults reasonably free of silt and debris.

8. Upon completion of installation, the regulatory authority shall be notified and all assemblies must be inspected and tested. All assemblies must be registered with the regulatory authority and shall provide the date of installation, manufacture, model, type, size, serial number of the backflow assembly, physical location and initial test report.

9. Assemblies must be sized and flow characteristics must be sufficient to provide an adequate supply of water and pressure for the premises being served.

10. Assemblies must be readily accessible for testing and maintenance and must be located in an area where water damage to buildings or furnishings would not occur from water discharge. The property owner assumes all responsibility for any damage caused by water discharge from an assembly.

11. No part of a backflow prevention assembly shall be submerged in water or installed in a location subject to flooding.

12. Use of an auxiliary water supply, such as a private well, a rainwater-harvesting system, reclaimed water, or a pump in a lake, must install a Reduced Pressure Principle backflow prevention assembly at the meter connection or provide an air gap at the meter. If it can be documented in a CSI that the plumbing system of the auxiliary water supply and the plumbing system of the potable water supply are physically separated and not cross-connected then this separation distance may serve as an air gap.

13. Assemblies installed on fire service lines must be placed within 40-feet of the public water main.

Section 22-70. Testing of Assemblies

A. All multi-family residential use and non-residential use backflow prevention
assemblies shall be inspected and tested in each of the following circumstances:

1. Upon installation.

2. Whenever the assembly is moved.

3. A minimum of once a year.

4. For premises that have been vacated and unoccupied for one year, prior to re-occupancy.

5. Immediately after repairs.

B. All single-family residential use backflow prevention assemblies shall be inspected and tested in each of the following circumstances:

1. Upon installation

2. A minimum of once a year for premises with on-site sewage facilities, ornamental fountains, and chemical added fire suppression systems.

3. Whenever the assembly is moved.

4. Immediately after repairs.

5. Whenever there is a sign of contamination within the residence.

C. Assemblies used for the protection from health hazards, whether installed at the meter or part of an internal program, must be tested upon installation and once a year thereafter by a licensed backflow prevention assembly tester and the records must be retained by the regulatory authority for three years.

D. State certified licensed backflow testers shall test and repair assemblies on any domestic, commercial, industrial, or irrigation service, however;

E. Testing and repairs of assemblies on fire protection systems or fire lines must be performed by a state certified fire line tester permanently employed by an approved fire-line contractor.

F. Duly authorized employees of the City bearing proper credentials and identification are entitled to enter any public or private property at any reasonable time for the purpose of enforcing this ordinance. Persons and occupants of premises which are provided water service by the City, either directly or indirectly, shall allow the City or its representatives access at all reasonable times to all parts of the premises for the purposes of inspection, testing, records examination, or to perform utility specific duties. Where persons or occupants of premises have security measures in force
which would require proper identification and clearance before entry into their premises, the persons and occupants of the premises shall make necessary arrangements with their security guards so that upon presentation of suitable identification, personnel from the City will be permitted to enter, without delay, for the purposes of performing their specific responsibilities.

G. The City is not liable for damage to a backflow prevention assembly which may occur during testing.

H. The regulatory authority may require a water use survey to be conducted at any establishment located in the City which is served by a public water supply or which provides water to the public. Upon determination by the regulatory authority that the establishment falls under the provisions of this ordinance and requires a backflow prevention assembly, the regulatory authority shall issue a notice to abate the condition or order the establishment to install the proper backflow prevention assembly.

I. It is the responsibility of any person who owns or controls property to have all assemblies tested in accordance with Section VIII of this ordinance. Assemblies may be required to be tested more frequently if the regulatory authority deems necessary.

J. For reports indicating a failed test, the owner of the premise shall:
   1. Monitor the connection for contamination until the repairs can be made.
   2. Determine the cause of failure and any risk posed by that connection.
   3. A follow-up test must be performed within 30 days or water service will be discontinued.

Section 22-71. Backflow Prevention Assembly Tester Certification and Registration

To be an approved backflow prevention assembly tester within the City, an individual must register annually with the regulatory authority, provide proof of TCEQ certification, provide proof that testing equipment is able to maintain a calibration of plus or minus 0.2 psid accuracy and pay an annual, non-refundable tester registration fee as stated in the City of Boerne Fees Ordinance. The regulatory authority will maintain a current list of licensed testers, which will be made available to facilities, which may need testers to perform their annual testing.

Section 22-72. Water System Connections

   A. Water Distribution Infrastructure
      1. All water distribution infrastructure must be constructed, installed and tested in accordance with TCEQ Rules and Regulations, as amended,
for Public Water Systems.

2. Permanent water service shall not be supplied to any newly constructed infrastructure until after the City has received the results of the bacteriological test(s) and the results show that no bacteria are present.

3. Permanent water service shall not be supplied to any newly constructed infrastructure until an inspection is completed by the regulatory authority or representative to insure that all State Regulations and Local Codes have been met.

Section 22-73. Lawn Irrigation Systems

A. All lawn irrigation system installations shall obtain a permit issued by the Code Enforcement Department. Installation requirements must comply with the current adopted City plumbing code and guidelines set forth by TCEQ and Interconnections of the potable water supply with an alternate water source are prohibited unless appropriate backflow protection is installed.

B. Irrigation systems installed on sites that have an on-site sewage facility (such as a septic tank), elevates the classification of the irrigation system to a health hazard requiring the installation of a Reduced Pressure Principle Assembly (RPBA).

C. Irrigation systems supplied with reclaimed water through a separate piping system and is not interconnected with the potable water system or any other water source, does not require the installation of a backflow prevention assembly.

D. Before performing any major maintenance, alteration, repair, or service of the irrigation system that is connected to the potable water supply, an approved backflow prevention assembly shall be installed.

E. Backflow prevention assemblies must be tested prior to being placed in service and the test results provided to the regulatory authority within ten days of testing.

F. Licensed irrigators may install backflow prevention assemblies; however, assemblies must be tested by a licensed BPAT upon installation.

Section 22-74. Residential Service Connections

Any person who owns or controls any residential property which has been determined to have an actual or potential cross-connection will be required to eliminate the actual or potential cross-connection or have an approved backflow prevention assembly installed in accordance with this ordinance.
Section 22-75. Multiple Connections

Any premises requiring multiple interconnected City service connections for adequacy of supply and/or fire protection will be required to install a backflow assembly on each of the service lines to the premises as applicable. The type of assembly will be determined by the degree of hazard that could occur in the event of an interconnection between any of the water systems on the premises.

Section 22-76. Rental Properties

Any person who owns or controls rental property is responsible for the installation, test and repair of all backflow assemblies on their property.

Section 22-77. Mobile Units

The connection of a mobile unit to any potable water system is prohibited unless an air gap or an approved backflow prevention assembly protects such connection. Prior approval and annual device testing of any backflow prevention assembly must be received from the regulatory authority before connecting to any potable water system.

Section 22-78. Right-of-Way Encroachment

No person shall install or maintain a backflow prevention assembly upon or within any City right-of-way unless authorized by the City Manager or his designee, provided as follows:

A. The City retains the right to approve the assembly, location, height, depth of enclosure, and other requisites, prior to installation.

B. All permits and inspections required by the City of Boerne Right-of-Way Construction Ordinance shall be obtained.

C. The assembly shall be installed below or flush with the surrounding grade except when it is not practicable to install it in this manner. Any assembly or portion of an assembly that extends above ground shall be located no closer than eighteen (18) inches to the face of the curb.

D. The City shall not be liable for any damage done to or caused by an assembly installed in a right-of-way.

E. A property owner shall, at the request of the City and at the owner's expense, relocate a backflow prevention assembly which encroaches upon any City right-of-way when such relocation is necessary for street or utility construction or repairs for purposes of public safety.

F. A person commits an offense if, after receiving a written order from the regulatory authority, he or she fails to relocate a backflow prevention
assembly located in or upon any City right-of-way.

**Section 22-79. Fire Protection Systems**

A. All new and existing installations of fire protection systems, which utilize the City’s potable water supply, shall have installed an approved backflow prevention device according to the degree of hazard.

B. An approved double check detector backflow-prevention assembly (DCDA) or reduced pressure principle detector backflow-prevention assembly (RPDA) shall be the minimum protection for fire sprinkler systems using piping material that is not approved for potable water use and/or that does not provide for periodic flow-through during each twenty-four (24) hour period, unless a variance has been issued in writing from the regulatory authority. A (RPDA) must be installed if any solution other than the potable water can be introduced into the sprinkler system.

1. In the event of any changes to the fire protection system, it is the responsibility of the property owner(s) to notify the regulatory authority.

2. Upon the approved installation of the (DCDA) or (RPDA) device, a device test report completed by a licensed fire line tester must be sent to the attention of the regulatory authority or its representative and include the information.

3. Retrofitting shall be required on existing water-based fire protection systems when the water supply in a certain area has been contaminated and the fire protection system has contributed to the contamination; when an authority having jurisdiction to protect the potable water supply determines the existing fire protection system does not meet the minimum requirements.

**Section 22-80. Fire Hydrant Protection**

A. An air gap separation shall be the minimum protection for fire hydrant water meters which are being used for a temporary water supply during any construction or other times, which would pose a potential hazard to the public water supply.

1. It is the responsibility of all persons engaging in the use of a fire hydrant water meter to abide by the conditions of this ordinance and the City of Boerne Bulk Water Ordinance.

2. Only City of Boerne fire hydrant water meters will be allowed within the potable water system.
3. A refundable deposit is required to ensure the return of all fire hydrant water meter to the Utilities Department. Failure to return or misuse of the meters can result in the forfeiture of deposit and/or enforcement action being taken against the responsible party, as allowed for in the penalty section of the City of Boerne Bulk Water Ordinance.

4. All non-approved fire hydrant meters which are found to be in use in the City of Boerne will be confiscated and enforcement action taken against the responsible party, as allowed for in the City of Boerne Bulk Water Ordinance.

Section 22-81. Thermal Expansion

It is the responsibility of any person who owns or controls property to eliminate the possibility of thermal expansion if a closed system has been created by the installation of a backflow prevention assembly.

Section 22-82. Pressure Loss

Any reduction in water pressure caused by the installation of a backflow assembly is the responsibility of the property owner, not the responsibility of the City.

Section 22-83. Customer Service Inspection

A. Pursuant to TCEQ Rules and Regulations for Public Water Systems, a Customer Service Inspection (CSI) is required by the regulatory authority prior to providing continuous or permanent water service in each of the following circumstances:

1. New connections, and newly constructed facility or previously non-existent premises.

2. Existing service where there is reason to believe that a cross-connection or other potential contamination hazard exists.

3. After any material improvement, correction, or addition to the private water distribution facilities and/or to the building(s) or premises.

2. The regulatory authority deems it necessary.

B. Customer service inspection reports shall be recorded on a form approved by the regulatory authority and retained for at least ten (10) years or as long as the inspected facility is in existence.
C. Individuals with the following credentials may conduct customer service inspections:
1. Customer service inspectors licensed by TCEQ.
2. Plumbing inspectors and water-supply-protection specialists licensed by the Texas State Board of Plumbing Examiners.

Section 22-84. Plumbing Code

As a condition of water service, a customer shall install, maintain, and operate the customer's piping and plumbing systems in accordance with the Plumbing Code provisions adopted by the City. In the event of conflict between this Article and the Plumbing Code, the more restrictive provisions shall apply.

Section 22-85. Fees

All fees and/or deposits referred to in this ordinance are specified in the City of Boerne Fees Ordinance.

Section 22-86. Enforcement

A. Violations - An offense is considered committed if:
1. There has been a failure to maintain backflow prevention assemblies in compliance with this section.
2. There has been failure to comply with a repair order issued by the regulatory authority.
3. Backflow from premises owned, operated or managed enters the public water supply system.
4. There has been a failure to pay fees required by this article.
5. There is violation of any section of this ordinance.
6. Water service is reinstated to premises discontinued or disconnected under this article, except as directed by the regulatory authority.
7. An unregistered tester is allowed to perform testing work at an establishment.
8. A backflow prevention assembly is tested within the City without being registered with the regulatory authority.
9. A backflow prevention assembly is tested within the City without being
certified by the TCEQ.

B. Penalty

1. Any person, firm or corporation who violates, disobeys, omits, neglects or refuses to comply with or who resists the enforcement of any of the provisions of this Ordinance shall be fined not more than Two Thousand Dollars ($2,000.00) for each offense. Each day that a violation is permitted to exist shall constitute a separate offense.

2. The City Attorney shall have full authority to seek imposition of Civil Penalties as provided by law for each violation of or offense against any provision of this Ordinance; and to obtain temporary and permanent orders of injunction against any violation of or offense against any provision of this Ordinance.

C. Sanction for Failure to Pay Fees
   In addition to sanctions provided for by this ordinance, the City is entitled to exercise sanctions provided for by other ordinances of the City for the failure to pay for water and sanitary sewer services when due.

D. A certified tester’s registration may be reviewed and revoked by the City if the regulatory authority determines that the tester has:

   1. Falsely, incompletely, or inaccurately reported assembly reports;

   1. Used inaccurate gauges;

   2. Used improper testing procedures; or

   3. Created a threat to public health or the environment.

PASSED and APPROVED on first reading this the 12th day of July 2022.

PASSED, APPROVED and ADOPTED on second reading this the 26th day of July 2022.

APPROVED:

[Signature]

Mayor Pro Tem

-20-
ATTEST:

[Signature]
City Secretary

APPROVED AS TO FORM:

[Signature]
City Attorney