

ORDINANCE NO. 1510

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF LAMPASAS, TEXAS, AMENDING CHAPTER 18, SECTION 18-3 OF THE CODE OF ORDINANCES OF THE CITY OF LAMPASAS, TEXAS, BY IMPLEMENTING A "CROSS- CONNECTION CONTROL PROGRAM" INTO THE CITY'S BUILDING REGULATIONS; PROVIDING A REPEALER CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVISIONS FOR ENFORCEMENT AND ESTABLISHING FINES AND PENALTIES FOR THE VIOLATION OF THE ORDINANCE; AND, PROVIDING AN EFFECTIVE DATE.

WHEREAS, the rules of the Texas Commission on Environmental Quality ("TCEQ"), formerly, an agency of the State of Texas formerly known as the Texas Natural Resource Conservation Commission ("TNRCC"), require that public water systems such as that operated by the City of Lampasas adopt and enforce adequate plumbing ordinances, regulations, and/or service agreements setting forth provisions to ensure that neither faulty cross-connections nor other unacceptable plumbing practices are permitted which may endanger public water supplies and public safety, health and welfare;

WHEREAS, the City of Lampasas, a Texas municipality with authority granted by its Home Rule Charter hereby adopts such provisions in compliance with the laws of Texas and the regulations of the TCEQ.

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

Section I: That the City of Lampasas Code of Ordinances Chapter 18 "Buildings and Building Regulations," Subsection 18-3 "Cross-Connection Control Program" is hereby amended to include the following:

Section 18-3. Cross-Connection Control Program

Sec. 18-3.1. - Purposes.

The purposes of this ordinance are to:

- (a) Protect the city's potable water system from contamination or pollution by preventing contaminants and pollutants originating from municipal customers' water systems from entering into the city's potable water system, in a manner that may jeopardize the health, safety and welfare of the public in general as well as the water customers of the City.
- (b) Provide for a continuing municipal program related to backflow prevention and cross-connection control by requiring the proper installation of approved backflow prevention assemblies and/or proper plumbing methods, as set forth in this ordinance, the building or plumbing codes adopted by the City, the requirements of chapter 290, title 30 of the Texas Administrative Code (TAC), and the requirements of V.T.C.A., Health and Safety Code ch. 341, subch. C, all as amended, and requiring the certification and operational testing of all testable backflow prevention assemblies within the City of Lampasas and the City's certificated water service area.

- (c) Comply with applicable provisions of the federal Safe Drinking Water Act (title 42, United States Code, chapter 6A, subchapter XII) and any state regulations as established by the Texas Commission on Environmental Quality (title 30, Texas Administrative Code) related to cross-connections and backflow prevention for municipal water supplies and providers.

Sec. 18-3.2. - Applicability.

This ordinance applies to all connections to the city's potable water system and to all installations of backflow prevention assemblies related to the city's potable water system, regardless of whether the connection or assembly is located within the city limits of Lampasas or in the city's certificated water service area.

Sec. 18-3.3. - Definitions.

Air gap separation means 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.

Approved assembly means a backflow prevention assembly that has been listed approved, manufactured, tested and installed for specific uses in accordance with the standards adopted by the AWWA (Manual M14, latest version) or approved and listed by the University of Southern California Foundation Manual for Cross-Connection Control (latest version) and is otherwise in compliance with this ordinance and the plumbing code.

Auxiliary water supply means any water supply on or available to a customer's premises from a source other than directly through the city water system. Auxiliary water supplies include all of the following:

- (1) Water from another public water system.
- (2) Water from a natural source, such as a well, spring, pond, river or creek.
- (3) Reclaimed water.
- (4) Any water supplied by a public water system, including the city water system, that has passed through a point of delivery and is no longer controlled by the city water system.

AWWA means the American Water Works Association.

Backflow means the undesirable reversal of flow of water and/or mixtures of water and other liquids, gases, or other substances from a customer's side of the service connection into the city water system. Backflow may occur under either a backpressure or back siphonage condition or as a result of a cross-connection.

Backflow prevention assembly or *assembly* means an approved assembly or aggregation of approved assemblies designed to prevent backflow.

Backpressure means any situation or occurrence where the pressure in a customer's system is higher than in the city water system.

Back siphonage means an occurrence where the pressure in the city water system becomes less than that of the customer's system due to a vacuum in the city water system causing the flow of water to reverse its flow.

Building official means the person designated as the building official in the construction code adopted in chapter 18 of this Code.

Bypass means a connection from the city side of a backflow prevention assembly to the customer side of the assembly for the purpose of diverting the water around the assembly while it is being repaired or replaced.

Certified backflow prevention assembly tester or *certified tester* means a person who: (1) holds a current professional certification as a backflow prevention assembly tester as required by 30 TAC §290.44(h)(4)(A), as amended; and (2) is currently registered with the city director of water and sanitary sewer department.

Check valve means a valve that seats readily and completely in order to completely cease the flow of water.

City water system means the entire potable water distribution system of the City of Lampasas, including, without limitation, all pipes, facilities, valves, pumps, conduits, tanks, receptacles and fixtures and appurtenances between the water supply source and the point of delivery, used by the city to produce, convey, deliver, measure, treat or store potable water for public consumption or use.

Contamination means the presence of any foreign substance (organic, inorganic, radiological or biological) in water that tends to degrade its quality so as to constitute a hazard or impair the usefulness of the water. Contamination includes both hazardous contaminants and pollutants.

Cross-connection means any physical connection between the city water system and either another supply of unknown or questionable quality, any source which may contain contaminating or polluting substances, or any source of water treated to a lesser degree in the treatment process, through which backflow may occur.

Customer means any person or entity that is supplied potable water by or through the city water system and includes an owner, tenant or lessee.

Customer service inspection means an examination of the customer's system for the purpose of providing or denying water service. This inspection is limited to the identification and prevention of cross-connections, potential contaminant hazards, and illegal lead materials. The customer service inspector has no authority or obligation beyond the scope of the TCEQ's regulations. A customer service inspection is not a plumbing inspection as defined and regulated by the Texas State Board of Plumbing Examiners (TSBPE).

Customer's system means the entire plumbing system, including all pipes, conduits, tanks, receptacles, fixtures, equipment and appurtenances used to produce, convey, store or utilize potable or non-potable water between the point of delivery and the customer's point of use.

Director means the director of public works for the City of Lampasas or another official as designated by the director.

Hazardous contaminant means any form of contamination that poses a health hazard with respect to the use of water for drinking or other domestic purposes.

Health hazard means 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.

Non-health hazard means a cross-connection, potential contamination hazard, or other situation involving any substance that generally will not be a health hazard, but will constitute a nuisance, or be aesthetically objectionable, if introduced into the city water system.

Person means any natural person, entity, corporation, corporate body, partnership, cooperative corporation, association, public or private organization of any character, or political subdivision of the state.

Plumbing code means the version of the International Plumbing Code or other related provisions in the International Residential Code, adopted in Chapter 18 of this Code, as amended from time to time by the City.

Point of delivery means the point at which water leaves the city water system and enters a customer's system at or near the property line or the edge of an easement. When a water meter is installed on or near the property line or edge of an easement, the point of delivery is the terminal end on the discharge side of the water meter.

Pollutant means a contaminant that impairs the quality of water in a manner or to a degree that does not create a hazard to public health, but may adversely affect the aesthetic qualities of the water for domestic use.

Potable water means water that complies with the TCEQ rules for drinking water and other domestic uses.

Potential contamination hazard means a condition which, by its location, piping or configuration, has a reasonable probability of being used incorrectly, through carelessness, ignorance, or negligence, to create or cause to be created a backflow condition by which contamination can be introduced into the water supply.

Service connection means the terminal end of a service connection from the city water system. If a meter is installed at the point of delivery, the service connection means the point at which the terminal end on the discharge side of the water meter connects to the customer's system.

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

Sec. 18-3.4. - Conflicts.

If there is a conflict between any provisions of this ordinance, any other provision of this code or state or federal law including TAC title 30, all as amended, the most restrictive provision shall apply.

DIVISION 2. - AUTHORITY AND RESPONSIBILITY

Sec. 18-3.5. – Building Official.

- (a) *Authority and responsibility.* The Building Official, or his/her authorized designee, is responsible for enforcing the requirements of this ordinance and may establish policies to implement the purposes of this ordinance.
- (b) *Adequate protection determination.* To ensure adequate protection in individual cases, the Building Official may assess and determine the degree of hazard to the city's potable water system posed in the case of individual connections, customers or users. When the Building Official determines that a backflow prevention assembly is required for the protection of the city water system, the Building Official will require the customer, at the customer's expense, to properly install an approved assembly at each service connection or hazard point. Notice of such requirement shall be given in accordance with section 18-3.12 of this ordinance.
- (c) *Certified testing required.* In accordance with the TCEQ's Rules, the Building Official, or his/her authorized designee, shall require a certified testing report for all required and testable assemblies where an actual or potential hazard has been determined to exist in accordance with subsection 18-3.5(d) in the following instances:

- (1) Prior to providing continuous water service to new construction;
 - (2) On any existing service when the director has reason to believe that cross connections or other unacceptable plumbing practices increase the risk of actual or potential contamination hazards entering into the city water system;
 - (3) After any installation, repair, relocation, alteration, or addition to a customer's system that may affect the system's compliance with this ordinance; and
 - (4) At other times as provided by this ordinance.
- (d) *Testing by City.* City personnel, as directed by the Lampasas Building Official, or his/her authorized designee, may perform periodic tests on assemblies at random locations to ensure that acceptable test standards are being followed by certified testers and randomly select and tag assemblies in a manner that will determine if the assemblies have been tested as required.
- (e) *Authority to compel report production.* The Building Official, or his/her authorized designee, may require from any person, entity or property owner or occupant the submission of any records relating to the installation, maintenance, repair or testing of backflow prevention assemblies performed in accordance with this ordinance
- (f) *Authority to refuse or terminate service.* The Building Official, or his/her authorized designee, may, upon approval of the City Manager, refuse to initiate water service or discontinue present water service to any customer where the Building Official, or his/her authorized designee, determines that: (1) an actual or potential sanitary hazard in the customer's system exists; and/or (2) adequate protection against backflow has not been provided or reported in accordance with this ordinance. Notice of terminating or temporarily stopping service is not required where the actual or potential threat of contamination endangers the health, safety and welfare of the city's water system, the customers the system serves, or the general health, safety and welfare of the public.
- (g) *Authority to revoke certified tester registration.* The Building Official, or his/her authorized designee, may revoke a certified tester's registration in the following cases:
- (1) Failure to register the serial number or have the gauge tested for accuracy annually;
 - (2) Use of a test gauge that does not meet the manufacturer's calibration standards in preparation of a city backflow test and maintenance report;
 - (3) Two (2) testing or reporting discrepancies within a one-year period, beginning on the date of the first discrepancy, including:
 - (i) False, incomplete, or inaccurate reporting of test completion or certification of a backflow prevention assembly;
 - (ii) Use of inaccurate gauges;
 - (iii) Improper operational certification methods; or,
 - (iv) Failure to comply with 18-3.7 (a) of this ordinance, below.
 - (4) Failure to maintain licensure or registration with TCEQ;
- or,
- (5) A successful enforcement action taken by the City against the person or entity for prior violation of this ordinance.

Revocation of *certified tester registration* under this paragraph is effective upon receipt of written notice from the Building Official, or his/her authorized designee, sent via certified mail, return receipt requested. Receipt is presumed to occur five (5) calendar days following the date the

notice is mailed. Non-receipt of the notice does not affect the validity of a revocation order. Written notice under this paragraph shall provide specific written findings justifying revocation. Registrations for certified tester's that have had a registration revoked shall not be accepted for a period of one (1) year following the effective date of revocation.

- (h) *Appeal of registration revocation.* A request for appeal and reconsideration of registration revocation by a certified tester shall be delivered to the City Manager within fifteen (15) calendar days of receipt of the revocation notice and shall specifically contest or justify the director's findings as outlined in the revocation notice. The City Manager shall have fifteen (15) calendar days to reconsider revocation and shall then issue a written final determination via certified mail, return receipt requested.

Sec. 18-3.6. - Responsibilities of customers.

- (a) *Duty.* Each customer has a duty to prevent contaminants from entering into the customer's system and the city water system. This duty begins at the point of delivery and includes the customer's entire internal water system. If the Building Official, or his/her authorized designee, determines that an actual or potential hazard exists in the customer's system, this ordinance, including the requirements to implement an adequate cross-connection control program and/or install a backflow prevention assembly at the service connection and compliance with the applicable testing requirements, shall apply.
- (b) *Consent to allow access and survey.* Each customer, as a condition of receiving water service, consents to allow city personnel access to the customer's property during normal business hours to inspect and survey the customer's system for potential contamination, backflow hazards and cross-connections in accordance with section 18-3.13. Written consent for access shall be requested by the city prior to conducting an inspection and the property owner shall grant such consent within ten (10) calendar days of receipt of the request for access by the city. If a customer refuses to allow access to city personnel for an inspection or survey in the time frame provided, the Building Official, or his/her authorized designee, may discontinue or refuse the customer's water service, and/or assume that a high contamination health hazard exists and, therefore, require the highest degree of protection to be used in the customer's system prior to providing water service. If access is denied the Building Official or his/her authorized designee, may immediately discontinue water service without further notice and the installation and certification of such required protection shall be required prior to allowing service to the customer.
- (c) *Expense.* Each customer, at the customer's expense, shall install, operate, maintain and test approved backflow prevention assemblies as required by this ordinance.
- (d) *Testing requirements.*
 - (1) *Customer responsibilities.* If the Building Official, or his/her authorized designee, determines that an internal cross-connection program and/or a backflow prevention assembly at the service connection is required, the customer shall: (a) initiate the testing required by this section; (b) have completed any maintenance or installation of backflow assemblies as determined by the test to be necessary; and (c) ensure that an original report is submitted to the Building Official as required by this ordinance.
 - (2) *Initial testing or testing following repair, replacement, alteration or relocation.* All required backflow prevention assemblies shall be tested by a certified tester upon installation, repair, alteration or relocation and prior to being placed into service (.

- (3) *Annual testing.* All required backflow prevention assemblies which are installed to provide protection against health hazards shall be tested by a certified tester annually following installation, repair or maintenance..
- (e) *Installation, repair or maintenance.* Each customer, when contracting for the installation, repair or maintenance of backflow prevention assemblies shall employ a person, entity or contractor lawfully permitted to perform such services under state law. A customer must apply for and obtain a permit from the Building Official, or his/her authorized designee, before installing, replacing, re-piping or relocating a backflow prevention assembly.
- (f) *Record keeping requirements.* Customers shall keep and maintain accurate copies of City of Lampasas test and maintenance report forms for all tests and repairs made to backflow prevention assemblies for at least three (3) years from the date of any such act, and shall provide the Building Official, or his/her authorized designee, with copies of these reports upon written request or as provided for in this ordinance.
- (g) *Internal System Inspections - thermal expansion.* With the installation of backflow assemblies the potential for creating a "closed-system" occurs. This closed system could result in injury to the water system customer if adequate safety measures, including thermal expansion valves, are not functioning properly. Thermal expansion of heated water may occur wherever potable water is heated in a closed system. This expansion may cause damage ranging from leaking faucets to a ruptured water heater if the condition is not addressed. The city shall not accept any liability resulting from the implementation of this ordinance.

Sec. 18-3.7. - Certified backflow prevention assembly testers.

- (a) *Registration of certified testers.* Each person qualified to perform services as a certified tester for a city water system customer shall submit a completed city registration form to the Building Official, or his/her authorized designee, prior to performing any services regulated under this ordinance. Test results or certification of the performance of other services shall not be accepted if the tester is not currently registered with the Building Official, or his/her authorized designee. The Building Official, or his/her authorized designee, shall maintain a current list of registered certified testers, and will make this list available to city water system customers upon request. Registrations will be valid for one (1) year and must be renewed annually.
- (b) *Testing equipment.* The certified tester shall furnish the city with the serial number of the tester's test kit, and the tester's test gauge must be tested when purchased and annually thereafter, or more frequently as required by the Building Official, to be in compliance with the University of Southern California's Manual of Cross Connection Control (latest edition) or the American Water Works Association Manual of Cross Connection Control requirements (Manual M14, latest edition). The certified tester must maintain the test gauge within a two (2) percent accuracy deviation and retain test results for three (3) years from the date of any such test. All test results shall be made available to the Building Official, or his/her authorized designee, upon written request or as provided for by this ordinance.
- (c) *Accountability of certified tester.* The certified tester is responsible for the competency and accuracy of all tests and reports certifying assemblies to be operating within specifications performed or submitted by the certified tester, and for all work done by any persons under the direction or control of the certified tester. All work performed by a certified tester's assistants must be performed in the tester's presence. Certified testers shall certify that all backflow prevention assemblies comply with the specifications provided in the University of Southern California's Manual of Cross Connection Control (latest edition) or the American Water

Works Association Manual of Cross Connection Control requirements (Manual M14, latest edition) and that such assemblies are otherwise in compliance with this ordinance.

- (d) *Reporting and record keeping requirements.* A TCEQ test and maintenance report form must be completed by a certified backflow prevention assembly tester for each assembly tested. The signed and dated original must be submitted to the Building Official, or his/her authorized designee, for record keeping purposes. Only TCEQ test and maintenance report forms will be accepted. All test and maintenance reports shall be retained for at least three (3) years from the date of any such test, and shall be made available to the Building Official, or his/her authorized designee, upon written request or as provided for by this ordinance.
- (e) *Immediate notification required from a certified tester.* If a backflow prevention assembly test fails or an assembly malfunctions and the actual or potential hazard of contamination is not immediately curable through repair or replacement, the certified tester shall notify the Building Official, or his/her authorized designee, and the customer immediately in person or by telephone. This notification shall also be submitted in writing within five (5) calendar days. If the failure or malfunction of a backflow prevention assembly is not immediately curable through repair or replacement, the director upon notification, shall take all necessary steps, including the immediate cessation of water service through the assembly, to prevent the possible contamination of the city water system.
- (f) *Alteration of backflow assembly.* It is a violation of this ordinance for a certified tester to alter the design, material, or operational characteristics of a backflow prevention assembly during testing, repairing or maintaining the assembly without the prior written approval of the director.
- (g) *Qualified.* Certified backflow prevention assembly testers are qualified to test and repair assemblies on any domestic, commercial, industrial, or irrigation service. However, certified testers shall only test and repair assemblies on fire lines if they are permanently employed by an approved fire line contractor as required by the State of Texas Fire Marshall's office.

Sec. 18-3.8. - Backflow assembly installation and maintenance; permit required.

- (a) *Permit and inspection required.* Plumbing permits shall be obtained prior to installing, replacing, modifying or relocating existing backflow prevention devices in accordance with chapter 18 of this Code. In addition, plumbing inspections are required to be requested upon completion of the above acts and no inspection shall be requested until the original backflow test results are submitted to the city in accordance with this ordinance.
- (b) *Testing, reporting and record keeping required.* When a backflow prevention assembly is installed, replaced, modified or relocated the approved assembly shall be tested prior to being placed into service. The person completing the work in subsection (a) of this section shall submit copies of written reports detailing the work to the customer and original reports to the Building Official, or his/her authorized designee, on the TCEQ test and maintenance report form. The report shall include a list of the materials or replacement parts used. All test, installation and maintenance reports shall be retained for at least three (3) years from the date of any such test, and shall be made available to the Building Official, or his/her authorized designee, upon written request or as provided for by this ordinance.

DIVISION 3. - STANDARDS AND REQUIREMENTS

Sec. 18-3.9. - General requirements.

- (a) *Compliance required.* This ordinance, the TCEQ Rules and Regulations for Public Water Systems provided in title 30 of the Texas Administrative Code, the city plumbing code and other applicable state and federal laws, all as amended, will govern the design, construction, operation and maintenance of the city water system with respect to cross-connection control and backflow prevention. Each person shall comply with all applicable provisions of these rules and regulations.
- (b) *Auxiliary and reclaimed water systems.* It is unlawful for a person to cause or allow water from an auxiliary water supply or reclaimed water system to enter the city water system. Where a customer is served by an auxiliary water supply or utilizes a reclaimed water system in addition to the city water system, all applicable TCEQ regulations shall be followed, and the Building Official will determine the type of backflow prevention assembly to be used.
- (c) *Unlawful connections.* It is unlawful for a person to make a connection from the city water system to a customer's system where an actual or potential contamination hazard to the city water system exists and there is no air gap separation between the drinking water supply and the source of potential contamination. Where a containment air gap is impractical and, instead, an individual internal air gap or mechanical backflow prevention assembly is used, a backflow prevention assembly will be required at the service connection in accordance with AWWA Standards on those establishments handling substances deleterious or hazardous to the public health. This requirement does not apply if the customer maintains an adequate internal cross-connection control program that includes an annual inspection by a certified tester.
- (d) *Non-potable connections.* It is unlawful for a person to make any connection from the city water system to any condensing, cooling or industrial process or any other system of non-potable usage, over which city water system officials do not have sanitary control, in a manner that does not fully comply with the requirements of subsection (c) above. It is unlawful for any person to cause or permit backflow from any such process to be transmitted into the city water system.
- (e) *Overhead bulk water dispensing stations.* Overhead bulk water dispensing stations must be provided with an air gap between the filling outlet hose and the receiving tank to protect against back siphonage and cross-contamination.
- (f) *Service connections, additional protection.* The use of a backflow prevention assembly at a service connection will be considered additional backflow prevention, and does not negate the requirement of backflow prevention on internal hazards as provided by this ordinance.
- (g) *Unlawful bypasses.* It is unlawful for a person to install, or to cause or permit the installation of, a bypass that has not been approved in advance by the Building Official. All bypasses on backflow prevention assemblies must themselves include provisions for backflow prevention as described in this ordinance.
- (h) *Exception.* This ordinance shall not apply at any residence or facility where there is no actual or potential contamination hazard as determined by the Building Official or his/her authorized designee.

Sec. 18-3.10. - Types of backflow prevention required.

- (a) *Generally.* Cross-connections vary widely in degree of potential contamination hazards. Backflow may occur under many different pressure differentials, varying from vacuum to very high pressures. The protection afforded by a backflow prevention assembly depends upon its type, the circumstances in which it is installed, and on its proper installation, maintenance and testing. Only approved assemblies shall be used (as defined in this ordinance).

(b) *Minimum specific backflow prevention assembly required.* Specific backflow prevention assembly requirements for all affected customers and persons shall comply with this ordinance, TCEQ regulations as provided in title 30, chapter 290 TAC and the city's plumbing code, all as amended. In the event that a conflict exists, the most stringent requirement shall control. Only approved assemblies shall be used. The TCEQ table provided below details the types of premises and uses that are commonly subject to compliance with this ordinance, however, notwithstanding this provision or the table below, the Building Official shall retain final approval authority in each individual case.

Assessment of Hazards and Selection of Assemblies

The following table lists many common hazards. It is not an all-inclusive list of the hazards which may be found connected to public water systems.

Premises Isolation - Description of Premises	Assessment of Hazard	Required Assembly
Aircraft and missile plants	Health	RPBA or AG
Animal feedlots	Health	RPBA or AG
Automotive plants	Health	RPBA or AG
Breweries	Health	RPBA or AG
Canneries, packing houses and rendering plants	Health	RPBA or AG
Commercial car wash facilities	Health	RPBA or AG
Commercial laundries	Health	RPBA or AG
Cold storage facilities	Health	RPBA or AG
Connection to sewer pipe	Health	RPBA or AG

Dairies	Health	RPBA or AG
Docks and dockside facilities	Health	RPBA or AG
Dye works	Health	RPBA or AG
Food and beverage processing plants	Health	RPBA or AG
Hospitals, morgues, mortuaries, medical clinics, dental clinics, veterinary clinics, autopsy facilities, sanitariums, and medical labs	Health	RPBA or AG
Metal manufacturing, cleaning, processing, and fabrication plants	Health	RPBA or AG
Microchip fabrication facilities	Health	RPBA or AG
Paper and paper products plants	Health	RPBA or AG
Petroleum processing or storage facilities	Health	RPBA or AG
Photo and film processing labs	Health	RPBA or AG
Plants using radioactive material	Health	RPBA or AG
Plating or chemical plants	Health	RPBA or AG
Pleasure-boat marinas	Health	RPBA or AG
Private/Individual/Unmonitored Wells	Health	RPBA or AG

Reclaimed water systems	Health	RPBA or AG
Restricted, classified or other closed facilities	Health	RPBA or AG
Rubber plants	Health	RPBA or AG
Sewage lift stations	Health	RPBA or AG
Sewage treatment plants	Health	RPBA or AG
Slaughter houses	Health	RPBA or AG
Steam plants	Health	RPBA or AG
Tall buildings or elevation differences where the highest outlet is 80 feet or more above the meter	Nonhealth	DCVA

Internal Protection - Description of Cross Connection	Assessment of Hazard	Required Assembly
Aspirators	Nonhealth†	AVB
Aspirator (medical)	Health	AVB or PVB
Autoclaves	Health	RPBA
Autopsy and mortuary equipment	Health	AVB or PVB
Bedpan washers	Health	AVB or PVB
Connection to industrial fluid systems	Health	RPBA
Connection to plating tanks	Health	RPBA

Connection to salt-water cooling systems	Health	RPBA
Connection to sewer pipe	Health	AG
Cooling towers with chemical additives	Health	AG
Cuspidors	Health	AVB or PVB
Degreasing equipment	Nonhealth†	DCVA
Domestic space-heating boiler	Nonhealth†	RPBA
Dye vats or machines	Health	RPBA
Firefighting system (toxic liquid foam concentrates)	Health	RPBA
Flexible shower heads	Nonhealth†	AVB or PVB
Heating equipment Commercial Domestic	Nonhealth† Nonhealth†	RPBA DCVA
Hose bibbs	Nonhealth†	AVB
Irrigation systems with chemical additives without chemical additives	Health Nonhealth†	RPBA AVB or PVB
Kitchen equipment - Commercial	Nonhealth†	AVB
Lab bench equipment	Health or Nonhealth†	AVB or PVB
Ornamental fountains	Health	AVB or PVB
Swimming pools Private Public	Nonhealth† Nonhealth†	RVB or AG RPBA or AG
Sewage pump	Health	AG
Sewage ejectors	Health	AG
Shampoo basins	Nonhealth†	AVB

Specimen tanks	Health	AVB or PVB
Steam generators	Nonhealth†	RPBA
Steam tables	Nonhealth†	AVB
Sterilizers	Health	RPBA
Tank vats or other vessels containing toxic substances	Health	RPBA
Trap primers	Health	AG
Vending machines	Nonhealth†	RPBA or PVB
Watering troughs	Health	AG or PVB

NOTE: AG = air gap; AVB = atmospheric vacuum breaker; DCVA = double check valve backflow prevention assembly; PVB = pressure vacuum breaker; RPBA = reduced-pressure principle backflow prevention assembly.

*AVBs and PVBs may be used to isolate health hazards under certain conditions, that is, back siphonage situations. Additional area of premises isolation may be required.

†Where a greater hazard exists (due to toxicity or other potential health impact) additional area protection with RPBA is required.

Uses not listed in this table may require backflow prevention through air gaps or backflow prevention assemblies depending on the nature of the use, the equipment and the plumbing system. These will be determined on an individual basis by the Building Official.

- (c) *Exceptions.* A person may request approval from the Building Official, or his/her authorized designee, for a proposed deviation from or exception to the requirements of this ordinance. Upon request, the Building Official, or his/her authorized designee, shall conduct a customer service inspection to determine what (if any) hazards are present and shall document what (if any) backflow protection is required and provide the same to the customer. The Building Official, or his/her authorized designee, may approve a deviation or exception if the deviation or exception does not conflict with applicable law or increase the risk of an actual or potential contamination hazard from entering into the city water system.
- (d) *Criteria for selection of backflow prevention assemblies.* The selection of an appropriate backflow prevention assembly depends upon the degree of hazard involved and will be based on the following criteria:
- (1) whether the assembly could ever be subject to backpressure due to the customer's internal pumping pressures or elevation differentials;
 - (2) the nature of contaminating material under the most critical circumstances;

- (3) the extent to which additions may be made to the plumbing system at a later date which would affect the initial selection of the assembly;
 - (4) the frequency with which a water supply could be exposed to a hazardous condition; and,
 - (5) the degree of protection of the water supply required, as provided by this ordinance, the local plumbing code and title 30, chapter 290 of the TAC, as enforced by the Building Official, or his/her authorized designee.
- (e) *Highly detrimental hazards.* Where an actual or potential contamination hazard is determined to be highly detrimental to the general health of the city water system, the Building Official, or his/her authorized designee, may require a total containment backflow prevention system to provide for backflow prevention assemblies on each internal branch line. The proper backflow protection assembly shall be maintained on each service connection or separation of internal systems. At the point of delivery, an assembly must be installed on each leg or branch (i.e., industrial and domestic). The type of backflow prevention assembly required on each leg or branch shall be in accordance with the highest degree of actual or potential contamination hazard found on the premises.
- (f) *Mobile connections.* Any person connecting any part of a vehicle or other container to the city water system shall utilize an air gap method or permanently install an approved backflow prevention assembly on the vehicle or container and shall have the assembly tested in accordance with this ordinance prior to connecting to the city water system.

DIVISION 4. - PROCEDURES

Sec. 18-3.11. - New facilities.

- (a) All new facilities, unless specifically exempted from this ordinance by a provision contained herein, are required to comply with the requirements of this ordinance. Compliance by a new city water system customer with the requirements for installation of one or more backflow prevention assemblies shall be verified in conjunction with the customer's application for water service or with the customer's building and plumbing permits.
- (b) The Building Official, or his/her authorized designee, may require field inspection of the customer's premises in addition to building plan submittal and review to determine the actual or potential contamination hazards and backflow prevention assembly requirements.
- (c) All plumbing layouts or building plans submitted to the city shall be reviewed to assure compliance with the requirements of this ordinance and the city's regulations and applicable plumbing code. All plumbing layouts or plans will be stamped by city personnel to indicate that containment backflow prevention may be required.

Sec. 18-3.12. - Existing facilities, inspections.

- (a) *Inspection procedure.* The Building Official or his/her authorized designee may inspect the existing facilities of city water system customers that do not have a record of backflow prevention assembly installation or current annual certified testing report(s) on file in the water and sanitary sewer department and at other times as determined necessary by the Building Official, or the authorized designee, in accordance with this ordinance. The Building Official, or his/her authorized designee, shall prioritize these inspections based on the severity of the potential health hazard as listed in this ordinance. After the inspection is completed, the Building Official, or his/her authorized designee, will provide a written notice to the customer advising of any backflow prevention assembly requirements for the customer's system.

- (b) *Installation and testing required.* Upon the receipt of written notice as provided for in paragraph (a) of this section the customer shall have thirty (30) calendar days from the date of receipt of the notice to have the appropriate backflow prevention assemblies installed, replaced or repaired and certification of testing submitted to the Building Official, or his/her authorized designee. Notice is presumed to be received five (5) calendar days after the notice is mailed. Upon written request of the customer and for cause, the Building Official, or his/her authorized designee, may extend this time period if an immediate threat of contamination does not exist for additional time periods, which, when combined, shall not exceed ninety (90) calendar days.
- (c) *Building plan review.* Plans submitted to the city for approval of plumbing modifications, or extensions to an existing plumbing system, may be reviewed by the Building Official, or his/her authorized designee, to determine the type of backflow prevention method or assembly required. The method and type of assembly required will be noted on the plans.

Sec. 18-3.13. - Customer service inspections.

- (a) A customer service inspection shall be completed prior to providing continuous water service to all new facilities, for any existing facility when the city has reason to believe that potential cross-connections or other contaminant hazards exists, or after any material improvement, correction, or addition to the private distribution facilities that may affect the system's compliance with this ordinance.
- (b) Only individuals with the following credentials shall be recognized as qualified to conduct a customer service inspection:
 - (1) Plumbing Inspectors and Water Supply Protection Specialists that have been licensed by the Texas State Board of Plumbing Examiners; or
 - (2) Customer service inspectors who have completed a TCEQ approved course, passed an examination administered by the TCEQ, and hold current professional certification or endorsement as a customer service inspector.
- (c) The customer service inspection must certify that:
 - (1) No direct connection between the city water system and a potential source of contamination exists and potential sources of contamination are isolated from the city water system by a properly installed air gap or an appropriate backflow prevention assembly;
 - (2) No cross-connection between the city water system and a private water source exists;
 - (3) No connection exists which would allow water to be returned to the city water system;
 - (4) No pipe or pipe fitting containing more than 8% lead has been used for the installation or repair of plumbing at any connection that provides water for human use; and
 - (5) No solder or flux containing more than 0.2% lead has been used for the installation or repair of plumbing at any connection that provides water for human use. A minimum of one lead test shall be performed for each inspection.

Sec. 18-3.14. - Penalty and disconnection.

- (a) A person who violates, or causes or permits the violation of, any provision of this ordinance commits a Class C misdemeanor which shall be punishable under section 1-15 of this Code. A fine not exceeding two thousand dollars (\$2,000.00) may be imposed for violation of provisions in the ordinance that govern fire safety or public health and sanitation. With respect to violations of this code that are continuous with respect to time, each day the violation

continues is deemed to be a separate offense. Proof of a culpable mental state is not required for conviction of an offense under this ordinance.

- (b) Failure or refusal on the part of a customer to comply with any provision of this ordinance will constitute grounds for refusing or discontinuing water service by the city, and in cases of impending danger to the water supply or public safety, discontinuing service may be done without notice to the customer.

Section II: All ordinances and resolutions, or parts thereof, in conflict with this Ordinance are hereby repealed, and are no longer of any force and effect.

Section III: If any provision of this Ordinance or application thereof to any person or circumstances shall be held invalid, such invalidity shall not affect the other provisions, or application thereof, of this Ordinance which can be given effect without the invalid provision or application, and to this end, the provisions of this Ordinance are hereby declared to be severable.

Section IV: This Ordinance shall take effect upon the date of final passage noted below, or when all applicable publication requirements, if any, are satisfied in accordance with the City's Charter, Code of Ordinances, and the laws of State of Texas.

PASSED AND APPROVED on First Reading, on this the 13th Day of February, 2017.

PASSED AND APPROVED on Second Reading on this the 27th Day of February, 2017.

APPROVED:

ATTEST:

Christian Toups, Mayor

Christina Marez, City Secretary

APPROVED AS TO FORM:

Jo-Christy Brown, City Attorney

[Signature of Attorney Provided on Separate Page, to be Attached