

ORDINANCE NO. _____

AN ORDINANCE AMENDING CHAPTER 53 OF THE CITY OF PFLUGERVILLE CODE OF ORDINANCES, TITLED WATERS AND SEWERS, BY ADOPTING SECTIONS 53.003 THROUGH 53.014 ESTABLISHING A CROSS-CONNECTION CONTROL AND BACKFLOW PREVENTION PROGRAM; PROVIDING A REPEALER CLAUSE; PROVIDING FOR A SEVERABILITY CLAUSE; PROVIDING FOR A SAVINGS CLAUSE; PROVIDING FOR A PENALTY NOT TO EXCEED \$2,000; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Pflugerville, Texas is a home-rule city acting under its charter adopted by the electorate pursuant to Article XI, Section 5 of the Texas Constitution and Chapter 9 of the Local Government Code; and,

WHEREAS, the City Council of the City of Pflugerville deems the introduction of contaminants and pollutants into the City's potable water supply to be potentially detrimental to the public's health, safety, and welfare of its citizens and deems it necessary to adopt ordinances to protect the public health, safety, and welfare; and,

WHEREAS, the City of Pflugerville has declared that, because safe, high quality drinking water is a precious resource, the general welfare requires that the City's water distribution facilities and water supplies be protected from actual or potential contamination presented by backflow, cross-connections or other potential contamination hazards; and,

WHEREAS, the City of Pflugerville deems it necessary to adopt a cross-connection control and backflow prevention program in order to comply with the federal Safe Drinking Water Act and state regulations as established by the Texas Commission on Environmental Quality relating to cross-connection control and backflow prevention.

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

SECTION I. That Chapter 53, Sections 53.003 through 53.014, of the City of Pflugerville Code of Ordinances are hereby adopted to read as follows:

CHAPTER 53: WATER AND SEWERS

CROSS-CONNECTION CONTROL AND BACKFLOW PREVENTION

Sec. 53.003 POLICY AND PURPOSES.

(A) Policy. It is declared the policy of the City to promote the public health, safety and welfare by:

- (1) Implementing the rules promulgated by the Texas Commission on Environmental Quality in Title 30 Texas Administrative Code, Chapter 290, to comply with Texas Health and Safety Code, Chapter 341, Subchapter C, and the federal Safe Drinking Water Act, 42 U.S.C.A. Section 300f et seq.;
- (2) Establishing a cross-connection control program of uniform regulations governing the installation, testing and certification of backflow prevention assemblies and technicians;
- (3) Establishing requirements to permit and control the installation, routine maintenance and inspection of backflow prevention assemblies.

(B) Purposes. The purposes of this ordinance are to:

- (1) Protect the City's potable water system from contamination or pollution by preventing contaminants and pollutants originating from customers' water systems from entering into the City's potable water system that may jeopardize the health, safety and welfare of the customers.
- (2) Provide for a continuing program of cross-connection control and backflow prevention by requiring the installation of approved backflow prevention assemblies or methods as required by this ordinance, the City's adopted plumbing code, the requirements of Chapter 290, Title 30 of the Texas Administrative Code, and the requirements of Chapter 341, Subchapter C, Texas Health and Safety Code, all as amended, and requiring the certification and operational testing of all testable backflow prevention assemblies.

(3) Comply with the federal Safe Drinking Water Act (Title 42, United States Code, Chapter 6A, Subchapter XII) and state regulations as established by the Texas Commission on Environmental Quality (Title 30, Texas Administrative Code) related to cross-connections and backflow prevention.

Sec. 53.004 APPLICABILITY.

This Ordinance applies to all connections to the City's potable water system, unless the customer's system is excepted hereunder, both as system protection and as internal protection, 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 Pflugerville or in the City's certificated water service area. (State law reference: 30 Texas Admin. Code (TAC) § 290.44(h)(1)).

Sec. 53.005 INTERPRETATION/CONFLICTS.

This Ordinance shall be liberally interpreted to achieve the policy and purposes stated in Section 53.003. If there is a conflict between any provisions of this ordinance, any other provision of this Code or State or Federal law, including Title 30 of the Texas Administrative Code, all as amended, the most restrictive provision shall apply unless otherwise determined by the Director.

Sec. 53.006 DEFINITIONS.

Air gap separation means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet conveying water to a tank, fixture, receptor, sink, or other assembly and the flood level rim of the receptacle. The vertical, physical separation must be at least twice the diameter of the water supply outlet, but never less than 1.0 inch.

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, the Plumbing and Irrigation code, and all other applicable laws.

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 150 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 Texas Administrative Code § 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 Pflugerville, 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. This system does not include the Customer's system defined below.

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 Pflugerville 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.

Irrigation code means the rules and regulations adopted in Chapter 113 of this Code, as amended.

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 150 of this Code, as amended.

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 non-health hazard 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. Examples include, without limitation, bypass arrangements, jumper connections, removable sections or spools, and swivel or changeover assemblies.

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.

Third-party vendor means a third party contracted by the City to provide Certified Tester registration, backflow testing notification and data management services on behalf of the City.

Sec. 53.007 AUTHORITY AND RESPONSIBILITY - DIRECTOR OF PUBLIC WORKS.

(A) Authority and responsibility. The Director, in accordance with this Ordinance and Title 30, Chapter 290 of the Texas Administrative Code, both as amended, is responsible for enforcing the requirements of this Ordinance and may establish policies and procedures to implement the policies and purposes of this Ordinance. (State law reference: 30 Texas Admin. Code § 290.44(h)(1)(B)(iii); Texas Health and Safety Code, Chapter 341, Subchapter C).

(B) Adequate protection determination. To ensure adequate protection in individual cases, the Director 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 Director determines that a backflow prevention assembly is required for the protection of the City water system, the Director 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 53.013 of this Ordinance. (State law reference: 30 Texas Admin. Code (TAC) § 290.44(h)(1)(A)).

(C) Certified testing required. In accordance with the TCEQ's Rules, the Director shall require a certified testing report for all required and testable assemblies where an actual or potential hazard has been determined to exist 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.

(State law reference: 30 Texas Admin. Code (TAC) § 290.44(h)(4)).

(D) Third-party vendor. The Director shall establish and maintain a contract with a third-party vendor to maintain an online database and website for certified tester and associated equipment registrations, notifications and test result reporting and maintenance.

(E) Testing by City. City personnel, as directed by the Director may perform periodic tests on assemblies for quality control and assurance purposes to ensure that acceptable test standards are being followed by certified testers and adequate protection is provided.

(F) Authority to compel report production. The Director may require from any person the submission of any records relating to the installation, maintenance, repair or testing of backflow prevention assemblies performed in accordance with this Ordinance. (State law reference: 30 Texas Admin. Code (TAC) § 290.44(h)(4)(C)).

(G) Authority to refuse or terminate service. The Director may refuse to initiate service or discontinue present service to any customer where the Director 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 service is not required where the actual or potential threat of contamination endangers the health, safety and welfare of the City water system and the customers the system serves. (State law reference: 30 Texas Admin. Code (TAC) § 290.46(j)(2)).

(H) Authority to revoke certified tester registration. The Director 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 did not pass the accuracy test in preparation of a City-required backflow test and maintenance report;
- (3) two (2) testing or reporting discrepancies within a one (1) year period, beginning on the date of the first discrepancy, including:
 - (a) false, incomplete, or inaccurate reporting of test completion or certification of a backflow prevention assembly;
 - (b) use of inaccurate gauges;
 - (c) improper operational certification methods; or,
 - (d) failure to comply with Sections 53.009(b) or (d) of this Ordinance;
- (4) failure to maintain licensure or registration with TCEQ or the City;
- (5) failure to comply with Sections 53.009(e) or (f) of this Ordinance; or,
- (6) conviction of a violation of this Ordinance.

Revocation under this paragraph is effective upon receipt of written notice from the Director 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 by the City or its Third-party vendor for a period of one (1) year following the effective date of revocation.

(I) 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 determination via certified mail, return receipt requested. The City Manager's decision shall constitute the City's final decision.

Sec. 53.008 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 Director determines that an actual or potential hazard exists in the customer's system, this Ordinance shall apply, 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. (State law reference: 30 Texas Admin. Code (TAC) § 290.44(h))

(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 53.013 of this Ordinance. If a customer refuses to allow access to City personnel for an inspection or survey, the Director 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 Director 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 Director 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 Director and information provided to the City's Third-party vendor, as required by this Ordinance. (State law reference: 30 Texas Admin. Code (TAC) § 290.44(h)(4))

(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. (State law reference: 30 Texas Admin. Code (TAC) § 290.44(h)(1)(B) and (4))

(3) *Annual/Periodic 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. (State law reference: 30 Texas Admin. Code (TAC) § 290.44(h)(1)(B)(i) and (h)(4)).

(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 before installing, replacing, re-piping or relocating a backflow prevention assembly.

(F) Record keeping requirements. Customers shall keep and maintain accurate copies of 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 Director 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. It is the responsibility of the customer to eliminate the possibility of thermal expansion if a closed system has been created by the installation of an assembly.

Sec. 53.009 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 register with the City’s Third-party vendor 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 Third-party vendor. The Director 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’s Third-party vendor 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 Director, 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 City's Third-party vendor, and to the Director upon written request or as provided for by this Ordinance. (State law reference: 30 Texas Admin. Code (TAC) § 290.44(h)(4)(A) and (B)).

(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 backflow prevention assembly test and maintenance report form (Form TCEQ-20700) must be completed by a certified backflow prevention assembly tester for each assembly tested and each form shall include the certified tester's test gauge serial number. The signed and dated original must be submitted to the Director for record keeping purposes. Only TCEQ backflow prevention assembly test and maintenance report forms will be accepted. The certified tester shall also enter all information into the City's Third-party vendor's database. All test and maintenance reports shall be retained by the certified tester for at least three (3) years from the date of any such test, and shall be made available to the Director upon written request or as provided for by this Ordinance. (State law reference: 30 Texas Admin. Code (TAC) § 290.44(h)(4)(b) and (C)).

(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 immediately turn off the portion of the Customer's system protected by the backflow prevention assembly and immediately notify the Director and the customer in person or by telephone.

(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. (State law reference: 30 Texas Admin. Code (TAC) § 290.44(h)(4)(A)(i) and (ii)).

Sec. 53.010 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 150 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 and the City's Third-party vendor in accordance with this Ordinance.

(B) Testing, reporting and recordkeeping 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 Director on Form TCEQ-20700. The report shall include a list of the materials or replacement parts used. The person shall also enter all information into the City's Third-party vendor's database. 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 Director upon written request or as provided for by this Ordinance.

Sec. 53.011 GENERAL STANDARDS AND 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 and Irrigation codes and other applicable local, 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 Director will determine the type of backflow prevention assembly to be used. In the event that a customer owns and operates a rainwater harvesting system, the requirements specified by 30 Texas Administrative Code § 290.44(j) will apply to such operation and connection to the City's water system. (State law reference: 30 Texas Admin. Code §§ 290.44(h)(1)(A) and 290.449(j)).

(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. (State law reference: 30 Texas Admin. Code § 290.44(h)(1)(A) and (B)).

(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. (State law reference: 30 Texas Admin. Code (TAC) § 290.44(h)(2)).

(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. (State law reference: 30 Texas Admin. Code (TAC) § 290.44(h)(3)).

(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 or Chapters 113 and 150 of this Code. (State law reference: 30 Texas Admin. Code (TAC) § 290.44(h)(5)).

(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 Director. 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 Director. (State law reference: 30 Texas Admin. Code (TAC) § 290.44(h)(6)).

Sec. 53.012 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 of the Texas Administrative Code and Chapters 113 (Irrigation code) and 150 (Plumbing code) of this Code, all as amended. In the event that a conflict exists, the most stringent requirement shall control unless otherwise determined by the Director. 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 Director shall retain final approval authority in each individual case.

Table Insert: (State law reference: Figure: 30 Texas Admin. Code (TAC) §290.47(f))

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
Fire-fighting system (toxic liquid foam concentrates)	Health	RPBA
Flexible shower heads	Nonhealth†	AVB or PVB
Heating equipment Commercial	Nonhealth†	RPBA
Domestic	Nonhealth†	DCVA
Hose bibbs	Nonhealth†	AVB
Irrigation systems with chemical additives	Health	RPBA
without chemical additives	Nonhealth†	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	Nonhealth†	PVB or AG
Public	Nonhealth†	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, backsiphonage 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 Director.

(C) Exceptions. A person may request approval from the Director for a proposed deviation from or exception to the requirements of this Ordinance. Upon request, the Director 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 Director 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 Irrigation code and Plumbing code (Chapters 113 and 150 of this Code) and Title 30, Chapter 290 of the Texas Administrative Code, as enforced by the Director.

(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 Director 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.

Sec. 53.013 PROCEDURES.

(A) New facilities.

- (1) All new facilities, unless excepted from this Ordinance, 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 as required by this Ordinance and other chapters of this Code.

(2) The Director 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.

(3) All plumbing layouts or building plans submitted to the City shall be reviewed to assure compliance with the requirements of this Ordinance and other applicable provisions of this Code.

(B) Existing facilities, inspections.

(1) *Inspection procedure.* The Director or designated representative may inspect the existing facilities of City water system customers that do not have a record of backflow prevention assembly installation or current annual (or periodic) certified testing report(s) on file with the City and/or the City's Third-party vendor and at other times as determined necessary by the Director in accordance with this Ordinance. After the inspection is completed, the Director will provide a written notice to the customer advising of any backflow prevention assembly requirements for the customer's system.

(2) *Installation and testing required.* Upon the receipt of written notice, 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 Director and the City's Third-party vendor. 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 Director may extend this time period if an immediate threat of contamination does not exist for additional time periods.

(3) *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 Director to determine the type of backflow prevention method or assembly required. The method and type of assembly required will be noted on the plans.

(C) Customer Service Inspections.

(1) A customer service inspection shall be completed prior to providing continuous water service to all new facilities, for any existing facility when the Director 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 (State law reference: Texas Admin. Code § 290.46(j)).

(2) Only individuals with the following credentials shall be recognized as qualified to conduct a customer service inspection (in accordance with Title 30, Chapter 290.46(j) of the Texas Administrative Code):

(a) Plumbing Inspectors and Water Supply Protection Specialists that have been licensed by the Texas State Board of Plumbing Examiners; or,

(b) 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.

(3) The Customer Service Inspection must certify on Form TCEQ-20699 that:

(a) 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;

(b) No cross-connection between the City water system and a private water source exists;

(c) No connection exists which would allow water to be returned to the City water system;

(d) No pipe or pipe fitting containing more than eight (8%) percent lead has been used for the installation or repair of plumbing at any connection that provides water for human use; and,

(e) No solder or flux containing more than two-tenths of one percent (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. 53.014 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 10.99 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 a separate offense. Proof of a culpable

mental state is not required for conviction of an offense under this Ordinance unless otherwise required by law.

(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.

SECTION II. Repealer. This ordinance shall be cumulative of all other ordinances of the City of Pflugerville, and this ordinance shall not operate to repeal or affect any other ordinances of the City of Pflugerville except insofar as the provisions thereof might be inconsistent or in conflict with the provisions of this ordinance, in which event such conflicting provisions, if any, are hereby repealed unless exempted herein.

SECTION III. Severability. If any provision of this Ordinance is illegal, invalid, or unenforceable under present or future laws, the remainder of this Ordinance will not be affected and, in lieu of each illegal, invalid, or unenforceable provision, a provision as similar in terms to the illegal, invalid, or unenforceable provision as is possible and is legal, valid, and enforceable will be added to this Ordinance.

SECTION IV. That the Code of Ordinances of the City of Pflugerville, Texas, as amended, shall remain in full force and effect, save and except as amended by this ordinance.

SECTION V. Effective Date. This Ordinance will take effect on October 1, 2017 after adoption by the City Council in accordance with Section 3.15(d) of the City Charter.

PASSED AND APPROVED at a regular meeting of the City Council of the City of Pflugerville, Texas, this 22nd day of August, 2017, at which meeting a quorum was present, held in accordance with the provisions of V.T.C.A., Government Code, §551.001 *et seq.*

APPROVED

Victor Gonzales, MAYOR

ATTEST:

Karen Thompson, CITY SECRETARY

APPROVED AS TO FORM:

Charles E. Zech, City Attorney
Denton Navarro Rocha Bernal & Zech PC