CITY OF ANNA, TEXAS

ORDINANCE NO. 833-2019

AN ORDINANCE OF THE CITY OF ANNA, TEXAS, AMENDING THE ANNA CITY CODE OF ORDINANCES CHAPTER 12 (UTILITIES), ARTICLE 12.03 (WATER) BY ADDING A NEW DIVISION 3. (CROSS-CONNECTION CONTROL PROGRAM) TO PREVENT POTABLE WATER POLLUTION; PROVIDING FOR A PENALTY FOR ANY VIOLATION OF THIS ORDINANCE NOT TO EXCEED $2,000; PROVIDING FOR SAVINGS, SEVERABILITY, AND REPEALING CLAUSES; PROVIDING FOR AN EFFECTIVE DATE; AND PROVIDING FOR THE PUBLICATION OF THE CAPTION THEREOF.

WHEREAS, it is the declared policy of the City of Anna, Texas (the "City") to promote the health, safety, and welfare of the public; and,

WHEREAS, the City Council has found and determined that it is in the best interests of the public to 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; and

WHEREAS, the City of Anna is 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.; and

WHEREAS, the City of Anna hereby establishes a cross-connection control program of uniform regulations governing the installation, testing, and certification of backflow prevention assemblies and technicians; and

WHEREAS, the City of Anna hereby establishes the requirements to permit and control the installation, routine maintenance, and inspection of backflow prevention assemblies; and

WHEREAS, the meeting at which this Ordinance is considered is open to the public as required by law, and the public notice of the time, place and purpose of said meeting was given as required by Chapter 551, Texas Government Code, as amended;

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

Section 1. **Recitals Incorporated.**

The above-referenced recitals are incorporated herein as if set forth in full for all purposes.

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Section 2. **Adoption of Cross-Connection Control Program.**

As relates to all connections to the City's potable water system, the City Council hereby adopts the definitions, rules, and regulations as set forth herein.

Section 3. **Amendments to Part II of the Anna Code.**

This ordinance amends Chapter 12 (Utilities), Art. 12.03 (Water) of the Anna City Code of Ordinances to add a new Division 3. (Cross-Connection Control Program) as follows:

Chapter 12 Utilities
[…]
Article 12.03 Water
[…]
Division 3. Cross-Connection Control Program

Sec. 12.03.101 Definitions.

For the purpose of this article, the following definitions shall apply unless the context clearly indicates or requires a different meaning. If a word or term used in this article is not contained in the following list, its definition, or other technical terms used, shall have the meanings or definitions listed in the most recent edition of the *Manual of Cross Connection Control* published by the Foundation for Cross Connection Control and Hydraulic Research, University of Southern California or the American Society of Sanitary Engineers (ASSE).

Administrator means administrator of the district, the city manager by contract.

Air gap means the vertical physical separation between the free flowing discharge end of the potable water supply line and the overflow rim of the receiving vessel. The separation must be at least twice the inside diameter of the supply line, but never less than one inch. When located near walls, the air gap separation must be increased in accordance with the Manual of Cross Connection Control.

Approved backflow prevention assembly or *backflow assembly* or *assembly* means an assembly to counteract backpressures or prevent backsiphonage. This assembly must appear on the list of approved assemblies issued by USC Foundation for Cross-Connection Control and Hydraulic Research.

Atmospheric vacuum breaker means a device, which contains a flat check (poppet), a check seat and an air inlet vent. When water pressure is reduced to a gauge pressure of zero or below, air enters the device, preventing backsiphonage. It is designed to protect against backsiphonage only.

Auxiliary supply means any water source or system other than the public water system that may be available in the building or on the property.

(1) Approved: An auxiliary water supply, which has been investigated and approved by the health authority, meets water quality regulations, and is accepted by the water purveyor.

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(2) Unapproved: An auxiliary water supply, which is not approved by the health authority.

Backflow means the flow in the direction opposite to the normal flow or the introduction of any foreign liquids, gases, or substances into the water system of the city's water.

Backflow prevention assembly tester shall mean a person who has met all of the requirements of TCEQ to be recognized as a certified tester in the State of Texas and is registered with the city. A certified tester who is employed by a state approved fireline contractor shall test fireline assemblies.

Boresight or *boresight to daylight* means providing adequate drainage for backflow prevention assemblies installed in vaults through the use of an unobstructed drain pipe.

City means City of Anna.

City manager means the city manager of the city or his/her designee.

Combination protection means there is an assembly installed for point-of-use isolation in addition to a premise isolation assembly.

Contamination means the entry into or presence in a public water supply system of any substance which may be deleterious to health and/or quality of the water.

Cross connection means any physical arrangement where a potable water supply is connected, directly or indirectly (actual or potential), with any other non-potable water system, used water system or auxiliary water supply, sewer, drain conduit, swimming pool, storage reservoir, plumbing fixture, swamp coolers, air conditioner units, fire protection system, or any other assembly which contains, or may contain, contaminated water, sewage, or other liquid of unknown or unsafe quality which may be capable of imparting contamination to the public water system as a result of backflow. Bypass arrangements, jumper connections, removable sections, swivel or change over assemblies, or other temporary or permanent assemblies through which, or because of which, backflow may occur are considered to be cross connections.

Customer service inspector or *CSI* is an individual who has fulfilled the requirements set out in TCEQ Rules and Regulations for Public Water Systems, paragraph 290.46(j)(1).

Degree of hazard means the low or high hazard classification that shall be attached to all actual or potential cross connections.

Double check detector assembly or *DCDA* means an approved assembly consisting of two (2) approved double check valve assemblies, set in parallel, equipped with a meter on the bypass line to detect small amounts of water leakage or use. This unit must be purchased as a complete assembly. The assembly may be allowed on fire line water services in place of an approved double check valve assembly upon approval by the local water authority.

Double check valve backflow prevention assembly or *double check assembly* or *double check* or *DC assembly* or *DC* means an assembly which consists of two (2) independently operating check valves which are spring-loaded or weighted. The assembly comes complete with a gate valve on each side of the checks, as well as test cocks to test the checks for tightness.

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Health hazard means an actual or potential threat of contamination of a physical or toxic nature to the public potable water system or the consumer's potable water system that would be a danger to health.

High hazard means the classification assigned to an actual or potential cross connection that potentially could allow a substance that may cause illness or death to backflow into the potable water supply.

Inspector means a person that is a cross connection inspector recognized by the city.

Low hazard means the classification assigned to an actual or potential cross connection that potentially could allow a substance that may be objectionable but not hazardous to one's health to backflow into the potable water supply.

Mobile unit shall mean any operation, which may have the potential to introduce contaminants into potable water systems from a mobile source. These include but are not limited to: carpet-cleaning vehicles, water-hauling vehicles, street-cleaning vehicles, liquid-waste vehicles, power-wash operations, and pest-control vehicles.

Person means a natural person (an individual), corporation, company, association, partnership, firm, limited liability company, joint venture stock company or association, and other such entity.

Plumbing hazard means an internal or plumbing-type cross-connection in a consumer's potable water system than may be either a pollutional or a contamination-type hazard.

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

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

Potable water supply means any water that has been tested as required by the state regulations for drinking water supplies and is considered safe for human consumption.

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

Premises isolation or containment means the appropriate backflow prevention at the service connection between the public water system and the water user.

Pressure vacuum breaker assembly means an approved assembly consisting of a spring-loaded check valve loaded to the closed position, an independently operating air inlet valve loaded to the open position and installed as a unit with and between two (2) resilient seated shutoff valves and with suitable connections for testing. It is designed to protect against backsiphonage only.

Public water system or *system* means any public or privately owned water system which supplies water for public domestic use. The system must meet all the health requirements set forth by the TCEQ. The system will include all services, reservoirs,

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facilities, and any equipment used in the process of producing, treating, storing or conveying water for public consumption.

Reduced pressure principle backflow prevention assembly or *reduced pressure principle assembly* or *RP assembly* or *RP* shall mean an assembly containing two (2) independently acting approved check valves together with a hydraulically-operated, mechanically independent pressure differential relief valve located between the check valves and at the same time below the first check valve. The assembly shall include properly located test cocks and tightly closing shut-off valves at each end of the assembly.

Reduced pressure detector assembly or *RPDC* shall mean an approved assembly consisting of two (2) approved reduced pressure backflow assemblies, set in parallel, equipped with a meter on the bypass line to detect small amounts of water leakage or use. This unit must be purchased as a complete assembly. The assembly may be allowed on fire line water services in place of an approved reduced pressure backflow assembly, upon approval by the local water purveyor.

Residential use shall include single family dwellings, duplexes, multiplex housing and apartments where the individual units are each on a separate meter.

(1) Non-residential use shall include, but is not limited to, all uses not specifically included in residential uses defined above.

Service connection is the point-of-delivery at which the public water system ends and is connected to the private supply line or lateral.

SOP means a standard operating procedure manual on cross connections written specifically for the city.

Spill resistant vacuum breaker shall mean an assembly containing an independently-operating, internally-loaded check valve, and an independently-operating, loaded air-inter valve, located on the discharge side of the check valve. The assembly is to be equipped with a properly located, resilient, seated test cock; a properly located bleed/vent valve, and a tightly-closing, resilient, seated shut-off valves attached at each end of the assembly. This assembly is designed to protect against a non-health hazard (i.e., pollutant) or a health hazard (i.e., contaminant) under a backsiphonage condition only.

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

TCEQ means Texas Natural Resources Conservation Commission.

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

Used water means water supplied by a public water system to a water user's system after it has passed through the service connection.

Anna means the City of Anna.

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Sec. 12.03.102 Jurisdiction.
For the purpose of this article, City of Anna is coterminous with City of Anna CCN No. 12976. All rights and obligations, associated with this article, are the responsibility of the city as stipulated by the Texas Commission on Environmental Quality and the Texas Public Utility Commission.

Sec. 12.03.103 Purpose.
Pursuant to Title 30, Texas Administrative Code, Section 290.44, 290.46, and the 2015 Edition of the Plumbing Code, or as amended, it is the responsibility of Anna to protect its drinking water supply by instituting and enforcing a cross connection program. The purpose of this article, therefore, is to comply with the above-cited regulatory requirements, and to protect the water supply of the city from contamination or pollution due to any cross connections.

Sec. 12.03.104 Backflow prevention assembly requirements.
A licensed and registered cross connection inspector, employed or under contract with the city, shall determine the type and location of a backflow assembly to be installed within the city's water service area. The assembly shall be required in each of the following circumstances, but the inspector is in no way limited to the following circumstances:

(1) When the nature and extent of any activity at a premise, or the materials used in connection with any activity at a premise, or materials stored at a premise, could contaminate or pollute the potable water supply.

(2) When a premise has one or more cross connections as that term is defined in section 12.03.015-01.

(3) When internal cross connections are present that are not correctable.

(4) When intricate plumbing arrangements are present that make it impractical to ascertain whether cross connections exist.

(5) When a premise has a repeated history of cross connections being established or re-established.

(6) When entry to a premise is restricted so that inspections for cross connections, or testing of required assemblies, cannot be made, a reduced pressure principle backflow prevention assembly will be required to be installed and maintained, in accordance with this article, at the service connection.

(7) When materials are being used such that, if backflow should occur, a health hazard could result.

(8) When installation of an approved backflow prevention assembly is deemed by an inspector to be necessary to accomplish the purpose of these regulations.

(9) When an appropriate cross connection survey report form has not been filed with the city manager.

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(10) In all new non-residential construction, there shall be installed an approved backflow assembly at the service connection. The type of the assembly will be commensurate with the degree of hazard as determined by an inspector.

(11) When a building is constructed on a commercial premise, and the end use of such building is not determined, or could change, a reduced pressure principle backflow prevention assembly shall be installed at the service connection to provide protection of the public water supply in the event of the most hazardous use of the building.

(12) Any used water-return system that has received approval from the city manager.

(13) If a point-of-use assembly has not been tested or repaired as required by this article, the installation of a reduced pressure principle assembly will be required at the service connection.

(14) If an inspector determines that additions or rearrangements have been made to the plumbing system, without the proper permits as required by the plumbing code, premise isolation shall be required.

(15) All commercial multi-story buildings, or any buildings with a booster pump or elevated storage tank.

Sec. 12.03.105 Irrigation systems.

(a) All irrigation systems, which currently have no backflow protection or systems installed after the effective date of this article, shall be required to meet all specifications pertaining to irrigation systems as stipulated by the TCEQ Chapter 290.44 and 290.46 Code, or the 2015 edition of the Plumbing Code, or as amended by city ordinance. In the event that there is a conflict between these codes and regulations, the more restrictive shall apply.

(b) All irrigation systems which do not currently meet the specifications, as stipulated in subsection (a), will be required to meet these specifications within 30 days of notification from the city or if the device fails a certification test.

(c) In the event an assembly is removed each year to protect against freezing, it must be tested immediately upon re-installation.

(d) The City and/or the cross connection inspector can choose to be more stringent if deemed necessary.

Sec. 12.03.106 Mobile units.

(a) A person who owns or operates any mobile unit that uses water from the city's public water system shall make application, pay appropriate fees, and obtain a permit from the city manager before accessing the public water system. The city manager may require a fixed air gap, or a backflow assembly commensurate with the degree of hazard, mounted either on the vehicle or piping.

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(b) The failure of the owner or operator of the vehicle to comply with this article shall be grounds for the city to revoke any permit or license, required under the City Code to operate the vehicle, or the business for which such vehicle is used.

(c) The city manager may deny a permit to any person who is not in compliance with this article, or who has a history of violating the requirements of this section.

(d) All assemblies used to protect the water supply, when using a mobile unit, must abide by the maintenance and testing sections of this article.

(e) If there is a conflict between this section of the article and Anna's Code of Ordinances, the more restrictive provision will apply.

Sec. 12.03.107 Multiple service connections.
If premises with multiple service connections require premises isolation, a backflow assembly shall be installed at each service connection. The assemblies shall be commensurate with the degree of the highest potential hazard.

Sec. 12.03.108 Plumbing code.
As a condition of water service, customers shall install, maintain, and operate their piping and plumbing systems in accordance with the current plumbing code as adopted by City ordinance. If there is a conflict between this article and the plumbing code, the more restrictive provision shall apply, or a reduced pressure principle backflow prevention assembly will be required to be installed at the service connection.

Sec. 12.03.109 Thermal expansion.
If a closed system has been created by the installation of a backflow assembly at the service connection, it is the responsibility of the property owner to eliminate the possibility of thermal expansion. Installations of the thermal expansion relief devices are to be installed by a state licensed plumber.

Sec. 12.03.110 Pressure loss.
Any water pressure drop caused by the installation of a backflow assembly shall not be the responsibility of the city.

Sec. 12.03.111 Residential service connections.
Any residential property which has been determined to have an actual or potential cross connection, or has violated the plumbing code in any way, shall be equipped with an approved backflow prevention assembly, installed in accordance with this article.

Sec. 12.03.112 Fire systems.

(a) An approved double check detector backflow prevention assembly (DCDA) shall be the minimum protection on all new fire sprinkler systems using piping material that is not approved for potable water use, and/or that does not provide for periodic flow-through during each 24-hour period. A reduced pressure principle detector backflow prevention assembly (RPDA) must be installed, if any solution

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other than the potable water can be introduced into the sprinkler system. If the cross connection inspector determines a chemical loop system can be isolated by installing an RP assembly at the point of the chemical injection, this, in conjunction with the installation of the DCDA, will be adequate protection. Retrofitting on fire sprinkler systems will be required in each of the following circumstances:

(1) Where improper maintenance has occurred;

(2) On all high hazard systems; and

(3) Wherever an inspector deems necessary.

(b) All fireline assemblies will be tested by fireline testers only.

Sec. 12.03.113 Retrofitting.
Approved backflow prevention assemblies, which shall be commensurate with the degree of hazard, shall be immediately installed on all actual or potential cross connections, regardless of the date the potential hazard was created.

Sec. 12.03.114 Wholesale customers.
Every wholesale customer and other water districts that have a contract for water services with the city shall have an active, ongoing cross connection program, approved by the city manager. The city reserves the right to require a reduced pressure principle backflow prevention assembly, or an air gap, at the interconnect.

Sec. 12.03.115 Responsibilities of owners and renters.
It is the responsibility of all property owners and their agents and lessees to abide by the conditions of this article.

Sec. 12.03.116 Access to premises.

(a) Every person provided water service by the city directly or indirectly shall permit the city manager to enter their premises and buildings for the purpose of inspecting pipes and fixtures and the manner in which the water is used to determine compliance with this article.

(b) If any water user refuses access to their premises for inspection by an inspector and/or the city manager, the water user shall install a reduced pressure principle assembly at the service connection to the premises so as to ensure premises isolation or containment protection.

(c) Any temporary, or permanent, obstruction to safe and easy access to the premises for the purposes of this article shall be promptly removed by the water user at the written, or verbal, request of the city manager, and shall not be replaced. The costs of clearing such access shall be borne by the user.

(d) Any and all costs associated with premise isolation or containment protection shall be the sole responsibility of the property owner, lessee, and/or agent.

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Sec. 12.03.117 Right-of-way encroachment.

(a) No person shall install or maintain a backflow prevention assembly upon or within any city right-of-way except as provided by this section.

(b) A backflow prevention assembly required by this article may be installed upon or within any city right-of-way only if the owner proves to the city that there is no other feasible location for installing the assembly, and installing it in the right-of-way will not interfere with traffic or utilities. The city retains the right to approve the location, height, depth, enclosure, and other requisites of the assembly prior to its installation.

(c) Any assembly or portion of an assembly which extends aboveground shall be located no closer than twenty-four (24) inches to the back of the curb.

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

(e) All of Anna's codes and/or ordinances relevant to easement issues will be recognized by and incorporated into this article.

Secs. 12.03.118—12.03.130 Reserved.

Sec. 12.03.131 Customer service inspection.

(a) Pursuant to TCEQ Water System Regulations, a customer service inspection for cross connection control shall be completed by the city prior to providing continuous water service in each of the following circumstances:

(1) A newly constructed facility or previously existing premise, which is requesting water service.

(2) Where any correction or addition to the plumbing of any facility or premise has occurred.

(3) The regulatory authority deems it necessary.

(b) Permanent water service shall not be supplied to a new construction facility(s) until the customer service inspection is completed.

(c) Customer service inspections will be carried out only by a certified customer service inspector, or a plumbing inspector employed by the city, or approved by the city manager.

Sec. 12.03.132 Cross connection inspectors.

Inspectors performing cross connection control duties within the city must be approved by the city manager, and shall meet the following requirements:

(1) Be employed by or be an independent contractor for Anna; and

(2) Meet the requirements set out in Anna's SOP, or as amended.

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Sec. 12.03.133 Backflow prevention assembly testers.

(a) All backflow assembly testers operating within the city shall be certified in accordance with all applicable regulations of TCEQ. No person shall operate as a backflow prevention assembly tester within the city without first being annually registered with the city manager.

(b) At the time of registration, recertification, and upon the city manager's request, each person certified as a backflow prevention assembly tester shall furnish evidence to show that he/she is insured and bonded to perform services on private property, and has current licenses as required by the state and the city to perform the contemplated services.

(c) Persons, certified as backflow prevention assembly testers, shall meet the following requirements:

(1) Hold a TCEQ-approved backflow prevention assembly certification;

(2) Have an approval from the City to test assemblies within the water system

Sec. 12.03.134 Certified backflow prevention assembly tester; responsibilities.

(a) No certified backflow assembly tester shall operate within the city, without first registering with the city manager and paying all appropriate fees.

(b) A registration shall remain in effect provided:

(1) The tester maintains eligibility for registration and certification as that is defined in this article;

(2) The tester attends and successfully completes a recertification training course as required by TCEQ;

(3) The backflow prevention assembly tester's registration is not revoked by the city manager.

(c) Upon recertification, a backflow prevention assembly tester shall renew his/her registration with the city manager. If a certification remains expired for a period of one year, the backflow prevention assembly tester may re-establish registration eligibility by showing proof that he/she has retaken the TCEQ-approved backflow prevention tester certification course.

(d) Each applicant for registration shall:

(1) Provide evidence to the city manager to establish that the applicant has available the necessary tools and equipment to properly test backflow prevention assemblies;

(2) Provide evidence to the city manager that the applicant has successfully completed permit confined-space entry training as specified by OSHA in 29 CFR 1910.146, or as amended; and

(3) Identify all test gauges the applicant will use in testing backflow prevention assemblies.

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(e) A registered backflow prevention assembly tester shall:

(1) File the serial number of each of their test gauges with the city manager;

(2) Annually, have each recorded test kit tested for accuracy and calibrated to maintain a two (2) percent accuracy factor;

(3) Perform competent and accurate certifications, as determined by the city manager, of each backflow prevention assembly tested and shall submit complete reports thereof to the city manager;

(4) List registered serial numbers of test gauges on tests and maintenance reports prior to submitting them to the city manager; and

(5) Not change the design or operation characteristics of a backflow prevention assembly.

(f) The city manager may revoke a registration if the he/she determines that the tester:

(1) Has made false, incomplete, or inaccurate assembly testing reports;

(2) Has used inaccurate gauges;

(3) Has used improper testing procedures;

(4) Has expired insurance;

(5) Is not in compliance with safety regulations;

(6) Has failed to register the serial numbers of his/her test kits, or failed to calibrate gauges annually as required by subsection (4) above;

(7) Has failed to maintain a current certification from TCEQ; or

(8) Has violated any other provision of this article.

Sec. 12.03.135 Cost of compliance.
The cost and expense of complying with this article shall be the responsibility of the property owners, their lessees, or agents. These costs include, but are not limited to: purchasing, installation, testing, repair and maintenance of the assembly. These costs shall include point-of-use and premises isolation assemblies. Any cost incurred by the city to enforce this article is the responsibility of the property owners and their lessees.

Secs. 12.03.136—12.03.150 Reserved.

Sec. 12.03.151 Maintenance of assemblies.

(a) A person who owns, operates, or manages premises in which required backflow prevention assemblies are installed, shall maintain such assemblies in proper working order at all times, including repair as required. All maintenance, and repair of assemblies, shall be done in accordance with all applicable regulations of the TCEQ and this article.

(b) Backflow prevention assemblies shall be maintained in a manner that allows them to be tested by a method that has been approved by TCEQ.

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Sec. 12.03.152 Installation requirements.
Backflow prevention assemblies shall be installed in accordance with the following requirements, to ensure their proper operation and accessibility:

(1) Backflow prevention assemblies shall be installed in accordance with all plumbing codes recognized by the city and this article. The assembly installer shall obtain the required plumbing permits prior to installation, and shall have the assembly inspected by a certified cross connection inspector as required by the plumbing code. In the event there is a conflict between the plumbing code installation and the installation requirements set forth in this article the more stringent will supersede.

(2) No part of a reduced pressure principle backflow prevention assembly shall be submerged in water, or installed in a location subject to flooding. If a double check valve assembly is installed in a vault, brass plugs shall be maintained in the test ports at all times and adequate drainage shall be provided. No backflow assembly RP or DC should be installed in a pit

(3) In the event a premises isolation assembly is required, the assembly shall be installed at the point-of-delivery of the water supply, before any branch in the line, and on private property located just inside the boundary of the city's right-of-way, and/or at the point of the cross connection.

(4) The assembly shall be protected from freezing and other severe weather conditions.

(5) All backflow prevention assemblies shall be of a type and model approved by the city manager.

(6) All vertical installations shall be approved in writing by the city manager prior to installation.

(7) The assembly shall be readily accessible with adequate room for maintenance and testing.

(8) If the backflow assembly is installed inside of a building, the assembly shall be readily accessible for inspection and testing.

(9) If an assembly is installed pursuant to this article and is five (5) feet or higher above the floor, it shall be equipped with a rigidly and permanently installed scaffolding acceptable to the city manager. This installation shall also meet all applicable requirements set out by the U.S. Occupational Safety and Health Administration and the State of Texas occupational safety and health laws.

(10) The property owner shall register all backflow assemblies with the city manager. Registration shall consist of the date of installation, manufacturer, model, serial number of the backflow prevention assembly, initial test report, and the name and plumbing license number of the installer.

(11) Lines shall be thoroughly flushed prior to installation. A strainer with blowout tapping may be required ahead of the assembly.

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(12) The property owner, their lessee, or their agent, assumes all responsibility for leaks and damage. The owner shall also see that any vault is kept reasonably free of silt and debris.

Sec. 12.03.153 Reduced pressure principle backflow prevention assembly (RP).
All RP assemblies shall be tested in each of the following circumstances: immediately upon installation, after repair, if it is moved, at least annually and more often if deemed necessary.

(1) RPs shall be utilized at premises where a substance is handled that would be hazardous to the public health if introduced into the potable water system. An RP is normally used in locations where an air gap is impractical. An RP is effective against both backsiphonage and backpressure.

(2) RPs shall be sized to provide an adequate supply of water and pressure for the premises being served.

(3) Premises where non-interruption of water supply is critical shall be provided with two (2) assemblies of the same type installed in parallel. They shall be sized in such a manner that either assembly will provide the minimum water requirements while the two together will provide the maximum flow required.

(4) Bypass lines are prohibited. Pipe fittings which could be used for connecting a bypass line shall not be installed.

(5) The assembly shall be readily accessible for testing and maintenance and shall be located in an area where water damage to buildings or furnishings will not occur from relief valve discharge. An approved air gap funnel assembly may be used to direct minor discharges away from the assembly; this assembly will not control flow in a continuous relief situation. Full relief valve discharge flow should be considered when installing this assembly.

(6) Enclosures shall be designed for ready access and sized to allow for the minimum clearances established in the Standard Operating Procedure Manual.

(7) All RP assemblies shall be tested in accordance with this article.

(8) Variances from these specifications will be evaluated on a case-by-case basis. Any deviations shall be prohibited without prior written approval of the city manager.

(9) RP assemblies may be installed in a vault only if relief valve discharge can be drained to daylight through a boresight type drain. The drain shall be of adequate capacity to carry the full rated flow of the assembly and shall be screened on both ends.

(10) An approved air gap shall be located at the relief valve orifice of RP assemblies. This air gap shall be at least twice the diameter of the incoming supply line as measured vertically above the top rim of the drain and in no case less than one inch.

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Sec. 12.03.154 Double check valve backflow prevention assembly (DC).
All DC assemblies will be tested in each of the following circumstances: immediately upon installation and after repair.

(1) Double check valve assemblies may be utilized at premises where a substance is handled that would be objectionable but not hazardous to health if introduced into the potable water system.

(2) DCs shall be sized to provide an adequate supply of water and pressure for the premises being served.

(3) Premises where non-interruption of water supply is critical shall be provided with two (2) assemblies of the same type installed in parallel. They shall be sized in such a manner that either assembly will provide the minimum water requirements while the two together will provide the maximum flow required.

(4) Bypass lines are prohibited. Pipe fittings which could be used for connecting a bypass line shall not be installed.

(5) Vertical installations are allowed on sizes up to and including four (4) inches that meet the following requirements:

a. Internally spring-loaded check valves;

b. Flow is upward through assembly;

c. Approved by the city manager; and

d. Found on the approved list of assemblies.

(6) All DCs shall be tested in accordance with this article.

(7) All assemblies must be found on the approved list as stipulated in the SOP manual.

(8) Variances from these specifications will be evaluated on a case-by-case basis. No deviations shall be permitted without prior written approval of the city manager.

Sec. 12.03.155 Pressure vacuum breaker assembly (PVB) and spill-resistant vacuum breaker (SVB).

(a) PVBs and SVBs may be utilized at point-of-use protection only. PVBs and SVBs protect against backsiphonage only and shall not be installed where there is potential for backpressure.

(b) The assembly shall be installed a minimum of twelve (12) inches above the highest use outlet or overflow level downstream from the assembly.

(c) PVBs and SVBs shall not be installed in an area subject to flooding or where damage would occur from water discharge.

(d) The assembly shall be readily accessible for testing and maintenance, with a minimum clearance of twelve (12) inches all around the assembly.

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(e) PVBs and SVBs shall be located between twelve (12) inches and sixty (60) inches above ground level.

(f) A strainer with blowout tapping may be required ahead of the assembly.

(g) All PVBs SVBs must be tested in compliance with this article.

(h) Variances from these specifications will be evaluated on a case-by-case basis. No deviations shall be permitted without prior written approval of the city manager.

Sec. 12.03.156 Atmospheric vacuum breaker (AVB).

(a) AVBs may be used for point-of-use protection only. AVBs protect against backsiphonage only and are prohibited where there is potential for backpressure.

(b) The device shall be installed a minimum of six (6) inches above the highest use outlet or overflow level downstream from the assembly.

(c) Shutoff valves downstream from the assembly are prohibited.

(d) AVBs shall be allowed only for those applications where there is less than twelve (12) hours per day continuous use.

(e) AVBs shall not be installed in an area subject to flooding or where damage may occur from water discharge.

(f) AVBs shall be allowed for point-of-use protection only in accordance with the plumbing code. AVB's, in some installations, may not be recognized as adequate protection by the city manager, so additional protection will be required.

Sec. 12.03.157 Air gap separation.

(a) Air gap separations provide maximum protection from backflow hazards and may be utilized at premises where a substance is handled that would be hazardous to health if introduced into the potable water system.

(b) An air gap separation shall be at least twice the diameter of the supply pipeline measured vertically above the top rim of the receiving vessel—in no case less than one inch. If splashing is a problem, tubular screens may be attached or the supply line may be cut at a forty-five (45) degree angle. The air gap distance is measured from the bottom of the angle. Hoses shall not be allowed.

(c) Air gap separations shall not be altered in any way and shall be available for inspection at all reasonable times.

(d) Side walls, ribs or similar obstructions do not affect air gaps when spaced from the inside edge of the spout opening a distance greater than three (3) times the diameter of the effective opening for a single wall, or a distance greater than four (4) times the effective opening for two (2) intersecting walls.

(e) In cases where there are three (3) or more sidewalls, ribs or similar obstructions extending from the water surface to or above the horizontal plane of

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the spout opening, other than as specified in paragraph (d) above, the air gap shall be measured from the top of the wall.

(f) The effective opening shall be the minimum cross-sectional area at the seat of the control valve or the supply pipe or tubing which feeds the assembly or outlet. If two (2) or more lines supply one outlet, the effective opening shall be the sum of the cross-sectional areas of the individual supply lines or the area of the single outlet, whichever is smaller.

Secs. 12.03.158=—12.03.170 Reserved.

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Sec. 12.03.171Enforcement and penalties.

(a) The city manager and the city attorney, and each of them, are hereby authorized to enforce the provisions of this article by any one or more of the enforcement mechanisms set forth in this division.

(b) The inspectors, agents, or representatives of the city charged with enforcement of this division, shall be deemed to be performing a governmental function for the benefit of the general public, and neither the city, the city manager, nor the individual inspector, agent, or representative of the city engaged in inspection, or endorsement activities under this division, when acting in good faith and without malice, shall ever be held liable for any loss or damage, whether real or asserted, caused, or alleged to have been caused, as a result of the performance of such governmental function.

(c) Failure on the part of any customer to discontinue the use of all cross connections, and to physically separate cross connections, is sufficient cause for the immediate discontinuance of public water service to the premises.

(d) Failure to comply with this article is a fine up to two thousand dollars ($2,000.00) per day, with each day being a separate offense.

Sec. 12.03.172 Emergency suspension of utility service.

(a) The city manager may, without prior notice, suspend water service to any premises when such suspension is necessary to stop an actual or potential cross connection which:

(1) Presents or may present imminent, and substantial, danger to the environment or to the health or welfare of persons; or

(2) Presents, or may present, imminent and substantial danger to the city's public water supply.

(b) As soon as is practicable after the suspension of service, the city manager shall notify the owner or person in charge of the premises of the suspension in person or by certified mail, return receipt requested, and shall order such person to correct the cross connection which allowed the backflow to occur. When time permits, and if the owner or person in charge is readily available, the city manager will give notice about the immediate suspension of services.

(c) If the person fails to comply with an order issued under this division, the city manager may take such steps, as deemed necessary, to prevent, or minimize, damage to the public water supply, or to minimize danger to persons.

(d) The city manager shall not reinstate suspended services until the person:

(1) Presents proof, satisfactory to the city manager, that the backflow has been eliminated, and its cause determined and corrected;

(2) Pays the city for all costs the city incurred, in responding to the backflow or threatened backflow; and

(3) Pays the city for all costs the city will incur in reinstating service.

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(e) A person whose service has been suspended may appeal such enforcement action to the city manager, in writing, within ten (10) days of notice of the suspension.

(f) A person commits an offense if the person reinstates water service to premises suspended pursuant to this section, without the prior approval of the city manager.

(g) The city may obtain a lien against the property to recover its response, abatement, and remediation costs.

(h) The remedies provided by this section are in addition to any other remedies set out in this division. Exercise of this remedy shall not be a bar against, nor a prerequisite for, taking other action against a violator.

Sec. 12.03.173 Non-emergency termination of water supply.

(a) The city manager may suspend, with twenty-four-hours' notice, the water supply of any water user who violates the following conditions:

(1) Refusing the city manager's reasonable access to the water user's premises for the purpose of inspection;

(2) Hindering or denying the city manager's access to backflow prevention assemblies;

(3) Failing to immediately eliminate, or protect against, an actual or potential cross connection;

(4) Failing to install and maintain backflow prevention assemblies in compliance with this article; or

(5) Failing to install, maintain, and operate their piping and plumbing systems in accordance with the plumbing code.

(b) The city manager will notify a water user of the proposed termination of its water supply. The water user may petition the city manager in writing for a reconsideration.

(c) Exercise of this enforcement option by the city manager shall not be a bar to, nor a prerequisite for, taking any other action against the water user.

(d) The city manager shall not reinstate suspended services until:

(1) The premises has been inspected by a city cross connection control inspector or a reduced pressure principle backflow prevention assembly is installed; or

(2) The person presents proof, satisfactory to the city manager, that the backflow has been eliminated and its cause determined and corrected; and

(3) The person pays the city for all costs the city will incur in reinstating service.

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Secs. 12.03.174—12.03.190 Reserved.

Section 4. Penalty.

Any violation of any of the terms of this ordinance, whether denominated in this ordinance as unlawful or not, shall be deemed a misdemeanor. Any person convicted of any such violation shall be fined in an amount not to exceed $2,000 for each incidence of violation. Each violation is considered a separate offense and will be punished separately.

Section 5. Severability.

All ordinances of the City in conflict with the provisions of this ordinance are repealed to the extent of that conflict. If any section, paragraph, clause or provision of this ordinance shall for any reason be held to be invalid or unenforceable, the invalidity or unenforceability of such section, paragraph, clause or provision shall not affect any of the remaining provisions of this ordinance.

Section 6. Publication of the Caption Hereof and Effective Date.

This ordinance shall be in full force and effective from and after its passage and upon the posting and/or publication, if required by law, of its caption and the City Secretary is hereby directed to implement such posting and/or publication.

PASSED AND APPROVED by the City Council of the City of Anna, Texas on this 12th day of November 2019.

ATTEST:

Carrie L. Smith

City Secretary, Carrie L. Smith

CITY OF ANNA TEXAS

APPROVED:

Nate Pike

Mayor, Nate Pike

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