

ORDINANCE NO. \_\_\_\_\_

**AN ORDINANCE OF THE CITY OF KENNEDALE, TEXAS, ADDING A NEW ARTICLE VIII "BACKFLOW PREVENTION" TO CHAPTER 23 OF THE KENNEDALE CITY CODE OF ORDINANCES (1991), AS AMENDED, TO REGULATE BACKFLOW PREVENTION ASSEMBLIES AND TO REQUIRE THE REGISTRATION OF LICENSED BACKFLOW PREVENTION ASSEMBLY TECHNICIANS; PROVIDING A PENALTY FOR VIOLATIONS OF THIS ORDINANCE; PROVIDING A CUMULATIVE CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING FOR PUBLICATION; AND PROVIDING AN EFFECTIVE DATE.**

**WHEREAS**, the City of Kennedale, Texas (City) 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 wishes to protect the potable water supply from contamination or pollution by preventing contaminants and pollutants from entering the City's water supply system; and

**WHEREAS**, the City Council wishes to control and maintain cross-connection by requiring the installation of approved backflow prevention assemblies as required by the Kennedale Plumbing Code, require the registration of licensed backflow prevention assembly technicians; and require the testing of all testable backflow prevention assemblies.

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

**SECTION 1.**

Chapter 23 "Water, Sewers, and Sewage Disposal", of the Kennedale City Code, is hereby amended to add a new Article VIII, which reads:

**"ARTICLE VIII. BACKFLOW PREVENTION AND CROSS-CONNECTION REGULATIONS**

**DIVISION 1. GENERALLY**

**Sec. 23-401. Purpose.**

The purpose of this Article is to enable the City of Kennedale (the "City") to maintain an effective cross-connection control program to prevent contaminants and pollutants from entering the City's water supply system and to protect public health.

### **Sec. 23-402. Applicability.**

This Article applies to all connections to the City's water supply system, and to all backflow prevention assemblies installed to protect the City's water supply system from contamination or pollution, regardless of whether the connection or assembly is located within the Kennedale city limits or in the City's certificated water service area, and regardless of whether the connection or assembly is for commercial or residential use of the potable water supply.

### **Sec. 23-403. Administration.**

Except as otherwise provided, the Regulatory Authority shall administer, implement, and enforce this Article.

### **Sec. 23-404 Nuisance.**

Backflow entering or threatening to enter the public water supply from any premises is hereby declared to be a nuisance. The City may abate the nuisance in accordance with Chapter 15 "Nuisances" of the Kennedale City Code or in any other manner authorized by State law.

### **Sec. 23-405. Definitions.**

Unless otherwise stated, the following terms and phrases in this Article shall have the following meanings:

*Air gap* means a physical separation between the free-flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel, plumbing fixture, or other device.

*Appeals officer* means the City Manager or his/her designee who presides over appeals of the Regulatory Authority actions or decisions.

*Atmospheric vacuum breaker ("AVB")* means a device used to prevent back siphonage in non-health hazard conditions. This device cannot be tested and cannot prevent backpressure backflow. Also known as an *Atmospheric vacuum breaker backflow prevention device*.

*Backflow* means the reverse flow of nonpotable water, other liquids, gases, or substances, into the potable water supply. There are two types of backflow, backpressure backflow and back siphonage.

*Backflow prevention assembly* means an approved assembly or device designed to prevent backflow into the potable water supply including a reduced pressure backflow assembly, a double-check valve assembly, a pressure vacuum assembly or an air gap.

*Backflow prevention assembly tester or ("Tester")* means a certified backflow prevention assembly technician licensed by the Commission and registered with the City.

*Backpressure backflow* means a type of backflow caused by pressure in the downstream piping system that is higher than the supply pressure which may cause the normal direction of flow to reverse and introduce nonpotable water, other liquids, gases, or substances from an unintended source. Backpressure may result from an increase in downstream pressure, a reduction in the potable water supply pressure, or a combination of both.

*Back siphonage* means a type of backflow caused by a sudden reduction of pressure in the potable water supply which results in nonpotable water, other liquids, gases, or substances into the potable water supply.

*City* means the City of Kennedale and the City's officers and employees.

*Commission* means the Texas Commission on Environmental Quality ("TCEQ") or its successor entities.

*Contaminant* means nonpotable water, other liquids, gases or substances in the City's potable water supply, which may make water unfit or undesirable for human or animal consumption.

*Contamination* means the introduction of a contaminant into the potable water supply.

*Cross-Connection* means an actual or potential connection between a potable water source and any plumbing fixture, tank, receptacle, equipment or device, through which any nonpotable, used, unclean, polluted, or contaminated water, other liquid, gas, or other substance, may enter the potable water supply. A Cross-Connection may be temporary or permanent.

*Cross-Connection control assembly* means any assembly placed upon any actual or potential connection between a potable water source and any plumbing fixture, tank, receptacle, equipment or device, designed to prevent any nonpotable, used, unclean, polluted, or contaminated water, other liquid, gas, or other substance, from entering the potable water supply.

*Degree of hazard* means the classification attached to an actual or potential cross-connection. The degrees of hazard are classified as follows:

- (1) *Health hazard* indicates an actual or potential threat of contamination of a physical or toxic nature to the potable water supply or the consumer's potable water supply that would endanger health;

- (2) *High hazard* indicates an actual or potential cross-connection that could allow a substance which may cause illness or death to backflow into the potable water supply;
- (3) *Low hazard* indicates an actual or potential cross-connection that could allow a substance which may be objectionable but would not be hazardous to public health to backflow into the potable water supply;
- (4) *Plumbing hazard* indicates an internal or plumbing-type cross-connection in a potable water supply that could be either a pollutant or a contaminant;
- (5) *Pollution hazard* indicates an actual or potential threat to the physical properties of the water system or the potability of the water system but which would not constitute a health or system hazard, as defined. Maximum degree of intensity of pollution which the potable water supply could be degraded under this definition would cause a nuisance or be aesthetically objectionable or could cause damage to the system or its appurtenances; and
- (6) *System hazard* indicates an actual or potential threat of severe danger to the physical properties of the potable water supply or of a pollutant or contaminant that would have a detrimental effect on the quality of the potable water supply.

*Double check detector ("DCDA")* means an assembly composed of a line-size approved double check assembly with a bypass containing a specific water meter and an approved double check valve assembly. The meter shall register accurately for very low rates of flow. Also known as a *Double check detector backflow prevention assembly*.

*Double check valve assembly ("DC")* means an assembly which consists of two (2) independently acting, approved check valves, including tightly closed resilient seated shutoff valves attached at each end of the assembly and fitted with properly located resilient seated test cocks. Also known as a *Double check* or *Double check valve backflow prevention assembly*.

*Fire line tester* means a tester who is employed by a state-approved fire line contractor and is qualified to test backflow prevention assemblies on fire lines only.

*Mobile unit* means any operation which may have the potential to introduce contaminants or pollutants into a potable water supply 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.

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

*Person* means any individual, firm, partnership, joint adventure, association, club, fraternal organization, joint stock company, corporation, cooperative, estate, trust, receiver, trustee, syndicate, or any other group or combination acting as a unit.

*Plumbing Code* means the Kennedale Plumbing Code as set forth in Article VI "Plumbing Code" of Chapter 4 of the Kennedale City Code, as amended.

*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.

*Potable water supply* means any water supply suitable for human consumption or other domestic use.

*Premises* means any property to which water is provided, including all buildings, facilities, mobile structures, or other improvements located on the property.

*Premises isolation* means a type of backflow prevention at the service connection between the potable water supply and the water user.

*Pressure vacuum breaker ("PVB")* means an assembly which protects against back siphonage, but does not provide adequate protection against backpressure backflow. The assembly is a combination of a single check valve with an AVB and can be used with downstream resilient seated shutoff valves. In addition, the assembly has suction and discharge gate valves and resilient seated test cocks which allow the full testing of the assembly. Also known as a *Pressure vacuum breaker backflow prevention assembly*.

*Reduced pressure zone assembly ("RPZ")* means an assembly containing two (2) independently acting approved check valves together with a hydraulically operating, mechanically independent pressure differential relief valve located between the check valves. The RPZ is normally used at premises where an air gap is impractical. The RPZ is effective against both back siphonage and backpressure. Also known as a *Reduced pressure principle backflow prevention assembly*.

*Reduced pressure zone detector ("RPZDA")* means an assembly composed of a line-size approved reduced pressure principle assembly with a bypass containing a specific water meter and an approved reduced pressure principle backflow prevention assembly. The meter shall register accurately for very low rates of flow. Also known as a *Reduced pressure principle detector backflow prevention assembly*.

*Regulatory authority* means the Director of Public Works or his/her designee charged with the administration and enforcement of this Article.

*Residential use* means water used by a residential customer of the water supply, including single-family dwellings, duplexes, multiplexes, housing and apartments where the individual units are each on a separate meter. If two (2) or more units are served by one (1) meter, both units must be used as full-time dwellings to qualify as a residential customer.

*Service connection* means the point of connection between the potable water supply and the customer's water system.

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

(b) A word or term not defined in this Article, unless the context clearly indicates otherwise, shall have the definition provided for such word or term as set out in the current edition of the *Manual of Cross-Connection Control* published by the Foundation for Cross-Connection Control and Hydraulic Research.

#### **Sec. 23-406. Conflict with other ordinances or codes.**

The provisions in this Article are cumulative of all City ordinances. If any other ordinance or code conflicts with this Article, the more restrictive provision shall apply.

[Sec. 23-407 to 23-420 Reserved ]

### **DIVISION 2. BACKFLOW PREVENTION**

#### **Sec. 23-421. Backflow prevention assembly required.**

(a) The Regulatory Authority shall determine the type and location of a backflow prevention assembly to be installed at premises located within the City's water supply service area.

(b) The use of a backflow prevention assembly at the service connection shall be in addition to any backflow prevention assembly or device and does not replace any backflow protection required by the Plumbing Code.

(c) In addition to other backflow prevention methods required by the Regulatory Authority, a backflow prevention assembly shall be required at premises where:

- (1) The nature and extent of any activity, or the materials used or stored in connection with any activity, may contaminate or pollute the potable water supply;

- (2) A facility or building has one (1) or more cross-connections;
- (3) A facility or building has an internal cross-connection that cannot be corrected;
- (4) A facility or building has intricate plumbing arrangements that make it impractical to ascertain whether a cross-connection exists;
- (5) A cross-connection has previously been established;
- (6) The Regulatory Authority's inspection for a cross-connection is difficult due to unduly restricted access to the premises;
- (7) A cross-connection survey report form has not been filed with the Regulatory Authority;
- (8) A facility or building's fire sprinkler system is connected to the potable water supply;
- (9) There is new non-residential construction and the Regulatory Authority deems it necessary to install a backflow prevention assembly at the service connection to protect the potable water supply from contaminants or pollutants;
- (10) A commercial facility or building is constructed and the end use of the facility or building is not determined or finalized;
- (11) A facility or building is required to have a backflow prevention assembly but water cannot be turned off during the testing of the assembly;
- (12) There is a used water return system;
- (13) A facility or building at which a point-of-use assembly has not been tested or repaired as required by this Article;
- (14) The Regulatory Authority determines that an addition or alteration has been made to a facility or building's plumbing system in violation of the Plumbing Code;
- (15) A booster pump or elevated storage tank is installed at a facility or building.
- (16) Any other premise where the Regulatory Authority has deemed it necessary to install a backflow prevention assembly to protect the City's water supply from contaminants or pollutants;

(d) The type of backflow prevention assembly required by the Regulatory Authority to protect the City's water supply from contaminants or pollutants shall be commensurate with the Degree of Hazard, as defined in section 23-405 of this Article.

(e) Premises isolation shall be required where either:

- (1) A point-of-use assembly installed at a facility or building has not been tested or repaired as required by this Article or
- (2) An addition or alteration to the plumbing system has been made without the permits required by the Plumbing Code.

(f) The Regulatory Authority shall require the addition of a backflow prevention assembly, alteration of a backflow prevention assembly, or other retrofitting on a cross-connection classified as a High Hazard. The Regulatory Authority may, in his/her discretion, require the addition of a backflow prevention assembly, alteration of a backflow prevention assembly, or other retrofitting for any cross-connection if he/she deems it necessary to protect the potable water supply from contaminants or pollutants.

(g) A reduced pressure principle backflow prevention assembly shall be installed at the service connection to protect the potable water supply in the event of the most hazardous potential use of the building where a commercial facility or building is constructed and the end use of the facility or building is not determined or finalized.

(h) A dual backflow prevention assembly of the same type shall be installed at a premises that is required to have a backflow prevention assembly but at which water cannot be turned off so that the assembly can be tested, repaired, or maintained.

(i) A person commits an offense if the person owns or controls premises and fails to require, install, or maintain a backflow prevention assembly as required by this Article.

(j) A person commits an offense if the person owns or controls premises from which backflow enters the potable water supply.

#### **Sec. 23-422. Installation requirements.**

(a) A backflow prevention assembly shall be installed in accordance with the following requirements:

- (1) A backflow prevention assembly shall be installed in accordance with the Plumbing Code, Commission regulations, this Article, and other relevant State and federal law. The installer of a backflow prevention assembly shall obtain the required permits prior to

installation and shall have the assembly inspected by the Regulatory Authority;

- (2) When the Regulatory Authority requires a backflow prevention assembly to be installed at the point of delivery of the water supply, the assembly shall be installed before any branch in the line and on private property located just inside the boundary between the City right-of-way and the landowner's property. Other areas of installation of a backflow prevention assembly may be required if the Regulatory Authority deems it necessary to protect the potable water supply from contaminants or pollutants;
- (3) A backflow prevention assembly shall be protected from freezing and other severe weather conditions;
- (4) A backflow prevention assembly shall be of a type and model approved by the Regulatory Authority;
- (5) Vertical installation of a backflow prevention assembly allowed under Section 23-434 shall be approved in writing by the Regulatory Authority prior to installation;
- (6) A backflow prevention assembly larger than four (4) inches and installed more than five (5) feet or higher above floor level shall be equipped with a rigidly and permanently installed scaffolding approved by the Regulatory Authority;
- (7) A bypass line is prohibited and a pipe fitting which could be used to connect a bypass line shall not be installed;
- (8) Premises that require a backflow prevention assembly where an uninterrupted, continuous water supply is critical shall be provided with two (2) parallel installed assemblies for testing, maintenance, or repair. Each assembly shall be sized in such a manner that either assembly will provide the maximum flow required or desired;
- (9) A line shall be thoroughly flushed prior to installation. A strainer with blowout tapping may be required ahead of the backflow prevention assembly; and
- (10) Upon completion of an installation, the Regulatory Authority shall be notified and the backflow prevention assembly shall be inspected and tested.
- (11) A signed and dated original test report shall be submitted to the Regulatory Authority and shall indicate: the test gauge make,

model, and serial number; the calibration date; the tester's name and state certification number; the facility's name, address and telephone number.

(b) A person commits an offense if the person fails to install a backflow prevention assembly as required by this Article.

(c) A person commits an offense if the person fails to notify the Regulatory Authority of a backflow prevention assembly installation, fails to inspect or test an installed backflow prevention assembly, or fails to submit a complete and accurate test report as required by this Article.

### **Sec. 23-423. Right-of-Way encroachment.**

(a) A person shall not install or maintain a backflow prevention assembly upon or within the City's right-of-way except as provided in this Section.

(b) A backflow prevention assembly required by this Article may be installed within the City's right-of-way only if:

- (1) The Regulatory Authority determines that there is no other feasible location for the assembly;
- (2) Installation of the assembly in the right-of-way does not interfere with traffic, utilities, public works projects;
- (3) All permits, approvals and inspections required under the Kennedale City Code, State or federal law to perform work in the right-of-way are obtained; and
- (4) The premises owner enters into an Easement Use Agreement approved by the City.

The City retains the right to approve the location, height, depth, enclosure, installation, and other assembly requirements prior to its installation. The City shall not be liable for any damage to the assembly or caused by an assembly installed in the City's right-of-way.

(c) An assembly or portion of an assembly which extends above-ground shall be located no closer than eighteen (18) inches to the face of the curb.

(d) A double check valve assembly installed in the City's right-of-way shall be installed below or flush with the surrounding grade unless the City determines that it is impracticable.

(e) A property owner shall, at the City's request and at the owner's sole expense, relocate a backflow prevention assembly that encroaches upon the City's right-of-way when such relocation is necessary to reconstruct, widen, or straighten public streets; place or install a traffic signal, sign or streetlight; or complete any other public improvement project.

(f) A person commits an offense if the person fails to relocate a backflow prevention assembly located in or upon any City right-of-way after receiving a written order from the City to do so.

(g) A person commits an offense if the person installs or maintains a backflow prevention assembly in violation of this Section.

(h) A backflow prevention assembly installed or maintained in the City's right-of-way in violation of this Section or an order issued pursuant to this section is hereby declared to be a nuisance.

#### **Sec. 23-424. Cross-connection inspection.**

(a) The Regulatory Authority shall complete an inspection for cross-connection control prior to providing continuous water service when:

- (1) A newly constructed facility or previously non-existing premise requests water service;
- (2) A structure undergoes a material improvement;
- (3) A structure undergoes a correction or addition to the plumbing;
- (4) As deemed necessary by the Regulatory Authority to protect the City's water supply from contaminants or pollutants.

(b) Permanent water service shall not be supplied to a new construction facility until the Regulatory Authority completes a cross-connection inspection.

#### **Sec. 23-425. Access to premises.**

(a) To determine compliance with this Article, every person who is directly or indirectly provided water service by the City shall allow the Regulatory Authority to enter their premises for the purpose of inspecting pipes and fixtures and identifying the manner in which water is used. The Regulatory Authority's right of entry is a condition of the person's water service or connection to the potable water supply.

(b) A person shall promptly remove, at the person's sole expense, a security barrier or other obstacle to allow the Regulatory Authority to access the premises.

(c) A person who is directly or indirectly provided water service by the City commits an offense if the person:

- (1) Fails to remove a barrier or obstacle to allow the Regulatory Authority to access the premises; or
- (2) Unreasonably delays the Regulatory Authority's access to the premises.

(d) The Regulatory Authority may apply for a search warrant from the municipal court or other court of competent jurisdiction if:

- (1) A person denies the Regulatory Authority access to a facility, building, structure, property, premises, or a potable water supply connected to the City's potable water supply; or
- (2) The Regulatory Authority has probable cause to believe that:
  - (A) A violation of this Article or other enforcement order has occurred;
  - (B) A cross-connection inspection or survey is necessary to determine whether a violation has occurred; or
  - (C) A potential or imminent threat to public health or safety exists.

#### **Sec. 23-426. Multiple connections.**

Premises requiring multiple service connections for adequate water supply and/or fire protection shall have a backflow prevention assembly at each service connection. The Regulatory Authority shall determine the type of backflow prevention assembly necessary to protect the City's water supply from contaminants or pollutants based on the potential Degree of Hazard.

#### **Sec. 23-427. Residential service connections.**

The Regulatory Authority shall require any residential premises with a cross-connection to either eliminate the actual or potential cross-connection or install a backflow prevention assembly that complies with this Article. The Regulatory Authority shall determine the type of backflow prevention assembly necessary to protect the potable water supply from contaminants or pollutants based on the potential Degree of Hazard.

**Sec. 23-428. Connection of mobile units.**

(a) The connection of a mobile unit to the potable water supply is prohibited unless:

- (1) An air gap or a backflow prevention assembly is installed;
- (2) The air gap or backflow prevention assembly is tested annually; and,
- (3) The Regulatory Authority has given prior written approval to connect the mobile unit to the potable water supply.

(b) A person commits an offense if the person operates, or causes the operation of, a mobile unit in violation of this Section.

**Sec. 23-429. Fire sprinkler systems.**

(a) Unless a variance has been issued in writing from the Regulatory Authority, a double check valve assembly (DCVA) approved by the Regulatory Authority shall be installed for a fire sprinkler system using piping material not approved for potable water use or that does not provide for periodic flow-through during each twenty-four-hour period. If an air gap is not used to protect a tank supply system, a reduced pressure principle assembly (RPZ) shall be installed when nonpotable water, other liquid, gas, or a substance may be introduced into the fire sprinkler system.

(b) A single detector check shall be installed on a fire sprinkler system connected to the potable water supply. Vaults are required to be used for installed backflow valves on a fire sprinkler system. All backflow valves/vaults used on a fire sprinkler system shall be located as close to the right-of-way as possible, but shall be located no further than one hundred (100) feet from the property line. Valves may be installed inside the building only if the backflow valve can be installed inside the building, and remain within one hundred (100) feet of the property line. The Regulatory Authority may grant a variance to the distance requirement by written approval.

(c) Upon the approved installation of a DCVA, RPZ or other approved backflow prevention assembly, a licensed fire line tester shall complete a cross-connection test report and submit the completed report to the Regulatory Authority as required by this Section.

(d) All fire line equipment, including piping and valves, shall be installed by a state licensed fire sprinkler system contractor. A backflow prevention assembly tester may test and repair an assembly on a fire line only if the tester is employed by an approved fire line contractor.

**Sec. 23-430. Fire hydrant protection.**

(a) A double check valve assembly (DCVA) or a reduced pressure principle assembly (RPZ) that has been approved by the Regulatory Authority shall be installed for a fire hydrant water meter used as a temporary water supply during construction or any other use that creates a potential hazard to the potable water supply. An RPZ is required if, other than potable water, a liquid, gas, or other substance may be introduced into the potable water supply.

(b) A person using or renting a fire hydrant water meter shall abide by this Article.

(c) Only a City fire hydrant meter with an approved backflow prevention assembly may be used within the City limits.

**Sec. 23-431. Lawn irrigation systems.**

(a) A permit must be issued by a City Building Inspector to install a lawn irrigation system and the installation shall comply with the Plumbing Code and this Article.

(b) An interconnection of the potable water supply with an alternate water source is prohibited.

**Sec. 23-432. Thermal expansion elimination.**

If a closed system has been created by the installation of a backflow assembly, a person who owns or controls the premises shall eliminate the possibility of thermal expansion.

**Sec. 23-433. Reduced water pressure.**

The City shall not be responsible for reduced water pressure due to the installation of a backflow prevention assembly.

**Sec. 23-434. Assembly testing required.**

(a) The Regulatory Authority shall require the inspection and testing of a backflow prevention assembly:

- (1) Immediately after installation;
- (2) When an assembly is moved;
- (3) A minimum of once a year if an assembly is intended to protect against a health hazard;

(4) installed on premises that have been unoccupied for at least one (1) year preceding re-occupancy; or

(5) Immediately after an assembly is repaired or replaced.

(b) If deemed necessary to protect the potable water supply from contaminants or pollutants, the Regulatory Authority may require a backflow prevention assembly to be tested more frequently than once a year.

(c) Testing of a backflow prevention assembly shall be performed by a licensed backflow prevention assembly tester who is registered with the City's Regulatory Authority and licensed by the State.

(d) It is the responsibility of the person who owns or controls the premises to test a backflow prevention assembly as required by this Article.

(e) A person commits an offense if the person owns or controls premises and fails or refuses to have a required backflow prevention assembly installed, maintained, inspected, or tested as required by this Article.

(f) The City shall not be liable for damage to a backflow prevention assembly that occurs during testing.

(g) A person commits an offense if the person allows an unlicensed or unregistered tester to test a backflow prevention assembly on premises they own or control.

### **Sec. 23-435. Assembly maintenance and repair.**

(a) A person who owns or controls premises at which a backflow prevention assembly is required shall maintain the assembly in proper working order, repair, annually register on a form approved by the Regulatory Authority, and pay an annual nonrefundable administrative fee as established by City Council. Assembly, maintenance and repair shall be done in accordance with state law, regulations and this Article.

(b) A backflow prevention assembly shall be located and maintained in a manner that allows it to be tested by a method that has been approved by the Regulatory Authority.

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

(d) A person commits an offense if a person fails to maintain a backflow prevention assembly in compliance with this Article.

(e) A person commits an offense if the person fails to comply with a repair order issued by the Regulatory Authority.

**Sec. 23-436. Installation standards and specifications.**

(a) *Reduced pressure principle backflow prevention assemblies (RPZs).* An RPZ may be utilized at premises where a substance is handled that would be hazardous to public health if introduced into the potable water supply. An RPZ shall include properly located resilient seated test cocks and a tightly closing resilient seated shutoff valve at the end of the assembly.

- (1) An RPZ shall be sized to provide adequate water supply and water pressure for the premises. Flow characteristics need not be standardized.
- (2) An RPZ assembly shall be readily accessible for testing and maintenance and shall be located in an area where water damage to building or furnishing would not occur from relief valve discharge. The property owner assumes all liability for damage caused by water discharge from an RPZ assembly. An approved air gap shall be located at the relief valve orifice of an RPZ assembly. An approved air-gap shall be at least twice the diameter of the supply pipe measured vertically above the overflow rim of the vessel, plumbing fixture, or other device, in no case less than one (1) inch. This air gap shall be at least twice the inside diameter of the incoming supply line as measured vertically above the top rim of the drain, and shall not be less than one (1) inch in diameter. An approved air-gap funnel assembly may be used to direct minor discharges away from an RPZ assembly but shall not control flow or provide continuous relief.
- (3) No part of a reduced pressure principle backflow prevention assembly shall be submerged in water or installed in an area subject to flooding. An RPZ shall be installed above grade in well-drained areas. The drain shall be of adequate capacity to carry the full rated flow of the assembly and shall be screened on both ends.
- (4) An enclosure shall be designed for ready access and sized to allow for the minimum clearances established by Section 23-436(a)(5). Removable protective enclosures may be installed for a smaller assembly. Daylight drain ports shall be provided to accommodate full pressure discharge from the assembly.

- (5) An assembly measuring two (2) inches in diameter or less shall have at least six (6) inches clearance on both sides and on top of the assembly, and twelve (12) inches below and behind the assembly. An assembly measuring larger than two (2) inches in diameter shall have a minimum of twelve (12) inches on the back side, twenty-four (24) inches on the test cock side, and the relief valve opening shall be at least twelve (12) inches plus nominal size of assembly above the floor or highest possible water level. Headroom of six (6) feet zero (0) inches is required in vaults without a fully removable top. A minimum access opening of thirty-six (36) inches is required on all vault lids.
- (6) Vertical installation of an RPZ assembly is prohibited.
- (7) The person who owns or controls the premises is responsible for testing an RPZ assembly as required by this Article and shall notify the Regulatory Authority upon installation of an RPZ assembly.
- (8) A variance from these specifications will be evaluated by the Regulatory Authority on a case-by-case basis and requires the Regulatory Authority's prior written consent.
- (9) In granting a variance, the Regulatory Authority may consider drain lines to accommodate full relief valve discharge flow.

(b) *Double check valve backflow prevention assemblies (DCs).* A DC 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.

- (1) A DC shall be sized to provide adequate water supply and water pressure for the premises.
- (2) Premises where an uninterrupted water supply is critical shall require two (2) parallel-installed assemblies. The assemblies shall be sized so that each assembly provides the minimum water supply and water pressure requirements and both assemblies jointly provide the maximum water flow required.
- (3) An assembly shall be readily accessible with adequate room for testing and maintenance. A DC may be installed below grade, provided that all test cocks are fitted with brass pipe plugs. All vaults shall be well-drained, constructed of suitable materials, and sized to allow for the minimum clearance established below by Section 23-436(b)(4).

- (4) An assembly measuring (2) inches or less in diameter shall have at least six (6) inches of clearance below and on both sides of the assembly and, if located in a vault, the bottom of the assembly shall not be more than twenty-four (24) inches below grade. An assembly larger than two (2) inches shall have a minimum clearance of twelve (12) inches on the back side, twenty-four (24) inches on the test cock side, and twelve (12) inches below the assembly. Headroom of six (6) feet zero (0) inches is required in a vault without a fully removable top. A minimum access opening of thirty-six (36) inches is required on all vault lids. "Y" pattern double check valve assemblies shall be installed so that the checks are horizontal and the test cocks face upward. These clearance standards apply to an assembly installed in a vault, enclosure, and meter box.
- (5) If approved in writing by the Regulatory Authority, a vertical installation of a DC is allowed if:
  - (A) It measures four (4) inches or less in diameter;
  - (B) Contains an internally spring-loaded check valves;
  - (C) Flow is upward through assembly; and
  - (D) Both the assembly, the manufacturer and the *Manual of Cross-Connection Control and Hydraulic Research* states the assembly can be used in a vertical position.
- (6) The person who owns or controls the premises is responsible for testing a DC assembly as required by this Article and shall notify the Regulatory Authority upon installation of a DC assembly.
- (7) A variance from these specifications will be evaluated on a case-by-case basis and requires the Regulatory Authority's prior written consent.

(c) *Pressure vacuum breaker backflow prevention assemblies (PVBs).* A PVB may be utilized as point-of-use protection only if a substance is handled at the premises that would be objectionable but not hazardous to health if introduced into the potable water supply. A PVB protects against back siphonage only and shall not be installed where there is potential for backpressure backflow.

- (1) A PVB assembly shall be installed a minimum of twelve (12) inches above the highest-elevated downstream piping.

- (2) A PVB shall not be installed in an area subject to flooding or where damage would occur from water discharge.
- (3) A PVB assembly shall be readily accessible for testing and maintenance, with a minimum clearance of twelve (12) inches all around the assembly.
- (4) The person who owns or controls the premises is responsible for testing a PVB as required by this Article and shall notify the Regulatory Authority upon installation of a PVB assembly.
- (5) A variance from these specifications will be evaluated on a case-by-case basis and requires the Regulatory Authority's prior written consent.

(d) *Spill-resistant pressure vacuum breaker backflow prevention assemblies (SVBs).* An SVB may be installed if a pressure vacuum breaker is required. An SVB shall comply with the installation requirements applicable for pressure vacuum breaker backflow prevention assemblies set forth in Section 23-436(c).

(e) *Air Gap Separation.* An air-gap separation provides the maximum protection from backflow and shall be utilized at premises where a substance is handled that would be hazardous to public health if introduced into the potable water supply.

- (1) An air-gap separation shall be at least twice the diameter of the supply pipeline as measured vertically above the top rim of the receiving vessel, and in no case less than one (1) inch in diameter. If there is potential for splashing, tubular screens may be attached or the supply line may be cut at a forty-five-degree angle. The air gap distance is measured from the bottom of the angle. Hoses shall not be allowed.
- (2) An air-gap separation shall not be altered in any way without the Regulatory Authority's prior written consent. Any alteration shall be made available for inspection.

[Sec. 23-437 to Sec. 23-450 Reserved.]

### DIVISION 3. BACKFLOW PREVENTION ASSEMBLY TESTER REGULATIONS

#### **Sec. 23-451. Registration required.**

(a) A backflow prevention assembly tester shall not operate within the City without first registering with the Regulatory Authority. The Regulatory Authority shall determine whether an applicant is eligible for registration.

(b) Each applicant for registration shall:

- (1) Annually register with the Regulatory Authority;
- (2) Be licensed by the Commission and must provide evidence of licensure;
- (3) Provide evidence that testing equipment is able to maintain a calibration of plus or minus 0.2 psid accuracy; and
- (4) Pay an annual non-refundable registration fee in an amount as established by City Council.

(c) Registration shall remain effective for one (1) year from the date of registration provided that the backflow prevention regulation tester:

- (1) Maintains eligibility for registration and licensure; and,
- (2) Registration is not revoked by the Regulatory Authority.

(d) After notice and hearing, the Regulatory Authority may revoke a registration if the Regulatory Authority determines that a tester:

- (1) Files a false, incomplete, or inaccurate report backflow prevention assembly report;
- (2) Uses an inaccurate gauge;
- (3) Uses improper testing procedures;
- (4) Allows his/her insurance to expire;
- (5) Fails to comply with safety regulations;
- (6) Fails to register the serial numbers of his/her test kits or fails to calibrate gauges annually as required by this Section 23-452(a)(3);
- (7) Fails to return completed test forms to the Regulatory Authority within the time period required by Section 23-452(a)(6) on three (3) or more occasions in a calendar year; or,
- (8) Has violated any other provision of this Section.

(e) The Regulatory Authority shall maintain a list of registered testers.

- (f) A person commits an offense if the person:
  - (1) Tests a backflow prevention assembly within the City and lacks licensure by the Commission; or
  - (2) Tests a backflow prevention assembly within the City and fails to register with the Regulatory Authority and pay the registration fee.

**Sec. 23-452. Certified backflow prevention assembly tester duties.**

- (a) A certified backflow prevention assembly tester shall:
  - (1) Register annually with the Regulatory Authority;
  - (2) File the serial number of each of his/her test kits with the Regulatory Authority;
  - (3) Annually test each recorded test kit for accuracy and calibrate each test kit to maintain two (2) percent accuracy;
  - (4) Maintain testing equipment in proper working condition;
  - (5) Perform competent and accurate certifications on each backflow prevention assembly tested and submit a complete original, signed, and dated report on forms approved by the Regulatory Authority;
  - (6) Report backflow prevention assembly test results to the Regulatory Authority within ten (10) days of testing;
  - (7) Provide a copy of the completed backflow prevention assembly test report to the person who owns and/or controls premises;
  - (8) Maintain backflow prevention assembly test reports and/or repair records for a minimum of three (3) years; and
  - (9) Refrain from changing a backflow prevention assembly's design or operation characteristics.

[Sec. 23-453 to 23-470 Reserved]

## DIVISION 3. FEES, ENFORCEMENT AND APPEAL

### **Sec. 23-471. Enforcement.**

(a) The Regulatory Authority is authorized to enforce the provisions of this Article and State laws and regulations regarding cross-connection and backflow prevention.

(b) The Regulatory Authority shall inspect or cause to be inspected a backflow prevention assembly installed pursuant to this Article.

(c) The Regulatory Authority shall not approve a certificate of occupancy until a backflow prevention assembly has been tested and is operational unless the testing of the backflow prevention assembly must be delayed until internal production or auxiliary equipment has been installed.

(d) The Regulatory Authority may, without prior notice, suspend water service to any premises when the Regulatory Authority finds such suspension is necessary to prevent or stop an actual or threatened backflow, which may present imminent and substantial danger to the environment, the public water supply, or the health and welfare of any person. As soon as practicable after the suspended service, the Regulatory Authority shall notify the owner or person in control of the premises of the suspended service in person or by certified mail, return receipt requested. When time permits, the Regulatory Authority may notify the owner or person in control prior to suspending water service. Notice shall include the date that service will be or was suspended, the reason for the suspension, and the option to request an administrative review regarding the reasons for suspension within five (5) days of the date of notice. Water service shall not be reinstated if an administrative review is requested. The Regulatory Authority may not reinstate suspended water service until:

- (1) The person presents proof, satisfactory to the Regulatory Authority, that the actual or threatened backflow has been eliminated and its cause determined and corrected;
- (2) The person reimburses the City for all costs the City has incurred due to responding to an actual or threatened backflow;
- (3) The person pays the City for all costs the City will incur in reinstating water service; and
- (4) The person pays the City any fines imposed by the City due to violation of this Article or the Kennedale City Code.

(e) The owner or person in control of premises for which water service has been suspended may request an administrative review by submitting a written request to the Regulatory Authority within five (5) business days of the date of the notice of

suspended water service or the date that water service was suspended, whichever date is later. The Regulatory Authority may, in his/her sole discretion, hold a hearing to be conducted by the Regulatory Authority. A hearing held under this Subsection shall be held no later than five (5) business days following receipt of the written request for administrative review. Upon consideration of any written and oral statements made to the Regulatory Authority, the Regulatory Authority shall act on the administrative review by issuing a written decision within five (5) days of the receipt of the written request or the administrative hearing, whichever date is later. The decision of the Regulatory Authority may be appealed to the Appeals Officer as set forth in Section 23-474. Failure to submit a timely written appeal to the Regulatory Authority shall be deemed to be a waiver of further administrative review.

(f) A person commits an offense if the person reinstates water service to any premises for which the Regulatory Authority has suspended water service in order to prevent or stop an actual or threatened backflow which presents, or may present imminent and substantial danger to the environment, the public water supply, or the health and welfare of any person, except as directed by the Regulatory Authority.

#### **Sec. 23-472. Registration fees.**

(a) A person who owns or controls premises where a backflow prevention assembly is required shall annually register and pay an annual nonrefundable administrative fee for each assembly categorized as a Health hazard or a High hazard. The annual fee charged for registration of a backflow prevention assembly shall be paid for each separate assembly or device and the fee amount shall be established by the fee schedule. The annual fee shall cover the administrative costs associated with the registration of a backflow prevention assembly, including obtaining, reviewing and maintaining documentation. The registration fee may appear on the person's water utility statement. The Regulatory Authority is authorized to collect such charges in a manner consistent with the Kennedale City Code, the City Charter, and State law.

(b) There shall be an annual nonrefundable registration fee for each applicant registering with the City as a Backflow Prevention Assembly Tester. The fee amount shall be established by the fee schedule. This annual registration fee shall cover administrative cost associated with the registration of licensed testers, including obtaining, reviewing, and maintaining documentation.

#### **Sec. 23-473. Penalties and other remedies.**

(a) *Civil Remedies.*

(1) The City may invoke Sections 54.012 - 54.017 of the Local Government Code and petition the State district court or the county court at law of Tarrant County, through the City Attorney, for either the injunctive relief or the civil penalties specified in this Article, or both the specified injunctive relief and civil penalties whenever it

appears that a person has violated, or continues to violate, any provision of this Article.

- (2) Pursuant to Section 54.016 of the Local Government Code, the City may obtain against a person who owns or controls premises, a temporary or permanent injunction, as appropriate, that:
  - a. prohibits any conduct that violates any provision of this Article; or
  - b. compels the specific performance of any action necessary to comply with any provision of this Article.

(b) *Criminal Penalties.*

- (1) Any person who has violated any provision of this Article, or any order issued hereunder, shall be strictly liable for such violation regardless of the presence or absence of a culpable mental state and shall, upon conviction, be subject to a fine of not more than Two Thousand Dollars and No Cents (\$2000.00) per violation, per day, or any greater fine authorized by State law.
- (2) Any person who has knowingly made any false statement, representation, or certification in any application, record, report, plan, or other documentation filed, or required to be maintained, pursuant to this Article, or any order issued hereunder, or who has falsified, tampered with, or knowingly rendered inaccurate any monitoring device or method required under this Article shall, upon conviction, be subject to a fine of not more than Two Thousand Dollars and No Cents (\$2000.00) per violation, per day, or any greater fine authorized by State law.
- (3) In determining the amount of any fine imposed hereunder, the court shall take into account all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the magnitude and duration of the violation, any economic benefit gained through the violation, corrective actions by the violator, the compliance history of the violator, the knowledge, intent, negligence, or other state of mind of the violator, and any other factor as justice requires.

(c) *Remedies Nonexclusive.* The remedies provided for in this Article are not exclusive of any other remedies that the City may have under State or federal law or the Kennedale City Code. The City may take any, all, or any combination of these actions against a violator. The City is empowered to take more than one enforcement action against any violator. These actions may be taken concurrently.

**Sec. 23-474. Appeal.**

A person may appeal the decision of the Regulatory Authority by submitting a written request to the Appeals Officer within seven (7) business days of the adverse decision or action. A hearing shall be conducted no later than seven (7) business days following receipt of the notice of appeal unless the parties agree to a later date. The hearing shall be conducted by the Appeals Officer. The decision of the Appeals Officer shall be final.

[Sec. 23-475 to 23-499 Reserved]”

**SECTION 2.**

This Ordinance shall be cumulative of all provisions of all existing ordinances and of the Kennedale City Code (1991), as amended, including but not limited to all ordinances of the City of Kennedale affecting the regulation of backflow prevention assemblies and cross-connection control, and shall not repeal any of the provisions of such ordinances except in those instances where provisions of such ordinances are in direct conflict with the provisions of this ordinance.

**SECTION 3.**

It is hereby declared to be the intention of the City Council that the phrases, clauses, sentences, paragraphs, and sections of this ordinance are severable, and if any phrase, clause, sentence, paragraph or section of this ordinance shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs and sections of this ordinance, since the same would have been enacted by the City Council without the incorporation in this ordinance of any such unconstitutional phrase, clause, sentence, paragraph or section.

**SECTION 4.**

All rights and remedies of the City of Kennedale are expressly saved as to any and all violations of the provisions of the Kennedale City Code (1991), as amended, or any other ordinances regarding the regulation of backflow prevention assemblies and cross-connection control that have accrued at the time of the effective date of this ordinance; and, as to such accrued violations and all pending litigation, both civil and criminal, whether pending in court or not, under such ordinances, same shall not be affected by this ordinance but may be prosecuted until final disposition by the courts.

**SECTION 5.**

The City Secretary of the City of Kennedale is hereby directed to publish the caption penalty clause publication clause and effective date clause of this ordinance in

every issue of the official newspaper of the City of Kennedale for two days or one issue of the newspaper if the official newspaper is a weekly newspaper as authorized by Section 3.10 of the City of Kennedale Charter.

**SECTION 6.**

This ordinance shall be in full force and effect from and after its passage and publication as required by law, and it is so ordained.

**PASSED AND APPROVED ON THIS \_\_\_\_\_ DAY OF NOVEMBER, 2009.**

\_\_\_\_\_  
Bryan Lankhorst, Mayor

ATTEST:

\_\_\_\_\_  
Kathy Turner, City Secretary

APPROVED AS TO FORM AND LEGALITY:

\_\_\_\_\_  
City Attorney