ORDINANCE NO. 2046

AN ORDINANCE ESTABLISHING AND MANAGING AN EFFECTIVE CROSS-CONNECTION CONTROL PROGRAM; AMENDING CHAPTER 3 OF THE CODE OF ORDINANCES OF THE CITY OF SNYDER, TEXAS, BY ADDING ARTICLE 3.09 RULES RELATED TO CROSS-CONNECTION CONTROL AND BACKFLOW PREVENTION. ADDING SECTIONS 3.09.001, 3.09.002, 3.09.003 AND 3.09.004, WITH REGARD TO THE ADDITION OF LOCAL PROVISIONS AFFECTING THE 2015 INTERNATIONAL PLUMBING AND RESIDENTIAL CODES AND RELATING TO BACKFLOW PREVENTION AND THE ESTABLISHMENT OF A BACKFLOW PREVENTION DEVICE TESTING PROGRAM CONFORMING TO THE REQUIREMENTS OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY; PROVIDING A SAVINGS CLAUSE; PROVIDING A PENALTY CLAUSE; AND PROVIDING FOR PUBLICATION.

WHEREAS, the City Council of the City of finds and determines that it is necessary to protect the health, safety and welfare of its citizens by regulating and controlling connections to the potable water system of the City and to prohibit any connection to the potable water system that has a potential for contamination or pollution of the potable water system; and

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

WHEREAS, the City Council of the City of Snyder finds and determines that it is in the best interest of the health, safety, and welfare of the citizens of the City of Snyder to make the following amendments to Chapter 3 of the Code of Ordinances of the City of Snyder.

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

SECTION 1. THAT Article 3.09 of the Code of Ordinances, City of Snyder, Texas, is hereby added to Chapter 3 of the Code of Ordinances, City of Snyder read as follows:

Sec. 3.09.001 Definitions.

For the purposes of Article 3.09 of the Code of Ordinances of the City of Snyder, and Sections 312.10 and 608 of the 2015 International Plumbing Code, Sections P2503.7 and P2902 of the 2015 International Residential Code, and the USC Manual of Cross-Connection Control, American Water Works Association M14 Manual, the following definitions shall apply. In the event of a conflict between the definitions set forth below and the definitions provided in the 2015 International Plumbing, 2015 International Residential Codes, the USC Manual of Cross-Connection Control, American Water Works Association M14 Manual, for the purposes of Sections 3.09.001, 3.09.002, and3.09.003 of the Code of Ordinances of the City of Snyder, the definitions set forth below shall control.

(1) *Air gap* shall mean the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet conveying water to a tank, fixture, receptor, sink, or other assembly and the flood level rim of the receptacle. The vertical, physical separation must be at least twice the diameter of the water supply outlet, but never less than 1.0 inch. An air gap may also be a horizontal space between two pipes at no less than 6.0 inches.

(2) *Approved* shall mean accepted by the authority responsible as meeting an applicable specification stated or cited in this ordinance or as suitable for the proposed use.

(3) *Auxiliary water supply* shall mean any water supply on or available to the premises other than the purveyor's approved public water supply that presents a potential contamination hazard of the

public water system. These auxiliary waters may include water from another purveyor's public water supply or any natural source(s) such as a well, spring, river or stream or used waters; or industrial fluids. These waters may be contaminated or polluted or they may be objectionable and constitute an unacceptable water source over which the water purveyor does not have sanitary control.

(4) *Backflow* shall mean the undesirable reversal of flow in a public water distribution system as a result of a cross connection.

(5) *Backflow prevention assembly* shall mean an approved assembly to counteract backpressure or prevent back siphonage.

(6) *Backflow prevention assembly test and maintenance report* shall mean the report required for each backflow prevention assembly upon initial installation and periodically thereafter as required, giving evidence that the backflow prevention assembly has been properly selected based on the degree of hazard, and has been properly installed and tested in accordance with applicable standards, and showing the results of this test. The completed form will be forwarded to the Building Inspection Department of the City for documentation and forwarded to the water purveyor for annual record keeping.

(7) *Backflow Prevention Assembly Tester, Backflow Tester, or General Tester* shall mean a backflow assembly device tester who is qualified to test backflow prevention assemblies on any domestic, commercial, industrial or irrigation service (excepting firelines). This person must be licensed by TCEQ and registered with the City.

(8) *Backpressure* shall mean pressure created by any means in the water distribution system, which by being in excess of the pressure in the water supply mains causes a potential backflow condition.

(9) *Backsiphonage* shall mean the backflow of potentially contaminated water into the potable water system as a result of the pressure in the potable water system falling below atmospheric pressure of the plumbing fixtures, pools, tanks or vats connected to the potable water distribution piping.

(10) *Building Official* shall mean the officer charged with the enforcement of the building, plumbing, mechanical, electrical, fuel gas, and energy conservation codes of the City, or his duly authorized representative. For purposes of this ordinance, all Texas-licensed plumbing inspectors under the supervision of the Building Official are his duly authorized representatives.

(11) *Bypass Arrangements* shall mean any jumper connections, removable section, unions, swivels or change-over devices and other temporary or permanent devices through which or because of which backflow can occur.

(12) *Contamination* shall mean an impairment of the quality of the potable water that creates an actual hazard to the public health through poisoning or through the spread of disease by sewage, industrial fluids or waste.

(13*) Cross connection* shall mean a physical connection or bypass arrangement between a public water system and either another supply of unknown or questionable quality, or another source that may contain contaminating or polluting substances, any source of water treated to a lesser degree in the treatment process, or any steam, gas or chemical system.

(14) *Cross connection control device* shall mean any nationally approved or recognized device placed upon any connection, physical or otherwise, between a potable water supply system and any plumbing fixture or any tank, receptacle, equipment or device, which is designed to prevent non-potable, used, unclean, polluted and contaminated water, or other substance, from entering into any part of such potable water system under any condition or set of conditions.

(15*) Cross connections-controlled* shall mean a connection between a public water system and a nonpublic water system with an approved backflow prevention assembly properly installed and

maintained so that it will continuously afford the protection commensurate with the degree of hazard.

(16*) Cross connection control by containment* shall mean the installation of an approved backflow prevention assembly at the water service connection to any customer's premises, where it is physically or economically unfeasible to find and permanently eliminate or control all cross connections or potential contamination hazards, within the customer's water system; or it shall mean the installation of an approved backflow prevention assembly on the service line leading to and supplying a portion of a customer's water system where there are cross connections or potential contamination hazards, that cannot be effectively eliminated or controlled at the point of the cross connection.

(17) *Customer/property owner* shall mean the owner, as determined by the real property records of Snyder County, Texas, or the agent of the owner in responsible charge of the subject premises. For purposes of this ordinance, a licensed plumber and/or irrigator shall be deemed to be an agent of the owner when performing work under the scope of this ordinance pursuant to a plumbing and/or irrigation permit.

(18) *Customer service inspection* shall mean an inspection designed to detect any actual or potential point of contamination of the potable water system and/or cross connection hazards.

(19) *Degree of hazard* shall mean the non-health hazard or health hazard classification that shall be attached to all actual or potential cross connections.

(a) *Non-health hazard* shall mean a cross connection or potential cross connection involving any substance that generally would not be a health hazard but would constitute a nuisance or be aesthetically objectionable, if introduced into a public water supply.

(b) *Health hazard* shall mean the classification assigned to a cross connection or potential contamination hazard or other situation involving any substance that can cause illness, death, spread of disease or has a high probability of causing such effects if introduced into the potable drinking water supply.

(20) *Double check valve backflow assembly (DCVA), double check assembly, and double check (DC)* shall mean an assembly consisting of two independently acting, approved check valves, including tightly closing resilient seated shutoff valves attached at each end of the assembly and fitted properly located resilient seated test cocks. This assembly shall only be used to protect against a non-health hazard.

(21) *Fireline tester* shall mean a tester who is qualified to test backflow prevention assemblies on firelines. This person must be licensed by TCEQ and registered with the City.

(22) *Licensed professional* shall mean any individual, or their representative, that must maintain a license obtained through a professional licensing board in order to conduct their business under state law.

(23) *Non-potable water* shall mean water not safe for drinking, personal or culinary utilization.

(24) *Pollution* shall mean an impairment of the quality of the potable water to a degree that does not create a hazard to the public health but that does adversely and unreasonably affect the aesthetic qualities of such potable water for domestic use.

(25) *Point of use isolation* shall mean the appropriate backflow prevention within the consumer's water system at the point at which the actual or potential cross connection exists.

(26) *Potable water* shall mean water free from impurities present in amounts sufficient to cause disease or harmful physiological effects and conforming to the bacteriological and chemical quality requirements of the Public Health Service Drinking Water Standards or the regulations of any public health authority having jurisdiction over such matters.

(27) *Potential contamination hazard* shall mean a condition which, by its location, piping or configuration, has a reasonable probability of being used incorrectly, through carelessness, ignorance, or negligence, to create or cause to be created a backflow condition by which

contamination can be introduced into the public water supply. Examples of potential contamination hazards are:

(A) bypass arrangements;

(B) jumper connections;

(C) removable sections or spools; and

(D) swivel or changeover assemblies.

(28) *Public Health Service Drinking Water Standards* shall mean the standards set forth in 30 TAC 290 Subchapter F, as may be amended from time to time.

(29*) Reduced pressure principle backflow prevention assembly (RPBA), reduced pressure principle assembly, RPZ or RP assembly* shall mean a backflow prevention device consisting of two independently acting check valves, internally force-loa normally closed position and separated by an intermediate chamber (or zone) in which there is an automatic relief means of venting to the atmosphere, internally loaded to a normally open position between two tightly closing shutoff valves and with a means for testing for tightness of the checks and opening of the relief means.

(30) *Repair* of an irrigation system shall mean the reconstruction or renewal of any part of an existing irrigation system, including without limitation, installation of a backflow prevention device, adding additional irrigation zones, reparation of a main irrigation line and valve replacement. For the purpose hereof, the replacement of a control box or sprinkler head(s) shall not be deemed to be a repair.

(31) *Service connection* shall mean the point of delivery where the water purveyor loses control over the water.

(32) *Used water* shall mean any water supplied by a water purveyor from a public water system to a consumer's water system after it has passed through the point of delivery or service connection and is no longer under the sanitary control of the water purveyor.

(33) *Water purveyor* shall mean the Director in charge of the water department of the City of Snyder, who is vested with the authority and responsibility for the implementation of an effective cross connection control program and for the enforcement of the provisions of this ordinance.

SECTION 2. THAT Section 3.09.002 of the Code of Ordinances of the City of Snyder, Texas, is hereby added to read as follows:

Sec. 3.09.002 General.

Section 3.09.001, Section 3.09.002, Section 3.09.003 and Section 3.09.004 of the Code of Ordinances of the City of Snyder are intended to supplement the USC Manual of Cross-Connection Control, American Water Works Association M14 Manual, Section 312.10, "Inspection and Testing of Backflow Prevention Assemblies", and Section 1308, "Protection of Potable Water Supply" of the 2015 International Plumbing Code, as well as Sections P2503.7 and P2905 of the 2015 International Residential Code, both codes having been previously adopted as a part of the Code of Ordinances of the City of Snyder, Texas. In the event of any conflict between the USC Manual of Cross-Connection Control, American Water Works Association M14 Manual, Sections 312.10 or 1308 of the 2015 International Plumbing Code or Sections P2503.7 or P2905 of the 2015 International Residential Code and Article 3.09 of the Code of Ordinances of the City of Snyder, Texas, the provisions of Section 3.09.001, of the Code of Ordinances of the City of Snyder shall control. Article 3.09 of the City of Snyder shall be liberally construed to protect the public health and safety of the citizens of the City of Snyder, Texas.

SECTION 3. THAT the Code of Ordinances of the City of Snyder, Texas, is hereby amended by adding Section 3.09.003, which said Section shall read as follows:

Sec. 3.09.003 Responsibilities of the Water Purveyor, User, Customer/Property Owner and Backflow Prevention Assembly Tester.

(a) Responsibilities of water purveyor.

(1)(i) No water service connection to any premises shall be installed or maintained by the water purveyor unless the water supply is protected as required by state law, including without limitation, 30 TAC 290.44(h), 30 TAC 290.413(j), 30 TAC 290.47(i), 30 TAC 344.73 and 30 TAC 344.75, as same may be amended from time to time. Service of water, subject to the provisions of Article 3.09 of the Code of Ordinances of the City of Snyder, or for the purposes of Article 3.09 of the Code of Ordinances of the City of Snyder, and Section 312.10 and 608 of the 2015 International Plumbing Code, Sections P2503.7 and P2902 of the 2015 International Residential Code, and the USC Manual of Cross-Connection Control, American Water Works Association M14 Manual, Sections 312.10 or 608 of the 2015 International Plumbing Code, or Sections P2503.7 or P2902 of the 2015 International Residential Code, as applicable, to any premises shall be discontinued by the water purveyor if a backflow prevention assembly required by this ordinance is not installed properly, tested and maintained, or if it is found that a backflow prevention assembly has been removed, bypassed, or if an unprotected cross connection exists on the premises. Service will not be restored until such conditions or defects are corrected.

(ii) For new facilities, permanent water service shall not be provided until all testable backflow prevention assemblies have been tested and are operational. Except in cases where the testing of backflow prevention assemblies must be delayed until the installation of internal production or auxiliary equipment, City shall not approve any certificate of occupancy until all backflow prevention assemblies have been tested and are operational.

(2) Customer service inspection.

(i) A customer service inspection for cross connection control shall be completed by the City water purveyor prior to providing continuous water service in each of the following circumstances.

(a) Water service to a newly constructed facility, in which case the customer service inspection shall be performed in conjunction with or near the same time as the plumbing final inspection conducted by the Building Official.

(b) Any correction, addition or improvement to the water service or water distribution plumbing of any facility or premises, except for minor repair and maintenance work exempted from permitting by Section 106.2 of the 2015 International Plumbing Code, or in cases where an approved RPBA backflow prevention device has been installed at the point of water service connection such that premises isolation is achieved, and said device has been verified as having been properly tested and maintained as provided herein. Where non-exempt plumbing work has been performed upon the water service or water distribution plumbing of any facility or premises, and approved premises isolation has been provided as described herein, the Building Official shall be solely responsible for ensuring compliance of any such work on the customer side of the backflow device.

(ii) A permanent water service shall not be established with regard to a newly constructed facility until after the customer service inspection is completed.

(iii) Temporary water service, for construction or other purposes, that is found to pose a potential cross connection threat to the potable water due to the unknown use of the water therefore, or other reasons or causes, shall be protected by an approved backflow prevention assembly.

(3) If, in the judgment of the water purveyor or Building Official an approved backflow prevention assembly is required at the customer's/property owner's water service connection; or, within the customer's/property owner's private water system for the safety of the public water system, the water purveyor or the designated agent shall:

(i) Give notice in writing to the customer/property owner to install an approved backflow prevention assembly(s) at specific location(s) at his/her expense, and depending on the

severity of the threat to the public water supply, within the time frame required by the City and in all instances within thirty (30) days.

(ii) In the case of any premise where, in the opinion of the water purveyor and/or building official, an imminent health threat is posed due to cross connection or a potential contamination hazard water service to the facility may immediately be discontinued without prior written notice to customer/property owner. Although the City will attempt to provide notice as is reasonably practical, no notice shall be required prior to discontinuance.

(4) Failure, refusal or inability on the part of the customer/property owner to install, have tested and maintain the backflow prevention assembly(s) shall be grounds for discontinuing water service to the premises until such requirements have been met as required by this ordinance.

(5) Any reduction in water pressure caused by the installation of backflow prevention assembly devices shall not be the responsibility of the City.

(b) Responsibilities of the Customer/Property Owner.

The customer's/property owner's system shall include those parts of the potable water conveyance facilities beyond the termination of the utility distribution system that are conveying potable water to the points of use of customer/property owner.

(1) Backflow prevention assemblies shall be installed within the customer's/property owner's system at the customer's/property owner's expense at any time required by Article 3.09 of the Code of Ordinances of the City of Snyder and For the purposes of Article 3.09 of the Code of Ordinances of the City of Snyder, and Section 312.10 and 608 of the 2015 International Plumbing Code, Sections P2503.7 and P2902 of the 2015 International Residential Code, and the USC Manual of Cross-Connection Control, American Water Works Association M14 Manual,

(2) /or Sections 312.10 or 608 of the 2015 International Plumbing Code, or Sections P2503.7 or P2902 of the 2015 International Residential Code, or the USC Manual of Cross-Connection Control, American Water Works Association M14 Manual, as applicable. All backflow prevention devices must be installed and tested as required by (i) and Article 3.09 of the Code of Ordinances of the City of Snyder; and (ii) Section 312.10 and Section 608 of the 2015 International Plumbing Code; and (iii) 30 TAC 290.44(h), 30 TAC 290.46(j) and 30 TAC 290.47(i).

(2) It shall be the responsibility of the customer/property owner to verify that all applicable City plumbing and/or irrigation permits are obtained and that the customer/property owner, or licensed plumber or irrigator, as applicable, is in compliance with all of the provisions of those permits. In addition to the remedies provided herein, in the event the backflow prevention assembly is installed by a licensed
professional, failure by such licensed professional to follow the provisions of such permit will result in written notice to the applicable state licensing agency, in addition to being a violation of this ordinance.

(3) It shall be the responsibility of the customer/property owner and backflow prevention assembly tester performing the subject test(s) to send to the City the backflow prevention assembly test and maintenance records. These materials shall be delivered to the Water Purveyor Office of the City within ten (10) days of installation of the backflow prevention assembly.

(4) The customer's/property owner's system shall be open for inspection at all reasonable times authorized representatives of the City to determine whether cross connections or potential contamination hazards, including violations of Article 3.09 of the Code of Ordinances of the City of Snyder and/or For the purposes of Article 3.09 of the Code of Ordinances of the City of Snyder, and Sections 312.10 and 608 of the 2015 International Plumbing Code, Sections P2503.7 and P2902 of the 2015 International Residential Code, and the USC Manual of Cross-Connection Control, American Water Works Association M14 Manual, Sections 312.10 or 608 of the 2015

International Plumbing Code, or Sections P2503.7 or P2902 of the International Residential Code, as applicable, exist.

(5) If the customer or premise wherein potable water from the City is supplied or provided has an auxiliary water supply that is treated to a lesser degree than the public water supply or if the water quality is unknown, and which is either cross connected or poses a potential contamination hazard to the public water system, the public water system shall be protected against backflow or backsiphonage by an approved backflow prevention device. The described threat shall be deemed a health hazard when determining the type of approved backflow required. If the auxiliary water supply is used for irrigation purposes, the backflow assembly shall be subject to the requirements of 30 TAC 344.75(c), as same may be amended from time to time.

(6) In the event industrial fluids, any material dangerous to health or any other objectionable substances are handled in such a fashion as to create potential contamination hazard to the public water system, such condition shall be deemed a health hazard. The public water system shall be protected against backflow from the premises by installing an air gap, a reduced pressure principle backflow assembly, or such other backflow assembly device as may be required by 30 TAC 290.47(i), as same may be amended from time to time. See Exhibit "A" latest revision (Appendix F, TCEQ publication RG-478) incorporated herein and made a part hereof for all purposes.

(7) All new installations of or substantial alterations to fire suppression systems that utilize the City's public water supply shall have installed a U.L. approved backflow prevention device according to the degree of hazard that exists. For purposes of this section, a "substantial alteration" is deemed to be any alteration or expansion of the system that would trigger a requirement for review and approval by the authority having jurisdiction, normally being the City Fire Marshal. All fire-line backflow prevention assemblies must be installed inside the building as determined by Section 3.09.002 of the Code of Ordinances of the City of Snyder. Upon the approved installation of the backflow prevention assembly, a cross connection test report completed by a licensed fire-line tester must be provided to the City as required by Section 3.09.002 (b)(3), above.

(8) Subject to the conditions of this Section 3.09.002 (b)(8), a reduced pressure assembly shall be the minimum protection for fire hydrant water meters which are being used for a temporary water supply during construction or other uses which may pose a potential contamination hazard to the public water supply. Only City fire hydrant water meters with approved backflow prevention assemblies are allowed to be used within the City limits. Failure to comply with this Section 3.09.002 (b)(8) will result in the fire hydrant meter being removed from the premise by the water purveyor.

(9) It shall be the duty of the customer/property owner at any premises where backflow prevention assemblies are installed to have certified inspections and operational tests made upon installation and at least once every three years in non-health hazard conditions. In those instances where the water purveyor and/or building official of the City deems the potential backflow to be a health hazard or a potential health hazard, certified inspections shall be required annually or at more frequent intervals as deemed necessary by the water purveyor. All inspections and tests of backflow prevention assemblies shall be at the expense of the customer/property owner and shall be performed by a backflow tester who is licensed with the Texas Commission on Environmental Quality and registered with the water purveyor and meeting all conditions and criteria of Section 3.09.001, Section 3.09.002, and Section 3.09.003 of the Code of Ordinances of the City of Snyder.

(10) It shall be the responsibility of the customer/property owner that all irrigation systems installed after the effective date hereof and for an existing system in the event of a repair, shall have installed an approved backflow prevention assembly other than an atmospheric vacuum breaker (AVB), in the event an existing irrigation system is repaired.

(11) It shall be the responsibility of the customer/property owner to have the backflow prevention assembly device tested as described in this Ordinance. The backflow prevention assembly shall be repaired, overhauled, or replaced at the expense of the customer/property owner whenever said assemblies are found to be defective. Water service shall not be restored until repairs are complete.

(c) Responsibilities of the Backflow Prevention Assembly Tester

In addition to requirements of the backflow prevention assembly tester set forth in other parts of this Ordinance, backflow prevention assembly tester shall also comply with the following:

(1) The backflow prevention assembly tester shall perform competent tests, issuing complete, accurate and legible reports of backflow prevention assemblies tested, and filing backflow prevention assembly test and maintenance reports as prescribed by this Ordinance. Test reports shall be submitted to the Water Purveyor Office of the City, within (10) ten days of the testing by the backflow prevention assembly tester of the installation, replacement, or repair of the backflow assembly.

(2) Prior to performing any testing of backflow prevention assemblies within the City of Snyder, a licensed backflow prevention assembly tester must be registered annually with the City in accordance with this Section.

(a) Eligibility for registration shall be conditioned upon applicant providing proof to the City that they are currently licensed as a backflow prevention assembly tester by the Texas Commission on Environmental Quality.

(b) Each applicant for registration shall furnish evidence to the City to show that he/she has available the necessary tools and equipment to properly test and certify such assemblies. Serial numbers of all test gauges shall be registered with the City annually and shall be listed on tests and maintenance reports prior to being submitted to the City. Each recorded test kit shall be tested annually for accuracy and calibrated to maintain a two (2) percent accuracy factor.

(3) In the event the City has reason to believe that testing or reporting deficiencies exist in a backflow prevention assembly tester's methods or report, the City shall notify the tester and

(a) Require the subject customer/property owner to have re-tested any backflow prevention assembly previously reported as operational;

(b) In the event the backflow prevention assembly tester has committed three (3) or more inadvertent testing or reporting inaccuracies within a twelve (12) month period commencing with the first inaccuracy, the backflow prevention assembly tester's registration with the City may be suspended for a period of six (6) months;

(c) In the event the backflow prevention assembly tester shall file with the City an intentional or knowing falsified test report, the backflow prevention assembly tester's registration with the City shall be revoked by the City.

SECTION 4. THAT Section 3.09.004 of the Code of Ordinances of the City of Snyder, Texas, is hereby added to read as follows:

Sec. 3.09.004 Approved Backflow Prevention Device Assembly and Installation.

(a) Any backflow prevention assembly required by Article 3.09 of the Code of Ordinances of the City of Snyder, or For the purposes of Article 3.09 of the Code of Ordinances of the City of Snyder, and Sections 312.10 and 608 of the 2015 International Plumbing Code, Sections P2503.7 and P2902 of the 2015 International Residential Code, and the USC Manual of Cross-Connection Control, American Water Works Association M14 Manual, Section 312.10 or 608 of the 2015 International Plumbing Code, or Sections P2503.7 or P2902 of the International Residential Code, or the USC Manual of Cross-Connection Control, American Water Works Association M14 Manual, as applicable, shall be of a model and size approved by the water purveyor/building official or as approved by 30 TAC 290.47(i), as same may be amended from time to time. Backflow prevention devices must be approved by the City prior to installation. The City shall determine the type and location of the backflow prevention assembly to be installed within the area served by the public water system.

(b) The term approved *backflow prevention assembly* shall mean a backflow prevention assembly that has been manufactured and installed in full conformance with the standards specified within the 2015 International Plumbing Code and those established by the American Water Works Association (AWWA) and the USC Manual of Cross-Connection Control, American Water Works Association M14 Manual, titled:

AWWA C510 Standard for Double Check Valve Backflow–Prevention Assembly, and AWWA C511 Standard for Reduced-Pressure Backflow-Prevention Assembly, and have met completely the laboratory field performance specifications of the Foundation for Cross-Connection Control and Hydraulic Research (FCCHR) and the University of Southern California (USC), "Specification of Backflow-Prevention Assemblies" – Sec. 10 of the most current issue of the *Manual of Cross-Connection Control.*

(c) Backflow prevention assemblies shall be installed in a manner designed to facilitate ease of testing and inspection by the City or any certified general tester. All backflow prevention assemblies shall be tested upon installation, relocation, or repair of same.

(d) Backflow prevention assemblies, in addition to other requirements set forth in Article 3.09 of the Code of Ordinances of the City of Snyder, or For the purposes of Article 3.09 of the Code of Ordinances of the City of Snyder, and Sections 312.10 and 608 of the 2015 International Plumbing Code, Sections P2503.7 and P2902 of the 2015 International Residential Code, and the USC Manual of Cross-Connection Control, American Water Works Association M14 Manual, Section 312.10 or 608 of the 2015 International Plumbing Code, Sections P2503.7 or P2902 of the 2015 International Residential Code, or the USC Manual of Cross-Connection Control, American Water Works Association M14 Manual, shall be installed in accordance with subparagraphs (1) through (9) below. The clearance standards set forth in subparagraphs (1) through (9), below, shall apply to all assemblies installed in enclosures and meter boxes.

(1) Backflow prevention assemblies that are larger than four inches and installed more than five feet above floor level must have a suitable platform for use by testing or maintenance personnel.

(2) All backflow prevention assemblies installed eight feet or higher above floor level must have installed a suitable permanent ladder for use by testing or maintenance personnel.

(3) All backflow prevention assembly enclosures shall be designed for ready access and sized to allow for the minimum clearance as established in this article. Removable protective enclosures may be installed on smaller assemblies.

(4) Reduced Pressure Zone assemblies two inches and smaller shall have at least a six-inch clearance on both ends and on top of the assembly. Additionally, there shall be twelve inches of clearance below the relief valve and twelve inches of clearance on the test cocks side of the assembly. All assemblies larger than two inches shall have a minimum of twelve inches of clearance on the back side, twenty-four inches of clearance on the test cock side, and the relief valve opening shall be at least twelve inches plus nominal size of assembly above the floor or highest possible water level.

(5) Double Check Valve Assemblies larger than two inches may be installed above finished grade in a freeze-proof enclosure or below grade in a vault. If assembly is installed below grade, the test cocks must be plugged with corrosion resistant watertight plugs, and shall be no less than twelve inches below grade with a minimum of twelve inches clearance below the backflow assembly device. There shall be at least a six inch clearance on both ends of the assembly with a minimum clearance of twelve inches on the back side and twenty-four inches on the test cock side. The top of the vault shall be two inches above ground level. Double Check Valve Assemblies shall be installed so that the checks are horizontal.

(6) Double Check Valve Assemblies two inches and smaller may be installed above finished grade in a freeze-proof enclosure or below grade in a box. If assembly is installed below grade, the test cocks must be plugged with corrosion resistant watertight plugs, and shall be no less than twelve inches below grade with a minimum of twelve inches clearance below the backflow assembly device. There shall be at least a six inch clearance on both ends of the

assembly with a minimum clearance of twelve inches on the back side and twelve inches on the test cock side. The top of the box shall be two inches above ground level. Double Check Valve Assemblies shall be installed so that the checks are horizontal.

(7) Bypass arrangements are prohibited. Pipe fittings which could reasonably be calculated to constitute a means by which a backflow assembly could be bypassed and defeated shall not be installed.

(8) All facilities that require continuous, uninterrupted water service and are required to have a backflow assembly must make provision for the parallel installation of assemblies of the same type so that testing, repair and maintenance can be performed.

(9) All health hazard facilities shall have containment from the City's potable water system. For the purposes of this section, "containment" shall mean protection of the public water supply at the service connection.

SECTION 5. THAT the mechanism for appeal from the provisions of this Ordinance, or from a decision of an administrative official enforcing same, shall be through the Building Board of Appeals of the City of Snyder in the same manner as set forth in Chapter 3, Article 3.03, Section 3.03.061 of the Snyder Code of Ordinances. It is further provided that said Board shall have no authority to waive, set aside or alter any provision of this Ordinance otherwise mandated by the laws of the State of Texas.

SECTION 6. THAT violation of any provision of this Ordinance shall be deemed a misdemeanor punishable as provided by Section 1.01.009 Code of Ordinances of the City of Snyder. Additionally, a violation of any provision of this Ordinance shall be deemed to be a nuisance under Section 3.04.006 of the Code of Ordinances of the City of Snyder. Notwithstanding the above, in the event a violation results in an imminent risk to human health, safety or welfare, the City may immediately discontinue water service to the subject facility without notice. Notwithstanding the right to immediately discontinue water service without notice, as described herein, the City will attempt to provide notice as is reasonably practical under the circumstances presented. The City will provide customer with necessary information to properly reinstate service.

SECTION 7. THAT should any paragraph, section, sentence, phrase, clause or word of this ordinance be declared unconstitutional or invalid for any reason, the remainder of this Ordinance shall not be affected thereby.

SECTION 8. THAT the City Secretary is hereby authorized and directed to cause publication of the descriptive caption of this Ordinance as an alternative method of publication provided by law.

SECTION 9. THAT this Ordinance shall become effective from and after its publication as provided by law.

PASSED AND APROVED by the City Council on first reading this 7th day of November, 2016.

Mayor

ATTEST:

Shai Green
City Secretary

PASSED AND ADOPTED by the City Council on second reading this 5th day of December, 2016.

Mayor

ATTEST:

Shai Green

City Secretary

EXHIBIT "A"

Appendix F: Assessment of Hazard and Selection of Assemblies [from 30 TAC 290.47(f)]

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

Premises Isolation:	Assessment of Hazard	Required Assembly
Aircraft and missile plants	Health	RPBA or AG
Animal feedlots	Health	RPBA or AG
Automotive plants	Health	RPBA or AG
Breweries	Health	RPBA or AG
Canneries, packing houses and rendering plants	Health	RPBA or AG
Commercial car wash facilities	Health	RPBA or AG
Commercial laundries	Health	RPBA or AG
Cold storage facilities	Health	RPBA or AG
Connection to sewer pipe	Health	AG
Dairies	Health	RPBA or AG
Docks and dockside facilities	Health	RPBA or AG
Dye works	Health	RPBA or AG
Food and beverage processing plants	Health	RPBA or AG
Hospitals, morgues, mortuaries, medical clinics, dental clinics, veterinary clinics, autopsy facilities, sanitariums, and medical labs	Health	RPBA or AG
Metal manufacturing, cleaning, processing, and fabrication plants	Health	RPBA or AG
Microchip fabrication facilities	Health	RPBA or AG
Pa Der and paper products plants	Health	RPBA or AG
Petroleum processing or storage facilities	Health	RPBA or AG
Photo and film processing labs	Health	RPBA or AG
Plants using radioactive material	Health	RPBA or AG
Plating or chemical plants	Health	RPBA or AG
Pleasure-boat marinas	Health	RPBA or AG
Private/Individual/Unmonitored Wells	Health	RPBA or AG
Reclaimed water systems	Health	RPBA or AG
Restricted, classified or other closed facilities	Health	RPBA or AG
Rubber plants	Health	RPBA or AG
Sewage lift stations	Health	RPBA or AG
Sewage treatment plants	Health	RPBA or AG
Slaughter houses	Health	RPBA or AG
Steam plants	Health	RPBA or AG

Tall buildings or elevation differences where the highest outlet is 80 feet or more above the meter	Non-health*	DCVA

Internal Protection: Description of Cross Connection	Assessment of Hazard	Required Assembly
Aspirators	Non-health*	AVB
Aspirator (medical)	Health	AVB or PVB
Autoclaves	Health	RPBA
Autopsy and mortuary equipment	Health	AVB or PVB
Bedpan washers	Health	AVB or PVB
Connection to industrial fluid systems	Health	RPBA
Connection to plating tanks	Health	RPBA
Connection to salt-water cooling systems	Health	RPBA
Connection to sewer pipe.....	Health	AG
Cooling towers with chemical additives	Health	AG
Cuspidors	Health	AVB or PVB
Degreasing equipment	Non-health*	DCVA
Domestic space-heating boiler	Non-health*	RPBA
Dye vats or machines	Health	RPBA
	Health	RPBA
Flexible shower heads	Non-health*	AVB or PVB
Heating equipment		
Commercial	Non-health*	RPBA
Domestic	Non-health*	DCVA
Hose bibbs	Non-health*	AVB
Irrigation systems		
with chemical additives	Health	RPBA
without chemical additives	Non-health*	DCVA, AVB,or PVB
Kitchen equipment—Commercial	Non-health*	AVB
Lab bench equipment	Health or Non-health*	AVB or PVB
Ornamental fountains	Health	AVB or PVB
Swimming pools		
Private	Non-health*	PVB or AG
Public	Non-health*	RPBA or AG
Sewage pump	Health	AG
Sewage ejectors	Health	AG
Shampoo basins	Non-health*	AVB
Specimen tanks	Health	AVB or PVB
Steam generators	Non-health*	RPBA
Steam tables	Non-health*	AVB
Sterilizers	Health	RPBA
Tank vats or other vessels containing toxic substances	Health	RPBA
Trap primers	Health	AG
Vending machines	Non-health*	RPBA or PVB
Watering troughs	Health	AG or PVB

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

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

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