

ORDINANCE # 122A
CROSS-CONNECTION CONTROL AND
BACKFLOW PREVENTION PROGRAM
City of Waskom, Texas

AN ORDINANCE AMENDING ORDINANCE # 122 OF THE CITY OF WASKOM'S ORDINANCES BY AMENDING THE REGULATIONS CONCERNING CROSS-CONNECTION AND BACKFLOW PREVENTION CONTROLS; PROVIDING THAT THIS ORDINANCE SHALL BE CUMULATIVE OF ALL ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A PENALTY FOR VIOLATIONS HEREOF; PROVIDING A SAVING CLAUSE; PROVIDING FOR PUBLICATION IN THE OFFICIAL NEWSPAPER; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Waskom's City Council has previously adopted regulations regarding cross-connection control and backflow prevention controls in Ordinance # 122 on April 14, 1992, and

WHEREAS, the City Council now desires to amend those regulations.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF WASKOM THAT THE FOLLOWING CROSS-CONNECTION CONTROL AND BACKFLOW PREVENTION PROGRAM REGULATIONS IS HEREBY AMENDED TO READ AS FOLLOWS:

EVERY SOURCE OF CONTAMINATION OR POSSIBLE CONTAMINATION FROM ANY CONTAMINANT WHICH ORIGINATES FROM OR IS LOCATED AT A RESIDENTIAL OR COMMERCIAL ESTABLISHMENT, THAT IS CONNECTED TO ANY PUBLIC WATER SUPPLY OR THAT PROVIDES WATER TO THE PUBLIC, SHALL BE EQUIPPED WITH THE PROTECTION REQUIRED UNDER THE PROVISIONS OF THIS ORDINANCE.

I. PURPOSE

- A. To protect the public potable water supply served by the City of Waskom Water Department from the possibility of contamination or pollution by isolating, within its customers internal distribution system, such contaminants or pollutants which could backflow or back-siphon into the public water system.**

- B. To promote the elimination or control of existing cross-connections, actual or potential, between its customer's potable water system and non-potable or contamination sources.
- C. To provide for the maintenance of a continuing program of cross-connection control which will effectively prevent the contamination or pollution of all potable water systems by cross-connection.

II. AUTHORITY

- A. Under the Federal Safe Drinking Water Act of 1974, Public Law 93.523, the Statutes of the State of Texas (30 TAC Chapter 290.44 and 290.46), The water purveyor has the primary responsibility for preventing water from unapproved sources, and other substances, from entering the public potable water supply.
- B. Texas Commission of Environmental Quality (TCEQ) pursuant to Chapter 341, Subchapter C, Texas Health and Safety Code.

III. RESPONSIBIITY

The Director of Public Works shall be responsible for the protection of the public potable water distribution system from contamination or pollution due to the backflow or back-sipnonage of contaminants or pollutants through the water service connection. If, in the judgement of the Director of Public Works, an approved backflow device and/or assembly is required at the city's water service connection to any customer's premises, the Director, or his delegated agent, shall give notice in writing to said customer to install an approved containment backflow prevention device and/or assembly at each service connection to his premises, and/or install isolation devices and/or assemblies at each potential or actual source of cross-connection on customers internal plumbing. The customer shall, within 30 days have installed by a licensed plumber, an approved device(s) and/or assembly(s), at his or her own expense. Failure or refusal, or inability on the part of the customer to have installed said device(s) and/or assembly(s) within thirty (30) days, shall constitute a ground for discontinuing water service to the premises until such device(s) and/or assembly(s) have been properly installed.

IV. DEFINITIONS

APPROVED. As accepted by the Director of Public Works as meeting applicable specifications Stated or cited in this regulation, or a suitable for the proposed use.

AIR GAP. A physical separation between the free flowing discharge end or a potable water supply piping and/or appurtenance and an open or non-pressure receiving vessel, plumbing fixture or other device. An "approved air-gap separation" 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 inch.

ATMOSPHERIC VACUUM BREAKER (AVB). A device used to prevent back-siphonage in non-health hazard conditions. This device cannot be tested and cannot prevent back-pressure backflow.

BACKFLOW PREVENTION ASSEMBLY OR ASSEMBLY. An assembly to counteract back pressure or prevent back-siphonage.

BACKFLOW. The undesirable reversal of flow or water of mixtures of water and other liquids, gases, or other substances into the distribution pipes or the potable supply of water from any source or sources.

BACK-PRESSURE. Any elevation of pressure in the downstream piping system (by any means) above the supply pressure at the point of consideration which would cause, or tend to cause, a reversal of the normal direction of flow and the introduction of fluids, mixtures, or substances from any source other than the intended source.

BACK-SIPHONAGE. A form of backflow due to a reduction in system pressure which causes a sub-atmospheric pressure to exist at a site in the water system.

BPAT. A backflow prevention assembly tester licensed by the TCEQ to do business in the State of Texas.

CITY OR THE CITY. The City of Waskom through the City Mayor, or any representative, inspector or employee designated by the City Mayor.

COMMERCIAL ESTABLISHMENT. Property or location which is used primarily for manufacture, production, storage, wholesaling or retailing of services which is or may be placed in the flow of commerce or any property or location which is used primarily for the provision of any service.

COMMISSION. The Texas Commission of Environmental Quality (TCEQ).

CONTAMINANTS. Any foreign material, solid or liquid, not common to the potable water supply which makes the water unfit or undesirable for human or animal consumption.

CONTAMINATION. An impairment of the quality of the water which creates an actual hazard to the public health through poisoning or through the spread of disease by sewage, industrial fluids, waste, etc.

CONTAINMENT. A method of backflow prevention which requires a backflow prevention assembly at the water service connection.

CROSS-CONNECTION. Any unprotected actual or potential connection or structural arrangement between a public water system and any other source or system through which it is possible to introduce into any part of the potable system any used water, industrial fluid, gas, or substance other than the intended potable water with which the system is supplied.

CROSS-CONNECTION CONTROL DEVICE. 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 substances, from entering into any part of such potable water system under any condition or set of conditions.

CUSTOMER SERVICE INSPECTION. An inspection designed to inspect and detect any actual or potential cross-connection hazards and/or exceed of the lead action level in solder, flux, or pipe fittings.

DIRECTOR. The Public Works Director, or his designee 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 chapter.

DOUBLE CHECK DETECTOR BACKFLOW PREVENTION ASSEMBLY OR DOUBLECHECK DETECTOR (DCDA). 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

DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY OR DOUBLE CHECK VALVE ASSEMBLY (DC). An assembly which consists of two independently acting, approved check valves, including tightly closing resilient seated shutoff valves attached at each end of the assembly and fitted with properly located resilient seated test cocks

FIRELINE TESTER. A tester who is employed by a state approved fireline contractor and is qualified to test backflow prevention assemblies on firelines only.

GENERAL TESTER. A tester who is qualified to test backflow prevention assemblies on any domestic, commercial, industrial, or irrigation services except fire lines.

HEALTH HAZARD. Any conditions, devices, or practices in the supply system and/or its operation which create, or may create, a danger to the public health and well-being of the water customer

HOSE BIB VACUUM BREAKER (HB). A device which is permanently attached to a hose bib and which acts as an atmospheric vacuum breaker.

ISOLATION. A method of backflow prevention in which a backflow prevention assembly is located to correct a cross connection at in-plant source rather than at a water service entrance.

MOBILE UNIT. Any operation, which may have the potential to introduce contaminants into a potable water system 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-HEALTH HAZARD. 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 the potable water supply.

PERSON/OWNER. Any individual, partnership, associations, corporations, firms, clubs, trustees, receivers, and bodies politic or corporate.

POINT-OF-USE ISOLATION. The appropriate backflow prevention within the consumers water system at the point at which the actual or potential cross-connection exists.

POTABLE WATER SUPPLY. Any water supply intended or used for human consumption or other domestic use.

PREMISES. Any piece of property to which water is provided, including all improvements, mobile structures, and structures located on it.

PRESSURE VACUUM BREAKER (PVB). An assembly that provides protection against back-siphonage, but does not provide adequate protection against back pressure.

PUBLIC WATER SYSTEM OR SYSTEM. Any public or privately owned water system, which supplies water for domestic use. The system will include all services, reservoirs, facilities, and any equipment used in the process of producing, treating, storing, or conveying water for public consumption.

REDUCED PRESSURE PRINCIPLE ASSEMBLY (RP OR RPZA). An assembly containing two independently acting approved check valves together with a hydraulically-operated, mechanically independent pressure differential relief valve located between the check valves and at the same time below the first check valve. The assembly shall include properly located resilient seated test cocks and a tightly closing resilient seated shutoff valve at the end of the assembly.

REDUCED PRESSURE PRINCIPLE- DETECTOR ASSEMBLY. (RPDA) An assembly composed of a line-size approved reduced pressure zone assembly with a bypass containing a specific water meter that shall register accurately for very low rates of flow.

REPRESENTATIVE OF THE WATER SYSTEM. A person designated by the City of Waskom to perform cross-connection control duties that shall include, but are not limited to, cross-connection inspections and water use surveys.

RESIDENTIAL USE. Water used by any residential customer of the water supply and includes single family dwellings, duplexes, housing and apartments where the individual units are each on a separate meter, or, in cases where two or more units are served by one meter, the units are full-time dwellings.

SERVICE CONECTION. The point of delivery which the water purveyor losses control of the water.

SPILL-RESISTANT PRESSURE VACUUM BREAKER (SVB). An assembly containing an independently operating, internally loaded check valve and independently operating, loaded air inlet valve located on the discharge side of the check valve. This assembly is to be equipped with a properly located resilient seated test cock and tightly closing resilient seated shutoff valves attached at each end of the assembly.

TESTER. A person that is a certified backflow prevention assembly technician approved by the city and the TCEQ.

TCEQ. The Texas Commission on Environmental Quality.

USED WATER. Water supplied by a public water system to a water user's system after it has passed through the service connection.

WATER USE SURVEY. A survey conducted or caused to be conducted by the local authority designed to identify any possible sources of contamination to the potable water supply.

V. RIGHT-OF-WAY ENCROACHMENT

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

- (1) A backflow prevention assembly required by the city may be installed upon or within any city right-of-way only if the owner proves to the city that there is no other feasible location for installing the assembly, installing it in the right-of-way will not interfere with traffic or utilities. The city retains the right to approve the location, height, depth, enclosure, and other requisites of the assembly prior to installation.
- (2) All inspections or permits (if required) by City Ordinances to perform work in the city right-of-way shall be obtained.
- (3) The assembly shall be installed below or flush with the surrounding grade except when it is not practicable to install it in this manner.
- (4) The city shall not be liable for any damage done to or caused by an assembly installed in a right-of-way.
- (5) A property owner shall, at the request of the city and at the owner's expense, relocate an assembly which encroaches upon any city right-of-way when such relocation is necessary for street or utility construction or repairs or for purposes of public safety.
- (6) A person commits an offense if he/she fails to relocate a backflow prevention assembly located in or upon any city right-of-way after receiving a written order from the regulatory authority.

VI. MULTIPLE CONNECITON.

Any premises requiring multiple service connections for adequacy of supply and/or fire protection will be required to install a backflow prevention assembly on each of the additional service lines to the premises. The type of assembly will be determined by the degree of hazard that could occur in the event of an interconnect between any of the buildings on the premises.

VII. PROTECTION REQUIRED, INSTALLATION.

- (1) No water connection will be allowed to any establishment where an actual or potential contamination or system hazard exists without appropriate backflow prevention device between the drinking water supply and the source of potential contamination. The containment air gap is sometimes impractical and, instead, reliance must be placed on individual internal air gaps and/or mechanical backflow prevention devices, under these conditions, additional protection shall be required at the meter in the form of a backflow prevention device.
- (2) No water connection shall be made to any condensing, cooling, or industrial process, or any other system of non-potable water which the City of Waskom does not have sanitary control,

unless in accordance with the requirements of this document and the present national requirements for cross-connection control and backflow prevention.

- (3) The backflow prevention assembly protection which is required under this chapter shall be any of the duly nationally recognized and authorized backflow prevention assemblies listed in the International plumbing code, University of Southern California Manual of Cross Connection Control Ninth Edition, or as determined by the regulatory authority. The city shall determine the type and location of backflow assembly to be installed within the area served by the City of Waskom. The assembly will be required in each of the following circumstances, but is in no way limited to the following circumstances:
 - (a) The nature and extent of any activity on the premises, or the materials used in connection with any activity on the premises, or materials stored on the premises, which could contaminate or pollute the potable water supply.
 - (b) Premises having any cross-connections and the cross-connections is protected by an atmospheric vacuum breaker device (AVB).
 - (c) Internal cross-connections are present that are not correctable.
 - (d) Intricate plumbing arrangements that are present which make it impractical to ascertain whether cross-connections exist.
 - (e) There is unduly restricted entry so that inspections for cross-connections cannot be made with sufficient frequency to assure that cross-connections do not exist.
 - (f) Installation of an approved backflow prevention assembly is deemed necessary to accomplish the purpose of these regulations in the judgement of the city.
 - (g) An appropriate cross-connection survey report or Customer Service Inspection report has not been filed with the Public Works/Water Utilities Department of the City of Waskom upon request of the city.
 - (h) A fire suppression system that is connected to the city's water system.
 - (i) All new construction if deemed necessary in the Customer Service Inspection. The type of assembly required will be determined by the health hazard in the judgement of the city.
 - (j) When a building on any premises, which the end use of such building is not determined or could change, a Reduced Pressure Principle Assembly may be installed at the service connection that supplies water for public use.
 - (k) Any used water return system.
 - (l) In the event a point-of-use assembly has not had testing or repair done as required by this chapter, a premises containment assembly will be required.
 - (m) If it is determined that additions or alterations have been made to the plumbing system without obtaining proper inspections or permits (if required), premises isolation may be required.
 - (n) All multistory buildings or any buildings with a booster pump or elevated storage tank
 - (o) All irrigation system.
 - (p) Retrofitting will be required on all health hazard connections and wherever else the city deems necessary to retrofit.
- (4) All backflow prevention assemblies installed after the effective date of this chapter shall be installed in a manner designed to facilitate ease of inspection by the city. Any current installed backflow prevention assembly which, are located in inaccessible locations, or where the tester is subject to physical danger shall be relocated to approved locations following current national guideline standards.

VIII. TESTING OF ASSEMBLIES

- (1) All backflow prevention assemblies shall be inspected and tested or caused to be inspected and tested by the city in each or the following circumstances:
 - (a) Immediately after installations;
 - (b) Whenever the assembly is moved;
 - (c) A minimum of once a year;

- (d) Premises that have been vacated and unoccupied for one year, prior to reoccupancy;
 - (e) Immediately after repairs.
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- (2) All assembly testing shall be performed by a state certified backflow prevention assembly tester, approved by the regulatory authority.
 - (3) Duly authorized employees of the city are entitled to enter any public or private property at any reasonable time for purpose of enforcing this chapter. Persons and occupants of premises which are provided water service by the city, either directly or indirectly, shall allow the city of its representative's ready access at all reasonable times to all parts of the premises for the purposes of inspection, testing, records examination, or in the performance of any of their duties. Where persons or occupants of premises have security measures in force, shall make necessary arrangements with their security guards so that personnel from the city will be permitted to enter, without delay, for the purposes of performing their specific responsibilities.
 - (4) The city is not responsible for damage to a backflow prevention assembly, which may occur during testing.
 - (5) A water use survey or Customer Service Inspection may be conducted at any establishment that is served by the city's public water supply. Upon determination that the establishment falls under the provisions of this chapter and requires a backflow prevention assembly, a notice to abate the condition or to install the proper backflow prevention assembly shall be issued.
 - (7) It is the responsibility of the person who owns or controls the property to have all assemblies tested, at his/her expense, in accordance with this chapter. Assemblies may be required to be tested more frequently if the regulatory authority deems necessary.
 - (8) All results from assembly testing by a certified backflow prevention assembly tester (BPAT) shall be placed on a form provided by the city.

IX. THERMAL EXPANSION

It is the responsibility of any person who owns or controls property to eliminate the possibility of thermal expansion, if a closed system has been created by the installation of a backflow assembly.

X. PRESSURE LOSS

Any reduction in water pressure caused by the installation of a backflow assembly in not the responsibility of the city.

XI. RESIDENTIAL SERVICE CONNECTIONS

Any person who owns or controls any residential property which has been determined to have an actual or potential cross-connection will be required to eliminate the actual or potential cross-connection or have an approved backflow assembly installed in accordance with this chapter.

XII. RENTAL PROPERTIES

Any person who owns or controls property is responsible for the installation, testing and repair of all backflow assemblies on their property.

XIII. CUSTOMER SERVICE INSPECTIONS

- (a) Water service to a newly constructed facility or previously non-existing premises.
 - (b) After any material improvement to building(s) or premises.
 - (c) Any correction or addition to the plumbing of any facility or premises.
 - (d) The city deems necessary.
- (2) Permanent water service shall not be supplied to a new construction facility(s) until after the customer service inspection is completed,
 - (3) Temporary water service which poses a potential cross-connection threat to the potable water supply shall be protected by an approved backflow prevention assembly.

XIV. INSTALLATION GUIDELINES AND REQUIREMENTS FOR BACKFLOW PREVENTION ASSEMBLIES

- (1) *General.* To ensure proper operation and accessibility of all backflow prevention assemblies, the following national guideline requirements shall apply to the installation of these assemblies.
 - (a) Backflow prevention assemblies shall be installed in accordance with the current TCEQ Rule and these regulations by a licensed plumber or irrigation specialist. The assembly installer must notify the city of installation, obtain appropriate forms, and have the installation inspected by the city.
 - (b) At facilities which require a backflow prevention assembly to be installed at the point of delivery of the water supply, such installation of the assembly must be 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. The city may specify other areas for installation of the assembly. Assemblies that must be installed or are located on city rights of ways are the responsibilities of the business or entity that the water line is serving.
 - (c) The assembly must be protected from freezing and other severe weather conditions.
 - (d) All backflow prevention assemblies shall be of a type and model approved by the city.
 - (e) All vertical installations of backflow assemblies must have prior approval by the city.
 - (f) 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.
 - (g) Bypass lines are prohibited. Pipefitting which could be used for connecting a bypass line must not be installed.
 - (h) Premises where an uninterrupted water supply is critical should be provided with two assemblies installed in parallel. They should be sized in such a manner that either assembly will provide the maximum flow required.
 - (i) Lines should be thoroughly flushed prior to installation. A strainer with blowout tapping may be required ahead of assembly.
 - (j) The property owner assumes all responsibility for any damages resulting from installation, operation, and/or maintenance of a backflow assembly. The owner shall be responsible for keeping all backflow prevention assembly vaults reasonably free of silt and debris.
 - (k) Upon completion of installation, the city shall be notified and all assemblies must be inspected by the city and tested by a TCEQ licensed backflow prevention assembly tester (BPAT) at the owner's expense. All assemblies must be registered with the city and shall provide the date of installation, manufacturer, model, type, size, serial number of the backflow assembly, and the initial test report on the city's forms.
- (2) Reduced Pressure Principle Assemblies (RP) will be utilized at premises where a substance is handled that would be hazardous to health if introduced into the potable water system. The

RP is normally used in locations where an air gap is impractical. The RP shall be effective against both back-siphonage and back-pressure.

- (a) RPs must be sized to provide an adequate supply of water and pressure for the premises being served. Flow characteristics are not standard. Consult manufacturer's specifications for specific performance data.
 - (b) The assembly must be readily accessible for testing and maintenance and must be located in an area where water damage to building or finishing would not occur from relief valve discharge. The property owner assumes all responsibility for any damage caused by water discharge. An approved air gap shall be located at the relief valve orifice of RP assemblies.
 - (c) No part of a Reduced Pressure Principle Assembly (RP) shall be submerged in water or installed in a location subject to flooding. RPs are typically installed above grade in well-drained areas, but may be installed below grade (ground level) if a boresight drain to daylight is provided. The drain shall be of adequate capacity to carry the full rated flow of the assembly and shall be screened on both ends.
 - (d) Enclosures shall be designed for ready access and sized to allow for the minimum clearances established below. Removable protective enclosures are typically installed on the smaller assemblies. Daylight drain ports must provide to accommodate full pressure discharge from the assembly.
 - (e) Assemblies two inches and smaller shall have at least six-inch clearance on both sides and on top of the assembly, and 12 inches below and behind the assembly. All assemblies larger than two inches shall have a minimum of 12 inches on the backside, 24 inches on the test cock side, and the relief valve opening shall be at least 12 inches plus nominal size of assembly above the floor or highest possible water level. Headroom of six feet zero inches is required in vaults without a fully removable top. A minimum access opening of 36 inches is required on all vault lids.
 - (f) All assemblies must be tested in accordance with this chapter as well as all TCEQ regulations. Tests are the responsibility of the assembly owner. The owner must notify the city upon installation of any backflow prevention assembly.
 - (g) Variances from these specifications will be evaluated on a case-by-case basis. Any deviations must have prior written approval of the city.
- (3) Reduced Pressure Principle Detector Assemblies (RPDA) may be utilized in all installations requiring a reduced pressure zone assembly and detector metering.
- (a) RPDAs shall comply with the installation requirements applicable for RPZAs (reduced pressure zone assembly).
 - (b) The line-sized assembly and the bypass assembly must each be tested. A separate test report of each assembly must be completed by the certified tester.
- (4) Double Check Valve Backflow Prevention Assemblies (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.
- (a) DCs must be sized to provide an adequate supply of water and pressure for premises being served. Consult manufacturer's specifications for specific performance data.
 - (b) Premises where an uninterrupted water supply is critical should be provided with two assemblies installed parallel. Assemblies should be sized in such manner that either assembly will provide the minimum water requirements while the two together will provide the maximum flow required.
 - (c) The assembly shall be readily accessible with adequate room for testing and maintenance. DCs may be installed below grade, providing all test cocks are fitted with brass pipe plugs. All vaults shall be well drained, constructed of suitable materials, sized to allow for the minimum clearances established below.

- (d) Assemblies two inches and smaller shall have at least six-inch clearance below and on both sides of the assembly, and if located in a vault, the bottom of the assembly shall be not more than 24 inches below grade. All assemblies larger than two inches shall have a minimum clearance of 12 inches on the back side, 24 inches on the test cock side, and 12 inches below the assembly. Headroom of six feet zero inches is required in vaults without a fully removable top. A minimum access opening of 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 all assemblies installed in vaults, enclosures, and meter boxes.
 - (e) Vertical installations of DCs are allowed only on sizes up to and including 4 inches that meet the following requirements;
 - (1) Internally spring-loaded check valves;
 - (2) Flow is upward through assembly;
 - (3) Manufacturer states their assembly can be used in a vertical position;
 - (4) Approved by Director.
 - (f) All DCs must be tested in accordance with this chapter. Tests are the responsibility of the assembly owner. The owner must notify the city upon installation of any backflow prevention assembly.
 - (g) Variances from these specifications will be evaluated on a case-by-case basis. Any deviations must have prior written approval of the city.
- (5) Double Check Detector Backflow Prevention Assembly (DCDA) may be utilized in all installations requiring a double check valve assembly and detector metering.
- (a) DCDAs shall comply with the installation requirements applicable for double check valve assemblies (DCs).
 - (b) The line-size DC assembly and the bypass DC assembly must each be tested. A separate test report for each assembly must be completed by the certified tester.
- (6) Pressure Vacuum Breaker Backflow Prevention Assemblies (PVB) may be utilized at point-of-use protection only and where a substance is handled that would be objectionable but not hazardous to health if introduced into the potable water system. PVBs protect against back-siphonage only and shall not be installed where there is potential for back-pressure.
- (a) Assembly shall be installed in a minimum of 12 inches above highest downstream piping.
 - (b) PVBs shall not be installed in an area subject to flooding or where damage would occur from water discharge.
 - (c) The assembly shall be readily accessible for testing and maintenance, with a minimum clearance of 12 inches all around the assembly.
 - (d) All PVBs must be tested in compliance with this chapter. Tests are the responsibility of the assembly owner. The owner must notify the city prior to installation of any backflow prevention assembly.
 - (e) Variances from these specifications will be evaluated on a case-by-case basis. Any deviations must have prior written approval of the city.
- (7) Spill Resistant Pressure Vacuum Breaker Backflow Prevention Assemblies (SVB) may be utilized in all installations requiring a pressure vacuum breaker. Installation requirements will be the same as for Pressure Vacuum Breakers (PVB).

XV. AIR GAP SEPARATION.

Air gaps provide maximum protection from backflow hazards and should be utilized at all locations where hazardous substances are at risk of entering the potable water.

- (1) An Air Gap separation shall be at least twice the diameter of the supply pipeline measured vertically above the top rim of the receiving vessel and in no case less than one inch. If splashing is a problem, tubular screens may be attached or the supply line may be cut at a 45-

degree angle. The air gap distance is measured from the bottom of the angle. Hoses are not allowed.

- (2) Air gap separations shall not be altered in any way without prior approval from the regulatory authority and must be available for inspection at all reasonable times.
- (3) Side walls, ribs or similar obstructions do not affect air gaps when spaced from the inside edge of the spout openings a distance greater than three times the diameter of the effective opening for a single, or a distance greater than four times the effective opening for two intersecting walls.

XVI. FIRE SUPPRESSION SYSTEMS.

- (1) All new installations of fire suppression systems which utilize the city's potable water supply shall have installed an approved backflow prevention devices according to the degree of hazard.
- (2) An approved double check detector backflow prevention assembly (DCDA) or reduced pressure detector assemblies (RPDA) shall be the minimum protection for fire sprinkler systems using piping material that is not approved for potable water use and/or that does not provide for periodic flow-through during each 24 hour period, unless a variance has been issued in writing from the city. A RPDA must be installed if any solution other than the potable water can be introduced into the sprinkler system.
 - (a) It is the responsibility of all property owners and persons in charge of any premises to abide by the conditions of this chapter. In the event of any changes to the plumbing system, it is the responsibility of the property owners to notify the city. All costs associated with this chapter and the purchase, installation, testing and repair of any assemblies of devices are the responsibility of the property owners and persons in charge of any premises.
 - (b) Upon the approved installation of the DCDA or RPDA, or any other devices or assemblies, a cross-connection test report completed by a licensed fireline tester must be sent to the attention of the city and include the information required by this chapter.

XVII. FIRE HYDRANT PROTECTION

An approved double check device backflow prevention assembly (DC) or reduced pressure detector assemblies (RPDA) shall be the minimum protection for fire hydrant water meters which are being used for a temporary water supply during any construction or other uses which would pose a potential hazard to the public water supply. A RPDA must be installed if any solution other than the potable water can be introduced into the potable water.

- (1) It is the responsibility of all persons engaging in the use of a fire hydrant water meter to abide by the conditions of this chapter.
- (2) Only City of Waskom fire hydrant water meters are allowed to be used on the city's potable water system, unless prior approval by the city is granted.
- (3) A refundable deposit (\$100.00) is required to place a fire hydrant meter to insure the return of the meter to the city. Failure to notify the city of discontinue use, or return of the meter can result in the forfeiture of deposit and/or enforcement action being taken against the responsible party, as allowed for in the penalty section of this chapter.
- (4) All non approved fire hydrant meters which are found to be in use in the City of Waskom water system will be confiscated and enforcement action taken against the responsible party as allowed for in the enforcement section in this chapter.

XVIII. RESPONSIBILITIES OF PROPERTY OWNERS

- (1) It is the responsibility of all property owners and/or persons in charge of any premises to abide by the conditions of this chapter and to comply with the following:
 - (a) Payment of all costs associated with this chapter and the purchase, installation, testing and repair of backflow assemblies.

- (b) Install and maintain all backflow prevention assemblies in accordance with this chapter and acceptable industry practices.
 - (c) All property owners shall cause to have all backflow prevention assemblies on their premises tested annually. Such testing must be conducted by certified backflow prevention assembly tester (BPAT) or certified fireline tester, licensed by the TCEQ with a valid, current license. Tester must supply a copy of license to the city and use city forms to report testing and maintenance.
 - (d) Maintain all backflow prevention assemblies in proper working order at all times, including repair as required.
 - (e) Maintain all backflow prevention assemblies in a manner, which allows them to be tested by a method that has been approved by the regulatory authority.
 - (f) All records related to backflow prevention assembly installation, testing and repair shall be maintained on the premises.
- (2) Certified backflow prevention assembly testers shall comply with the following:
- (a) Notify the City of Waskom of any maintenance, repair, or testing performed on any assembly that is served by the city's potable water supply.
 - (b) Use the appropriate forms supplied by the city to record all maintenance and testing performed on any assembly that is served by the city's potable water supply.
 - (c) Maintain testing equipment in proper working condition/calibration.
 - (d) Maintain the design or operation characteristics of an assembly.
 - (e) Ensure the devices are tested according to accepted industry practice and TCEQ regulations.
 - (f) Enter required testing data, including test gauge serial numbers, on cross-connection test forms.
 - (g) Report test results to the city within 15 (fifteen) days of testing.
 - (h) Provide a copy of the completed test report to the property owners and/or the persons in charge of the premises.
 - (i) Maintain all testing and/or repair records.

XIX. BACKFLOW PREVENTION ASSEMBLY TESTER CERTIFICATION

Only approved TCEQ licensed backflow prevention assembly testers can test backflow prevention assemblies served by the City of Waskom potable water supply. Testers must provide proof of TCEQ certification and proof that testing equipment is certified annually and is able to maintain a calibration of plus or minus 0.2 psid accuracy to the city.

XX. COMPLIANCE FOR LAWN IRRIGATION.

Installation requirements must comply with the current city plumbing codes and/or the guidelines for the appropriate device found in this chapter. Interconnections of the potable water supply with an alternate water source is prohibited. Health Hazard backflow protection devices (Air Gap or RPZA) must be installed if any mechanical injection stations are used with the irrigation system in accordance with this chapter.

XXI. MOBILE UNITS

The connection of a mobile unit to any potable water system is prohibited unless such connection is protected by an air gap or an approved backflow prevention assembly. Prior approval and annual device testing of any backflow prevention assembly must be received from the city before connecting to any potable water system.

XXII. ENFORCEMENT

- (1) This chapter shall be enforced by the City of Waskom Public Works Director or his/her designated representatives or employees.
- (2) The city shall inspect all backflow prevention assemblies installed pursuant to the requirements of this chapter. For new facilities, permanent water service shall not be provided until all 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, the regulatory authority shall not approve a certificate of occupancy until all backflow prevention assemblies have been tested and are operational. The city shall not be liable for damage caused to any backflow prevention assembly as a result of the inspection or testing.
- (3) Violations.
 - (a) A person commits an offense if there is failure to maintain backflow prevention assemblies in compliance with this chapter/section.
 - (b) A person commits an offense if there is failure to comply with a repair order issued by the city.
 - (c) A person commits an offense if backflow from premises owned, operated, or managed by the person enters the public water supply system/
 - (d) A person commits an offense by violating any section of this chapter.
 - (e) A person commits an offense if there is a failure to pay any fees required by this chapter.
 - (f) A person commits an offense if discontinued or disconnected water service to premises under this chapter is reinstated except as directed by the city.
 - (g) A person in charge of any facility commits an offense by allowing an uncertified tester to perform testing work at their establishment.
 - (h) A person commits an offense by testing backflow prevention assembly on assemblies installed in the City's potable water supply without a valid license issued by TCEQ.
 - (i) A person commits an offense by installing a backflow prevention assembly on the city's connections without being a licensed plumber in the State of Texas or a licensed fireline installer in the State of Texas.
- (4) Penalty.
 - (a) A person who violates any provision of this chapter is guilty of a misdemeanor and upon conviction is punishable for each act of violation and for each day or part of day during which the violation is committed, continued or permitted.
 - (b) In addition of proceeding under the authority of subsection (3)(a) of this section, the city is entitled to pursue all other criminal and civil remedies to which is entitled under authority of statutes or other ordinances against a person committing any violation of this chapter including injunctions and civil penalties.
- (5) Sanction for failure to notify – in addition to sanctions provided for by this chapter, the city is entitled to exercise sanctions provided for by other ordinances of the city.
- (6) A certified tester may be denied or not allowed to test any assembly installed in the city's potable water supply system if it is determined by the city that the tester:
 - (a) Has falsely, incompletely, or inaccurately reported assembly reports;
 - (b) Has used inaccurate gauges;
 - (c) Has used improper testing procedures;Or
 - (d) Has created a threat to public health or the environment.

XXIII. This ordinance shall be cumulative of all provisions of ordinances of the City of Waskom, as amended, except where the provisions of this ordinance are in direct conflict with the provisions of such ordinances, in which event the

conflicting provisions of such ordinances are hereby repealed.

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

XXV. Any person, firm, or corporation who violates, disobeys, omits, neglects, or refuses to comply with or who resists the enforcement of any the provisions of this ordinance shall be fined not more than 2000.00 dollar for each offense. Each day that a violation is permitted to exist shall constitute a separate offense.

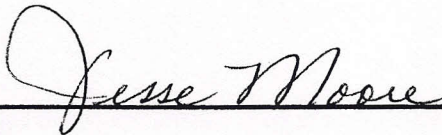
XXVI. All rights and remedies of the City of Waskom are expressly saved as to a violations of the provisions of this ordinance, as amended, or any other ordinances protecting the potable water supply from contamination which have accrued at the time of the effective date of this ordinance; and, as to 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

XXVII. The City Secretary of the City of Waskom is hereby directed to publish

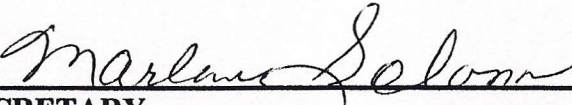
caption, penalty clause, and effective date clause in the official newspaper
at least once within ten (10) days after the passage of this ordinance.

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

PASSED AND APPROVED ON THIS 9 **DAY OF** May **2006.**




MAYOR

ATTEST: 

CITY SECRETARY

EFFECTIVE: May 9, 2006

APPROVED AS TO FORM AND LEGALITY:



CITY ATTORNEY