

ORDINANCE NO. 12-07

**AN ORDINANCE ADDING SECTION 110-36. (CROSS-CONNECTION CONTROL AND PREVENTION) TO CHAPTER 110, ARTICLE II. (WATER), DIVISION 1 (GENERALLY); OF THE CODE OF ORDINANCES OF THE CITY OF PORT ARTHUR; SAID ADDITIONS REPEAL ALL OR PARTS OF ORDINANCES IN CONFLICT HERewith; AND DECLARING THE EFFECTIVE DATE HEREOF.**

**WHEREAS**, Title 30 of the Texas Administrative Code Chapter 290, Subchapter D: Rules and Regulations for Public Water Systems, §290.46(i) states: “Public water systems must adopt an adequate plumbing ordinance, regulations, or service agreement with provisions for proper enforcement to insure that neither cross-connections nor other unacceptable plumbing practices are permitted.”; and,

**WHEREAS**, the City Council of Port Arthur deems it to be in the best interest of the citizens of the City of Port Arthur to adopt an amendment to Chapter 110, Article II (Water), Division 1 (Generally) of the Code of Ordinances of the City of Port Arthur by adding Section 110-36. Cross-connection Control and Prevention in order to comply with this code; NOW THEREFORE,

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF PORT ARTHUR, TEXAS:**

**Section 1.** That the facts and opinions in the preamble are true and correct.

**Section 2.** That Chapter 110, Article II (Water), Division 1 (Generally), Section 110-36 (Cross-connection Control and Prevention) of the Code of Ordinances is hereby added to read:  
“Sec. 110-36. Cross-connection Control and Prevention.

**(a) Cross-connection prohibited.**

No water service connection shall be made to any establishment where a potential or actual contamination hazard exists unless the public water supply is protected in accordance with the rules and regulations of the Texas Commission on Environmental Quality (TCEQ) and this section. Water service shall be discontinued by the city if a required backflow prevention assembly is not installed, maintained, and tested in accordance with TCEQ Rules and this section.

**(b) Definitions**

**Air Gap.** The unobstructed vertical distance through free atmosphere between the lowest opening from any pipe or faucet conveying water or waste to a tank, plumbing fixture, receptor, or other assembly and the flood level rim of the receptacle. These vertical, physical separations must be at least twice the diameter of the water supply outlet, never less than one (1) inch (25.4mm).

**Auxiliary supply.** Any water supply on or available to the premises other than the city's approved public water supply. These auxiliary waters may include water from another purveyor's public potable water supply or any natural sources, such as, but not limited to a well, spring, river, stream, used waters, or industrial fluids. These waters constitute an unacceptable water source over which the city does not have sanitary control.

**Backflow.** The undesirable reversal of flow in a potable water distribution system as a result of a cross-connection.

**Backflow prevention device or assembly.** Any mechanical or physical means to prevent backflow into the potable water system, including reduced pressure backflow assemblies, double-check valve assemblies, atmospheric vacuum breakers, pressure vacuum breaker assemblies, or air gap. All backflow prevention assemblies must be approved by the city and shall have been manufactured in full conformance with the standards established by the American Water Works Association and have met completely the laboratory and field performance specifications of the Foundation for Cross-Connection Control and Hydraulic Research of the University of Southern California established by "Specification of Backflow Prevention Assemblies" of the most current issue of the Manual of Cross-Connection Control.

**City or the city.** The City of Port Arthur, Texas or its authorized representative, which, for the purposes of implementation and enforcement of the backflow prevention program, shall normally mean representatives of Utility Operations – Public Works.

Commission or TCEQ. Texas Commission on Environmental Quality, regulator agency of the state.

Cross-connection. Any actual or potential connection or structural arrangement between a potable water supply system and any plumbing fixture or any tank, receptacle equipment or device, through which it may be possible for any non-potable, used, unclean, polluted and/or contaminated water, or other contaminant, to enter into any part of such potable water system under any conditions or set conditions.

Double check valve assembly. A backflow prevention assembly which consists of two internally loaded check valves, either spring loaded or internally weighted, installed as a unit between two tightly closing resilient-seated shutoff valves and fittings with properly located resilient-seated test cocks.

Person. Any individual, partnership, associations, corporations, firms, clubs, trustees, receivers, and bodies politic and corporate.

Plumbing code. The city's plumbing code as adopted under Chapter 18, Article V. of the Code of Ordinances of the City.

Potable water supply. Any water supply intended or used for human consumption or other domestic use.

Public water system or supply. Any public or privately owned water system which supplies water for public 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. For the purposes of this section, this shall normally mean the public water supply maintained by the City.

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

Recognized backflow prevention assembly tester. An individual meeting the requirements of the most recent revisions to Title 30, Texas Administrative Code § 290.44(h)(4) and holding a current endorsement from the Texas Commission on Environmental Quality or its designated agent, for the type of assembly being tested.

Reduced pressure principle assembly or reduced pressure zone backflow prevention assembly. A backflow prevention assembly consisting of two independently acting approved check valves together with a hydraulically operating, mechanically independent pressure differential relief valve located between the check valves and below the first check valve. These units are located between two tightly closing resilient-seated shutoff valves as an assembly and equipped with properly located resilient-seated test cocks.

Utility Operations Director. Person in charge of the City Water Utilities Department or his/her designated representative.

(e) Cost of compliance. The cost of complying with these regulations shall be the responsibility of the property owners and their lessees. These costs include but are not limited to the purchase, installation, testing, and repair of backflow prevention assemblies. These costs shall also include point-of-use and premise isolation assemblies.

(j) Abatement by city.

- (1) The city shall conduct a plumbing inspection or customer service inspection on any residential or commercial establishment served by the city's public water supply prior to providing continuous water service to all new construction, on any existing service when the Utility Operations Director has reason to believe that cross-connections or other contaminant hazards exist, or after any material improvement, correction, or addition to the customer's private distribution facilities. The purpose of the inspection is to determine compliance with this section and applicable portions of the city's plumbing code relating to cross-connection control and unsafe plumbing practices. Upon determination by the city that the residential or commercial establishment falls under the provisions of this section and requires a backflow prevention assembly, the Utility Operations Director shall issue a notice to abate the condition or order the establishment to install the proper backflow prevention assembly(ies) commensurate with the degree of hazard. A copy of the notice which is issued or caused to be issued by the Utility Operations Director shall be forwarded to the Director of Code Enforcement of the city.
- (2) An approved backflow prevention assembly shall be installed on each service line or point of delivery to a consumer's water system whenever the following conditions exist:

- a. In the case of premises having an auxiliary water supply which is not or may not be of safe bacteriological or chemical quality and which is not acceptable as an additional source by the TCEQ or the city, the public water system shall be protected against backflow from the premises by the installation of an approved backflow prevention assembly in the service line commensurate with the degree of hazard.
  - b. In the case of premises on which any industrial fluids or any other objectionable substance is handled in such a fashion as to create an actual or potential hazard to the public water system, the public system shall be protected against backflow from the premises by the installation of an approved backflow prevention assembly in the service line commensurate with the degree of hazard. This shall include the handling of process waters and waters originating from the city's public water system which have been subject to deterioration in quality.
  - c. In the case of premises having: 1) internal cross-connections that cannot be permanently corrected or protected against, or 2) intricate plumbing and piping arrangements or where entry to all portions of the premises is not readily accessible for inspection purposes, making it impracticable or impossible to ascertain whether or not dangerous cross-connections exist, the city's public water system shall be protected against backflow from the premises by the installation of an approved backflow prevention assembly in each service line.
- (3) Using the city's plumbing code, TCEQ regulations and guidelines, and American Water Works Association (AWWA) recommendations, the Utility Operations Director shall designate the type of backflow prevention assembly required for each type of establishment or hazard. In the case of conflict between these references, the more stringent standard shall apply.
  - (4) Any backflow prevention assembly required by this section shall be of a model and size approved by the Utility Operations Director.

- (k) Fire hydrant protection. An approved double check valve backflow prevention assembly or reduced pressure zone backflow prevention assembly 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 city's public water supply. A reduced pressure zone backflow prevention assembly must be installed if any contaminant other than the potable water can be introduced into the system.
  - (1) It is the responsibility of all persons engaging in the use and rental of a fire hydrant water meter to abide by the conditions of this section. All fire hydrant water meter rentals shall meet the current requirements as provided for by the customer service agreement.
  - (2) Only City-owned fire hydrant water meters with approved backflow prevention assemblies are allowed to be used on fire hydrants in the City public water supply system. All fire hydrant meters shall be obtained from, and installed by, the City of Port Arthur Utility Operations Department.
  - (3) A deposit is required to ensure the return of all water meters and backflow prevention assemblies to the Utility Operations Department. Loss, damage, or failure to return the assemblies will result in forfeiture of the deposit and enforcement action may be taken against the responsible party, as allowed for in the penalty section of this section.
  - (4) Non-approved fire hydrant meters which are found to be in use in the city's public water system will be confiscated and not returned. Enforcement action may be taken against the responsible party, as allowed for in the enforcement section of this section.
  - (5) It shall be a violation of this section for anyone other than authorized employees of the City to open, tamper with, or use water from any fire hydrant without the express written permission of the City Utility Operations Department.
- (l) Installation requirements. Backflow prevention assemblies shall be in accordance with the following requirements, to ensure their proper operation and accessibility:

- (1) Backflow prevention assemblies shall be installed in accordance with the city's plumbing code and the manufacturer's instruction. All backflow prevention assemblies installed in accordance with this section shall be tested upon installation by a recognized backflow prevent assembly tester. The test report shall be sent to the Utility Operations Department within ten (10) days of the installation. The assembly installer shall obtain the required plumbing permits prior to installation as required by the city's plumbing code.
- (2) No part of a reduced pressure principle backflow prevention assembly shall be located in water or installed in a pit or other location subject to flooding. If a double check valve assembly is installed in a vault, brass plugs shall be maintained in the test ports at all times and adequate drainage shall be provided.
- (3) When a backflow prevention assembly is installed to serve an entire establishment, the assembly shall be installed at the service connection of the water supply, before any branch in the line, and on private property located just inside the boundary of the city's right of way. The Utility Operations Director may specify additional areas for installation of assemblies if needed.
- (4) Backflow prevention assemblies shall be protected from freezing and other severe weather conditions.
- (5) All vertical installations shall be approved in writing by the Utility Operations Director prior to installation.
- (6) Backflow prevention assemblies shall be readily accessible with adequate room for maintenance and testing. Assemblies two (2) inches and smaller shall have at least six-inch clearance on all sides of the assembly. All assemblies 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, twelve (12) inches below the assembly, and thirty-six (36) inches above the assembly. "Y" pattern double check valve assemblies shall be installed so that the checks are horizontal and the test cocks face upward.

- (7) If an assembly is installed five (5) feet or higher above the ground or floor, it shall be equipped with a suitable platform for use by testing or maintenance personnel. This installation shall meet all applicable Occupational Safety and health Administration (OSHA) regulations and occupational safety and health laws of the state.
  - (8) Bypass lines are prohibited. Pipe fittings which could be used for connecting a bypass line shall not be installed.
- (m) Annual inspections and maintenance
  - (1) Regular inspections and testing of mechanical backflow prevention assemblies shall be conducted at least one per year by a recognized backflow prevention assembly tester on backflow prevention assemblies which are installed to provide protection against health hazards, as defined by TCEQ rules, AWWA standards, or as determined by the Utility Operations Director. The Utility Operations Director may also require more frequent testing in certain applications to protect against high health hazards. If upon inspection of the backflow prevention assembly, it is deemed to not be operating properly, it is the responsibility of the establishment to immediately make all necessary repairs. It is the responsibility of the tester to report all assemblies found not to be operating correctly to the Utility Operations Department. Text reports shall be submitted to the Utility Operations Department within ten (10) working days of the test. Only tests conducted by recognized backflow prevention assembly testers and which are reported correctly on TCEQ-approved report forms shall be in compliance with this section.
  - (2) The maintenance and repair of any backflow prevention assembly shall be the responsibility of the property owner of the premises, the lessee of the premises, or both. The backflow prevention assembly is to be installed and maintained in proper working order at all times, including repair as required. All maintenance and repair of assemblies or assemblies shall be in accordance with all applicable regulations of the TCEQ and with acceptable industry practice. In the event that the water to an establishment may not be turned off for testing of the backflow prevention assembly, the establishment shall be equipped with dual backflow prevention assembly of the same type so that testing, repair, and maintenance may be performed.



- (3) No backflow prevention assembly shall be removed from use, relocated, or other assembly substituted without the approval of the Utility Operations Director. Whenever an existing backflow prevention assembly is moved from its present location or cannot be repaired, the assembly shall be replaced with a backflow prevention assembly in compliance with this section. The new assembly shall be installed and tested in compliance with this section.
  - (4) Test gauges used for backflow prevention assembly testing shall be calibrated at least annually in accordance with the American Water Works Association's Recommended Practice for Backflow Prevention and Cross-Connection Control (Manual M14) or the University of Southern California's Manual of Cross-Connection Control. The Utility Operations Director may require calibration reports or other documentation of compliance with this requirement.
  - (5) City personnel may perform inspections and request testing of backflow prevention assemblies while they are present to verify proper testing and to determine the proper operation of assemblies. The city shall not be liable for damage caused to any backflow prevention assembly as a result of the inspection or testing.
- (n) Emergency suspension of water utility service.
- (1) The Utility Operations Director may, without prior notice, suspend water service to any premises when such suspension is necessary to stop an actual or threatened backflow which:
    - a. Presents or may present imminent and substantial danger to the environment or to the health or welfare of persons; or
    - b. Presents or may present imminent and/or substantial danger to the City's public water supply.
  - (2) As soon as is practical after the suspension of service, the Utility Operations Director shall notify the owner or person in charge of the premises of the suspension, in person or by certified mail, return receipt requested, and shall order such person to correct the cross-connection which allowed the

backflow to occur. When time permits, the Utility Operations Director should also notify the owner or person in charge prior to suspending water service.

- (3) The Utility Operations Director shall not reinstate suspended services until:
    - a. The person presents proof, satisfactory to the Utility Operations Director, that the hazard has been eliminated and its cause determined and corrected;
    - b. The person pays the city for all costs the city incurred in responding to the backflow or threatened backflow; and
    - c. The person pays the city for all costs the city will incur in reinstating service.
  - (4) A person whose service has been suspended, may appeal such enforcement action to the Utility Operations Director, in writing, within ten (10) days of notice of the suspension.
  - (5) A person commits an offense if the person reinstates water service to the premises suspended pursuant to this section, without the prior written approval of the Utility Operations Director.
- (o) Non-emergency termination of water utility service.
- (1) The Utility Operations Director may terminate the city-provided water supply of any user who violates the following conditions:
    - a. Refusing the Utility Operations Department reasonable access to the water user's premises for the purpose of inspections;
    - b. Hindering or denying the Utility Operations Department access to backflow prevention assemblies;
    - c. Failing to install, maintain, or test backflow prevention assemblies as required by the Utility Operations Director and this section; or

- d. Failing to install, maintain, and operate their piping and plumbing systems in accordance with the city's plumbing code.
- (2) The Utility Operations Director will notify a water user in writing of the proposed termination of its water supply by certified mail, return receipt requested. The water user may petition the Utility Operations Director for a reconsideration of the decision.
- (3) Exercise of this enforcement option by the Utility Operations Director shall not be a bar to, nor a prerequisite for, taking any other action against the water user.
- (4) The Utility Operations Director shall not reinstate suspended services until:
  - a. The person presents proof, satisfactory to the Utility Operations Director, that the condition has been eliminated and its cause determined and corrected;
  - b. The person pays the city for all costs the city incurred in responding to the backflow or threatened backflow; and
  - c. The person pays the city for all costs the city will incur in reinstalling service.
- (5) A person commits an offense if the person reinstates water service to the premises terminated pursuant to this section, without the prior written approval of the Utility Operations Director."

**Section 3.** That this being an Ordinance that does not require publication, it shall be effective immediately.

**Section 4.** That the caption of this Ordinance shall be spread upon the minutes of the City Council.

**READ, ADOPTED AND APPROVED ON THIS** 25<sup>th</sup> day of Jan A.D., 2012,

at a Regular Meeting of the City Council of Port Arthur, Texas, by the following vote:

AYES: Mayor Prince; Mayor Pro Tem Osuna;

Council Members: Scott, Segler, Albright, Beard,  
Williamson, Freeman and Thomas  
NOES: None.

Deloris Prince  
Deloris Prince  
Mayor

**ATTEST:**

Sherri Bellard  
Sherri Bellard  
City Secretary

**APPROVED AS TO FORM:**

Valecia Tizeno  
Valecia Tizeno  
City Attorney

**APPROVED FOR ADMINISTRATION:**

John A Comeaux, P.E.  
John Comeaux, P.E.  
Acting City Manager

Kelly Eldridge  
Kelly Eldridge  
Director of Utility Operations

Ross Blacketter  
Ross Blacketter, P.E.  
Director of Public Works

LAWRENCE BAKER  
Lawrence Baker  
Director of Code Enforcement