

CITY OF DEL RIO
PLANNING & ZONING COMMISSION
COUNCIL CHAMBERS - CITY HALL
109 WEST BROADWAY ST.
THURSDAY, AUGUST 20, 2015
5:30 P.M.

AGENDA

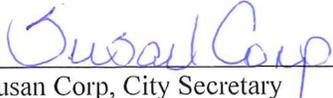
1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF MINUTES
 - a. Approval of July 22, 2015 Meeting Minutes

4. OPEN PUBLIC HEARING

5. OTHER BUSINESS
(ACTION MAY BE TAKEN ON THESE MATTERS)

- a. Consideration of the Repealing and Replacing in Entirety the Current Cross-Connection Control Section 8-42 of the Del Rio Code of Ordinances Chapter 8 and Providing for a Penalty, Publication, and an Effective Date
6. ADJOURNMENT

I, Susan Corp, City Secretary, hereby certify that the above agenda was posted on the bulletin board in the Municipal Building and on the bulletin board immediately outside the Municipal Building on or before 5:30 p.m. on the 13th day of August, 2015.



Susan Corp, City Secretary

Planning & Zoning Commission

3. a.

Meeting Date: 08/20/2015

Submitted By: Janice Pokrant, City Planner

Information

SUBJECT:

Approval of July 22, 2015 Meeting Minutes

Attachments

July 2015 Minutes

CITY OF DEL RIO
PLANNING & ZONING COMMISSION
COUNCIL CHAMBERS - CITY HALL
109 WEST BROADWAY ST.
July 22, 2015 @ 5:30 P.M.

MINUTES

1. CALL TO ORDER

The meeting was called to order at 5:30 p.m.

2. ROLL CALL

3. APPROVAL OF MINUTES

a. May 2015 Meeting Minutes

Motioned by Board Member B'Ann Vaughan, Seconded by Board Member J.P. Sanchez

AYE: Chairperson Diana Salgado
Board Member J.P. Sanchez
Board Member Raul Padilla
Board Member B'Ann Vaughan
Board Member Cherry Sheedy

MOTION PASSED

4. OPEN PUBLIC HEARING

a. Conduct a Public Hearing and Consideration of the Repealing and Replacing in Entirety the Current Cross-Connection Control Section 8-42 of the Del Rio Code of Ordinances Chapter 8 and Providing for a Penalty, Publication, and an Effective Date

Ms. Pokrant gave some information on the agenda item.

Darryl Lane, City of Del Rio Plumbing Inspector, was present to answer any questions.

Board member Salgado asked if every city is mandated to have this regulation.

Mr. Lane stated that the water systems across the state did have to have to enforce a back flow and cross connection regulations. That we currently enforce the regulations in the inspection of newly installed systems.

Board member Salgado asked how we are going to ensure that the ordinance is going to be enforced and stated she was concerned that this ordinance was going to create a big burden on the homeowner.

Mr. Lane stated that the ordinance will only affect the homeowners who are connected to the city water system who have an irrigation system, who have a septic tank or who have live stock. This just protects from potential cross connections. He also spoke about an item being brought before City Council approving a contract with a 3rd party firm which would assist the city in tracking the annual inspections. There was further discussion on the tracking of the inspections

Board member Salgado asked about fees for this program

Mr. Lane said that staff had considered a fee for the registration of the testers, but nothing is included in this ordinance. He also mentioned that the 3rd party firm will have a fee for the inspectors to log in their testing results and the inspectors will charge a fee for their inspections.

Board member Salgado also asked if we could make available a list of the licensed inspectors for the citizens.

Mr. Lane stated that he has that list for anyone who would like a copy.

Mrs. Pokrant stated that this ordinance does not include an additional city charged fee for the annual inspections, that there is a new building official coming in and it would be his decision if he would like to bring a request to Council to impose a fee.

Board member Padilla asked for clarification on what was going to be inspected and how often.

Mr. Lane gave this information that there will be an annual inspection on commercial businesses, residential irrigation systems and individuals who are connected to our water system who have a septic system on

Board member Sanchez expressed concern about the additional cost for the residential customers.

Mr. Lane stated that we do provide a list of the licensed testers so that customers can price shop for the best quote. He stated that we have no control over the fee they will charge the customers.

Board member Vaughan asked if we could impose a price cap that the testers would be able to charge.

Mr. Lane and Mrs. Pokrant explained that we could not impose anything like that with this ordinance.

There was further discussion of the testing requirements.

Board member Salgado asked about the liability section of the ordinance and who would be liable should something be damaged in the course of an inspection.

Mr. Lane stated that the testers are licensed and more often carry liability insurance that would cover if anything is damaged in the inspection process.

Board member Salgado asked for additional clarification on the water pressure section of the ordinance and asked what type of time frame the customer is given to get the annual inspection to be done.

Mr. Lane stated that they would be issued three letters from the 3rd party consulting firm and then City staff would be notified where an inspector will contact the owner to confirm when the inspection is being planned for. He stated that he doesn't see that there would be a problem getting an inspector to come out to inspect the device as there is about 6-8 licensed inspectors in our community now and there will probably be more licensed in the near future.

Board member Salgado asked about the fees for an assembly to be installed.

Mr. Lane answered and explained that the cost of the back flow is already included in the quote for the irrigation system and there shouldn't be anything installed during the annual inspection unless the inspection didn't pass. He explained that if a system didn't pass that the whole device didn't have to necessarily be replaced, that they can sometimes be rebuilt or parts replaced.

Board member Salgado stated that she found the ordinance to be very vague and reading it as she was not an expert would have appreciated expanded clarification of the regulations in the ordinance.

Board member Padilla asked when the ordinance would be effective.

Mrs. Pokrant informed the board that the proposed effective date is October 1, 2015 to coincide with the effective date for the newly adopted building codes.

Board member Padilla asked about the advertising schedule

Mrs. Pokrant stated that the two public hearings were posted in the newspaper and on the website. An email was also sent out on numerous occasions to a list of developers and that the previous building official has spoken about the ordinance over the 4 or 5 months or developer roundtable meetings. We will also utilize the television station and the social media to get the word out to the property owners.

Board member Salgado asked what happens if the tester doesn't submit the report within the required 30 window.

Mr. Lane stated that the property/business owner can file a complaint or can contact him and he can try to assist.

There was more discussion of the fees and requirements of mobile units connecting to the potable water source.

Board member Salgado expressed concern about the penalty of shutting off water if someone doesn't comply with the annual testing.

Mr. Lane explained that if there is a potential for contamination then we would need the authority to shut off the water. He further stated that this section of the regulations is more for the commercial customers.

Board member Salgado asked who could install the back flow devices.

Mr. Lane stated that a homeowner who qualifies for homestead could get approval to install the device in a residential irrigation system but it would still need to be tested by a licensed tester.

Board member Sanchez asked what would happen if the board doesn't approve the ordinance.

Mrs. Pokrant stated that the Planning and Zoning is a recommending body and the recommendation

would be forwarded over to the City Council, she did state that this ordinance is coming forward because of a mandate from TCEQ if we do not have the regulation for an annual inspection in place we could be fined for violating the requirements.

There was a discussion of areas in the ETJ and properties with water wells.

Mr. Lane explained that there is a check valve installed on the water wells that will not allow outside water into the well, but it is not able to be inspected annually.

Board member Salgado stated that we should make every effort to ensure water quality for those in the ETJ with water wells as we are with the ones connected to the water system.

Board member Padilla said that he would make a motion if he could state that it was pending additional clarification and information as requested in this meeting.

Mrs. Pokrant stated that there was another Planning and Zoning Commission meeting prior to the date that the City Council was scheduled to vote on the item.

With this in mind board member Padilla withdrew his motion

Mrs. Pokrant clarified what information the board wanted staff to bring back.

Motioned by Board Member J.P. Sanchez, Seconded by Board Member B'Ann Vaughan motioned to table the item until the August meeting

AYE: Chairperson Diana Salgado
Board Member J.P. Sanchez
Board Member Raul Padilla
Board Member B'Ann Vaughan
Board Member Cherry Sheedy

MOTION PASSED

- b. Conduct a Public Hearing and Consider a Request for Zoning Change Appeal # 15-02 Don Ellis, Representing Lela Wagner is requesting a Zoning Change from Local Commercial District (C-1) to Estate Residential Single Family District (R-220). Property Description: Lot 3, Tract 309, Braddie G. Lowe Estates Subdivision 7.109 Acres (1409 Bedell Ave.)
- Mrs. Pokrant presented the staff report and recommendation.*
- Board member Sheedy stated that she was going to recuse herself from this agenda item.*
- Board member Padilla asked what the owner was planning on building on this site.*
- Mrs. Pokrant stated that there was a representative for the applicant present at the meeting and that she would like to defer the question to him.*
- Mr. Don Ellis representing Ms. Wagner spoke in favor of the request. He gave a history of the zoning of the property and explained that the property was replatted and rezoned for a commercial use for a project that was withdrawn and as a result the property has been given a valuation for commercial even though the property is not developer as such.*
- Board member Salgado asked if they were requesting the change in zoning for the entire 7 acres and asked if the highest and best use for the property is commercial.*
- Mr. Ellis stated that the highest and best use would be commercial but the owner is asking for this change due to taxing purposes.*
- Board member Salgado asked what would happen if this change was made and an interested party came in a month from now wanting to use the property for commercial use.*
- Mrs. Pokrant stated that if approved, the owner could come right back to the board and City Council to change the zoning again. If the zoning request was denied then he would have to wait for 6 months to request a similar zoning change.*
- Board member Salgado asked if there was any agricultural exemptions on the property.*
- Mr. Ellis stated that he was unsure if it had that exemption.*
- Mrs. Salgado asked when the property was platted.*
- Mrs. Pokrant stated it was platted in 2012.*
- Board member Vaughan asked for clarification on the land size.*
- Mr. Ellis explained that Barbara Way is a private road so a portion of the road is considered part of the*

land in question.

Board member Salgado asked if the properties on Barbara Way were part of all of this land

Mrs. Pokrant stated that it was and that the owners have subdivided the land a few times since 2010.

Board member Sanchez asked what the City Council's decision was the last time this came up.

Mrs. Pokrant explained that the recommendation from Planning and Zoning Commission the last time was for approval and that after much discussion regarding the benefits to the city of changing the zoning the City Council voted to deny the request.

There was further discussion of the property, the surrounding zoning and the property valuation.

Board member Padilla asked for clarification of the property boundary and the surrounding zoning.

Board member Sanchez stated that his point of view on this issue is that the property owner had a use for the property and they zoned it for that use but now that the proposed buyers are no longer interested in the land that she should be able to change the zoning back to its original use. She can change it back if she finds another user. He then made his motion to approve the request.

Board member Salgado asked if she could propose an amendment to the motion subject to Board member Sanchez's approval to where the first 200' of the frontage along Bedell would remain commercial and the remainder be rezoned to R-220.

Board member Sanchez stated that he would not like to amend his motion.

Motioned by Board Member J.P. Sanchez, Seconded by Board Member Raul Padilla to approve the request.

AYE: Board Member J.P. Sanchez

Board Member Raul Padilla

Board Member B'Ann Vaughan

NAY: Chairperson Diana Salgado

MOTION PASSED

5. ADJOURNMENT

The meeting was adjourned at 6:50 p.m.

Motioned by Board Member Raul Padilla, Seconded by Board Member J.P. Sanchez to adjourn.

AYE: Chairperson Diana Salgado

Board Member J.P. Sanchez

Board Member Raul Padilla

Board Member B'Ann Vaughan

Board Member Cherry Sheedy

MOTION PASSED

Meeting Date: 08/20/2015

Submitted By: Janice Pokrant, City Planner, Engineering Department

Information

SUBJECT:

Consideration of the Repealing and Replacing in Entirety the Current Cross-Connection Control Section 8-42 of the Del Rio Code of Ordinances Chapter 8 and Providing for a Penalty, Publication, and an Effective Date

SUMMARY:

Discussion and possible action of the repealing and replacing in entirety the current Cross-Connection Control Ordinance located in Section 8-42 of the Del Rio Code of Ordinances Chapter 8 and Providing for a Penalty, Publication, and an Effective Date.

BACKGROUND:

TCEQ mandates that 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.

The City of Del Rio has adopted the most recent IRC and IBC Plumbing Codes and is introducing this agenda item to revise the cross-connection ordinance to ensure that we comply with this TCEQ mandate.

Cross-connection is any connection, physical or otherwise, between a potable water supply system and any plumbing fixture or any tank, receptacle, equipment or device, through which it is possible for any non-potable, used, unclean, polluted and contaminated water, or other substances, to enter into any part of such potable water system under any condition or set of conditions.

DISCUSSION:

The City of Del Rio currently has cross-connection control and prevention regulations located within Chapter 8 of the Del Rio Municipal Code. After reviewing these regulations and comparing them to the Texas Commission on Environment Quality (TCEQ) mandates, staff has found that the ordinance needs to be revised and updated. Staff determined that there are portions of the current ordinance that has been unenforced and has found the ordinance does not clearly state all of the TCEQ requirements. Staff is also proposing to utilize a 3rd party web based system to record and track all customer service inspections and cross control devices. The outsourcing of the TCEQ required customer service inspection program is an effort to eliminate the need for funding and training of city staff to perform these duties.

A public hearing notice was posted in the July 5, 2015 Del Rio News Herald informing the public of a public hearing to be held on July 22, 2015 at the Planning and Zoning Commission and August 11, 2015 at City Council. The proposed ordinance has been placed on the main page of the City of Del Rio website, along with the above mentioned public hearing notice. Staff has also

sent out notification of the public hearings and the proposed ordinance to a developers email list that has been compiled throughout the years. This list consists of land developers, builders, plumbers, electricians, realtors and chamber representatives.

PROS:

Approving this revision of the ordinance will keep the City current with TCEQ requirements, will adopt an ordinance that clearly states the regulations, and through the recommended 3rd party management system will reduce City manpower and costs, and easily tracks devices.

CONS:

There could be some customer complaints since the City has not fully complied with TCEQ requirements in the past regarding a cross connection program.

RECOMMENDATION:

Staff recommends approval of the request to repeal and replace in entirety the current cross-connection control Section 8-42 of the Del Rio Code of Ordinances Chapter 8 and Providing for a Penalty, Publication, and an Effective Date.

Fiscal Impact

FISCAL IMPACT:

The contract for the 3rd party management system will not cost City any money for the first 2 years, then a contract fee of 500-\$600 will be charged for the service.

Attachments

Ordinance Cross-Connection & Prevention

Cross-Connection & Prevention Information Sheet

ORDINANCE NO. O: 2015 - 017

AN ORDINANCE REPEALING AND REPLACING IN ENTIRETY CHAPTER 8, SECTION 8-42 CROSS-CONNECTION CONTROL OF THE DEL RIO CODE OF ORDINANCES AND PROVIDING FOR A PENALTY, PUBLICATION AND AN EFFECTIVE DATE

WHEREAS, TCEQ mandates that 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 adopted Section 42 of Chapter 8 to establish Cross Connection Control Regulations in 2000; and

WHEREAS, after reviewing these regulations and comparing them to the Texas Commission on Environment Quality (TCEQ) mandates, staff has found that the ordinance needs to be revised and updated in order to provide for annual inspections for the program; and

WHEREAS, City staff recommends repealing and replacing in entirety Section 8-42.

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

Section 1. Repealed and Replaced Ordinance - The City of Del Rio, Texas Code of Ordinances is hereby amended by adding language that is *italicized* and deleting language that is ~~stricken~~ to reflect the following changes.

~~Sec. 8-42. – Cross-connection control.~~

~~(a) Backflow prevention assembly testing.~~

~~(1) All backflow prevention assemblies shall be tested upon installation by a recognized backflow prevention assembly tester and certified to be operating within specifications. Backflow prevention assemblies which are installed to provide protection against health hazards must also be tested and certified to be operating within specifications at least annually by a recognized backflow prevention assembly tester. A test report must be completed by a recognized backflow prevention assembly tester for each assembly tested. The signed and dated original form must be submitted to the City of Del Rio within five (5) working days of the test.~~

~~(2) Assemblies shall be repaired, overhauled or replaced at the expense of the customer whenever said assemblies are found to be defective. Original forms of such tests, repairs and overhauls shall be kept and submitted to the City of Del~~

~~Rio within five (5) working days of the test, repair or overhaul of each backflow prevention assembly.~~

~~(3) No backflow prevention assembly or device shall be removed from use, relocated or other~~

~~assembly or device substituted without the approval of the City of Del Rio. Whenever the existing assembly is moved from the present location or cannot be repaired, the backflow prevention assembly shall be replaced with a backflow prevention assembly or device that complies with this section, the American Water Works Association Manual M14, current addition, University of Southern California Manual of Cross-Connection Control, current addition, or the current Plumbing Code of the City of Del Rio, whichever is more stringent.~~

~~(4) All backflow prevention assemblies shall be installed in accordance with the manufacture's instructions, the American Water Works Association Manual M14 or the University of Southern California Manual of Cross-Connection Control.~~

~~(5) Test gauges used for backflow prevention assemblies testing shall be calibrated at least annually in accordance with the University of Southern California's Manual of Cross-Connection Control or the American Water Works Association's Recommended Practice for Backflow Prevention and Cross-Connection Control (Manual M14). The original calibration form must be submitted to the City of Del Rio within five (5) working days after calibration.~~

~~(6) A recognized backflow prevention assembly tester must hold a current endorsement from the Texas Natural Resource Conservation Commission (commission).~~

~~(b) Customer service inspections.~~

~~(1) A customer service inspection shall be completed prior to providing continuous water service to all new construction, on any existing service when the water purveyor has reason to believe that cross connections or other contaminant hazards exist, or after any material improvement, correction or addition to the private water distribution facilities.~~

~~(2) Only individuals with the flowing credentials shall be recognized as capable of conducting a customer service inspection;~~

~~(a) Plumbing inspectors and water supply protection specialist that have been licensed by the Texas State Board of Plumbing Examiners.~~

~~(b) Customer service inspectors who have completed a commission approved course, passed an examination administered by the commission or its designated agent and hold current certification or endorsement as customer service inspector.~~

~~(3) The customer service inspection must certify that:~~

~~(a) No direct connection between the public drinking water supply and a potential source of contamination is permitted. Potential sources of contamination shall be isolated from the public water system by an air gap or an appropriate backflow prevention device.~~

~~(b) No cross connection between the public drinking water supply and a private water system is permitted. These potential threats to the public drinking water supply shall be eliminated at the service connection by the~~

~~installation of an air gap or a reduced pressure zone backflow prevention device.~~

~~(c) No connection which allows water to be returned to the public drinking water supply is permitted.~~

~~(d) No pipe or pipe fitting which contains more than eight (8) per cent lead may be used for the installation or repair of plumbing at any connection which provides water for human use.~~

~~(e) No solder flux which contains more than 0.2 per cent lead can be used for the installation or repair of plumbing at any connection which provides water for human use. A minimum of one lead test shall be performed for each inspection.~~

~~(Ord. No. 2000-10, § 2, 3-7-00)~~

~~Secs. 8-43 — 8-55. — Reserved.~~

Sec. 8 – 42. - CROSS CONNECTION CONTROL AND PREVENTION

Sec.8-42.1 - Web-based reporting.

Reporting of all testing, maintenance and inspections of backflow devices as required by this code, shall be reported by the company performing such testing, maintenance and inspections to the City of Del Rio Building Department; through a designated third-party web-based tracking system. This must be completed by the technician's company representative no later than three, (3), business days after completing the inspection or testing; to include all designated fees required by the current fee schedule. The reporting of impaired and out-of-service systems/devices will be as specified in rules published by the Texas Commission on Environmental Quality, and the City of Del Rio, and shall be made through the webbased tracking system; and shall be considered in compliance with the rules requiring the immediate notification to the authority having jurisdiction.

Sec. 8-42.2. - Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Air gap shall mean a physical separation between the free-flowing discharge end of 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, and in no case shall be less than one inch.

Atmospheric vacuum breaker backflow prevention device or atmospheric vacuum breaker or AVB shall mean a device used to prevent back siphon in non-health hazard conditions. This device cannot be tested and cannot prevent backpressure backflow.

Auxiliary supply shall mean any water source or system other than the public water system that may be available in the building or on the property, including ground water or surface waters used for industrial, irrigation or any other purpose.

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

Backflow prevention assembly or assembly shall mean an assembly to counteract back pressure or prevent back siphon.

Backpressure shall mean 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 siphon shall mean the flow of water or other liquids, mixtures or substances into the distribution pipes of a potable water supply system from any source other than its intended source caused by a sudden reduction of pressure in the potable water supply system.

Bore sight or bore sight to daylight shall mean providing adequate drainage for backflow prevention assemblies installed in vaults through the use of an unobstructed drainpipe.

Commercial/residential establishment shall mean any property or location which is not defined as residential.

Contaminants shall mean 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 means the admission of contaminants into the potable water supply system.

Cross Connection under this article shall mean any connection, physical or otherwise, between a potable water supply system and any plumbing fixture or any tank, receptacle, equipment or device, through which it is possible for any non-potable, used, unclean, polluted and contaminated water, or other substances, to enter into any part of such potable water system under any condition or set of conditions.

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 substances, from entering into any part of such potable water system under any condition or set of conditions.

Cross connection customer service inspection shall mean an inspection designed to inspect and detect any actual or potential cross connection hazards and/or any excess of the lead action level in solder or flux, pipe or pipe fittings.

Degree of hazard shall mean the low- or high-hazard classification that shall be attached to all actual or potential cross connection as determined by the most recently adopted International Plumbing Code, as amended, and defined as follows:

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

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

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

(d) Pollution hazard means an actual or potential threat to the physical properties of the water system or the potability of the public or the consumer's potable water system but which would not constitute a health or system hazard, as defined.

Maximum degree of intensity of pollution which the potable water system could be degraded under this definition would cause a nuisance or be aesthetically objectionable or could cause damage to the system or its appurtenances.

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

Double check detector backflow prevention assembly or double check detector or DCDA shall mean 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 assembly or double check or DC shall mean 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.

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

General tester shall mean a tester who is qualified to test backflow prevention assemblies on any domestic, commercial/residential, industrial or irrigation service except fire-lines.

Mobile unit shall mean 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.

Nonresidential use shall mean water used by any person other than a residential customer of the water supply and include all uses not specifically included in "residential uses" as defined in the city zoning ordinance.

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.

Potable water supply shall mean any water supply intended or used for human consumption or other domestic use.

Premises isolation shall mean the appropriate backflow prevention at the service connection between the public water system and the water user.

Pressure vacuum breaker backflow prevention assembly or pressure vacuum breaker or PVB shall mean an assembly which provides protection against back siphon, but does not provide adequate protection against backpressure backflow. The assembly is a combination of a single check valve with an AVB and can be used with downstream resilient seated shutoff valves. In addition, the assembly has suction and discharge gate valves and resilient seated test cocks which allows the full testing of the assembly.

Public water system or system shall mean 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 use in the process of producing, treating, storing, or conveying water for public consumption.

Reduced pressure principle backflow prevention assembly or reduced pressure principle assembly or RP assembly or RP shall mean an assembly containing two 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 backflow prevention assembly or reduced pressure detector or RPDA shall mean an assembly composed of a line-size approved reduced pressure principle assembly with a bypass containing a specific water meter and an approved reduced pressure principle backflow prevention assembly. The meter shall register accurately for very low rates of flow.

Representative of the water system shall mean a person approved by the city to perform cross connection control duties that shall include, but are not limited to, cross connection inspections and water use surveys.

Residential use shall mean water used by any residential customer of the water supply and include homeowners' associations, single-family dwellings, duplexes, triplexes, 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 connection shall mean the point of delivery which the water purveyor loses control of the water.

Spill-resistant pressure vacuum breaker or SVB shall mean 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.

TCEQ shall mean the Texas Commission on Environmental Quality.

Tester shall mean a person that is a certified backflow prevention assembly technician approved by and registered with the city and the TCEQ.

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

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

Water use survey shall mean 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.

Sec. 8-42.3. – Cross connection standards.

Every source of contamination or possible contamination from any contaminant which originates from or is located at a residential or commercial/residential establishment, which is connected to any public water supply or which provides water to the public shall be equipped with the protection required under the provisions of this article.

Sec. 8-42.4. - Right-of-way encroachment.

No person shall install or maintain a backflow prevention assembly upon or within any city rights-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 rights-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 rights-of-way will not interfere with traffic or utilities, and obtains a permit from the city. The city retains the right to approve the location, height, depth, enclosure, and other requisites of the assembly, prior to its installation.

(2) All permits and inspections required by the Code of Ordinances to perform work in the rights-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. Any assembly or portion of an assembly, which extends aboveground, shall be located no closer than 18 inches to the face of the curb.

(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 a backflow prevention assembly which encroaches upon any city rights-of-way when such relocation is necessary for street or utility construction or repairs for purposes of public safety.

(6) A person commits an offense if he fails to relocate a backflow prevention assembly located in or upon any city rights-of-way after receiving a written order from the regulatory authority.

Sec. 8-42.5. – Multiple connections.

Any premises requiring multiple service connections for adequacy of supply and/or fire protection will be required to install a backflow 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 inter-connect between any of the buildings on the premises.

Sec. 8-42.6. - Protection required; installation.

(a) All backflow prevention assemblies installed after October 1, 2015, shall be installed in a manner designed to facilitate ease of inspection by an approved tester. The backflow prevention assembly protection which is required under this article shall be any of the duly nationally recognized and authorized backflow prevention assemblies listed in a state approved plumbing code. Failure to install a backflow prevention assembly as authorized by state approved plumbing code may result in the backflow prevention assembly failing to meet final approval 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. The backflow prevention assembly shall be required in each of the following circumstances, but is in no way limited to the following:

(1) 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, could contaminate or pollute the potable water supply.

- (2) Premises having any one or more cross connections and such cross connection is protected by an atmospheric vacuum breaker device.*
 - (3) Internal cross connection (s) are present that are not correctable.*
 - (4) Intricate plumbing arrangements that are present which make it impractical to ascertain whether cross connections exist.*
 - (5) 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.*
 - (6) Installation of an approved backflow prevention assembly is deemed to be necessary to accomplish the purpose of these regulations in the judgment of the city.*
 - (7) An appropriate cross connection survey report form has not been filed with the building inspections department of the City of Del Rio upon request of the city.*
 - (8) A fire suppression system that is connected to the city's water system.*
 - (9) All new construction, if deemed necessary in the system plan review. The type of assembly required will be determined by the degree of hazard.*
 - (10) When a building is constructed on commercial/residential premises, and the end use of such building is not determined or could change, a reduced pressure principle backflow prevention assembly may be installed at the service connection that supplies water for public domestic use.*
 - (11) Any used water return system.*
 - (12) In the event a point-of-use assembly has not had the testing or repair done as required by this article, a premises isolation assembly will be required.*
 - (13) If it is determined that additions or alterations have been made to the plumbing system without obtaining proper permits, premises isolation may be required.*
 - (14) All multistory buildings or any building with a booster pump or elevated storage tank.*
 - (15) Retrofitting will be required on all high hazard connections and wherever else the city deems necessary to retrofit.*
- (b) All backflow prevention assemblies installed after October 1, 2015, shall be installed in a manner designed to facilitate ease of inspection by an approved tester. Any currently installed backflow prevention assemblies 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 at the discretion of the authority having jurisdiction.*

Sec. 8-42.7. - Testing of assemblies.

(a) All commercial/residential backflow prevention assemblies shall be caused to be inspected and the test report must be filed with the city in each of the following circumstances:

- (1) Immediately after installations;*
- (2) Whenever the assembly is moved;*
- (3) A minimum of once a year;*

(4) Premises that have been vacated and unoccupied for one year, prior to re-occupancy;

(5) Immediately after repairs.

All assembly testing shall be performed by a state certified backflow prevention assembly tester, approved by the regulatory authority.

(b) Duly authorized employees of the city bearing proper credentials and identification are entitled to enter any public or private property at any reasonable time for the purpose of enforcing this article. Persons and occupants of premises which are provided water service by the city, either directly or indirectly, shall allow the city or 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 which would require proper identification and clearance before entry into their premises, the persons and occupants of the premises shall make necessary arrangements with their security guards so that upon presentation of suitable identification, personnel from the city will be permitted to enter, without delay, for the purposes of performing their specific responsibilities.

(c) The city is not liable for damage to a backflow prevention assembly, which may occur during testing.

(d) A water use survey may be conducted at any establishment located in the city which is served by a public water supply or which provides water to the public. Upon determination that the establishment falls under the provisions of this article and requires a backflow prevention assembly, a notice to abate the condition or to install the proper backflow prevention assembly shall be issued.

(e) It is the responsibility of the person who owns or controls property to have all assemblies tested in accordance with this article. Assemblies may be required to be tested more frequently if the city or state or any agents thereof deem necessary.

(f) All results from assembly testing by a certified backflow prevention assembly tester as required by this ordinance, shall be reported to the City of Del Rio Building Department.

Sec. 8-42.8. - 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.

Sec. 8-42.9. - Pressure loss.

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

Sec. 8-42.10. - 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 article.

Sec. 8-42.11. - Rental properties.

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

Sec. 8-42.12. - Customer service inspection.

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

(1) Water service to a newly constructed facility or previously non-existing premises.

(2) After any material improvement to building(s) or premises.

(3) Any correction or addition to the plumbing of any facility or premises.

(4) The city deems it necessary.

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

(c) Temporary water service which poses a potential cross connection threat to the potable water supply shall be protected by an approved backflow prevention assembly.

Sec. 8-42.13. - Installation guidelines and requirements for backflow prevention assemblies.

(a) 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.

(1) Backflow prevention assemblies shall be installed in accordance with the current TCEQ rule and these regulations. The assembly installer must obtain the required plumbing permits and be a certified backflow prevention assembly technician approved and registered with the city and the TCEQ.

(2) 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 rights-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-way are the responsibilities of the individual, business or entity that the water line is serving.

(3) The assembly must be protected from freezing and other severe weather conditions.

(4) All backflow prevention assemblies shall be of a type and model approved by the city inspector and according to "Hi/Lo" Hazard.

(5) All vertical installations of backflow assemblies must have prior approval by the city.

(6) 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.

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

- (8) Premises where an uninterrupted water supply is critical shall be provided with two assemblies installed in parallel. They shall be sized in such a manner that either assembly will provide the maximum flow required.*
- (9) Lines shall be thoroughly flushed prior to installation. A strainer with blowout tapping may be required ahead of the assembly.*
- (10) All facilities that require continuous, uninterrupted water service and are required to have a backflow assembly must make provisions for the parallel installation of assemblies of the same type so that testing, repair and maintenance can be performed.*
- (11) 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.*
- (12) Upon completion of installation, the city shall be notified and all assemblies must be inspected and tested. 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 initial test report.*
- (b) Reduced pressure principle backflow prevention assemblies (RP). Reduced pressure principle backflow prevention assemblies may 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 siphon and backpressure.*
- (1) RPs must be sized to provide an adequate supply of water and pressure for the premises being served. Flow characteristics are not standard. The manufacturer's specifications shall be consulted for specific performance data.*
- (2) The assembly must be readily accessible for testing and maintenance and must be located in an area where water damage to building or furnishing would not occur from relief valve discharge. The property owner assumes all responsibility for any damage caused by water discharge from an RP assembly. An approved air gap shall be located at the relief valve orifice of RP assemblies.*
- (3) No part of a reduced pressure principle backflow prevention assembly 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 bore sight 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.*
- (4) 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 be provided to accommodate full pressure discharge from the assembly.*
- (5) Assemblies two inches and smaller shall have at least a 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 back side, 24 inches on the test cock side, and the relief valve*

opening shall be at least 12 inches plus nominal size of the assembly above the floor or highest possible water level. Headroom of six feet is required in vaults without a fully removable top. A minimum access opening of 36 inches is required on all vault lids.

(6) All RP assemblies must be tested in accordance with this article. Tests are the responsibility of the assembly owner. The owner must notify the city upon installation of any backflow prevention assembly.

(7) Variances from these specifications will be evaluated on a case-by-case basis. Any deviations must have prior written approval of the city.

(c) Reduced pressure principle detector backflow prevention assemblies (RPDA).

Reduced pressure principle detector backflow prevention assemblies (RPDA) may be utilized in all installations requiring a reduced pressure principle backflow prevention assembly and detector metering.

(1) RPDA's shall comply with the installation requirements applicable for reduced Pressure principle backflow assemblies (RP).

(2) The line-size RP assembly and the bypass RP assembly must each be tested. A separate test report for each assembly must be completed by the certified tester.

(d) Double check valve backflow prevention assemblies (DC). 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.

(1) 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.

(2) Premises where an uninterrupted water supply is critical shall be provided with two assemblies installed in parallel. Assemblies shall be sized in such a manner that either assembly will provide the minimum water requirements while the two together will provide the maximum flow required.

(3) 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, and sized to allow for the minimum clearances established below.

(4) 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 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.

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

- a. Internally spring-loaded check valves;*
- b. Flow is upward through the assembly;*
- c. Manufacturer states their assembly can be used in a vertical position;*
- d. Approved by the building official or his designee.*

(6) All DCs must be tested in accordance with this article. Tests are the responsibility of the assembly owner. The owner must notify the regulatory authority upon installation of any backflow prevention assembly.

(7) Variances from these specifications will be evaluated on a case-by-case basis. Any deviations must have prior written approval of the city.

(e) Double check detector backflow prevention assemblies (DCDA). Double check detector backflow prevention assemblies (DCDA) may be utilized in all installations requiring a double check valve assembly and detector metering.

(1) DCDA's shall comply with the installation requirements applicable for double check valve assemblies (DCs).

(2) 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.

(f) Pressure vacuum breaker backflow prevention assemblies (PVB). 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 siphon only and shall not be installed where there is potential for backpressure.

(1) Assembly shall be installed a minimum of 12 inches above highest downstream piping.

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

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

(4) All PVBs must be tested in compliance with this article. Tests are the responsibility of the assembly owner. The owner must notify the regulatory authority regarding installation of any backflow prevention assembly.

(5) Variances from these specifications will be evaluated on a case by case basis. Any deviations must have prior written approval of the regulatory authority.

(g) Spill resistant pressure vacuum breaker backflow prevention assemblies (SVB). Spill resistant pressure vacuum breaker backflow prevention assemblies (SVB) may be utilized in all installations requiring a pressure vacuum breaker. SVBs shall comply with the installation requirements applicable for pressure vacuum breaker backflow prevention assemblies.

Sec. 8-42.14. - Air gap separation.

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

(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 opening to a distance greater than three times the diameter of the effective opening for a single wall, or a distance greater than four times the effective opening for two intersecting walls.

Sec. 8-42.15. - Fire suppression systems.

All new installations of a fire suppression system which utilize the city's potable water supply shall have installed an approved backflow prevention device, according to the degree of hazard.

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. An RPDA must be installed if any solution other than the potable water can be introduced into the sprinkler system.

(1) It is the responsibility of all property owners and persons in charge of any premises to abide by the conditions of this article. In the event of any changes to the plumbing system, it is the responsibility of the property owners to notify the regulatory authority. All costs associated with this article and the purchase, installation, testing and repair of a DCDA or RPDA device is the responsibility of the property owner and persons in charge of any premises.

(2) Upon the approved installation of the DCDA or RPDA device, a cross connection test report completed by a licensed fire-line tester must be sent to the attention of the city and shall include the information required by this article.

Sec. 8-42.16. - Fire hydrant protection.

An approved double check device backflow prevention assembly (DCD) 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. An RPDA must be installed if any solution other than the potable water can be introduced into the sprinkler 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 article. All fire hydrant water meter rentals shall meet the current requirements as provided for by the city.

(2) Only city fire hydrant water meters with approved backflow prevention assemblies are allowed to be used within the city limits.

(3) A refundable deposit is required to insure the return of all water meter and backflow assemblies to the city. Failure to return the assemblies 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 article.

(4) All non-approved fire hydrant meters which are found to be in use in the city will be confiscated and enforcement action taken against the responsible party, as allowed for in the enforcement section in this article.

Sec. 8-42.17. - Responsibilities of property owner clause.

(a) It is the responsibility of all property owners and/or persons in charge of any premises to abide by the conditions of this article and to comply with the following:

(1) Payment of all costs associated with this article and the purchase, installation, testing and repair of backflow prevention assemblies.

(2) Install and maintain all backflow prevention assemblies in accordance with this article and acceptable industry practice.

(3) Test all commercial/residential backflow prevention assemblies on their premises annually. Such testing of all commercial/residential establishments must be conducted by a certified backflow prevention assembly tester who is registered with the city.

(4) Maintain all backflow prevention assemblies in proper working order at all times, including repair, as required.

(5) Maintain all backflow prevention assemblies in a manner which allows them to be tested by a method that has been approved by the city.

(b) Certified backflow prevention assembly tester shall comply with the following requirements:

(1) Annually register with the city and pay the required fee.

(2) Maintain Insurance on file with the City.

(3) Maintain testing equipment in proper working condition/calibration.

(4) Maintain the design or operation characteristics of the approved assembly.

(5) Ensure that devices are tested according to accepted industry practice and TCEQ regulations.

(6) Enter required testing data, including test gauge serial numbers, on cross connection test forms required by the State.

(7) Provide a copy of the completed test report to the city within three, (3), business days of testing the assemblies. The degree of hazard will be determined by the type of application device and table provided for in the most recently adopted International Plumbing Code.

(8) Provide a copy of the completed test report to the property owners and/or persons in charge of any premises. Completed test reports submitted to the city after the required time must pay double the required fee. Completed test reports submitted more than 30 days late must be retested and the tester must pay double the required fee.

(9) Maintain testing and/or repair records for a minimum of five years.

Sec. 8-42.18. – Backflow prevention assembly tester certification—Registration required- Insurance Required.

Only approved TCEQ licensed backflow prevention assembly testers can test backflow prevention assemblies in the city. Testers must register annually with the city, provide proof of TCEQ certification, provide proof that testing equipment is able to maintain a calibration of plus or minus two-tenths psid accuracy, pay an annual, nonrefundable, tester registration fee, show proof of and maintain insurance in the amount equal to or better than that which is required by the Texas State Plumbing Board for “Responsible Master Plumbers” license under 367.3 (6) (c) of the Texas State Board of Plumbing Examiner Board Rules.

Sec. 8-42.19. – Reserved.

Sec. 8-42.20. - Reserved.

Sec. 8-42.21. – 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.

Sec. 8-42.22. - Enforcement.

(a) Official. This article shall be enforced by the building official, or his designated representative.

(b) Testing of backflow prevention assemblies. The city shall require to be tested all backflow prevention assemblies by a licensed tester, pursuant to the requirements of this article.

(1) 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.

(2) Failure to have backflow prevention assemblies tested within the required timeframe may result in the city testing, or causing the testing, of such device. The city reserves the right to disconnect water service to any property in lieu of testing.

(c) Violations.

(1) A person commits an offense if there is failure to maintain backflow prevention assemblies in compliance with this section.

(2) A person commits an offense if there is failure to comply with a repair order issued by the city.

(3) A person commits an offense if backflow from premises owned, operated or managed by the person enters the public water supply system.

(4) A person commits an offense if there is a failure to pay any fees required by this article.

- (5) *A person commits an offense by violating any section of this article.*
- (6) *A person commits an offense if discontinued or disconnected water service to premises under this article is reinstated except as directed by the city.*
- (7) *A person in charge of any facility commits an offense by allowing an unregistered tester to perform testing work at their establishment.*
- (8) *A person commits an offense by testing a backflow prevention assembly within the city without being registered with the regulatory authority.*
- (9) *A person commits an offense by testing a backflow prevention assembly within the city without being certified by the TCEQ.*
- (d) *Penalty.*
- (1) *Penalties for violation of this Code are as stated in Section 1-7 of the Code of Ordinances of the City of Del Rio.*
- (2) *In addition to proceeding under the authority of subsection (1), the city is entitled to pursue all other criminal and civil remedies to which is entitled under the authority of statutes or other ordinances against a person committing any violation of this article including injunction and civil penalties.*
- (e) *Sanction for failure to pay inspection fees. In addition to sanctions provided for by this article, the city is entitled to exercise sanctions provided for by other ordinances of the city.*
- (f) *Review and revocation of tester's registration. A certified tester's registration may be reviewed and revoked by the city if it is determined that the tester:*
- (1) *Has falsely, incompletely, or inaccurately reported assembly reports;*
- (2) *Has used inaccurate gauges;*
- (3) *Has used improper testing procedures; or*
- (4) *Has created a threat to public health or the environment.*

Sec. 8-43 – 8.55. - Reserved.

Section 4. Said Chapter 8, except as amended, shall remain the same period.

Section 5. This ordinance shall be published twice in a newspaper of general circulation and as prescribed by the City Charter.

Section 6. This Ordinance shall become effective on the 1st day of October, 2015.

PASSED AND APPROVED on this 25th day of August 2015.

ROBERT GARZA
MAYOR

ATTEST:

SUSAN CORP
CITY SECRETARY

REVIEWED FOR ADMINISTRATION: REVIEWED AS TO FORM AND LEGALITY:

HENRY ARREDONDO
CITY MANAGER

SUZANNE WEST
CITY ATTORNEY



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Search Site [Org Chart](#) | [A to Z index](#) |

[Advanced Search...](#)



- For **Public**

- Do Your Part at Home and Work
- Make an Environmental Complaint
- Track Complaints and Enforcement
- Your Air Quality
- Your Water Quality
- Resources for Educators and the Community
- Working with Us
- More...

- For **Businesses**

- Small Business Assistance
- Licensing
- Training, Workshops, Seminars, Events
- Permitting
- Water/Wastewater Utilities
- Business and Industry Action
- More...

- For **Governments**

- Local Government
- Regional Authorities (within Texas)
- Interstate and International
- U.S.-Mexico Border Region
- More...

- Air
- Land
- Water

»Questions or Comments:
pdws@tceq.texas.gov

You are here: [Home](#) / [Drinking Water](#) / [Technical Review and Assistance](#) / Cross-Connection Control Program

Cross-Connection Control Program

Information for public water systems and their customers on identifying potential cross connections and preventing contamination from backflow into drinking-water systems.

To protect public health, our Cross-Connection Control (CCC) and Backflow Prevention Program is committed to helping you protect your drinking water system from potential contamination. The [Cross-Connection Control Subcommittee](#) advises us in this effort.

- [How Cross-Connection and Backflow Can Lead to Contaminated Water](#)
- [Definitions](#)
- [Your Role as a Water Customer](#)
- [Your Public Water System's Role](#)
- [The TCEQ's Role](#)
- [Technical Guidance](#)
- [Staff Contact](#)

How Cross Connection and Backflow Can Lead to Contaminated Water

It really happened in Texas:

- While mixing a batch of pesticide, a worker pushed a garden hose into the tank until it touched the bottom.
- Nearby, city utility workers opened a flush valve, releasing a large flow of water from a water main.
- Where the worker was mixing the pesticide, the water pressure dropped, and the flow in the hose reversed. Water and pesticides flowed from the pesticide tank back through the hose and into the water lines of his house.

Luckily, this is where it stopped: The worker mixing the pesticide realized the danger and alerted the utility workers, who closed the flush valve before the contamination reached the city's distribution line.

Still, good water and time were wasted:

- To remove the pesticide from the water lines of the customer, utility workers flushed those lines.
- In case the water main had been contaminated, the utility workers had to flush the city's distribution line, too.
- Until testing showed authorities that the city's water was safe, they warned customers in the area not to drink it.

As shown by the [case histories of backflow incidents](#)  maintained by the backflow-prevention education program of the University of Florida's TREEO Center, not all cases of cross connection and backflow end so smoothly.

[Return to top](#)

Definitions

cross connection

a physical connection between drinkable water and a liquid or gas that could make the water unsafe to drink (wherever there is a cross connection, there is a potential threat to public health from the liquid or gas contaminants)

backflow

water flowing in the opposite of its intended direction, either from a loss of pressure in the supply lines or an increase in pressure on the customer's side (in either of these situations, if any affected customer's pipes include a cross connection, contaminants could be drawn through the cross connection into that customer's pipes—and, if the backflow continues, perhaps even into the water mains)

[Return to top](#)

Your Role as a Water Customer

By taking steps to control cross connections and prevent the possibility of backflow at your home, you will help to protect the public water supply and ensure that your family continues to enjoy safe

drinking water. Garden hoses and irrigation systems are common concerns, but there are other common residential sources of cross connections, too.

Garden Hoses and Backflow

The garden hose is the most common cross connection. Each of these common uses of a garden hose sets up a cross connection:

- forcing it into a clogged gutter, downspout, or sewer pipe to flush out the clog
- connecting it directly to a hose-end sprayer to apply pesticide or fertilizer to your yard
- connecting it to a soap-and-brush attachment to wash your car, boat, or siding
- letting the end of the hose lie in a puddle or pool of water on the ground

No doubt you can think of other examples. In each of these cases, if backflow happens, your household's water lines could be contaminated. Depending on how long the backflow event lasts, the contamination could spread to the public drinking water system. Fortunately, there are two inexpensive ways to solve this problem:

- Make sure that the end of your garden hose is never become submerged in or connected to a nonpotable substance. This solution is free, but not highly reliable. Can you always be this careful?
- Install a hose bibb vacuum breaker on each of your outside faucets. These inexpensive devices are designed to allow water to flow in only one direction. You can find them at most home supply stores and through plumbing suppliers. Before you use a hose-end sprayer, you should first install a hose bibb vacuum breaker at the faucet.

Irrigation Systems and Backflow

As a homeowner, you may install and maintain your own irrigation system, but it's still important to have a suitable backflow prevention assembly (BPA) in place and to be sure that it works properly.

Here are a few ways you can do just that:

- Hire a licensed irrigator. You can find one from our [online licensing database](#) .
- If you install your own system, have a licensed BPA tester confirm that the BPA is installed and operating properly. Licensed BPA testers are also listed in our [online licensing database](#)

- TCEQ requires you to have a licensed BPA tester check the BPA when it is installed on your irrigation system. Your water provider may have adopted additional codes or regulations which require an annual test of the BPA on your irrigation system.

For more information regarding TCEQ's regulations for irrigation systems, contact TCEQ's Landscape Irrigation Program at 512-239-LAWN.

[Return to top](#)

Your Water System's Role

Your water system's role begins with good system maintenance and sound operations. By replacing pipes before they break, taking steps to ensure that system pressures do not fall during periods of high demand, and asking for the cooperation of customers when there is a risk that system pressures could fall below safe levels, your public water system operator reduces the risk of backflow.

Many public water systems also operate rigorous cross-connection control (CCC) programs of their own. They identify locations where the risk of cross connection is high and ensure that the proper measures are taken to minimize that risk. For example, these and other businesses would be required to install high-grade backflow prevention assemblies and have them tested by a certified tester annually:

- mortuaries
- minor surgery centers
- hospitals
- chemical plants

Another aspect of an effective CCC program is the customer service inspection (CSI). Your public water system must require a CSI to be performed under the following circumstances:

- All new construction.
- Existing customers that have had substantial plumbing modifications.
- Existing customers whenever there is a reason to suspect that a hazard or a source of contamination may be present.

Water providers notify their customers that a CSI is required. Some public water systems have licensed staff who perform the CSIs and then bill the customer for the inspection. Other public water systems require the customer to hire a licensed person to conduct the CSI. The following individuals are authorized to perform CSIs:

- A TCEQ-licensed Customer Service Inspector.
- A Texas State Board of Plumbing Examiners (TSBPE) licensed Plumbing Inspector.
- A TSBPE-licensed plumber with a Water Supply Protection Specialist endorsement.

Our Occupational Licensing Section licenses Customer Service Inspectors and maintains a [database of licensed Customer Service Inspectors](#).

To learn more, read [Introduction to Cross-Connection Control](#) or the [technical guidance](#).

[Return to top](#)

The TCEQ's Role in Cross-Connection Control and Backflow Prevention

We require water providers to meet standards to obtain, treat, and deliver water. A public water system's Cross-Connection Control Program is inspected during routine investigations made by our regional staff. Technical assistance in the area of cross-connection control is offered to public water systems by staff from our central office.

We also coordinate meetings of the [Cross-Connection Control \(CCC\) Subcommittee](#), a group of participants that meet to discuss issues related to cross-connection control and backflow prevention. A voluntary group that is open to anyone who would like to join, the CCC Subcommittee provides us with expanded knowledge and resources to address cross-connection control and backflow prevention throughout Texas.

[Return to top](#)

Technical Guidance

Cross-Connection Control forms found in TCEQ's regulations:

- [Sample Service Agreement](#)  (290.47(b))
- [Customer Service Inspection Certificate](#)  (290.47(d))
- [Sample Backflow Prevention Assembly Test and Maintenance Report](#)  (290.47(f))

A partial listing of common cross-connection hazards:

- [Table Listing Common Cross-Connection Hazards](#)  (290.47(i))

Individual copies of these publications are free:

- [Backflow Protection on Fire Prevention Systems](#) (TCEQ publication RG-345)
- [A Public Water System Guide to Customer Service Inspections](#) (TCEQ publication RG-206)
- [A Public Water System Guide to Preparing a Backflow-Incident Emergency-Response Plan](#) (TCEQ publication RG-477)
- [A Public Water System Guide to Responding to a Backflow Incident](#) (TCEQ publication RG-476)
- [Establishing and Managing an Effective Cross-Connection Control Program](#) (TCEQ publication RG-478)
- [EPA's Cross-Connection Control Manual](#) 

These manuals are available for purchase from their publishers:

- [Recommended Practice for Backflow Prevention and Cross-Connection Control](#) (M14), third edition, from the [American Water Works Association](#) 
- [Manual of Cross-Connection Control](#), tenth edition, from the [Foundation for Cross-Connection Control and Hydraulic Research](#) 
- [Guide to Cross Connection Protection Devices and Assemblies: Application and Selection](#), from the [American Society of Sanitary Engineering](#) 

[Return to top](#)

Staff Contact

For more information, call our main Water Supply Division line, 512-239-4691, and ask for the Cross-Connection Control and Backflow Prevention Program coordinator. You may also e-mail your question or comment to pdws@tceq.texas.gov. Please include "Cross-Connection/Backflow Prevention" in the subject line of your e-mail.

[Return to top](#)

Related Links

[TROT Home](#)