ORDINANCE NO. C-15-17

AN ORDINANCE AMENDING CHAPTER 28, ARTICLE III, DIVISION 2, BACKFLOW PREVENTION, SECTION 28-145, 28-148, 28-152, 28-153, 28-154, 28-155, 28-156, 28-157 AND DIVISION 4, BILLING AND COLLECTION PROCEDURES, 28-190 OF THE CODE OF ORDINANCES OF THE CITY OF FORT LAUDERDALE, FLORIDA, TO UPDATE THE MUNICIPAL WATER SYSTEM BACKFLOW PREVENTION PROGRAM; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, backflow prevention sections of the Code of Ordinances of the City of Fort Lauderdale, Florida (hereinafter "Code") need updating according to the U.S. Environmental Protection Agency Safe Drinking Water Act and the Florida Administrative Code; and

WHEREAS, certain service and administrative fees are to be imposed; and

WHEREAS; updating the municipal water system backflow prevention program
is in the best interest of the city;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF FORT LAUDERDALE, FLORIDA:

Section 1. That Section 28-145 of the Code is hereby amended to read as follows:

Sec. 28-145. Private fire service protection.

(a) . . .

(b) The city shall install fire line connections up to the property line upon application made to the appropriate city department. The property owner is responsible for installation and maintenance of the fire line on his property in accordance with Florida Statutes. The owner shall apply for service and prepay the estimated cost of the installation from the main to the curb line (plus the extension of the properly

sized main, if necessary); including labor, materials, valves, street repairs, sidewalk repairs, and such other costs as may be incurred in rendering service. The property owner, his successors in interest, and all tenants on the property shall be subject to the following regulations:

(1) *Use for fire purposes only.* This connection is to be used for fire purposes only and is to have no connection whatsoever with any taps that may be used for other than fire purposes and, because of the danger of pollution, shall have no connection with any other source of supply unless a tank or fire pump is installed as a secondary supply. There shall be a backflow prevention assembly ~~check valve~~ installed in each city connection to prevent the water from these secondary supplies running back into the city mains in accordance with Chapter 28, Article III, and Division 2 Backflow Prevention.

(2) *Tests.* The owner shall not draw any water whatever through this connection for any purpose except the extinguishment of fires or for periodic tests of the fire system, which tests shall be made in the presence of a representative of the city.

(3) *Equipment inspection. The City Fire Inspector and a*~~A~~ny authorized City representative ~~of the water division~~ shall have free access to the building at any reasonable time for the purpose of inspecting any of the equipment.

(4) *Backflow prevention assembly ~~Detector check~~.* At the time of installation of the fire line, the owner shall install at owner's sole expense a backflow prevention assembly ~~a detector check~~ on owner's property at a location designated by the city Fire Plans Examiner ~~plumbing inspector~~ as close as practical to the property line. Such backflow prevention assembly ~~detector check~~ shall be fitted with a detector assembly bypass, on which shall be set a meter, the purpose of which shall be to indicate whether water is being used through this connection and for the further purpose of showing if there is leakage. Whether backflow prevention is required shall be determined by the provisions of Chapter 28, Article III, Division 2 Backflow Prevention and subparagraph (5) below. ~~A detector check is a specialized check valve assembly which includes a mainline check valve and an external metered bypass section. The metered bypass section consists of an approved meter, an inlet gate valve and an outlet swing check valve.~~

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(5) *Backflow prevention.* At the time of application by the owner for fire service, the Fire Plans Examiner ~~plumbing inspector shall~~ may require an approved backflow prevention ~~detector~~ assembly to be installed by owner at owner's sole expense on each fire line at or near the property line ~~or immediately inside the building being served~~. American Waterworks Association Manual M-14, as it may be amended from time to time~~,~~ is hereby adopted by reference~~, and the provisions of Table 4.2 and Chapter 6 thereof~~ and applicable provisions of Division 2 of this chapter shall govern the installation of backflow prevention assemblies on fire lines. Nothing herein shall be construed to require backflow prevention on existing fire lines; provided that the fire service was installed prior to May 5, 2014 and adheres to the current Florida Administrative Code governing cross-connection control, however, ~~that~~ the Public Works Director or City Fire Marshal ~~plumbing inspector~~ shall have the authority to make a determination whether the owner ~~should~~ shall have a backflow prevention assembly installed on an existing fire line to protect the public potable water system.~~, as a condition to a permit being issued for any of the following:~~

~~(i) Replacement of the fire service connection to the city main;~~
~~(ii) A change in the type of fire protection from standpipe only to standpipe and sprinkler;~~
~~(iii) Renovation of fifty (50) percent or more of the total building area~~.

(6) *Repairs, alterations and relocations.* The owner shall be responsible for repairs, alterations or relocations to fire lines and backflow prevention assemblies on fire lines, pay applicable fees, provide certifications and recertifications and meet the provisions of Chapter 28, "Water, Wastewater and Stormwater, Article III – Municipal Water Supply System, Division 2 Backflow Prevention. The City of Fort Lauderdale reserves ~~T~~the right ~~is reserved by the city~~ to shut off the water supply at any time in case of accident or to make alterations, extensions, connections or repairs, and, if possible, the ~~utilities~~ Public Works department will attempt to provide a 24 hour notice prior to discontinuing service. ~~agrees to give due and ample notice of shut-off.~~

(7) *Pressure not guaranteed.* The city shall not make any guarantee as to a certain pressure in this pipe or in the main supplying the same, and shall not be, under any circumstances, held liable for loss or damage to the owner for a deficiency or failure in the supply of water, whether occasioned by shutting off of water in

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case of accident or alterations, extensions, connections or repairs or for any cause whatsoever.

(8) *Resealing valves and connections.* When fire line valves or connections are used in case of fire or for any other reason whatsoever, the owner shall immediately notify the ~~water division~~ Public Works Department and the Utilities ~~water~~ division shall forthwith reseal the used valves or connections.

. . .

SECTION 2. That Section 28-148 of the Code is hereby amended to read as follows:

Sec. 28-148. Diverting water from city's distribution system.

(a) The owner or consumer at the premises shall pay to the city the sum of one hundred fifty dollars ($150.00) for each and every time the seal on any meter or its coupling on or for such premises is found broken or a pipe has been installed to bypass a meter or utility
lines have been tampered with to divert water around the meter. The owner, consumer or contractor shall pay to the city the sum of five hundred dollars ($500.00) for each and every time a fire hydrant or fill station or a pipe has been installed to bypass a meter or utility
lines have been tampered with to divert water around a hydrant meter, fill station meter, contractor meter or backflow prevention assembly. After the first occurrence the appropriate city department shall notify the customer that his regular deposit has been increased to a special deposit as outlined in section 28-186.

(b) Upon the second occurrence of such offense, the city shall, at its option, shut off the supply and discontinue its service and may further refuse to turn the same on again and resume its service to such premises so long as the owner or consumer at the premises at the time of the breaking or removal of such seal shall continue to be the owner or consumer at the premises or discontinue its service to owner, consumer or contractor at the time of the breaking, bypass or removal of such meter or backflow prevention assembly.

(c) The existence of any mechanical device or pipe having as its apparent object the diversion of water before reaching the meter and capable of such diversion and which has not been authorized by the city manager, and the existence of a broken meter, broken meter lock, or broken metal seal, meter bypass, or lack of meter shall constitute prima facie evidence of the fraudulent appropriation of water, as the case

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may be, by the person on whose premises, vehicle, or equipment such device, pipe or tank was found or by the person occupying the premises, vehicle, or equipment being served with water, on which fire hydrant, fill station, or service line was found a broken meter, broken meter lock, ~~or~~ broken meter seal, meter bypass, or missing meter.

SECTION 3. That Section 28-152 of the Code is hereby amended to read as follows:

Sec. 28-152. Definitions.

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

Air gap (AG) means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying ~~conveying~~ water ~~or waste~~ to a tank, plumbing fixture, receptor, or other device ~~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, but not less than one inch (25mm).

Approved means accepted by the director of ~~utilities~~ Public Works as meeting an applicable specification stated or cited in this division or as suitable for the proposed use.

Approved backflow prevention assembly means an assembly that has been manufactured in full conformance with the standards established by the American Water Works Association (AWWA) titled, "AWWA C510-89-Standard for Double Check Valve Backflow Prevention Assembly" (DC) and "AWWA C511-89-Standard for Reduced Pressure Principle Backflow Prevention Assembly" (RP), and has been certified to meet completely the laboratory and field performance specifications of the Foundation for Cross Connection Control and Hydraulic Research of the University of Southern California (USC-FCCCHR) established by "Specification of Backflow Prevention Assemblies" - Sec. 10 of the most current issue of the Manual of Cross-Connection Control. Said AWWA and USC-FCCCHR standards and specifications are hereby adopted by the city. Final approval shall be evidenced by a "Certificate of Approval" issued by an approved testing laboratory certifying full compliance with said AWWA standards and USC-FCCCHR specifications.

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Approved backflow prevention assembly testing laboratories means the Foundation for Cross Connection Control and Hydraulic Research of the University of Southern California (FCCCHR) or other qualified laboratories approved by the Director of Public Works.

Atmospheric vacuum breaker (AVB) means an approved assembly consisting of a float check, a check seat and an air inlet port. A shutoff valve immediately upstream may or may not be an integral part of the assembly. The atmospheric vacuum breaker is designed to allow air to enter the downstream water line to prevent back siphonage. This assembly may never be subjected to a backpressure condition or have a downstream shutoff valve, or be installed where it will be in continuous operation for more than twelve (12) hours.

Auxiliary water supply means any water supply on or available to the premises other than the water purveyor's approved potable water supply. These auxiliary waters may include water from another purveyor's public potable water supply or any natural source(s), such as a well, spring, river stream, harbor; used waters; reclaimed, recycled or conditioned waters; or industrial fluids. These waters may be contaminated or polluted, or they may be objectionable or altered and constitute an unacceptable water source over which the water purveyor does not have sanitary control.

Auxiliary Water System means a pressurized system of piping and appurtenances using an auxiliary water supply; specifically excluding any water recirculation or treatment system for a swimming pool, hot tub, or spa.

Backflow means the undesirable reversal of flow of water, liquids, mixtures or substances into the public water supply distribution pipe system from any source or sources other than the intended source as a result of a cross connection. Backsiphonage is one type of backflow.

Backflow prevention assembly means a device or an assembly that ~~designed to~~ prevents backflow. ~~The following are assemblies and means of backflow prevention and standards for their use:~~

Backpressure means a pressure, higher than the supply pressure of the

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utility, caused by a pump, elevated tank, tall building, boiler, gravity, air/steam pressure, pressure washer, or any other means that may cause backflow.

Backsiphonage means a type of backflow caused by negative or reduced pressure in the supply piping of the utility.

Certification (of backflow prevention devices) means certification to the testing of backflow prevention devices for the purpose of ensuring their operational conformance with AWWA, American Society of Sanitary Engineers (ASSE), and the Foundation for Cross Connection Control and Hydraulic Research of the University of Southern California (USC-FCCCHR) specifications. The certification procedure shall be performed by a certified backflow prevention tester who shall submit a "Backflow Prevention Assembly Field Test Report". The initial certification at installation, repair or relocation of the backflow prevention assembly shall accompany a permit and approval from the City's Department of Sustainable Development (DSD). Subsequent recertification and periodic testing for existing backflow prevention assemblies, not requiring repair or relocation shall be through the Director of Public Works which may include a third party vendor that certifies the device has been properly tested and is properly operating.

Certified backflow prevention ~~technician~~ assembly tester means a person who has demonstrated competence to test, repair, and maintain backflow prevention assemblies as evidenced ~~holding a current~~ by current certification by the University of Florida Center for Training, Research and Education for Environmental Occupations (TREEO), American Society of Sanitary Engineers (ASSE) or other organization acceptable to the Director of ~~utilities~~ Public Works.

Chief Plumbing Inspector means the chief administrative officer for the City of Fort Lauderdale charged with the administration, enforcement and application of the plumbing sections of the Florida Building Code and all amendments thereto.

Contamination means an impairment of the potable water supply by the introduction or admission of any foreign substance that degrades the quality and creates a health hazard (high hazard).

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Cross connection means a connection or potential connection between any part of the potable water system and any other environment containing other substances in a manner that under any circumstances would allow such substances to enter the potable water system. These substances may be gases, liquids, or solids, such as chemicals, biology, waste products, oil, gas, food, soap, ice, steam, water from other sources (potable or nonpotable), or any matter that may change the quality, taste, characteristics, color or add odor to the water. Bypass arrangements, jumper connections, removable sections, swivel or changeover assemblies, or any other temporary or permanent connecting arrangement through which backflow may occur are considered to be cross-connections; and as defined in Rule 62-550.200 F.A.C. and any subsequent amendments.

Cross connection-controlled means a connection between the potable water system and a nonpotable water source with an approved backflow prevention assembly properly installed and maintained so that it will continuously afford the protection commensurate with the degree of hazard.

Customer means any person, business or other entity whose name or names appear on billing for a water service connection from the city.

Customer's system means those parts of the water system beyond the termination of the utility distribution system that are utilized in conveying utility- delivered potable water to points of use.

Director of ~~utilities~~ Public Works means the Public Works Director ~~of the Utilities Department~~ of the city or the Public Works Director's designee.

Distribution system means the network of conduits used by the utility system for the delivery of potable water from the source to the customer's system.

Double check valve assembly (DC) means an approved, complete assembly consisting of two internally loaded, independently operating check valves, located ~~either spring loaded or internally weighted, installed as a unit~~ between two tightly closing resilient-seated shutoff valves ~~and fittings~~ with four (4) properly placed ~~located~~ resilient-seated test cocks. This assembly shall only be used to protect against a non-health hazard (i.e. a pollutant).

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Double check detector backflow-prevention assembly (DCDA) means a specially designed backflow assembly composed of a line-size approved double check valve assembly with a bypass containing a specific water meter and an approved double check valve assembly. The meter shall register accurately for only very low rates of flow up to 3 gallons per minute (gpm) and shall show a registration
for all rates of flow. This assembly shall only be used to protect against a non-health hazard (i.e. a pollutant).

Dual Check Valve (DuC) means an approved device containing two internally loaded, independently operating check valves.

Fire Services, Private are defined in Section 28-145. The Cross-connection control ordinance may not be less restrictive than established fire or building codes.

Hazard, degree of means an evaluation of the potential risk to public health and the adverse effect of the hazard upon the potable water system.

Hazard, health (high hazard) means a cross connection or potential cross connection involving any substance that could, if introduced in the potable water supply, cause death, illness, spread disease, or have a high probability of causing such effects.

Hazard, plumbing means a plumbing-type cross connection in a customer's system that has not been properly protected by an approved air gap or an approved backflow prevention assembly.

Hazard, nonhealth (low hazard) means a cross connection or potential cross connection involving any substance that generally would not be a health hazard but would constitute a nuisance or be aesthetically objectionable such as changing the quality, taste, characteristics, color or add odor to the water, if introduced into the potable water supply.

Hazard, system means an actual or potential threat of severe damage to the physical properties of the water system or pollution or contamination that would have a protracted effect on the quality of the potable water in the water

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system.

Industrial fluids system means any system containing a fluid or solution that may be chemically, biologically, or otherwise contaminated or polluted in a form or concentration such as would constitute a health, system, pollution, contamination or
plumbing hazard, if introduced into the potable water supply. This may include, but not be limited to: polluted or contaminated waters; all types of process waters and used waters originating from the utility system that may have deteriorated in sanitary quality; chemicals in gaseous or fluid form; plating acids and alkalies; circulating cooling waters connected to an open cooling tower; cooling towers that are chemically or biologically treated or stabilized with toxic substances; contaminated natural waters, such as wells, springs, streams, rivers, bays, harbors, seas, irrigation canals or systems; oils, gases, glycerine, paraffins, caustic and acid solutions, metals in boilers, pesticides in irrigation systems, chemicals in fire sprinkler systems ~~and other purposes~~ for firefighting purposes.

Low Hazard Auxiliary Water System means a well unless determined otherwise by the Director of Public Works.

Low Hazard Reclaimed Water System means reclaimed water regulated under Part III of Chapter 62-610, F.A.C. unless it is stored with surface water in a pond that is part of a stormwater management system.

Non-Residential Service Connection means any other service connection. (see *residential service connection).*

Pollutant means any liquid, gas or material that may change the characteristics, taste, odor or color of the water.

Pollution means the presence of any foreign substance in potable water that tends to degrade its quality so as to constitute a non-health hazard (low hazard) or impair the usefulness of the potable water.

Potable water means water which is satisfactory for drinking, culinary and domestic purposes, and meets the requirements of the Safe Drinking Water Act under the purview of the Florida Department of Health.

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Pressure vacuum breaker assembly (PVB) means an approved assembly consisting of an independently operating, internally loaded check valve, an independently operating, loaded air inlet valve located on the discharge side of the check valve, with properly located resilient-seated test cocks and tightly closing resilient-seated shutoff valves attached at each end of the assembly designed to operate under pressure for prolonged periods of time to prevent backsiphonage. The pressure vacuum breaker may not be subjected to any backpressure.

Public Water System means that portion of the water distribution system over which the City has management and maintenance responsibilities.

Reclaimed Water - Water that, as a result of treatment of wastewater, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is not safe for human consumption.

Reduced pressure principle backflow-prevention assembly (RP) means an approved complete assembly consisting of a mechanical, independently acting, hydraulically dependent relief valve, located between two independently acting, hydraulically dependent relief valve, located between two independently operating, internally loaded ~~approved~~ check valves that ~~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 four (4) properly placed ~~located~~ resilient-seated test cocks.

Reduced pressure principle detector backflow-prevention assembly (RPDA) means a specially designed backflow assembly composed of a line-size approved reduced pressure principle backflow-prevention assembly (RP) with a bypass containing a specific water meter and an approved reduced pressure principle backflow-prevention assembly (RP). The meter shall register accurately for only very low rates of flow up to 3 gallons per minute (gpm) and shall show a registration for all rates of flow. This assembly shall be used to protect against a non-health hazard, (i.e. a pollutant) or a health hazard (i.e. a contaminant). The RPDA is primarily used on fire sprinkler systems.

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Residential Service connection means any service connection including any dedicated irrigation or fire service connection that is two (2) inches or less in diameter and that supplies water to a building, or premises, containing only dwelling units.

Service connection means the terminal end of a service connection from the utility, that is, where the water purveyor loses jurisdiction and sanitary control over the water at its point of delivery to the customer's system. If a meter is installed at the end of the service connection, then the service connection shall mean the downstream end of the meter. Service connection shall also include water service connection from a fire hydrant and all other temporary or emergency water service connections from the utility system.

Source means all components of the facilities utilized in the production, treatment, storage, and delivery of potable water to the distribution system.

Tall Building means a building with four (4) or more floors at or above ground level.

Temporary cross connection means a connection from the public water system to a new water main, wastewater forcemain or reclaimed water main to supply water for flushing or pressure testing; or connection to a fire hydrant.

. . .

SECTION 4. That Section 28-153 of the Code is hereby amended to read as follows:

Cross connections are prohibited unless appropriate backflow protection is provided to prevent backflow through the cross connection into the public water system. Appropriate backflow protection for various applications is described in "Recommended Practice for Backflow Prevention and Cross-Connection Control": American Water Works Association (AWWA) Manual M14, Third Edition 2004 and as subsequently amended in Rule 62-555.330 Florida Administrative Code (FAC) and the requirements as follows:

(a) An approved backflow prevention assembly or means, appropriate to the degree of hazard, shall be installed on each service connection to a customer's water system as close as practical to the city water meter at or near the property line ~~or immediately inside the building being served, but~~ and in all cases before the first branch line leading off the service line, wherever the following conditions exist:

(1) For premises using an auxiliary water ~~supply that is not or may not be of safe~~

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~~bacteriological or chemical quality and that is not acceptable as an additional source by the director of utilities.~~

(2) For premises on which any industrial fluids or any other objectionable substances may be stored or ~~are~~ handled ~~in such a fashion as to~~ that may create an actual or potential hazard to the public water supply or utility system. ~~This shall include the handling of process waters and waters originating from the utility system that have been subject to deterioration in quality~~

(3) For premises having internal cross connections, ~~that cannot be permanently corrected and controlled, or~~ intricate plumbing or ~~and~~ piping arrangements.

(4) For premises ~~or~~ where entry to all portions of the premises is not readily accessible or practical for inspection purposes~~, making it impracticable or impossible to ascertain whether or not dangerous cross connections exist.~~

(5) ~~(4)~~ For premises in which backpressure may be generated in the customer's system.

(6) All dedicated irrigation services.

(7) All dedicated fire services.

(8) All ~~commercial~~ properties and businesses identified in the City of Fort Lauderdale's Cross Connection Control Plan by business tax codes as defined in Sec. 15-57 and F.A.C. 62-555.360.2.

(9) Temporary connections.

(b) The type of backflow prevention assembly or means required under subsection (a) above, shall be determined by the degree of hazard that may exist, the facility type, business operation, customer category or business tax code as follows:

~~(1) For premises where there is an auxiliary water supply the utility system shall be protected by an approved air gap separation or a reduced pressure principle assembly.~~

~~(2) For premises where there is backpressure, or the presence of water or other substance that would be objectionable, but not hazardous to health, if introduced into the utility system, the utility system shall be protected by a double check valve assembly.~~

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~~(3) For premises where there is any material dangerous to health that is handled in such a fashion as to create an actual or potential hazard to the utility system, the utility system shall be protected by an air gap separation or a reduced pressure principle assembly. Examples of premises where these conditions will exist include, but are not limited to, sewage treatment plants, sewage pumping stations, chemical manufacturing plants, hospitals, mortuaries, and plating plants.~~

~~(4) For premises where there are cross connection that are not controlled, either actual or potential, the utility system shall be protected by an air gap separation or a reduced pressure principle assembly.~~

~~(5) For premises where, because of security requirements or other prohibitions or restrictions, it is impossible or impractical to make a complete in-plant cross connection survey, the utility system shall be protected against backflow from the premises by either an air gap separation or a reduced pressure principle assembly.~~

~~(6) For premises where, in the opinion of the director of utilities an undue health threat is posed because of the presence of extremely toxic substances, the director of utilities shall require an air gap at the service connection to protect the utility system.~~

~~(7) For premises where an irrigation system is connected directly to the utility system through an irrigation meter, the utility system shall be protected as follows:~~

~~a. On an open head sprinkler irrigation system and where such system is not in use more than twelve (12) consecutive hours an atmospheric vacuum breaker shall be required.~~

~~b. On an irrigation system not subject to backpressure a pressure vacuum breaker assembly shall be required.~~

~~c. On an irrigation system subject to backpressure a double check valve shall be required.~~

~~d. On an irrigation system with chemical additives or agents a reduced pressure principle assembly shall be required.~~

~~(8) For premises with a fire service connection, the provisions of section 28-145 shall apply.~~

~~The type of any backflow prevention assembly required herein shall be subject to the approval of the director of utilities.~~

Category of Customer	Minimum Backflow Protection to be Provided at or for the Service Connection from the City to the Customer
Beverage processing/bottling plant, including any brewery	Double check valve assembly (DC) if the plant presents a non-health hazard (low

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	hazard) Reduced pressure principle backflow-prevention assembly (RP) if the plant presents a health hazard (high hazard)
Cannery, packing house, rendering plant, or any facility where fruit, vegetable, or animal matter is processed, restaurants, or food service facility.	Reduced pressure principle backflow-prevention assembly (RP)
Car wash	Reduced pressure principle backflow-prevention assembly (RP)
Chemical plant or facility using water in the manufacturing, processing, compounding, or treatment of chemicals, including any facility where a chemical that does not meet the requirements in paragraph 62-555.320(3)(a), F.A.C., is used as an additive to the water	Reduced pressure principle backflow-prevention assembly (RP)
Dairy, creamery, ice cream plant, cold-storage plant, or ice manufacturing plant	Reduced pressure principle backflow-prevention assembly (RP)—A Double check valve assembly (DC) may be provided if it was installed before 5-5-14; and if such a Double check valve assembly (DC) is replaced on or after 5-5-14, it may be replaced with another Double check valve assembly (DC)
Dye plant	Reduced pressure principle backflow-prevention assembly (RP)
Film laboratory or processing facility or film manufacturing plant, excluding any small, noncommercial darkroom facility	Reduced pressure principle backflow-prevention assembly (RP)
Hospital; medical research center; sanitarium; autopsy facility; medical, dental, or veterinary clinic where surgery is performed; or plasma center	Reduced pressure principle backflow-prevention assembly (RP)
Laboratory, excluding any laboratory at an elementary, middle, or high school	Reduced pressure principle backflow-prevention assembly (RP)
Laundry (commercial), excluding any self-service laundry or Laundromat	Reduced pressure principle backflow-prevention assembly (RP)
Marine repair facility, marine cargo handling	Reduced pressure principle backflow-

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facility, or boat moorage	prevention assembly (RP)
Metal manufacturing, cleaning, processing, or fabricating facility using water in any of its operation or processes, including any aircraft or automotive manufacturing or repair facility.	Double Check (DC) if the facility presents a non-health hazard (low hazard). Reduced pressure principle backflow prevention assembly (RP) if the facility presents a health hazard (high hazard).
Mortuary	Reduced pressure principle backflow prevention assembly (RP)
Premises where oil or gas is produced, developed, processed, blended, stored, refined, or transmitted in a pipeline or where oil or gas tanks are repaired or tested, excluding any premises where there is only a fuel dispensing facility	Reduced pressure principle backflow-prevention assembly (RP)
Premises where there is an auxiliary or reclaimed water system	At or for a residential service connection: Dual Check Valve (DuC)[1] At or for a non-residential service connection: • Double check valve assembly (DC) if the auxiliary or reclaimed water is a low hazard[2,3]; or • Reduced pressure principle backflow-prevention assembly (RP) if the auxiliary or reclaimed water is a high hazard[2,3]
Premises where there is a cooling tower	Reduced pressure principle backflow-prevention assembly (RP)
Premises where there is an irrigation system that is using potable water and that... I. Is connected directly to the Public Water System distribution system via a dedicated irrigation service connection II. Is connected internally to the customer's plumbing system	I. At or for a residential or non-residential dedicated irrigation service connection: Pressure vacuum breaker assembly (PVB) if backpressure cannot develop in the downstream piping, or Reduced pressure principle backflow-prevention assembly (RP) if backpressure could develop in the downstream piping. II. None

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Premises where there is a wet-pipe sprinkler, or wet standpipe, fire protection system that is using potable water and that: I. Is connected directly to the Public Water System distribution system via a dedicated fire service connection.[7] II. Is connected internally to the customer's plumbing system	I.A. At or for a residential dedicated fire service connection: Dual Check Valve (DuC) if the fire protection system contains no chemical additives and is not connected to an auxiliary water system; or Reduced pressure principle backflow-prevention assembly (RP) or RPDA if the fire protection system contains chemical additives or is connected to an auxiliary water system[6]. I.B. At or for a non-residential dedicated fire service connection[6]. Double check valve assembly (DC) or DCDA if the fire protection system contains no chemical additives and is not connected to an auxiliary water system; or Reduced pressure principle backflow-prevention assembly (RP) or Reduced pressure principle detector backflow-prevention assembly (RPDA) if the fire protection system contains chemical additives or is connected to an auxiliary water system[6]. II. None[5]
Radioactive material processing or handling facility or nuclear reactor	Reduced pressure principle backflow-prevention assembly (RP)
Paper products plant using a wet process	Reduced pressure principle backflow-prevention assembly (RP)
Plating facility, including any aircraft or automotive manufacturing plant	Reduced pressure principle backflow-prevention assembly (RP)
Restricted-access facility	Reduced pressure principle backflow-prevention assembly (RP)
Steam boiler plant	Reduced pressure principle backflow-prevention assembly (RP)
Tall building – i.e., a building with four or more floors at or above ground level	Double check valve assembly (DC) if the customer has no potable water distribution lines connected to the suction side of a

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	booster pump; or Reduced pressure principle backflow-prevention assembly (RP) if the customer has one or more potable water distribution lines connected to the suction side of a booster pump
Wastewater treatment plant or wastewater pumping station	Reduced pressure principle backflow-prevention assembly (RP)
Customer supplied with potable water via a temporary or permanent service connection from a fire hydrant	Double check valve assembly (DC) if the hazard present is a non-health hazard (low hazard) Reduced pressure principle backflow-prevention assembly (RP) or Air Gap (AG) if the hazard present is a health hazard (high hazard)

(1) A DuC may be provided only if there is no known cross-connection between the plumbing system and the auxiliary or reclaimed water system on the customer's premises. Upon discovery of any cross-connection between the plumbing system and any reclaimed water system on the customer's premises, the cross-connection shall be eliminated. Upon discovery of any cross-connection between the plumbing system and any auxiliary water system other than a reclaimed water system on the customer's premises, the cross-connection shall be eliminated or backflow protection be provided at or for the service connection that is equal to that required at or for a non-residential service connection.

(2) Reclaimed water regulated under Part III of Chapter 62-610, F.A.C., is a low hazard unless it is stored with surface water in a pond that is part of a stormwater management system, in which case it is a high hazard; well water is a low hazard unless determined otherwise; industrial fluids and used water other than reclaimed water are high hazards unless determined otherwise; reclaimed water not regulated under Part III of Chapter 62-610, F.A.C., and surface water are high hazards.

(3) Upon discovery of any cross-connection between the plumbing system and any reclaimed water system on the customer's premises, the cross-connection shall be eliminated

(4) A DC may be provided if both of the following conditions are met:
   a. The dedicated irrigation service connection initially was constructed before 5-5-14.
   b. No chemicals are fed into the irrigation system.

(5) Internal backflow protection may be required under the Florida Building Code or the predecessor State plumbing code, but such internal backflow protection is not inspected/tested and maintained

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the same as backflow protection provided at or for service connections.

(6) Upon discovery of any cross-connection between the fire protection system and any reclaimed water system on the customer's premises, the cross-connection shall be eliminated.

(7) An exception to the requirement for backflow protection at or for a residential or non-residential dedicated fire service connection to a wet-pipe sprinkler, or wet stand pipe, fire protection system. If both of the following conditions are met:

- The fire protection system was installed and last altered before May 5, 2014 and
- The fire protection system contains no chemical additives and is not connected to an auxiliary water system.

The type of any backflow prevention assembly required herein shall be subject to the approval of the Director of ~~utilities~~ Public Works.

(c) All owners with premises requiring a backflow prevention assembly in accordance with the City Code of Ordinances shall obtain a permit from the Department of Sustainable Development (DSD) for the initial installation or relocation of the backflow prevention assembly and pay applicable fees.

(d) Periodic Certifications - All existing RPs, RPDAs, DCs, DCDAs, and PVBs, shall be inspected, tested, and certified upon installation, by a certified backflow prevention assembly tester. The tester shall complete a Backflow Prevention Assembly Field Test Report (available on line) and deliver the completed report to the Director of Public Works. Backflow prevention assemblies for non-residential service connections shall be tested annually on a calendar basis thereafter and two (2) RPZs in series shall be tested biannually (every six months). Residential service connections shall be tested biennially (i.e. every two years on a calendar basis) or more frequently if deemed necessary by the City. All Air Gaps (AGs) shall be inspected annually.

(e) All owners with premises requiring a backflow prevention assembly in accordance with this chapter shall:

(1) Obtain recertification of the backflow prevention assembly from a backflow prevention assembly tester.

(2) Provide a fully complete "Backflow Prevention Assembly Field Test Report" to the Director of Public Works or third party vendor monitoring compliance that indicates the backflow prevention assembly has been tested and found to be operating in accordance with the industry's specifications as provided by the AWWA, ASSE, and USC-FCCHR.

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(3) Pay a forty five dollar ($45) backflow recertification administration fee to the City for each backflow prevention assembly at the same premises. The backflow recertification administrative fees shall be paid to the Director of Public Works or third party vendor monitoring compliance.

SECTION 5. That Section 28-154 of the Code is hereby amended to read as follows:

Sec. 28-154. Authority of Director of ~~utilities~~ Public Works.

The director of ~~utilities~~ Public Works shall be responsible for the protection of the utility system from contamination or pollution due to the backflow of contaminants or pollutants through water service connection. When backflow prevention is required at the customer's water service connection or within such customer's system, as provided in this ~~division~~ Chapter, the director of ~~utilities~~ Public Works shall give notice in writing to ~~such customer~~ the property owner to install such approved backflow prevention assembly or means.

The director of Public Works shall receive confirmation of backflow prevention for water services from the property owner in accordance with this chapter. The director of Public Works shall disconnect water service for non-compliance to protect the public water supply or shall install backflow prevention and charge the owner all costs and associated fees.

SECTION 6. That Section 28-155 of the Code is hereby amended to read as follows:

Sec. 28-155. Customer responsibilities.

(a) The customer shall have tested and continually maintain the approved backflow prevention assembly or means required by this division.

(b) The customer's system shall be open for inspection at all reasonable times to authorized representatives of the director of ~~utilities~~ Public Works to determine whether cross connections or other threats to the utility system exist.
~~(c) It shall be the duty of the customer at any premises where a required backflow prevention assembly, other than an atmospheric vacuum breaker, is installed, to have certified inspections and operational tests made in accordance with Sec 28-153 at least once per year. In those instances where the Director of utilities Public Works deems the hazard to be great enough, certified inspections may be required at more frequent intervals~~.

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(c) ~~(d)~~ All backflow prevention assembly installations, ~~inspections and tests~~ shall be ~~at the sole expense of the customer and shall be~~ performed by a licensed plumber ~~under~~ with a permit issued by the Department of Sustainable Development. ~~who is also a certified backflow prevention technician. It shall be the duty of the director of utilities to see that these tests are made in a timely manner. If any backflow prevention assembly requires repair, overhaul, or replacement, such work shall be done within ten (10) working days of the notice to the customer of the need for such work and all such work shall be done by a licensed plumber under permit who is also a certified backflow prevention technician at the sole expense of the customer. A copy of the record of all such tests or other work specified herein shall be reported to the city immediately upon receipt by the customer of the record.~~

(d) All testing including but not limited to recertification shall be performed by a certified backflow prevention assembly tester.

(e) All repairs of a backflow prevention assembly shall be performed by a licensed plumber or a certified backflow prevention assembly repair technician.

(f) If any backflow prevention assembly requires repair or replacement, such work shall be done within ten (10) working days upon notice at the sole expense of the customer or property owner. Documentation of the completed work shall be provided to the city immediately upon receipt by the customer or property owner.

SECTION 7. That Section 28-156 of the Code is hereby amended to read as follows:

Sec. 28-156. Violations~~; penalties~~.

(a) ~~It shall be~~ The following shall constitute a violation of this ~~division~~ chapter ~~for a customer~~:
(1) ~~To fail~~ Failure to properly install, ~~test~~ certify, repair or maintain a backflow prevention assembly ~~or means~~, as required by this ~~division~~ chapter.
(2) ~~To r~~ Removal or bypass of a required backflow prevention assembly ~~or means~~.
(3) ~~To fail~~ Failure to make ~~his~~ premises accessible for inspection, as required by this ~~division~~ chapter.
(4) ~~To have~~ Having an unprotected cross connection exist on ~~his~~ premises.

(b) Any person who violates any provision of this chapter and who shall be found violating or found in violation of any provision of this chapter shall be subject to the penalties as prescribed in section 1-6 and/or Chapter 11 of this Code.

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(c) The Director of ~~utilities~~ Public Works shall give written notice via certified mail to a ~~customer~~ property owner of any violation of this ~~division~~ chapter, which ~~notice~~ shall allow ~~such customer~~ a maximum of ten (10) ~~working~~ days upon receipt to bring the premises into compliance. If the property owner fails to correct the violation within the time set forth in the notice, the Director of Public Works may:
~~Failure to correct the violation within the time set forth in the notice shall authorize the Director of utilities or his designee to discontinue water service to the premises immediately service will not be restored until such violation is corrected. On any premises where the violation does not create an imminent and substantial danger to public health, the Director of utilities shall allow up to an additional one hundred eighty (180) days for the customer to bring the premises into compliance. In addition, the penalties provided in section 1-6 of this Code shall apply.~~

(1) Discontinue water service to the premises; or
(2) Upon receipt of an executed written permission and hold harmless agreement by the property owner, authorize entry of city personnel, contractors, plumbers, backflow testers, architects, consultants or others and modify or authorize modification of pipes, meters, structures, infrastructure, and equipment on public and private property and install, raise, relocate, modify, replace, repair, and test backflow prevention assemblies and eliminate cross connections in accordance with these requirements and applicable building and fire codes to protect the public water supply and maintain water services, cooling tower services, fire services and related systems to protect the health, safety, and welfare of one or more customers, owners, patients, neighbors, persons or animals and bill the owner for all costs and associated fees.

(d) Where the property owner is also the water account customer, a charge will be placed on the water bill for the contractor's costs of testing, repair, replacement or installation of the backflow preventer and permit fees, if applicable.

(1) In the case of a new installation, repair or replacement, the costs will be distributed over an 18 month period payable in monthly installments and will include an administrative fee of 15% of the contractor's fee. In addition, the full amount due will be placed on the water account and on the monthly water bill until paid in full, with credit shown for any payment made.
(2) When the owner needs only a backflow test, the entire fee will be placed on the next water bill and will include an administrative fee of 10% of the contractor's fee and be

payable within 30 days.

(3) Upon failure to timely remit any payment due, the full remaining amount due may be placed as a lien on the property and filed in the public records of Broward County.

(e) In cases where a backflow is occurring, a meter is running backward, or there is a perceived imminent threat to the Public Water System, the Public Works Department reserves the right to immediately terminate the water service without providing notice. Service will not be restored until the Public Works Department determines the threats to the Public Water System have been eliminated.

SECTION 8. That Section 28-157 of the Code is hereby amended to read as follows:
Sec. 28-157. Non-required backflow prevention assemblies.

A backflow prevention assembly installed on the service connection but not required by this ~~division~~ chapter may be removed by a licensed plumber under permit issued by the Department of Sustainable Development. Where no backflow prevention assembly is required but is in place, testing and repair shall be at the discretion of the customer or property owner.

SECTION 9. That Section 28-190 of the Code is hereby amended to read as follows:

Sec. 28-190. When bills due and payable; disconnection of service; liens for unpaid fees and service charges.

(a) . . .

(c) In the event that a water ~~consumer~~ customer whose water service has been cut off by reason of: 1) nonpayment of water or sewer bill, 2) the lack of backflow prevention assembly, inspection, testing or recertification, or 3) violations or provisions of Chapter 28 – Water, Wastewater, and Stormwater and who ~~desires~~ requests to have ~~his~~ water service reestablished, ~~he~~ the customer shall pay the entire amount of such delinquent water or sewer bill, together with a twenty- dollar ($20.00) fee for a service call to disconnect the ~~consumer's~~ customer's water supply and a twenty-dollar ($20.00) fee for a service call to reestablish such water service.

(d) Water service shall not be established or reestablished at the request of a ~~consumer~~ customer whose service has been terminated for : 1) nonpayment of water or sewer bill,

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2) the lack of backflow prevention assembly, inspection, testing or recertification, or 3) violations or provisions of Chapter 28 – Water, Wastewater, and Stormwater until all amounts due for water or sewer service, together with any charges for disconnection or reestablishment of such consumer's water supply, have been paid in full. When service has been disconnected at the water main by the city, an additional fee of three hundred sixty dollars ($360.00) shall be paid by the ~~consumer~~ customer for the reestablishment of the water service.

. . .

SECTION 10. That if any clause, section or other part of this Ordinance shall be held invalid or unconstitutional by any court of competent jurisdiction, the remainder of this Ordinance shall not be affected thereby, but shall remain in full force and effect.

SECTION 11. That all ordinances or parts of ordinances in conflict herewith, be and the same are hereby repealed.

SECTION 12. That this Ordinance shall be in full force and effect ten days from the date of final passage.

PASSED FIRST READING this the 7th day of April 2015.
PASSED SECOND READING this the 21st day of April 2015.

Mayor
JOHN P. "JACK" SEILER

ATTEST:

City Clerk
JONDA K. JOSEPH

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