

**PROPOSED ORDINANCE NO. 2016-10**

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**AN ORDINANCE OF THE CITY OF PEMBROKE PINES, FLORIDA, AMENDING TITLE V, "PUBLIC WORKS", CHAPTER 50, "UTILITIES", BY ADOPTING A NEW SECTION 50.40, "CROSS CONNECTION CONTROL PROGRAM", TO IMPLEMENT AND ENFORCE A CROSS CONNECTION CONTROL PROGRAM PURSUANT TO SECTION 62-555.360, FLORIDA ADMINISTRATIVE CODE; PROVIDING FOR CODIFICATION; PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.**

**WHEREAS**, the Florida Department of Environmental Protection ("DEP") has a Cross Connection Control Program ("CCCP"), as provided in Section 62-555.360, Florida Administrative Code; and

**WHEREAS**, pursuant to the applicable provisions of the Florida Administrative Code, the City of Pembroke Pines ("City") is required to implement a CCCP in order to protect the public water supply; and

**WHEREAS**, the CCCP will require the installation of backflow prevention valves on single family homes with irrigation systems in order to eliminate cross-connections with any other source of water or process water used for any purpose whatsoever which may jeopardize the safety of the City's water supply; and

**WHEREAS**, the City Commission finds that it is in the best interest of the health, safety, and welfare of the residents of the City of Pembroke Pines to adopt a CCCP pursuant to this Ordinance; and

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**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION  
OF THE CITY OF PEMBROKE PINES, FLORIDA THAT:**

**SECTION 1.** The foregoing "WHEREAS" clauses are hereby ratified and confirmed as being true and correct, and are hereby incorporated herein and made a part hereof.

**SECTION 2.** That Title V, "Public Works", Chapter 50, "Public Works", of the City of Pembroke Pines Code of Ordinances is hereby amended by enacting a new Section 50.40, "Cross Connection Control Program" to read as follows:

50.40 Cross Connection Control Program

A. PURPOSE The purpose of this Program is:

(1) To protect the public water main against actual or potential cross-connections, backflow by backpressure and backsiphonage by isolating within the premise or private property contamination or pollution that has occurred or may occur because of same undiscovered or unauthorized cross-connection on the premises or private property.

(2) To protect the water supply system within the premise or private property against actual or potential cross-connections, backflow by backpressure and backsiphonage by requiring such air gaps, vacuum breakers, backflow preventers, special devices as required by this Program, or other applicable regulations.

(3) To eliminate cross-connections, backflow by backpressure and backsiphonage on any other source of water or process water used for any purpose whatsoever which may jeopardize the safety of the water supply or which may endanger the health and welfare of the general public.

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(4) To establish a cross-connection control and backflow prevention program that includes provisions for inspection and maintenance to ensure compliance.

#### B. RESPONSIBILITIES

(1) DIRECTOR OF UTILITIES. The Director of the Utilities System, or their designee, shall be responsible for the protection of the public potable water distribution system from contamination or pollution due to backflow of contaminants or pollutants through the water service connection. If, in the judgment of said Director, or their designee, an approved backflow prevention assembly is required, at the city's water service connection to any customer's premises, for the safety of the water system, the Director, or his designated agent, shall give notice in writing to said customer to install such an approved backflow prevention assembly at each service connection to his premises. The customer shall immediately install such approved device, or devices, or assemblies at his own expense; and, failure, refusal, or inability on the part of the customer to install said device, or assemblies, immediately shall constitute a ground for discontinuing water service to the premises until such device, or assemblies, have been properly installed. Cross-connection control devices or assemblies shall comply with Florida Administrative Code(FAC) 62-555.360.

Enforcement of this Program shall be administered by the Director, or his designee.

(2) WATER PURVEYOR (CITY OF PEMBROKE PINES) Except as otherwise provided herein, the water purveyor's (City of Pembroke Pines) responsibility to ensure a safe water supply begins at the source and includes all of the public water distribution system, including the service connection, and ends at the point of delivery to the consumer's water system(s).

(3) CONSUMER. The consumer has the primary responsibility of preventing pollutants and contaminants from entering the consumer's potable water systems or the public potable water system. It is the responsibility of the consumer and/or his designee to determine the size of the backflow prevention assembly. The

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consumer's responsibility starts at the point of delivery from the public potable water system and includes all of the property's water system(s).

The consumer, at their own expense, shall install, operate, test, and maintain approved backflow prevention assemblies as set forth in this manual, unless otherwise stated in this manual. Prior to installation, replacement or relocation of a backflow prevention assembly, the consumer must apply for all necessary permits through the Building Department. The Building Department must be notified and provided copies of required testing reports upon completion of the installation of a backflow prevention device. Subsequent tests shall be maintained and performed at the customer's expense by a plumbing contractor licensed in the State of Florida. The consumer shall maintain accurate records of tests and repairs made to backflow prevention assemblies and shall maintain such records for a minimum period of five (5) years. The records shall be on a test form approved by the City and shall include the list of materials or replacement parts used. Following any repairs, overhaul, re-piping or relocation of an assembly the consumer shall have it tested to insure that it is in good operating condition and will prevent backflow. Tests, maintenance and repairs of backflow prevention assemblies shall be made by a Certified Plumbing Contractor that is a Certified Backflow Prevention Assembly Tester or a certified Backflow Prevention Assembly Repair and Maintenance Technician, whichever is applicable.

(4) BUILDING DEPARTMENT. The Building Department of the City of Pembroke Pines has the responsibility to not only review building plans and inspect plumbing as it is installed; but they have the explicit responsibility of preventing cross connections from being designed and built into the plumbing system within their jurisdiction. Where the review of building plans suggests or detects the potential for cross connections being made as an integral part of the plumbing system, the plumbing inspector has the responsibility, under the Florida Building Code, for requiring that such cross connections be either eliminated or provided with backflow prevention equipment approved by the Florida Building Code.

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The plumbing inspector's responsibility, with respect to backflow prevention, begins at the point of delivery and continues throughout the entire length of the consumer's water system. The plans inspector should inquire about the intended use of water at any point where it is suspected that a cross connection might be made or where one is actually called for by the plans. When such is discovered, it shall be mandatory that a suitable, approved backflow prevention assembly/device be required by the plans and be properly installed.

(5) CERTIFIED BACKFLOW PREVENTION ASSEMBLY TESTERS AND REPAIRERS. All individuals or companies who install, test, repair, overhaul, or maintain backflow prevention assemblies within the City of Pembroke Pines Utilities Service area, must submit the following current documents to the Building Department:

1. Certified Plumbing Contractor – State of Florida Occupational License.
2. County or City Local Business Tax Receipt from where the business originates.
3. Backflow Prevention Assembly Tester Certification for the tester.
4. Backflow Prevention Assembly Repair Certification for the repair technician.
5. Annual Testing Kit Calibration Report/Certification for the testing kit that will be used by the plumber or technician.

Such individuals will be responsible for the following:

1. Making competent installations, inspections, repairs and/or the overhauling of backflow prevention assemblies.
2. Making reports of such repairs to the consumer and responsible authorities on forms approved by the City.
3. Include the list of materials or replacement parts used.
4. Maintain equipment and be competent to use all the necessary tools, gauges, manometers and other

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- equipment necessary to properly install, test, repair, and maintain backflow prevention assemblies.
5. Ensuring original manufactured parts are used in the installation, repair and maintenance of backflow prevention assemblies.
  6. It will be the tester's further responsibility not to change the installation, design, material or operational characteristics of an assembly during installation, repair or maintenance without prior approval of the Building Department.
  7. A certified tester and repairer will perform the work and be responsible for the competency and accuracy of all tests and reports.
  8. Provide a copy of all test and repair reports to the consumer and to the Building Department within ten (10) business days of any completed test or repair work.
  9. A certified tester shall maintain such records for a minimum period of five (5) years.
  10. Report to the Building Department if a containment backflow prevention assembly has been by-passed or removed by the consumer.
  11. Carry all necessary credentials while testing and repairing backflow prevention assemblies (e.g. tester and repairer certification, testing kit calibration report) and present to City personnel upon request.
  12. The City reserves the right to prevent any testers or companies from testing and repairing backflow prevention assemblies within the City's service area due to falsification of records and non-compliance with the City's Cross Connection Control Manual, the City at large, County and State regulations, laws, etc.

It is the sole responsibility of the approved plumbing contractor to maintain current, all required certifications, licenses etc. Further, it is the approved plumbing contractor's responsibility to submit all required certifications to the Building Department to avoid any undue delays to the consumer to whom services are being rendered. The Building Department may not accept any test or repair report if any of

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the required certifications were expired when services were performed.

City Utilities Personnel or their contractor may install dual check devices on residential service meters without the requirements listed above.

#### C. DEFINITIONS

(1) Approved: Accepted by the Building Department, Director of Utilities or his designee, as meeting an applicable specification stated or cited in this Program, or as suitable for the proposed use.

(2) Auxiliary Water Supply: Any water supply on or available to the premises other than the purveyor's approved public potable water supply. These auxiliary waters may include water from another purveyor's public potable water supply or any natural source(s) such as well, spring, lake, pond, canal, river, stream, etc., or "used waters" or "industrial fluids". These waters may be polluted or contaminated or they may be objectionable and constitute an unacceptable water source over which the water purveyor does not have sanitary control.

(3) Backflow: The flow of water or other liquids, mixtures or substances under pressure into the distributing pipes of a potable water supply system from any source or sources other than its intended source.

(4) Backpressure: A pressure, higher than the supply pressure, caused by a pump, elevated tank, boiler, or any other means that may cause backflow.

(5) Backsiphonage: The flow of water or other liquids, mixtures or substances into the distributing pipes of a potable water supply system from any other source other than its intended source caused by the sudden reduction of pressure in the potable water supply system.

(6) Backflow prevention assembly: A mechanical backflow preventer (i.e., DC, PVB, DCVA, RP), used to prevent the backward flow of contaminants or pollutants into a potable water distribution system. An assembly has a resilient seated, full-flow shut-off valve before and after the backflow preventer making it testable in-line. The assembly is shipped with the shut-off valves attached to the backflow

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preventer. An assembly is labeled with the manufacture's symbol, size, serial number, model number, the working pressure, and the direction of flow. The Foundation for Cross Connection Control and Hydraulic Research at the University of Southern California tests and approves backflow prevention assemblies.

(7) Backflow Prevention Device: A means of backflow protection, usually mechanical that does not require shut-off valves and test cocks. Any backflow prevention assembly without the shut-off valves is called a device. The American Society of Sanitary Engineers (ASSE) approves backflow prevention devices.

(8) Backflow Preventer: A device, assembly or means designed to prevent backflow. These devices or assemblies are described below:

a. Air-Gap: A physical separation between the free-flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel. An "approved air gap separation" shall be at least double the diameter of the supply pipe measured vertically above the top of the rim of the vessel. In no case shall it be less than 1 inch. When an air-gap is used at the service connection to prevent the contamination or pollution of the public potable water system and an emergency by-pass is desired to be installed around the air-gap system, an approved reduced pressure principle assembly shall be installed in the bypass system. Air Gaps shall be inspected annually.

b. Approved Backflow Prevention Device: Must include isolation valves and test cocks to facilitate in-line testing and repair. The assembly must appear on a current approval list from the American Society of Sanitary Engineering (ASSE) or on a current approval list from the Foundation of Cross-Connection Control and Hydraulic Research at the University of Southern California (FCCC & HR @ USC).

c. Double Check Valve Assembly (DC): A testable assembly composed of two single, independently acting, check valves, including tightly closing shutoff valves located at each end of the assembly and suitable connections for testing the water tightness of each check



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valve, plus properly located test cocks for the testing of each check valve. A check valve is a valve that is drip-tight in the normal direction of flow when the inlet pressure is one psi and the outlet pressure is zero. The check valve shall permit no leakage in a direction reverse to the normal flow. The closure element (e.g., clapper) shall be internally weighted or otherwise internally loaded to promote rapid and positive closure. The entire assembly shall meet the design and performance specifications and approval of a recognized and City-approved testing agency for backflow prevention assemblies. To be approved, these assemblies must be readily accessible for in-line maintenance and testing.

d. Double Check Detector Assembly (DCDA) A DCDA shall consist of a main-line DC with a bypass (detector) arrangement around the main-line DC that shall contain a bypass water meter and a bypass DC. The DCDA shall be installed as an assembly as designed and constructed by the manufacturer. This assembly shall only be used on fire lines to protect against non-health hazards.

e. Dual Check Device(DuC): A compact unit manufactured with two independent spring actuated check valves and meets ASSE Standard #1024.

f. Pressure Vacuum Breaker (PVB): An assembly containing one independently operated internally loaded check valve and an independently operated internally loaded air inlet valve located on the discharge side of the check. Assembly includes tightly closing shut-off valves on the inlet and outlet sides of the assembly and properly located test cocks.

g. Reduced-Pressure Principle Assembly (RP): A device containing within its structure a minimum of two independently acting approved check valves, together with an automatically operating pressure differential relief valve located between the two check valves. The first check valve reduces the supply pressure a predetermined amount so that during normal flow and at cessation of normal flow the pressure between the checks shall be less than the supply pressure. In case of leakage of either

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check valve, the differential relief valve, by discharging to the atmosphere, shall operate to maintain the pressure between the checks less than the supply pressure. The unit shall include tightly closing shutoff valves located at each end of the device, and each device shall be fitted with properly located test cocks. The entire assembly shall meet the design and performance specifications and approval of a recognized and City-approved testing agency for backflow prevention assemblies. To be approved, these assemblies must be readily accessible for in-line maintenance and testing and be installed in a location where no part of the assembly will be submerged.

h. Reduced-pressure Detector Assembly (RPDA) A RPDA shall consist of a main-line RP with a bypass (detector) arrangement around the main-line RP that shall contain a bypass water meter and a bypass RP. The RPDA shall be installed as an assembly as designed and constructed by the manufacturer. This assembly shall be used on fire lines to protect against health hazards.

(9) Certified Tester or Repairer: A person who has proven his/her competency to test, repair, overhaul and make reports on backflow prevention assemblies as evidenced by certification of successful completion of American Water Works Association(AWWA), American Backflow Prevention Association(ABPA), American Society of Sanitary Engineering(ASSE), or International Association of Plumbing and Mechanical Officials(IAPMO), sanctioned training.

(10) Consumer (Customer): Any person, firm, or corporation responsible for any property at which water from the City public water supply is received; without regard to whether the City is aware of the existence of such customer. In the absence of other parties or the failure of other parties to accept the responsibilities herein set forth, the owner of record shall be ultimately responsible.

(11) Consumer's Water System: Any water system commencing at the point of delivery and continuing throughout the consumer's plumbing system, located on the consumer's premises, whether supplied by public potable water or an auxiliary water supply.

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The system or systems may be either a potable water system or an industrial piping system.

(12) Contamination: Means an impairment of the quality of the potable water by sewage, industrial fluids or waste liquids, compounds or other materials to a degree which creates an actual hazard to the public health through poisoning or through the spread of disease.

(13) Cross-Connection: Any physical connection or arrangement of piping or fixtures between two otherwise separate piping systems one of which contains potable water and the other non-potable water or industrial fluids of questionable safety, through which, or because of which, backflow by backpressure or backsiphonage may occur into the potable water system. A water service connection between a public potable water distribution system and a customer's water distribution system which is cross-connection to a contaminated fixture, industrial fluid system or with a potentially contaminated supply or auxiliary water system, constitutes one type of cross-connection. Other types of cross-connections include connectors such as swing connections, removable sections, four-way valves, spools, dummy sections of pipe, swivel or change-over devices, sliding multi-port tube, solid connections, etc.

(14) Cross-Connection Control Inspector: A person designated by the Director to administer, to implement and enforce the provisions of this Program.

(15) Cross-Connections – Controlled: A connection between a potable water system and a non-potable water system with an approved backflow prevention assembly properly installed that will continuously afford the protection commensurate with the degree of hazard.

(16) Cross-Connection Control by Containment: The installation of an approved backflow prevention assembly at the water service connection to any customer's premises where it is physically and economically infeasible to find and permanently eliminate or control all actual or potential cross-connections within the customer's water system; or, it shall mean the installation of an approved backflow prevention assembly on the service line leading to and supplying a portion of a customer's water system where there are actual or potential cross-connections which cannot be effectively eliminated or controlled at the point of cross-connection.

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(17) Director of Utilities: The Director of the Utilities System, or his designee in charge of the Water Department with the authority and responsibility for the implementation of an effective cross-connection control program and for the enforcement of the provisions of this Program.

(18) Hazard, Degree of: The term is derived from an evaluation of the potential risk to public health and the adverse effect of the hazard upon the potable water system.

a. Hazard-Health: Any condition, device or practice in the water supply system and its operation which could create, or in the judgment of the Director, or his designee may create a danger to the health and well-being of the water consumer. An example of a health hazard is a structural defect, including cross-connection, in a water supply system.

b. Hazard-Plumbing: A plumbing type cross-connection in a consumer's potable water system or to the potability of the public or the consumer's potable water system but which would constitute a nuisance or be aesthetically objectionable or could cause damage to the system or its appurtenances, but would not be dangerous to health.

c. Hazard-Pollution: An actual or potential threat to the physical properties of the water system or to the potability of the public or the consumer's potable water system but which would constitute a nuisance or be aesthetically objectionable or could cause damage to the system or its appurtenances.

(19) Distribution system: Includes the network of conduits used for the delivery of water from the source to the customer's system.

(20) Hazard-System: An actual or potential threat of severe damage to the physical properties of the public potable water system or the consumer's potable water system or of a pollution or contamination which would have a protracted effect on the quality of the potable water in the system.

(21) Industrial Fluids System: Any system containing a fluid or solution which may be chemically, biologically or otherwise contaminated or polluted in a form or concentration such as would

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constitute a health, system, pollutional or plumbing hazard is introduced into an approved 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 public potable water system which may have deteriorated in sanitary quality; chemicals in fluid form; plating acids and alkalis, circulated cooling water connected to an open cooling tower and/or cooling towers that are chemically or biologically treated or stabilized with toxic substances; contaminated natural water such as from wells, springs, streams, rivers, bays, harbors, seas, irrigation canals or systems, etc.; oils, gases, glycerin, paraffin’s, caustic and acid solutions and other liquids and gaseous fluids used in industrial or other purposes or for fire-fighting purposes.

(22) Isolation: Isolation consists of two types, fixture isolation and area or zone isolation. Isolation at a fixture means installing an approved backflow preventer at the source of the potential contamination. Isolation at an area or zone is confining the potential source of contamination within a specific area. Isolation may be appropriate with or without containment depending on the whether the conditions create a health or non-health hazard.

(23) Pollution: Means the presence of any foreign substance (organic, inorganic or biological) in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness or quality of the water to a degree which does not create an actual hazard to the public health but which does adversely and unreasonably affect such waters for domestic use.

(24) Point of Delivery: The point of delivery shall generally be at the property line of the customer, adjacent to the public street where the City’s water mains are located; or at a point on the customer’s property where the meter is located. The point of delivery for all fire line connections shall be considered as the point where the isolation valve is located, generally adjacent to the public water mains. The customer shall be responsible for all water piping, control devices and other appurtenances located on the customer’s side of the point of delivery.

(25) Private Water System – Any pipe, system of pipes and other associated facilities that are not part of the public water and are used in whole or in part to convey, move or receive water, regardless of the source(s) of water in such system.

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(26) Program – This Cross Connection Control Program

(27) Public Potable Water System: The potable water system owned, maintained and operated by the City. This system includes all transmission and distribution mains, lines, pipes, connections, storage tanks and other facilities used to produce, treat, convey or store potable water for public consumption or use.

(28) Residential Service Connection - any service connection, including any dedicated irrigation or fire service connection, that is two inches or less in diameter and that supplies water to a building, or premises, containing only dwelling units AND Non-residential Service Connection- any other service connection

(29) Source: Includes all components of the facilities utilized in the production, treatment, storage, and delivery of water to the distribution system.

(30) Utility system: Consists of the source facilities and the distribution system, and shall include all those facilities of the water system under the complete control of the utility, up to the point where the customer's system begins.

(31) Water-Potable: Any water, which, according to recognized standards is safe for human consumption.

(32) Water-Non Potable: Water which is not safe for human consumption or which is of questionable potability.

(33) Water Purveyor: The term water purveyor shall mean the owner or operator of the public potable water system supplying an approved water supply to the public. As used herein, the terms water purveyor and City of Pembroke Pines may be used synonymously.

(34) Water Service Connections: The terminal end of a service connection from the public potable water system i.e., where the Water Purveyor loses jurisdiction and sanitary control over the water at its point of delivery to the customer's water system. If a meter is installed at the end of the service connection, then the service connection shall mean the downstream and of the meter. There should be no unprotected takeoffs from the service line ahead of any meter or backflow prevention assembly located at the point of delivery to the customer's water system. Service connection shall also include water service connection from a fire hydrant and all other temporary or emergency water service connections from the public water system.

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(35) Water-Used: Any water supplied by a water purveyor from a public potable water system to a consumer's water system after it has passed through the point of delivery and is no longer under the sanitary control of the Water Purveyor.

#### D. POLICY

(1) All new water service connections, shall cause the service line be fitted by the customer with the following minimum backflow prevention devices or those prescribed by FAC Table 62-555.360-2, whichever is more stringent:

a. Residential Service Connection – DuC Minimum(owned and installed by City Personnel when setting the meter) (refurbished or replaced every 10 years by City)

b. Non-residential Service Connection– RP Minimum (tested annually by customer)

(2) Meters which are replaced or changed by the Water Purveyor for Residential Service Connections 2 inch or less shall be fitted by the Water Purveyor with a DuC backflow prevention device.

(3) Whenever the customer's premises is altered under a building permit in a manner that could change the backflow protection required, a backflow prevention device shall be installed by the customer.

(4) No water service connection to any premises shall be installed or maintained by the Water Purveyor unless the water supply is protected as required by Chapter 62-555.360 of the Florida Administrative Code (FAC) and this Program. Service of water to any premises may be discontinued by the Water Purveyor if a backflow prevention assembly required by this program is not installed, tested and maintained, or if it is found that a backflow prevention device or any water assembly has been removed, by-passed, or if an unprotected cross-connection exists on the premises. Service will not be restored until such conditions or defects are corrected.

(5) The customer's system shall be open for inspection at all reasonable times to authorized



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representatives of the City of Pembroke Pines to determine whether cross-connections or other structural or sanitary hazards, including violations of these regulations exist. Water service may be discontinued after reasonable notice to the Consumer if a violation of this Program exists on the premises, and such other precautionary measures may be taken as are deemed necessary to eliminate any danger to the potable water. Water service shall not be restored until the danger had been eliminated in compliance with the provisions of this Program. If inspection access is not granted, the connection shall be fitted with an RP assembly by the customer.

(6) An approved backflow-prevention assembly shall be installed by the customer on each service line to a customer's water system at or near the property line or immediately inside the building being served; but in all cases, before the first branch line leading off the service line wherever the following conditions exist:

- a. In the case of premises having an auxiliary water supply which is not or may not be of safe bacteriological or chemical quality and which is not acceptable as an additional source by the Director, or his designee, the public water system shall be protected against backflow from the premises by installing a backflow prevention assembly or device in the service line appropriate to the degree of hazard.
- b. In the case of premises on which any industrial fluids or any other objectionable substance is handled in such a fashion as to create an actual or potential hazard to the public water system, the public system shall be protected against backflow from the premises by installing a backflow prevention assembly in the service line appropriate to the degree of hazard. This shall include the handling of process waters and waters originating from the utility system which have been subject to deterioration in quality.



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c. In the case of premises having (1) internal cross-connections that cannot be permanently corrected and controlled, or (2) intricate plumbing and piping arrangements or where entry to all portions of the premises is not readily accessible for inspection purposes, making it impracticable or impossible to ascertain whether or not dangerous cross-connections exist, the public water system shall be protected against backflow from the premises by installing a backflow prevention device assembly in the service line.

(7) The type of protection assemblies in Section C(8) of this Section shall depend upon the degree of hazard which exists as follows:

a. In the case of any premises where there is an auxiliary water supply as stated in Section C(2) of this Section and it is not subject to any of the following rules, the public water system shall be protected by an approved air-gap separation or an approved reduced pressure principle backflow prevention assembly.

b. In the case of any premises where there is water or substance that would be objectionable but not hazardous to health, if introduced into the public water system, the public water system shall be protected by an approved dual or double check valve assembly as determined by the Director.

c. In the case of any premises where there is any material dangerous to health which is handled in such a fashion as to create an actual or potential hazard to the public water system, the public water system shall be protected by an approved air gap separation or an approved reduced pressure principle backflow prevention assembly. Example of

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premises where these conditions will exist include sewage treatment plants, sewage pumping station, chemical manufacturing plants, hospitals, mortuaries and plating plants.

d. In the case of any problems where there are “un-controlled” cross-connections, either actual or potential, the public water system shall be protected by an approved air-gap separation or an approved reduced pressure principle backflow prevention assembly at the service connection.

e. In case of any 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 public water system shall be protected against backflow by backpressure or backsiphonage from the premises device in the service line. In this case, maximum protection will be required; that is, an approved air-gap separation or an approved reduced pressure principle backflow prevention assembly shall be installed in each service to the premises.

(8) The minimum backflow protection to be provided and the different categories of facilities that require backflow preventers, as required by the City, are listed in Table 62-555.360-2 of the Florida Administrative Code, as may be amended from time to time.

(9) Any backflow prevention assembly required herein shall be of a model and size approved by the Director of Utilities or his/her designee. The term “Approved Backflow Prevention Assembly” shall mean a device that has been manufactured in full conformance with the standards established by the American Water Works Association entitled: 1.) AWWA C510-97 - Double Check Valve Backflow Prevention Assembly and 2.) AWWA C511-97 Reduced Pressure Principle and Double Check Valve Backflow

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Prevention Assembly, as may be amended from time to time, as well as the standards set forth by the Foundation for Cross-Connection Control and Hydraulic Research of the University of Southern California for all devices, as may be amended from time to time.

(10) All presently installed backflow prevention assemblies which do not meet the requirements of this section but were approved assemblies for the purposes described herein at the time of installation and which have been properly maintained and tested yearly, may be excluded from the requirements of these rules so long as the Director of Utilities is assured that they will satisfactorily protect the utility system. Whenever the existing assembly is moved from the present location or requires more than minimum maintenance or when the Director, or his designee, finds that the maintenance constitutes a hazard to health, the unit shall be replaced by a backflow prevention assembly meeting the requirements of this section.

(11) The Public Services Department shall evaluate the customer's premises at an existing, i.e., previously constructed, service connection whenever the customer connects to a reclaimed water distribution system, whenever an auxiliary water system is discovered on the customer's premises, whenever a prohibited or inappropriately protected cross-connection is discovered on the customer's premises, or whenever the customer's premises is altered in a manner that could change the backflow protection required at or for a service connection to the customer.

a. The owner/consumer or authorized representative shall accompany the Utilities Representative during the inspection of the premise(s).

b. A letter of notification shall be sent to the owner/consumer or authorized representative indicating what corrective measures must be taken, type of device or assembly that needs to be installed and time limit for the installation to be completed.

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c. A questionnaire may be used to evaluate customers' premises. Also, reviews of construction plans or pertinent records, on-site inspections, or any combination thereof may be used for evaluations.

(12) A consumer must immediately notify the Public Services Department if the consumer's potable water system is or has potentially been contaminated or if there is a reason to believe that backflow has occurred from the consumer's private water system to the public potable water system.

(13) No water will be supplied to any newly constructed service connection with a backflow preventer that requires testing before the Public Services Department receives a satisfactory test report.

#### E. TESTING AND REPAIR

(1) It shall be the duty of the customer-user at any premises where backflow prevention assemblies are installed to have certified inspections and operational tests made at the required intervals. In those instances where the Director of Utilities, or his designee, deems the hazard to be great enough, he may require certified inspections at more frequent intervals. These inspections and tests shall be performed by the assembly manufacturer's representative, or by a certified tester approved by the Director of Utilities, or his designee. It shall be the duty of the Director, or his designee, to see that these timely tests are made. The customer-user shall notify the Director, or his designee, in advance when the tests are to be undertaken so that he or his representative may witness the tests if it is so desired. These assemblies shall be repaired, overhauled, or replaced at the expense of the customer-user whenever said assemblies are found to be defective. Records of such test, repairs, and overhaul shall be kept and copies sent to the Public Service Department Environmental Services Division within ten (10) business days after the completion of any testing and/or repair work. An Annual Backflow Test Report Administration Fee (per report) will be charged to the consumer as determined by City Fee Schedule. This testing is

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not required on City installed Dual Check Devices on single family residential service connections.

(2) Any time that repairs to backflow prevention assemblies are deemed necessary, whether through annual or required testing or routine inspection by the owner or by the Department of Public Utilities, these repairs must be completed within a specified time in accordance with the degree of hazard. In no case shall this time period exceed: 15 days for Hazard-Health and 30 days for Hazard-Plumbing/Pollution degrees of hazard.

(3) Nothing herein shall relieve the consumer of the responsibility for conducting, or causing to be conducted, periodic surveys of water use practices on his premises to determine where there are actual or potential cross-connections in the consumer's water system through which contaminants or pollutants could flow back into a public water system or potable consumer's water system.

(4) It shall be unlawful for any customer or certified tester/repairer to submit any record to the Public Services Department that is false or incomplete in any material respect. It shall be unlawful for any customer or certified tester to fail to submit to the Public Services Department any record, which is required by this program. Such violations may result in any of the enforcement actions outlined in PENALTY FOR NON-COMPLIANCE section.

(5) A courtesy notice will be sent to the owner/consumer of record prior to the testing or replacement due date as an advance notice of backflow testing requirements. Lack of notice by the City does not relieve the owner/consumer of the testing requirement. A subsequent notice will be sent if the consumer fails to test the assembly by the required test due date. In the event that the assembly is not tested or replaced after the second notice a final notice will be sent and will require compliance within 30 days. Failure to comply with the final notice shall be a violation of this Program and deemed to be in non-compliance.

#### F. DESIGNATED FACILITIES

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(1) Facilities that have been identified where backflow preventers are required are listed in Table 62-555.360-2 of the Florida Administrative Code, as may be amended from time to time. All commercial or business enterprises that are not residential are required to install an RP assembly.

(2) Backflow preventers may be required by the Director of Utilities, or his designee, for other facilities not listed if deemed necessary to protect the water system from possible contamination.

#### G. PENALTY FOR NON-COMPLIANCE

(1) Water service may be discontinued after reasonable notice to the Customer if a violation of this Program exists on the premises, and such other precautionary measures may be taken as are deemed necessary to eliminate any danger to the potable water. Water service will be discontinued if the proper backflow prevention assembly is not installed or not tested as required or not repaired when the assembly fails to meet minimum design standards. Water service shall not be restored until the danger had been eliminated in compliance with the provisions of this Program.

(2) All field visits are subject to a charge and shall be paid by the consumer as determined by City Fee Schedule.

(3) Failure of a customer to submit any record by a certified tester required by this program, or the submission of falsified reports/records may result in a charge as enumerated in the City Fee Schedule.

#### H. RECORDS

(1) An inventory of backflow prevention assemblies devices or air gaps on non-fire flow lines will be maintained by the Public Services Department. An inventory of backflow prevention assemblies on fire flow lines will be maintained by the Fire Department Fire Prevention Division. This inventory should include, at a minimum, the following:

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- a. Location of the backflow preventer or air gap (adequate details to locate the backflow preventer).
- b. Description of hazard isolated.
- c. Type, size, make, model, static line pressure, and serial number of backflow prevention assembly or air-gap details.
- d. All field test reports should include at a minimum, the following:
  - 1. Name and certification number of the backflow prevention assembly tester.
  - 2. Field-test results
  - 3. Repairs performed to obtain acceptable test results.
  - 4. Repair history.
  - 5. Tester's signature.
  - 6. Type, size, make, model, and serial number of backflow prevention assembly or field tagging.
  - 7. Test equipment calibration information.
  - 8. Date and time of the test.

~~(1)~~(2) The Public Services Department shall maintain all correspondence with its customers for a minimum of seven years.

**SECTION 4.** All Ordinances or parts of Ordinances, Resolutions or parts of Resolutions in conflict herewith be, and the same are hereby repealed to the extent of such conflict.

**SECTION 5.** If any clause, section, or other part or application of this Ordinance shall be held by any court of competent jurisdiction to be unconstitutional or invalid, such unconstitutional or invalid part or application shall be considered as eliminated and so not affecting the validity of the remaining

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portions or applications remaining in full force and effect.

**PASSED AND ADOPTED BY THE CITY COMMISSION OF THE CITY OF  
PEMBROKE PINES, FLORIDA, ON THE FIRST READING, THIS \_\_\_\_ DAY  
OF \_\_\_\_\_, 2016.**

**PASSED ADOPTED BY THE CITY COMMISSION OF THE CITY OF  
PEMBROKE PINES, FLORIDA, ON THE SECOND AND FINAL READING,  
THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2016.**

CITY OF PEMBROKE PINES, FLORIDA

By: \_\_\_\_\_

ATTEST:

MAYOR FRANK C. ORTIS

\_\_\_\_\_  
MARLENE GRAHAM, CITY CLERK

ORTIS \_\_\_\_\_

APPROVED AS TO FORM:

CASTILLO \_\_\_\_\_

SCHWARTZ \_\_\_\_\_

SHECHTER \_\_\_\_\_

\_\_\_\_\_  
OFFICE OF THE CITY ATTORNEY

SIPLE \_\_\_\_\_

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