

ORDINANCE NO. 59 88

AN ORDINANCE OF THE TOWN OF JUPITER, FLORIDA, AMENDING CHAPTER 25 OF THE CODE OF ORDINANCE ENTITLED WATER SYSTEM; CREATING ARTICLES OF DIVISION IN SAID CHAPTER; ADDING A NEW ARTICLE III THEREOF, ENTITLED CROSS-CONNECTIONS, BACKFLOW PREVENTION AND CROSS-CONNECTION CONTROL PROGRAM; DEFINING SAME AND OTHER TERMS IN REFERENCE THERETO; ESTABLISHING A PROGRAM AND POLICY FOR THE CONTROL OF BACKFLOW AND CROSS-CONNECTIONS; PROHIBITING IMPROPER AND UNSAFE PRACTICES WHICH PROVIDE FOR CROSS-CONNECTIONS AND BACKFLOW OF WATER; REQUIRING THE INSTALLATION OF APPROVED BACKFLOW PREVENTION DEVICES; AND PROVIDING FOR A PENALTY.

WHEREAS, the Town of Jupiter , as the entity owning and managing a public water system, is required by the Palm Beach County Environmental Control Rule #2 to establish a cross-connection control program for the purpose of detecting and preventing cross-connections that create dangers to the public health from contamination of water; and,

WHEREAS, the Town Council of the Town of Jupiter deems it necessary and advisable to adopt the within ordinance providing for a cross-connection control program for the Town of Jupiter for the protection of the health, safety, welfare and well being of its citizens and residents and of the public in general as the consumers of this water utility service; NOW THEREFORE,

BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF JUPITER, FLORIDA, THAT:

Section 1. Chapter 25 of the Code of Ordinances of the Town of Jupiter is hereby amended by the creation of Articles of Division in said chapter and by the addition of a new Article to be numbered Article III, which said Article reads as follows:

Chapter 25 - Water System

|      |      |   |
|------|------|---|
| Art. | I.   | In general, Sec 25-1 to Sec 25-45   |
| Art. | II.  | Water Shortage Conservation Program Sec 25-46 to Sec 25-61  |
| Art. | III. | Cross-Connections, Backflow Prevention and Cross-Connection Control Program, Sec 25-101 to Sec 25-123 |

ARTICLE III. CROSS-CONNECTIONS, BACKFLOW  
PREVENTION AND CROSS-CONNECTION CONTROL  
PROGRAM

Sec. 25-101. Definitions.

For the purpose of this chapter the following words, terms and phrases shall be interpreted as having the following meanings unless some other meaning or interpretation is plainly intended.

**APPROVED.** a) The term approved, as herein used in reference to a water supply that has been approved by the Florida Department of Environmental Regulation. b) The term approved, as herein used in reference to air-gap separation, a double check valve assembly, or a reduce pressure principle backflow prevention device or other backflow prevention device or method, shall mean by approval of the Jupiter Water System.

**AUXILIARY WATER SYSTEM.** The term Auxiliary water system means any water supply on or available to the premises other than the department's approved public potable water supply. The auxiliary supply may include water from another public water supply or any natural source such as a well, spring, river, stream, harbor, 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.

**BACKFLOW.** The term backflow shall mean the undesirable reversal of the flow of water or other liquids, mixtures, gases, or other substances into or towards the distribution piping of a potable supply of water from any source or sources.

**BACKSIPHONAGE.** The term backsiphonage shall mean a form of backflow due to the sudden reduction of pressure in the potable water supply system.

**BACKFLOW PREVENTION DEVICE.** The term backflow prevention device shall mean any effective device or method used to prevent backflow into a potable water system. The type of device used shall be based on the degree of hazard, either existing or potential and as approved by the Water System.

a. **AIR-GAP SEPARATION.** The term air-gap separation shall mean a physical separation between the free flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel. It is measured as the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture, or other device and the flood level rim of the receptacle. An approved air-gap separation shall be a distance of at least two (2) times the diameter of the supply pipe measured vertically above the top rim of the vessel - with a minimum distance of one (1) inch. (When an air-gap is used at the service connection to prevent the contamination or pollution of the public potable water system, an emergency bypass shall be installed around the air-gap system and an approved reduced pressure principle device shall be installed in the bypass system.)

b. **DOUBLE CHECK VALVE ASSEMBLY - APPROVED.** The term approved double check valve assembly shall mean an assembly of at least two independently acting approved check valves, including tightly closing shut-off valves on each side of the check valve assembly and suitable connections for testing the water tightness of each check valve. The entire assembly shall meet the design and performance specifications and approval of a recognized and Town approved testing agency for backflow prevention devices. To be approved these devices must be readily accessible for in-line maintenance and testing.

- c. **REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION DEVICE - APPROVED.** The term approved reduced pressure principle backflow prevention device shall mean 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 check valves shall be less than the supply pressure. In case of leakage of either check valve, the differential relief valve, by discharging to the atmosphere, shall operate to maintain the pressure between the checks at less than the supply pressure. The unit shall include tightly closing shut-off valves located at each end of the device and each device shall be fitted with properly located test cocks for testing of the check and relief valves. To be approved these devices must be readily accessible for in-line maintenance and testing, and be installed in a location where no part of the device will be submerged.
- d. **PRESSURE VACUUM BREAKER.** The term pressure vacuum breaker shall mean a backflow prevention device which is operated by atmospheric pressure in combination with the force of gravity. This unit shall be designed to work on a vertical plane only. The one moving part consists of a poppet valve which is activated by a spring and must be carefully sized to slide effectively to shut off the reverse flow of water. This type of vacuum breaker does not require a negative pressure to react and can be used on a pressure side of a valve.

**BACKFLOW PREVENTION DEVICE TECHNICIAN - CERTIFIED.** The term certified backflow prevention device technician shall mean a person who has proven his competency to the satisfaction of the Jupiter Water System. Each person who is certified to make competent tests or to repair, overhaul and make reports on backflow prevention devices shall be conversant with applicable laws, rules and regulations, and shall have attended and successfully completed the University of Florida TREEO (Training, Research and Education for Environmental Occupations) Certification Program for Backflow Prevention Device Testers, or other programs acceptable to the Water System.

**CONTAMINATION.** The term contamination shall mean an impairment of the quality of the Town water supply by sewage, industrial fluids or any other foreign substance to a degree which creates a hazard to the public health through poisoning or through the spread of disease.

**CROSS-CONNECTION.** The term cross-connection means any real or potential unprotected connection between any part of the Jupiter Water System used or intended to supply water for drinking purposes and any source or system containing water or substances that is not or cannot be approved as safe, wholesome and potable for human consumption.

**DIRECTOR.** The term director shall mean the Director of the Water System, who shall be responsible for the management of the affairs of such System, and for the enforcement of the provisions set forth in this Ordinance.

**HAZARD - HEALTH.** The term health hazard shall mean an actual or potential threat of contamination or pollution of a physical or toxic nature to the public potable water system or the consumer's potable water system to such a degree of intensity that there would be a danger to health.

**HAZARD - PLUMBING.** The term plumbing hazard shall mean a plumbing type cross connection in a consumer's potable water system that has not been properly protected by a vacuum breaker, air-gap separation or other device. Unprotected plumbing type cross-connections are considered to be a health hazard.

**HAZARD - POLLUTION.** The term pollution hazard shall mean an actual or potential threat to the physical properties of the water system or the potability of the public or the consumer's potable water system but which would not constitute a health or system hazard, as defined. The maximum degree or intensity of pollution to which the potable water system could be degraded under this definition would cause a nuisance, or be aesthetically objectionable, or could cause minor damage to the system or its appurtenances.

**HAZARD - SYSTEM.** The term system hazard shall mean an actual or potential threat of severe danger to the physical properties of the public 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.

**INDUSTRIAL FLUIDS.** The term industrial fluids shall mean any fluid or solution which may be chemically, biologically or otherwise contaminated or polluted in a form or concentration, such as would constitute a system health, pollution or plumbing hazard if introduced into an approved water supply.

**INDUSTRIAL PIPING SYSTEM - CONSUMER'S.** The term consumer's industrial piping system shall mean any system used by the consumer for transmission of or to store any fluid, solid or gaseous substance other than an approved water supply. Such a system would include all pipes, conduits, tanks, receptacles, fixtures, equipment and appurtenances to produce, convey or store substances which are or may be polluted or contaminated.

**OWNER, TENANT, OCCUPANT AND CONSUMER.** The terms , owner, tenant, occupant and consumer as used herein, shall include the executors, administrators, successors and assigns of the party referred to; and the covenants and agreement contained in any contract between the department and its consumers shall be binding upon and inure to the benefit of the successors, heirs, executors, administrators or assigns of the respective parties thereto. The consumer is considered the owner, as distinguished from a tenant, when the property serviced is recorded or stands of record in his name.

**POLLUTION.** The term pollution shall mean an impairment of the 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 it for domestic use.

**WATER - POTABLE.** The term potable water shall mean water from any source which has been investigated by the Florida Department of Environmental Regulation and which has been approved for human consumption.

**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. The utility shall be one that is operating under a valid permit from the Department of Environmental Regulation. As used herein the terms water purveyor and water system may be used synonymously.

**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 end of the meter. There should be no unprotected takeoffs from the service line ahead of any meter or backflow prevention device located at the point of delivery to the customer's water system. Service connection shall also include temporary water service connections from fire hydrants and all other temporary or emergency water service connections from the public potable water system.

**WATER - USED.** The term used water shall mean 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.

**Section 25 - 102 Responsibility of Town for Cross-Connection Control.**

Under the Rules of the Florida Department of Environmental Regulation, Section 17-22.107, relating to cross-connections, the water purveyor has the primary responsibility to prevent water from unapproved sources, or any other substances, from entering the water system. Therefore, upon detection of a prohibited cross-connection, the Jupiter Water System is directed to either eliminate the cross-connection by requiring the installation of an appropriate backflow prevention device or discontinue service until the contaminant source is eliminated.

**Section 25 - 103 Responsibility of Consumers for Cross-Connection Control.**

The consumer's responsibility starts at the water service connection from the public potable water system and includes all of his water systems. The consumer, at his own expense, shall install, operate, test and maintain approved backflow prevention devices as directed by the Jupiter Water System. The consumer shall maintain accurate records of test and repairs made to backflow prevention devices and provide the Jupiter Water System with copies of such records. The records shall be on forms approved or provided by the Jupiter Water System. In the event of accidental pollution or contamination of the public or consumer's potable water system due to backflow on or from consumer's premises, the owner shall promptly take steps to confine further spread of pollution or contamination within the consumer's premises, and shall immediately notify the Jupiter Water System of the hazardous condition.

**Section 25 - 104 Purpose.**

The purpose of a cross-connection control program is to prevent waterborne diseases and contaminants from entering the distribution system and thus the water consumed by the public. The program is intended to prevent delivered water - water that has passed beyond the public water system and into the private distribution systems of consumers - from re-entering the public distribution system and being subsequently delivered to customers. The program aims to protect the Public Water System and its consumers from those water-using establishments which could possibly alter the quality and safety of the community water supply through backflow and/or cross-connection.

**Section 25 - 105 Objectives.**

The objectives of the Jupiter Water System's Cross-Connection Control Program are as follows:

1. To protect the Town of Jupiter Public Water System from the possibility of contamination by isolating within its consumers' private water systems, contaminants or pollutants which could, under adverse conditions, backflow through uncontrolled cross-connections into the public water system.
2. To eliminate or control existing cross-connections, actual or potential, between the consumer's in-plant potable water system(s) and non-potable water system(s) plumbing fixtures, and industrial piping systems.
3. To provide a continuing inspection program of cross-connection control, which will systematically and effectively control all actual or potential cross-connections which may be installed in the future.

**Section 25 - 106 Authority for Inspection.**

The director and other duly authorized employees of the Town who are appointed by the director, bearing proper credentials and identification, shall be permitted to enter upon all properties for the purpose of sampling and testing of the water, or make inspections and observations of the connections to the waterworks system. Refusal to allow inspection of the connections to the water system or refusal to allow inspection of any water using equipment, plumbing or other suspected cross-connections shall cause the water system to discontinue service and shall constitute a violation of this Article.

**Section 25 - 107 New Construction.**

A) All new non-residential construction shall have installed a reduced pressure principle backflow prevention device in accordance with the terms set forth in this Ordinance.

B) All new residential multi-family construction over one (1) story shall have installed a reduced pressure principle backflow prevention device in accordance with the terms set forth in this Ordinance.

**Section 25 - 108 Existing Facilities.**

In order to determine the degree of hazard to the public potable water system, a survey shall be made of the consumer's presently installed water system. This survey need not be a detailed inspection of the location or disposition of the water lines, but can be confined to establishing the water uses on the premises, the existence of cross-connections, and the availability of auxiliary or used water supplies. On site inspections shall be made of existing facilities. Should any devices or plumbing changes be required, a follow-up inspection will be made of the same facilities at a later date.

Existing Consumers will be given a reasonable amount of time to install and test devices. Failure to comply with the time limits for installation and testing of devices shall result in discontinuance of water service and constitute a violation of this chapter until compliance is achieved.

**Section 25 - 109 Backflow Prevention Devices - Approval.**

Any backflow prevention device required herein shall be of a model and size approved by the Town of Jupiter Water System. The term "Approved Backflow Prevention Device" shall mean a device that has been manufactured in full conformance with the standards established by the American Water Works Association entitled:

"AWWA C506-69 Standards for Reduced Pressure Principle and Double Check Valve Backflow Prevention Devices":

as well as the standards set forth by the Foundation for Cross Connection Control and Hydraulic Research of the University of Southern California established by:

Specification of Backflow Prevention Devices - #69-2 dated March 1969" or the most current revised standards of such Association and Foundation as are from time to time promulgated.

**Section 25 - 110 Backflow Prevention Devices - Installation.**

All approved backflow prevention devices shall be installed in accordance with the water system's requirements and manufacturer's instructions, and shall be owned, tested, and maintained by the consumer.

**Section 25 - 111 Owner's Responsibility of Backflow Prevention Device Installations**

The owner's responsibility is to make proper installation of backflow prevention devices in accordance with the manufacturer's installation instructions and those furnished by the Jupiter Water System. The owner is also responsible to make sure a device is working properly when it is installed, and is required to furnish the following information to the Jupiter Water System within 5 days after a reduced pressure principle backflow preventer (RP) double check valve assembly (DCVA) or pressure vacuum breaker (PVB) is installed:

1. Service address where device is located.
2. Owner
3. Description of device's location.
4. Date of Installation.
5. Type of Device.
6. Manufacturer.
7. Model Number
8. Serial Number

All RP, DCVA, and PVB are required to be tested following installation by a certified backflow prevention device technician.

**Section 25 - 112 Testing of Backflow Prevention Devices Required.**

It shall be the duty of the customer-user at any premises where reduced pressure backflow prevention devices (RP), double check valve assemblies (DCVA), and pressure vacuum breakers (PVB) are installed to have thorough inspections and operational tests made at least once a year or more often in those instances where inspections indicate a need. These inspections and tests shall be at the expense of the water user and be performed by a certified backflow device technician. The water purveyor will notify the customer-user when tests are required and supply the necessary test forms. These forms will be completed and returned to the water purveyor by the date indicated.

**Section 25 - 113 Testing Procedures.**

All approved backflow prevention devices are required to be tested with a minimum frequency of once per year. Testing requires a water shutdown usually lasting five (5) to twenty (20) minutes. For facilities that require an uninterrupted supply of water, provisions shall be made for a "parallel installation" of backflow prevention devices. The Water System will not accept a by-pass around a backflow preventer when the device is in need of testing, repair or replacement.

**Section 25 - 114 Testing and Repair by Certified Technician.**

(a) All reduced pressure principle backflow preventers, double check valve assemblies, and pressure vacuum breakers shall be tested at the time of installation and afterwards with a minimum frequency of once per year by a certified backflow prevention device technician. Certified test results shall be forwarded to the water system within seven (7) calendar days following the completion of the testing procedure. The water system may require more frequent testing should the operating history of the device dictate.

(b) All repairs for backflow prevention devices which are required to be tested shall be conducted by certified backflow prevention device technicians.

**Section 25 - 115 Dual System of Pipes Required on Property where water is furnished by the Town and by Private Supply.**

If any person, as the owner of the property, shall have upon such property a supply of water other than the supply of water furnished by the department, and also have upon such property a water supply furnished by the department, such owner shall have and is hereby required to have a dual system of pipes upon the property, one system of pipes being for water supplied by the department and the other system of pipes being for the supply of water from the private supply. It shall be unlawful for the (2) systems to be connected together in any manner except as may be permitted by this Article.

**Section 25 - 116 No Cross-Connection to Town Water System from Other Facilities**

(a) In case a consumer has a private supply of water, the Town shall have the right to refuse service to the consumer where the pipes containing Town water are cross-connected to private supplies.

(b) It shall be unlawful for any person to connect or cause to be connected to the Town water pipes, by any means whatsoever, other pipes containing water from individual or public supply other than water furnished by the Town unless he has fully complied with the rules and regulations for backflow prevention as set out in this Article.

**Section 25 - 117 Notice to Owner to Disconnect.**

Where unauthorized cross-connections exist, the owner, his agent, occupant or tenant shall be promptly notified to disconnect the same forth with.

**Section 25 - 118 Cross-Connections Prohibited: Property owner held responsible for Violation.**

It shall be unlawful for any person, owner, agent or tenant to make or allow others to make a cross-connection of water pipes with any other pipelines, public or private, on the property; and the owner of such property shall be held responsible for the violation thereof.

**Section 25 - 119 Control of Backflow.**

Approved backflow prevention devices shall be installed on the service connection to any premises that the department has identified as having a potential for backflow. Such devices and installations shall be subject to inspection and approval by the department.

**Section 25 - 120 Use of Fire Hydrants for other than Fire Fighting Purposes.**

The operation of Fire Hydrants by other than authorized personnel is prohibited. The department may permit the use of water from a fire hydrant for construction or other purposes provided the applicant shall properly apply for, and the department attach, a hydrant meter, backflow prevention device, and hand-operated valve. Only department employees or other authorized Town employees may operate the hydrant to provide water to the meter. The necessary fees for the installation of the hydrant meter must have been paid in advance. The prevailing rates for water provided through the meter are billed in the usual way.

Section 25 - 121 Enforcement

The director shall endeavor to assure compliance with the requirements of this chapter by conference and persuasion. If such efforts are futile, the director shall take formal action as provided hereafter.

In any case involving a person who has violated or failed to comply with any of the provisions of these regulations the procedures for enforcement shall be as follows:

(a) The director shall give notice to such person by mail or delivery stating the specifics of the failure of compliance and requiring that the person remedy the failure within a maximum time period of seventy-two (72) hours.

(b) If, after the expiration of seventy-two (72) hours, or lesser time period, such person has not remedied the failure, the director shall report the facts, in writing, to the Town Manager.

(c) Subject to the direction of the Town Manager, the director thereupon, without further notice to the violator may cause the water service from the waterworks system to be discontinued for such person.

(d) In any case where water service is discontinued for enforcement purposes, the restoration of such service shall be conditioned on full compliance and payment by such person of any expense incurred in the enforcement proceeding and in the restoration of service.

Section 25 - 122 Reviewing Authority and Amendment

The Town Council shall be the reviewing authority for all administrative action or determinations by the Jupiter Water System. Notice of an intent to appeal and request for a hearing shall be addressed to the Town Manager, in writing, and shall detail the nature of the appeal which he shall schedule for the Town Council.

Section 25 -123 Providing Penalty for Violations.

Any person violating any provision of this Article shall be deemed guilty of an offense against the Town and, upon conviction thereof, shall be punished by a fine not exceeding Five Hundred Dollars (\$500.00) or by imprisonment for a period not exceeding thirty (30) days or by both such fine and imprisonment. Each day any such violation shall continue shall constitute a separate offense and shall be punishable as such. Further, any person violating any provision of this Article shall become liable to the Town for any expense, loss or damage suffered by the Town by reason of such violation.

Section 2 . Severability. If a Section, subsection, sentence, clause or provision of this Ordinance is held invalid, the remainder of this Ordinance shall not be affected by such invalidity.

Section 3 . Permission to codify this Ordinance is hereby granted.

Section 4 . This Ordinance shall take effect immediately upon adoption.

Upon first reading this 5<sup>th</sup> day of October, 1988, the foregoing Ordinance was offered by Council Member Donald L. Osha, who moved its adoption. The motion was seconded by Council Member Thomas J. McCarthy, and upon being put to a roll call vote, the vote was as follows:

|                                | AYE           | NAY   |
|--------------------------------|---------------|-------|
| MAYOR, MARY D. HINTON          | <u>x</u>      | _____ |
| VICE-MAYOR, DONALD L. OSHA     | <u>x</u>      | _____ |
| COUNCILMAN, ROBERT CHAPMAN     | <u>absent</u> | _____ |
| COUNCILMAN, THOMAS McCARTHY    | <u>x</u>      | _____ |
| COUNCILWOMAN, KAREN J. GOLONKA | <u>x</u>      | _____ |

Upon second reading this 18<sup>th</sup> day of October, 1988, the foregoing Ordinance was offered by Council Member Robert Chapman, who moved its adoption. The motion was seconded by Council Member Karen Golonka, and upon being put to a roll call vote, the vote was as follows:

|                                | AYE      | NAY   |
|--------------------------------|----------|-------|
| MAYOR, MARY D. HINTON          | <u>x</u> | _____ |
| VICE-MAYOR, DONALD L. OSHA     | <u>x</u> | _____ |
| COUNCILMAN, ROBERT CHAPMAN     | <u>x</u> | _____ |
| COUNCILMAN, THOMAS McCARTHY    | <u>x</u> | _____ |
| COUNCILWOMAN, KAREN J. GOLONKA | <u>x</u> | _____ |

The Mayor thereupon declared the foregoing Ordinance duly passed and adopted this 18<sup>th</sup> day of October, 1988.

TOWN OF JUPITER, FLORIDA

BY:

Mary D. Hinton  
MARY D. HINTON, MAYOR

ATTEST:

Jean H. Beck  
JEAN H. BECK, TOWN CLERK