

TOWN OF HILLSBORO BEACH, FLORIDA

ORDINANCE NO. 248

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

17
18
19

20
21
22
23

24
25

26
27

28
29
30
31
32
33
34
35
36
37

AN ORDINANCE OF THE TOWN COMMISSION OF THE TOWN OF HILLSBORO BEACH, FLORIDA, PROVIDING FOR THE PROTECTION OF THE PUBLIC POTABLE WATER DISTRIBUTION SYSTEM FROM CONTAMINATION OR POLLUTION DUE TO CROSS-CONNECTION, BACKFLOW OR BACK-SIPHONAGE OF CONTAMINANTS OR POLLUTANTS THROUGH THE WATER SERVICE CONNECTION; PROVIDING FORE DEFINITIONS; PROVIDING FOR BACKFLOW PREVENTION DEVICES; PROVIDING FOR INSPECTION; TESTING, AND MONITORING OF BACKFLOW PREVENTION DEVICES; PROVIDING FOR BACKFLOW PREVENTION PERMITS; PROVIDING FOR CONFLICTS; PROVIDING FOR CODIFICATION; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Town of Hillsboro Beach desires to conform to the Department of Environmental Regulation (DER), of the State of Florida, Chapter 17-555, Florida Administrative Code, as now written and as subsequently amended; and,

WHEREAS, the State Department of Environmental Regulation is requiring community water systems to establish a routine cross connection program for the purpose of detecting and preventing cross connections that create an imminent and substantial danger to the public health by and from contamination due to the cross connection; and,

WHEREAS, it is the intent of the Town to enact and enforce an ordinance providing for such requirements, standards and safeguards;

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COMMISSION OF THE TOWN OF HILLSBORO BEACH, FLORIDA, THAT:

Section 1. The foregoing “WHEREAS” clauses are hereby ratified and confirmed as being true and correct and are hereby made a specific part of this Ordinance.

Section 2. Chapter _____ entitled _____ of the Town’s Code of Ordinances is hereby amended as follows:

TOWN OF HILLSBORO BEACH, FLORIDA

ORDINANCE NO. 248

1 Sec. _____. Short Title.

2
3 _____ This article shall be known as “The Hillsboro Beach Cross Connection Control
4 and Backflow Prevention Ordinance”.

5
6 **Section _____ . Definitions.**

7
8 The following terms and phrases when used in this chapter shall have the meaning
9 ascribed to them in this section except where the context clearly indicates a different
10 meaning. Words used in the present tense shall include the future, and the singular
11 number includes the plural, and the plural the singular.

12
13
14 (1) Air-gap: The unobstructed vertical distance through the free atmosphere between
15 the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture,
16 or other device and the flood level rim of such vessel. An approved air-gap shall be at
17 least double the diameter of the supply pipe; measured vertically, above the top of the rim
18 of the vessel and, in no case, less than two (2) inches. When an air-gap is used at the
19 service connection to prevent the contamination or pollution of the public potable water
20 system, an emergency bypass shall be installed in the bypass system which shall include
21 an approved back-flow prevention device.

22
23 (2) Approved: Accepted by the Building Official or his designee as meeting an
24 applicable specification stated or cited in this section, or as suited for the proposed use.

25
26 (3) Auxiliary water supply: Any water supply on, or available to, the premises other
27 than the purveyor's approved public potable water supply. These auxiliary waters may
28 include water from another purveyor's spring, river, stream, harbor, or the like, or “used
29 waters” or “industrial fluids”. These waters may be polluted or contaminated or they may
30 be objectionable and constitute an unacceptable water source over which the water
31 purveyor does not have sanitary control.

32
33 (4) Backflow: The flow of water or other liquid, mixture or substance under
34 pressure into the distributing pipes of a potable water supply system from any source or
35 sources other than its intended source.

36
37 (5) Backflow preventer: A device or means designated to prevent backflow or back-
38 siphonage.

TOWN OF HILLSBORO BEACH, FLORIDA

ORDINANCE NO. 248

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41

(6) Back-siphonage: The flow of water or other liquid, mixture or substance into the distributing pipes of a potable water supply stream from any source other than its intended source caused by the sudden reduction of pressure in the potable water supply system.

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

(8) Cross-connection: Any physical connection or arrangement of piping or fixtures between two (2) otherwise separate piping systems, one of which contains potable water and the other nonpotable water or industrial fluids of questionable safety, through which, or because of which, backflow or back-siphonage 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-connected 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 plug valves, spools, dummy sections of pipe, swivel or changeover devices, sliding multiport tube, solid connections, and the like.

a. Cross-connection control by containment: The installation of an approved backflow prevention device at the water service connection to any customer's premises where it is not physically and economically feasible to find and permanently eliminate or control all actual or potential cross-connections within the customer's water system; or the installation of an approved backflow prevention device 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.

b. Cross-connection controlled: A connection between a potable water system and a nonpotable water system with an approved backflow prevention device properly installed that will continuously afford the protection commensurate with the degree of hazard.

TOWN OF HILLSBORO BEACH, FLORIDA

ORDINANCE NO. 248

1 (9) Double check valve assembly: An assembly of two (2) independently operating
2 approved check valves with tightly closing shutoff valves on each side of the check
3 valves, plus properly located test cocks for the testing of each check valve. The entire
4 assembly shall meet the design and performance specifications and approval of a
5 recognized and Town-approved testing agency for backflow prevention devices. To be
6 approved, these must be readily accessible for in-line maintenance and testing.
7

8 (10) Hazard, degree of. The term is derived from an evaluation of the potential risk
9 to public health and the adverse effect of the hazard upon the potable water system, and
10 shall include:
11

12 a. Hazard, health: Any condition, device or practice in the water supply system
13 and its operation which could create or, in the judgment of the Utility Superintendent,
14 may create a danger to the health and well-being of the water consumer. An example of a
15 “health hazard” is a structural defect, including a cross-connection, in the water supply
16 system.
17

18 b. Hazard, plumbing: A plumbing-type cross-connection in a consumer's potable
19 water system that has not been properly protected by a vacuum breaker, air-gap
20 separation, or backflow prevention device. Unprotected plumbing-type cross-connections
21 are considered to be a health hazard.
22

23 c. Hazard, pollutional: An actual or potential threat to the physical properties of
24 the water system or to the potability of the public or the consumer's potable water system
25 but which would constitute a nuisance or be aesthetically objectionable or could cause
26 damage to the system or its appurtenances, but would not be dangerous to health.
27

28 d. Hazard, system: An actual or potential threat of severe damage to the physical
29 properties of the public potable water system or the consumer's potable water system or
30 of a pollutant or contaminant which would have a protracted effect on the quality of the
31 potable water in the system.
32

33 (11) Industrial fluids system: Any system containing a fluid or solution which may
34 be chemically, biologically or otherwise contaminated or polluted in a form or
35 concentration such as would constitute a health, system, pollutional or plumbing hazard if
36 introduced into an approved water supply. This may include, but shall not be limited to:
37 polluted or contaminated waters; all types of process waters and “used waters”
38 originating from the public potable water system which may have deteriorated in sanitary
39 quality; chemicals in fluid form; plating acids and alkalis; circulated cooling waters
40 connected to an open cooling tower and/or cooling waters that are chemically or
41 biologically treated or stabilized with toxic substances; contaminated natural waters such

TOWN OF HILLSBORO BEACH, FLORIDA

ORDINANCE NO. 248

1 as from wells, springs, streams, rivers, bays, harbors, irrigation canals or systems, and the
2 like; and oils, gases, glycerine, paraffins, caustic and acid solutions, and other liquid and
3 gaseous fluids used in industrial or other purposes or for fire-fighting purposes.

4
5 (12) Pollution: The presence of any foreign substance (organic, inorganic or
6 biological) in water which tends to degrade its quality so as to constitute a hazard or
7 impair the usefulness or quality of the water to a degree which does not create an actual
8 hazard to the public health but which does adversely and reasonably affect such waters
9 for domestic use.

10
11 (13) Pressure-type vacuum breaker: An assembly used to isolate entire irrigation
12 lines from potable water systems. It has the ability to withstand supply pressure for long
13 periods and to prevent backflow of toxic and nontoxic water into the potable water
14 system in back-siphonage conditions. To be approved, these devices must be readily
15 accessible for in-line maintenance and testing.

16
17 (14) Purveyor or Water purveyor. The owner or operator of the public potable water
18 system supplying an approved water supply to the public.

19
20 (15) Reduced pressure principle device: An assembly of two (2) independently
21 operating approved check valves with an automatically operating differential relief valve
22 between the two (2) check valves, tightly closing shutoff valves on either side of the
23 check valves, plus properly located test cocks for the testing of the check and relief
24 valves. The entire assembly shall meet the design and performance specifications and
25 approval of a recognized and Town approved testing agency for backflow prevention
26 assemblies. The device shall operate to maintain the pressure in the zone between the two
27 (2) check valves at a level less than the pressure on the public water supply side of the
28 device. At cessation of normal flow, the pressure between the two (2) check valves shall
29 be less than the pressure on the public water supply system side of the device. In case of
30 leakage of either of the check valves, the differential relief valve shall operate to maintain
31 the reduced pressure in the zone between the check valves by discharging to the
32 atmosphere. When the inlet pressure is two (2) pounds per square inch or less, the relief
33 valve shall open to the atmosphere. To be approved, these devices must be readily
34 accessible for in-line maintenance and testing and be installed in a location where no part
35 of the device will be submerged.

36
37 (16) Water:

38
39 a. Water, nonpotable: Water which is not safe for human consumption or
40 which is of questionable potability.

41

TOWN OF HILLSBORO BEACH, FLORIDA

ORDINANCE NO. 248

1 b. Water, potable: Any water which, according to recognized standards, is
2 safe for human consumption.

3
4 c. Water, service connections: The terminal end of a service connection from
5 the public potable water system; that is, where the water purveyor loses jurisdiction and
6 sanitary control over the water at its point of delivery to the customer's water system. If a
7 meter is installed at the end of the service connection, the service connection shall mean
8 the downstream end of the meter. There should be no unprotected takeoffs from the
9 service line ahead of any meter or backflow prevention device located at the point of
10 delivery to the customer's water system. "Service connection" shall also include water
11 service connection from a fire hydrant and all other temporary or emergency water
12 service connections from the public potable water system.

13
14 d. Water, used: Any water supplied by a water purveyor from a public potable
15 water system to a consumer's water system after it has passed through the point of
16 delivery and is no longer under the sanitary control of the water purveyor.

17
18 (17) Water system: The water system shall be considered as made up of two (2)
19 parts: The customer system and the utility system.

20
21 a. The "customer system" shall include those parts of the facilities beyond the
22 termination of the utility distribution system which are utilized in conveying utility-
23 delivered domestic water to points of use.

24
25 b. The "utility system" shall consist of the source facilities and the
26 distribution system; and shall include all those facilities of the water system under the
27 complete control of the utility, up to the point where the customer's system begins
28 (meter). The "source" shall include all components of the facilities utilized in the
29 production, treatment, storage and delivery of water to the distribution system. The
30 "distribution system" shall include the network of conduits used for the delivery of water
31 from the source to the customer's system.

32
33 **Section . Backflow prevention devices; when required; specifications.**

34
35 (a) No water service connection to any premises shall be installed or maintained by
36 the water purveyor unless the water supply is protected as required by state law and
37 regulation (Chapter 17-555, Florida Administrative Code) and this article. Service of
38 water to any premises shall be discontinued by the water purveyor if a backflow
39 prevention device required by this article is not installed, tested and maintained, or if it is
40 found that a backflow prevention device has been removed, bypassed, or if an
41 unprotected cross-connection exists on the premises. Service will not be restored until

TOWN OF HILLSBORO BEACH, FLORIDA

ORDINANCE NO. 248

1 such conditions or defects are corrected.

2
3 (b) The customer's system should be open for inspection at all reasonable times to
4 authorized representatives of the Town to determine whether cross-connections or other
5 structural or sanitary hazards, including violations of these regulations, exist. When such
6 a condition becomes known, the Utility Superintendent or his designee shall deny or
7 immediately discontinue service to the premises by providing for a physical break in the
8 service line until the customer has corrected the condition in conformance with state and
9 Town laws relating to plumbing and water supplies and the regulations adopted pursuant
10 thereto.

11
12 (c) An approved backflow prevention device shall be installed on each service line
13 to a customer's water system at or near the property line or immediately inside the
14 building being served and, in all cases, before the first branch line leading off the service
15 line, whenever the following conditions exist:

16
17 (1) In the case of premises having an auxiliary water supply which is not or may
18 not be safe bacteriologically or [in] chemical quality and which is not acceptable as an
19 additional source by the Utility Superintendent. The public water system shall be
20 protected against backflow from the premises by installing a backflow prevention device
21 in the service line appropriate to the degree of hazard.

22
23 (2) In the case of premises upon which any industrial fluids or any other
24 objectionable substance is handled in such a fashion as to create an actual or potential
25 hazard to the public water system, the public system shall be protected against backflow
26 from the premises by installing a backflow prevention device in the service line
27 appropriate to the degree of hazard. This shall include the handling of process waters and
28 waters originating from the utility system which have been subject to deterioration in
29 quality.

30
31 (3) In the case of premises having internal cross-connections that cannot be
32 permanently corrected and controlled, intricate plumbing and piping arrangements, or
33 where entry to all portions of the premises is not readily accessible for inspection
34 purposes, making it impracticable or impossible to ascertain whether or not dangerous
35 cross-connections exist, the public water system shall be protected against backflow from
36 the premises by installing a backflow prevention device in the service line. The type of
37 protective device required shall depend upon the degree of hazard which exists, as
38 follows:

TOWN OF HILLSBORO BEACH, FLORIDA

ORDINANCE NO. 248

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41

a. In the case of any premises where there is an auxiliary water supply as stated in this section, the public water system shall be protected by an approved air-gap separation or an approved reduced pressure principle backflow prevention device.

b. In the case of any premises where there is water or some 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 double check valve assembly.

(4) 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 device. Examples of premises where these conditions may exist include wastewater treatment plants, wastewater pumping stations, chemical manufacturing plants, hospitals, mortuaries and metal plating plants.

(5) In the case of any premises where there are “uncontrolled” 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 device at the service connection.

(6) In the 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 or back-siphonage from the premises by the installation of a backflow prevention 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 device shall be installed in each service to the premises.

(7) An approved backflow prevention device of the type designated shall be installed on each water service connection to the following types of facilities. This list is presented as a guideline and should not be construed as being complete.

Abbreviations are as follows:

A.G. —Air-gap separation

R.P. —Reduced pressure principle backflow preventer

TOWN OF HILLSBORO BEACH, FLORIDA

ORDINANCE NO. 248

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40

(4) All presently installed backflow prevention devices which do not meet the requirements of this section but were approved devices for the purposes described herein at the time of installation and which have been properly maintained shall, except for the inspection maintenance requirements, be excluded from the requirements of those rules so long as the Utility Superintendent is assured that they will satisfactorily protect the public potable water supply system. Wherever the existing device is moved from the present location or requires more than minimum maintenance, or when the Utility Superintendent finds that the maintenance constitutes a hazard to health, the unit shall be replaced by a backflow prevention device meeting the requirements of this section.

Sec. . Utilities department to administer.

(a) The utilities department shall be responsible for the protection of the public potable water distribution system from contamination or pollution due to the backflow or back-siphonage of contaminants or pollutants through the water service connection.

(b) If, in the judgment of the Town through its designated representative, an approved backflow prevention device is required at the Town's water service connection to any customer's premises for the safety of the water system, the Utility Superintendent or their designated agent shall give notice in writing to the customer to install such an approved backflow prevention device at each service connection to its premises. The customer shall immediately install such approved device or devices at their own expense; the failure, refusal, or inability on the part of the customer to install such device or devices immediately, shall constitute a ground for discontinuing water service to the premises until such device or devices have been properly installed.

Sec. . Fees and permits.

The Town shall identify those users required to install backflow prevention devices for the safety of the water system. All users shall be required to have their backflow prevention devices tested at least once annually by certified Town personnel or, if Town personnel are not available, then by a certified backflow prevention device technician. Should the device(s) fail the test, then the owner must have the unit repaired and re-tested in a timely manner so as to ensure protection of the public water supply. The Town shall levy a fee for testing (and re-testing as necessary) all devices based upon program cost administration, as shown in Fee Schedule A:

TOWN OF HILLSBORO BEACH, FLORIDA

ORDINANCE NO. 248

1 FEE SCHEDULE A

Type of Unit	Test Fee
Reduced pressure backflow preventer	
Annual test	\$50.00
Each re-test due to failure	35.00
Double check valve assembly	
Annual test	50.00
Each re-test due to failure	35.00
Pressure vacuum breaker	
Annual test	40.00
Each re-test due to failure	25.00

2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

Sec. . Notice of violation; failure to remedy.

The shall notify the owner or authorized agent of the owner of the building or premises in which there is found a violation of this article, of such violation. The director shall set a reasonable time for the owner to have the violation removed or corrected (thirty (30) days maximum, or as determined by degree or hazard). On failure of the owner to have the violation corrected by the end of a specified time interval, the director may, if in its judgment an imminent health hazard exists, cause the water service to the building or premises to be terminated and/or recommend such additional fines or penalties to be involved as are provided in section 26-111.

Sec. . Penalties.

(a) Any person who knowingly fails or refuses to obey or comply with, or willfully violates any of the provisions of this article, or any lawful rule or regulation promulgated hereunder, or any lawful order of the director issued pursuant to the provisions of this article, shall, upon conviction of such offense, be subject to punishment as provided by law. Each day during which the knowing or willful failure or refusal to comply with this article continues shall constitute a separate offense.

TOWN OF HILLSBORO BEACH, FLORIDA

ORDINANCE NO. 248

1 (b) Any person who violates any of the provisions of this article shall be liable to the
2 Town for all costs and damages incurred by the Town as a proximate result of such violation
3 plus a fine up to five hundred dollars (\$500.00) per day.
4

5 **Section 3.** The Town Commission hereby authorizes the appropriate Town
6 Officials to submit the appropriate number of copies of this Ordinance to the South Florida
7 Water Management District and to any other governmental agency having jurisdiction with
8 regard to the approval of same and to keep copies of the Ordinance available for public
9 review and examination at Town Hall.

10
11 **Section 4.** The Town Commission hereby certifies that it has conducted and
12 will conduct such public hearings as may be required pursuant to Chapter 163, Florida
13 Statutes, as amended, in order to adopt the amendments to the Town’s Code of Ordinances
14 and so directs the Town Administration to conduct and publish same, as provided by general
15 law.

16
17 **Section 5.** All Ordinances or parts of Ordinances, Resolutions or parts of
18 Resolutions in conflict herewith be and the same are hereby repealed to the extent of such
19 conflict.

20
21 **Section 6.** If any clause, section, or other part or application of this Ordinance
22 shall be held by any court of competent jurisdiction to be unconstitutional or invalid, such
23 unconstitutional or invalid part or application shall be considered as eliminated and so not
24 affecting the validity of the remaining portions or applications remaining in full force and
25 effect.

26
27 **Section 7.** This ordinance shall be effective as provided for by Florida Statutes
28 following its passage and adoption.
29

**PASSED AND ADOPTED BY THE TOWN COMMISSION OF THE TOWN OF
HILLSBORO BEACH, FLORIDA, ON FIRST READING, THIS 8th DAY OF
SEPTEMBER, 2009.**

**PASSED ADOPTED BY THE TOWN COMMISSION OF THE TOWN OF
HILLSBORO BEACH, FLORIDA, ON SECOND AND FINAL READING, THIS
11th DAY OF NOVEMBER, 2009.**

TOWN OF HILLSBORO BEACH, FLORIDA

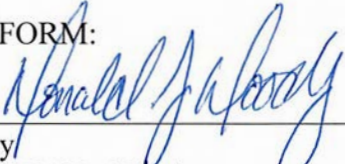
ORDINANCE NO. 248

By: 
CARMEN R. McGARRY, Mayor

ATTEST:

By: 
Town Clerk

APPROVED AS TO FORM:

By: 
Town Attorney

H:\2006\060649 HB\ORD 2009\09-08-19 Back Flow.doc