ARTICLE X. - CROSS-CONNECTION BACKFLOW PREVENTION

Sec. 2-31-301. - Definitions.

For the purposes of this article, the definitions contained in this section shall apply unless otherwise specifically stated. Words used in the present tense include the future, words in the plural number include the singular, and words in the singular include the plural. The word shall is always mandatory and not merely discretionary.

(a) Approved air-gap separation means 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 as measured vertically above the top of the rim of the receiving vessel. In no case shall the air-gap be less than one (1) inch.

(b) Approved backflow prevention assembly means a backflow prevention assembly that:

(1) Meets the standards set forth by the American Water Works Association (AWWA), the American Society of Sanitary Engineers (ASSE), the Foundation for Cross-Connection Control and Hydraulic Research (FCCC), or the utility standards, whichever is most stringent, has been approved for the prevention of backflow by the Foundation for Cross-Connection Control and Hydraulic Research (FCCC), and is published in the FCCC’s list of Approved Backflow Prevention Assemblies; or

(2) Met the applicable utility standards or the requirements of Manatee County Resolution R-87-125 in effect at the time of original installation and was approved by the county at the time of original installation.

(c) Approved backflow prevention assembly technician or approved technician means any person who holds at a minimum a valid and current certification from the University of Florida TREEO Center (UF/TREEO), Florida Water and Pollution Control Operators Association (FW&PCO), American Backflow Prevention Association (ABPA), or equivalent minimum thirty-two-hour certification program as a certified backflow prevention assembly technician, who has submitted the proper documentation to the department, and who is on the approved list. Such person must:

(1) Hold a valid and current license as a plumbing contractor or work under the direct supervision of a plumbing contractor for potable water lines; or
(2) Hold a valid and current certificate as a fire protection system contractor V for fire system lines.

(d) Approved backflow prevention assembly test equipment means equipment recommended by the assembly manufacturer and approved by the department.

(e) Approved backflow prevention assembly test methods means methods approved by the American Water Works Association (AWWA) or the Foundation for Cross-Connection Control and Hydraulic Research (FCCC), whichever is more stringent.

(f) Approved double check valve assembly (DC) means an assembly containing two (2) independently operating approved check valves with replaceable seats and tightly closing approved shut-off valves on each side of the check valves, plus properly located and approved connections (test cocks) for testing the watertightness of each check valve. The check valve shall permit no leakage in a direction reverse of normal flow. The closure element shall be internally weighted or otherwise loaded to promote rapid and positive closure and supplied with replacement valve seats. Only those double check valve assemblies (DC) approved by the Foundation for Cross-Connection Control and Hydraulic Research (FCCC) and the department are acceptable for installation.

(g) Approved double detector check valve assembly (DDC) means an assembly containing two (2) independently operating approved check valves with replaceable seats and tightly closing approved shut-off valves on each side of the check valves, plus properly located and approved connections (test cocks) for testing the watertightness of each check valve. A bypass (detector) arrangement consisting of an approved water meter and an approved double detector check valve assembly (DDC) shall be incorporated into the assembly for detection of leaks or unauthorized use of water. Only those double detector check valve assemblies (DDC) approved by the Foundation for Cross-Connection Control and Hydraulic Research (FCCC) and the department are acceptable for installation.

(h) Approved list means the list of approved backflow prevention assembly technicians who have submitted their certifications and the most recent calibration results on their testing equipment to the department for review and approval. All approved technicians meeting these requirements shall be approved to perform work on backflow prevention assemblies for potable water lines applicable to their licenses or fire system lines applicable to their certificates. To remain on the approved list, approved technicians must comply with all the requirements specified in this article and the requirements under which they were certified.
Approved public water supply means any public or private potable water supply or system which has been approved by the Florida Department of Environmental Protection (FDEP) and which is operating under a valid Florida Department of Environmental Protection (FDEP) operating permit.

Approved reduced pressure principle assembly (RP) means an assembly containing two (2) independently acting approved check valves with replaceable seats together with a hydraulically operating, mechanically independent pressure differential relief valve located between the check valves and at the same time below the first check valve. The unit shall include properly located and approved connections (test cocks) and tightly closing and approved shut-off valves at each end of the assembly. Only those reduced pressure principle assemblies (RP) approved by the Foundation for Cross-Connection Control and Hydraulic Research (FCCC) and the department are acceptable for installation.

Approved reduced pressure principle detector assembly (RPD) means an assembly containing two (2) independently acting approved check valves with replaceable seats together with a hydraulically operating, mechanically independent pressure differential relief valve located between the check valves and at the same time below the first check valve. The unit shall include properly located and approved connections (test cocks) and tightly closing and approved shut-off valves at each end of the assembly. A bypass (detector) arrangement consisting of an approved water meter and an approved reduced pressure principle detector assembly (RPD) shall be incorporated into the assembly. Only those reduced pressure principle detector assemblies (RPD) approved by the Foundation for Cross-Connection Control and Hydraulic Research (FCCC) and the department are acceptable for installation.

Auxiliary water supply means any water supply on or available to a facility other than the county's public water system, which is not permitted by the Florida Department of Environmental Protection and over which the county does not have sanitary control. Auxiliary water supplies may include water from another public supply, a swimming pool, any natural source such as a well, spring, river, stream, pond, lake, bay, harbor, sea, or used water, reclaimed water, irrigation quality (IQ) water, or industrial fluids.

Backflow means a reversal of the normal direction of flow, which has the potential to introduce used water or mixtures of used water and other liquids, gases, or other substances into the county's public water system from a source or sources. Backflow may occur as the result of back-pressure, back-siphonage, or
(n) Backflow control means a connection between the county's water system and a facility's system with an approved and appropriate backflow prevention assembly properly installed that will continuously afford protection against contamination or pollution commensurate with the degree of hazard.

(o) Backflow prevention assembly or assembly means a device to prevent the flow of any contaminated fluids into the potable water system or other water supply.

(p) Back-pressure means any elevation of pressure in the downstream piping system caused by a pump, elevated tank, boiler, or other means that could create pressure within that system greater than the supply pressure of the county's water system which would cause or tend to cause a reversal of the normal direction of flow.

(q) Back-siphonage means a form of backflow due to a reduction of pressure in the county's public water system.

(r) Board means the board of county commissioners of the county.

(s) Certificate means a certificate of competency as a contractor V issued by the state fire marshal as provided in Chapter 633, Florida Statutes.

(t) Contamination means an impairment of the quality of the county's public water system by sewage, industrial fluids, or wastes, compounds, or other materials to a degree which creates an actual hazard to the public health through poisoning or through the spread of disease.

(u) Contractor shall have the same definition as set forth in Section 489.105(3), Florida Statutes.

(v) Contractor V shall have the same definition as set forth in Section 633.021(5)(e), Florida Statutes.

(w) County means Manatee County, a political subdivision of the State of Florida.

(x) Cross-connection means any physical arrangement whereby the county's public water system is connected, directly or indirectly, with any other water supply, sewer, drain, conduit, pool, storage reservoir, plumbing fixture, or other device which contains or may contain contaminated water, sewage, or other wastes or liquids of unknown or unsafe quality, which may be capable of imparting contamination to the public water system as the result of
backflow. Bypass arrangements, jumper connections, removable sections, swivel or changeable devices, or other temporary or permanent devices, through which or because of which backflow could occur, are considered to be cross-connections unless otherwise specified in this article.

(y) Cross-connection control means the installation of an approved backflow prevention assembly as part of the service connection to a facility where there are actual or potential cross-connections.

(z) Cross-connection control program means the findings, requirements, and procedures established by this article.

(aa) Degree of hazard means an evaluation of the potential risk to the public health, safety, and welfare, and the potential adverse effect upon the county's public water system.

(bb) Department means the Manatee County utilities department.

(cc) Facility means a residence, building, structure, property, business, operation, or premises of any kind that is connected or seeks to connect to the county's public water system.

(dd) Facility owner means the owner of a residence, building, structure, property, business, operation, or premises of any kind that is connected or seeks to connect to the county's public water system to receive water through the service connection. The term facility owner shall also include any agent or representative of a facility owner acting for or on behalf of the facility owner.

(ee) Facility's system means the system beginning beyond the county's service connection. The facility's system may include a potable water system, an industrial piping system, or both, and may be supplied by the county's public water system, an auxiliary water system, or both.

(ff) Fire protection system shall have the same definition as set forth in Section 633.021(10), Florida Statutes.

(gg) Flood zone means all V zones and all A zones as described in section 2-10-21 of the Manatee County Code of Ordinances and as designated on the current flood insurance rate maps for the county adopted by the board.

(hh) Groundwater source means water that is withdrawn from an underground aquifer that is not considered by the Florida Department of Environmental Protection (FDEP) to be under the direct influence of surface water.
(ii) Hazard means a health hazard, a nonhealth hazard, a pollution hazard, or a system hazard.

(jj) Health hazard means a cross-connection or potential cross-connection involving any substance that could, if introduced into the county's public water system, cause death or illness, spread disease, or have a high probability of causing such effects.

(kk) Industrial fluids means any fluid or solution which may be chemically, biologically, or otherwise contaminated or polluted in a form or concentration that would constitute a hazard if introduced into the county's public water system. These may include, but are not limited to, the following: polluted or contaminated waters; all types of processed waters and used waters originating from the county's public water system which may deteriorate in sanitary quality; chemicals in fluid form; plating acids and alkalis; circulated cooling waters connected to an open cooling tower or cooling towers that are chemically or biologically treated or stabilized with toxic substances; contaminated natural waters, such as from wells, springs, rivers, streams, ponds, lakes, bays, harbors, and seas; irrigation canals or systems; oils, gases, glycerin, paraffins, or caustic or acid solutions; and other liquids and gaseous fluids used for industrial or other purposes or for firefighting purposes.

(II) Irrigation quality (IQ) water means water other than potable water which meets all of the state and local regulatory requirements mandated by the Florida Department of Environmental Protection (FDEP) permits and the Florida Administrative Code (F.A.C.).

(mm) License means a certificate of competency issued by the state or a local license issued by the county and registered with the state as provided in Chapter 489, Part I, Florida Statutes.

(nn) Nonhealth hazard means a cross-connection or potential cross-connection involving any substance that generally would not be a health hazard, but would constitute a nuisance or be aesthetically objectionable, if introduced into the county's public water system.

(oo) Nonpotable water means water that is not safe for human consumption or that is of questionable quality.

(pp) Pest control shall have the same definition as set forth in Section 482.021(22), Florida Statutes.

(qq) Plumbing contractor shall have the same definition as set forth in Section 489.105(3)(m), Florida Statutes.
(rr) Pollution hazard means an actual or potential threat to the physical properties or the potability of the county's public water system, which would constitute a nuisance or be aesthetically objectionable or could cause damage to the county's public water system or its appurtenances, but would not be dangerous to health.

(ss) Potable water means water that is safe for human consumption as determined by the Florida Department of Environmental Protection (FDEP).

(tt) Public water system means any or all components of the county's potable water system.

(uu) Reclaimed water means water that has received at least advanced secondary treatment and basic disinfection and is reused after flowing out of a domestic wastewater treatment facility.

(vv) Service connection means:

(1) The terminal end of a connection from the public water system where the sanitary control of the potable water from the water purveyor stops at the point of delivery to the facility's system; or

(2) The downstream end of a meter installed at the point of connection.

(ww) Surface water supply means any source or supply of water which contains in part or entirety water from a lake, canal, pond, retention area, or wetland in excess of ten (10) per cent.

(xx) System hazard means an actual or potential threat of severe damage to the physical properties of the county's public water system from pollution or contamination, which would have a protracted effect on the quality of the county's public water system.

(yy) Unapproved water supply means a water supply which has not been approved for public consumption by the Florida Department of Environmental Protection (FDEP).

.zz) Used water means any water supplied by the county's public water system after it has passed through the facility's service connection and is no longer under the sanitary control of the water purveyor.

(aaa) Utility standards means the current version of the document entitled "Manatee County Public Works Utility Standards," approved by the board.

(bbb) Water purveyor means the Manatee County potable water system.

(Ord. No. 13-35, § 2, 10-22-13)
Sec. 2-31-302. - Operation policy and requirements.

(a) Except as otherwise provided in subsection (d) of this section, no service connection that creates a hazard to the county's public water system shall be installed or maintained by the county unless the county's public water system is protected as required by this article.

Service of water to any premises shall be discontinued by the county if a backflow prevention assembly is not installed, tested, and maintained as required by this article, or if it is found that a backflow prevention assembly has been removed or tampered with. Service shall not be restored until such conditions or defects are corrected.

(b) The facility owner shall be responsible for monitoring the changes in use of the facility and the degree of hazard that those changes represent to the county's public water system in accordance with this article. Failure to provide this information to the department in a timely manner may result in discontinuance of water service to the facility until the facility owner has corrected the hazard and reported the information to the department, as required by this article.

(c) An appropriate and approved backflow prevention assembly shall be installed as part of each new service connection wherever and whenever any of the following conditions exist:

1. An auxiliary water supply exists.
2. Industrial fluids or any other objectionable substances are handled in such a manner as to create a hazard to the county's public water system.
3. Internal plumbing or piping arrangements are not known, making it impracticable or impossible to ascertain whether or not cross-connections exist.
4. A commercial, industrial, multistory, or multifamily residential facility exists.
5. The property is located in a flood zone.
6. Any cross-connection is found.

(d) An appropriate and approved backflow prevention assembly shall be installed at any facility wherever and whenever:

1. A cross-connection is found; or
2. A plumbing permit is required for any improvement, renovation, or repairs at any facility existing on or before July 20, 1987, and any of the following conditions exist:
   a. An auxiliary water supply exists.
b. Industrial fluids or any other objectionable substances are handled in such a manner as to create a hazard to the county's public water system.

c. Internal plumbing or piping arrangements are not known, making it impracticable or impossible to ascertain whether or not cross-connections exist.

d. A commercial, industrial, multistory, or multifamily residential facility exists.

   e. The property is located in a flood zone.

   f. A swimming pool is constructed or renovated.

g. An irrigation system is installed or replaced.

   (e) All backflow prevention assemblies installed on or after July 20, 1987, and existing as of the effective date of this article that do not meet the requirements of this article, but that were approved by the county at the time of original installation and that have been properly maintained, shall be exempt from the installation standards of this article, provided that any such backflow prevention assembly will satisfactorily protect the county's public water system. Whenever any such existing backflow prevention assembly is moved from its present location or requires replacement, the backflow prevention assembly shall be replaced by an approved backflow prevention assembly that meets all the requirements of this article.

   (f) The type of backflow prevention assembly required shall depend upon the degree of hazard that may exist as follows:

   (1) In cases where there is a surface water auxiliary supply, the county's public water system shall be protected by an approved air-gap separation or an approved reduced pressure principle backflow prevention assembly.

   (2) In cases where there is a ground water auxiliary water supply, the county's public water system shall be protected by an approved reduced pressure principle backflow prevention assembly.

   (3) In cases where there are any substances that would be objectionable but not hazardous to health, the county's public water system shall be protected by either an approved double check valve assembly or an approved reduced pressure principle backflow prevention assembly.

   (4)
In cases of any facility where material is stored or handled so as to create a hazard to the county's public water system, the county's public water system shall be protected by an approved air-gap separation or an approved reduced pressure principle backflow prevention assembly.

(5) In cases of any facility where, because of security requirements or other prohibitions or restrictions, it is impossible or impractical to make a complete cross-connection survey, the county's public water system shall be protected against backflow by either an approved air-gap separation or an approved reduced pressure principle backflow prevention assembly.

(6) In cases of any facility where the department determines an undue health threat is posed because of the presence of extremely toxic substances, the department may require an approved air-gap separation at the service connection to protect the county's public water system.

(7) In cases of any facility located in a flood zone, the county's public water system shall be protected by an approved double check valve assembly.

(8) In cases of any facility where two (2) or more conditions listed in paragraphs (1) through (7) above exist, the approved backflow prevention assembly shall provide the highest degree of protection for any of the conditions existing at the same service connection.

(g) Any approved backflow prevention assembly and its configuration shall be as specified in this article.

(h) In cases of any facility where a backflow prevention assembly is installed, it shall be the responsibility of the facility owner to comply with the requirements for facility owners specified in this article.

(i) All persons or companies providing services to the county or the facility owner specified in this article shall comply with all provisions and requirements of this article. Failure to comply with the requirements contained in this article shall be grounds for removal from the approved list or termination of any county contracts for the provision of services under this article.

(Ord. No. 13-35, § 3, 10-22-13)

Sec. 2-31-303. - Department responsibilities.

(a) The county shall maintain a cross-connection control and backflow prevention section within the department to administer the requirements of this article. The department shall maintain a minimum staff of qualified personnel to perform and/or oversee the following services as required by this article:
(1) Site (field) inspections;
(2) Cross-connection control systems approval;
(3) Emergency services and inspections;
(4) Educational assistance regarding cross-connection control;
(5) Maintenance and correlation of data generated by the cross-connection control program;
(6) Administration of all fees of the program;
(7) Review of qualifications established under this article for approving private independent backflow prevention assembly technicians;
(8) Maintenance of the approved list; and
(9) Inspection, testing, maintenance, repair, replacement, and submission of reports relating to backflow prevention assemblies at county facilities.

(b) Subject to written authorization from facility owners, the county may contract with approved backflow prevention assembly technicians to perform the installation, testing, maintenance, repair, replacement, and relocation of approved backflow prevention assemblies in accordance with requirements and procedures to be established by ordinance of the board. Under such program, the department shall be responsible for administration of any county contracts for the installation, testing, maintenance, repair, replacement, and relocation of backflow prevention assemblies.

(Ord. No. 13-35, § 4, 10-22-13)

Sec. 2-31-304. - Program responsibilities.

(a) Facility owner.

(1) The facility owner shall be responsible for ensuring, by installation of an appropriate and approved backflow prevention assembly, that water from an unsuitable source or any other harmful substance does not enter the county’s public water system.

(2) Except as otherwise provided in subsection (d) of section 2-31-302, all facilities
that pose a hazard to the county's public water system shall comply with all provisions of this article under the direction of the department.

(3) The facility owner shall comply with all requirements specified by the department in its administration of this article.

(4) Upon order by the department, the facility owner shall install or cause to be installed an approved backflow prevention assembly and shall maintain such backflow prevention assembly at the facility owner's expense.

(5) The facility owner shall be directly responsible and wholly liable for all procedures regarding the facility's backflow prevention assembly.

(6) No facility owner shall alter the backflow prevention assembly protecting the county's public water system unless such alteration is approved by the department.

(7) No facility owner shall circumvent the facility's backflow prevention assembly protecting the county's public water system.

(8) No facility owner shall operate the facility's internal water system when any part of that system is malfunctioning in a manner that poses a hazard to the county's public water system.

(9) The facility owner shall immediately report to the department any malfunction or damage which could affect the backflow prevention assembly's ability to protect the county's public water system.

(10) The facility owner shall be responsible for arranging all installations, tests, maintenance, repairs, replacements, and relocations of backflow prevention assemblies in accordance with this article at the facility owner's expense. In addition, the facility owner shall be responsible for maintaining copies of all documentation and results of all tests, repairs, and replacements for the backflow prevention assemblies protecting the county's public water system on file at the facility's location for one year from the date of testing.

(11) The facility owner shall cause each backflow prevention assembly to be tested as required by this article.

(12) The facility owner shall be responsible for reporting to the department any installations, tests, repairs, replacements, and relocations of backflow prevention assemblies at the facility.

(b) Department.

(1) The department shall review and approve the information and data submitted by facility owners and approved backflow prevention
assembly technicians for the installation, testing, repair, replacement, and relocation of backflow prevention assemblies required under this article or that existed as of the effective date of this article.

(2) The department shall be responsible for evaluating the hazard posed by the facility's system or facility's use.

(3) The department shall have the authority to prohibit a service connection or order the disconnection of service to any connection where:

a. Any hazard exists to the county's public water system, except as otherwise provided in subsection (d) of section 2-31-302; or

b. The facility owner fails to install, test, operate, maintain, repair, or replace an appropriate and approved backflow prevention assembly in accordance with this article.

(4) The department may inspect all new approved backflow prevention assembly installations for compliance with the current edition of the AWWA Manual M-14, the utility standards, and this article.

(5) The department shall accept for review only those initial certification tests, scheduled tests, and repair and replacement reports for any backflow prevention assembly performed by an approved backflow prevention assembly technician from the approved list.

(6) The department shall compile and maintain all significant data resulting from reports submitted under this article.

(7) The department shall require additional data on any report deemed necessary, prudent, or helpful in the administration of this article.

(c) Approved backflow prevention assembly technicians.

(1) Approved backflow prevention assembly technicians shall ensure that all installations, tests, maintenance, repairs, replacements, and relocations completed on any backflow prevention assembly protecting the county's water system are performed in compliance with manufacturer's recommendations, the current edition of the AWWA Manual M-14, the utility standards, and this article.

(2) Approved backflow prevention assembly technicians shall submit to the department all information relating to installations, tests, repairs, replacements, and relocations on any backflow prevention assembly protecting the county's public water system as requested by the department.

(3) Approved backflow prevention assembly technicians shall ensure that all
information submitted to the department is reliable and accurate.

(4) Approved backflow prevention assembly technicians shall maintain copies of all documentation and results of all tests, repairs, and replacements on backflow prevention assemblies protecting the county's public water system and any related correspondence for one year from the date of testing.

(5) Approved backflow prevention assembly technicians shall only perform those activities for which their certification is valid and approved as specified in this article. Reports submitted by non-certified or non-approved personnel shall not be accepted by the department.

(6) Approved backflow prevention assembly technicians shall comply with the current edition of the AWWA Manual M-14, the utility standards, and all provisions and requirements of this article.

(d) Pest control.

(1) Tanks, vehicles, equipment, and machines used for pest control activities must be filled at designated protected potable water locations or the reclaimed water filling station at the county's water reclamation plant. Use of potable water from unspecified locations or private residences to fill tanks, vehicles, equipment, or machines is prohibited.

(2) Protected locations consist of overhead piping arrangements with installed reduced pressure and a minimum one-inch air gap between fluids in the tank and fill discharge. If an overhead piping arrangement cannot be used, a reduced pressure zone backflow prevention assembly must be installed on the fill line.

(Ord. No. 13-35, § 5, 10-22-13)

Sec. 2-31-305. - Backflow prevention assembly systems.

(a) Approved backflow prevention assemblies. Approved backflow prevention assemblies shall have the following features:

(1) Shall be testable in line.

(2) Shall be repairable in line.

(3) Shall have approved shut-off valves located at each end of the backflow prevention assembly.

(4) Shall be supplied with ammonia resistant silicone discs or other material having the same ammonia resistant properties and approved by the department.

(b) Hazard classifications. Unless otherwise specified in this article, the department shall use the
American Water Works Association (AWWA) standards and guidelines in determining all classifications of hazards. Single-family residential facilities shall be evaluated on a case-by-case basis. If such residential facilities have auxiliary water sources or other types of systems or operations on-site which would classify the system as hazardous or are located in a flood zone, an approved backflow prevention assembly shall be required. Multistory and multifamily residential facilities with a single service connection or individual service connections having auxiliary water or other types of systems or operations on-site that would classify the system as hazardous or are located in a flood zone shall have an approved reduced pressure principle backflow prevention assembly installed as required by this article.

(Ord. No. 13-35, § 6, 10-22-13)

Sec. 2-31-306. - Backflow prevention assembly system design.

(a) All facilities.

(1) The design shall be consistent with the standards and specifications contained in the current edition of the Florida Plumbing Code or the utility standards, whichever is more stringent.

(2) The design shall utilize the current edition of the AWWA standards and guidelines and FCCC approved backflow prevention assemblies, unless otherwise specified in this article or approved by the department.

(3) The facility owner shall be responsible for determining if the facility's system requires an uninterrupted supply of water that would be adversely affected by routine maintenance or other activities involving the approved backflow prevention assembly. The facility owner shall be responsible for installing or requesting a parallel approved backflow prevention assembly. An unprotected bypass around a backflow prevention assembly for use when such assembly needs testing, repair, or replacement shall be prohibited.

(4) Backflow prevention assemblies must be accessible to county employees at all times. A minimum distance from landscaping shall be maintained as specified in the utility standards. Dangerous and/or dense underbrush will be trimmed to a margin of safety by county employees and the actual cost of such trimming will be billed to the facility owner.

(b) Existing facilities only.

(1) Single-family residential facilities. Except as otherwise provided in subsection (d) of section 2-31-302, an approved backflow prevention assembly shall be installed if a hazard poses a threat to the county's
public water system.

(2) Other facilities. These facilities include, but are not limited to, commercial, industrial, multistory, and multifamily residential facilities. Except as otherwise provided in subsection (d) of section 2-31-302, an approved backflow prevention assembly shall be installed where a hazard is identified. In some instances, it may be difficult or impossible to accurately determine such facility's cross-connection status because plumbing plans of the facility's potable water system are nonexistent, unreliable, or unobtainable. In instances where a cross-connection survey is not feasible, an approved air-gap separation or an approved reduced pressure assembly shall be installed based upon the degree of hazard.

(c) Installation requirements.

(1) All installations shall comply with the requirements specified in the current edition of the Florida Plumbing Code or the utility standards, whichever is more stringent.

(2) All approved backflow prevention assemblies shall be installed above final finished grade, unless otherwise approved by the department.

(3) Approved backflow prevention assemblies shall not be installed above final finished grade in any type of vault, unless such vault is constructed to allow at least thirty (30) per cent of its sidewalls to be open or ventilated at grade level. These openings or vents shall be unobstructed and of sufficient size to permit any vented water to freely pass through the openings to the outside.

(4) Approved backflow prevention assemblies shall not be installed in any position other than horizontal, unless the assembly has received approval for such installation by the assembly's manufacturer and the FCCC.

(5) Approved backflow prevention assemblies shall be installed in outside locations and shall be protected from possible damage caused by normal traffic.

(6) All approved backflow prevention assemblies shall be installed at a height consistent with the utility standards.

(7) Following installation, approved backflow prevention assemblies shall be tested, then tagged and certified. All such installations, tests, and certification reports shall be completed only by an approved backflow prevention assembly technician with the appropriate certification from the approved list.

(8) After a facility's approved backflow prevention assembly has been installed and initially tested, certified, and approved, the facility owner shall notify the department that the new assembly is ready for final inspection. The department shall make a site inspection of the new assembly. Until the facility's approved
backflow prevention assembly passes the final inspection, the service connection shall not be activated.

(9) Any time a replacement is required for a backflow prevention assembly, such new approved backflow prevention assembly shall comply with all provisions of this article.

(Ord. No. 13-35, § 7, 10-22-13)

Sec. 2-31-307. - Testing, service, and reporting requirements.

(a) Testing frequency schedules.

(1) All backflow prevention assemblies shall comply with the following requirements:

a. Be tested at least once every year;
   b. Be tested only by an approved backflow prevention assembly technician;

   c. Be tested utilizing procedures approved by the AWWA or its equivalent and the FCCC;

   d. Be tested with test equipment approved by the AWWA or its equivalent;

   e. Be tagged at the time of testing with a tag that contains the name of the qualifying company, the license number or certificate number of the approved backflow prevention assembly technician, the month of the test, and the year of expiration; and

   f. Be reported to the department no later than fifteen (15) days following the test.

(2) No backflow prevention assembly shall be tagged before being tested.

(3) The department may require a more frequent test schedule for backflow prevention assemblies serving facilities classified in accordance with this article as high hazard or that frequently fail regularly scheduled tests, as necessary to protect the public health, safety, and welfare.

(4) If an inactive water service is reactivated and more than one year has passed since the last test, the service connection associated with such service shall not be activated until the backflow prevention assembly has been tested and approved.

(b) Repairs and replacements.
(1) **Backflow prevention assemblies.**
   
a. Backflow prevention assemblies that fail a required test shall be reported to the department immediately. Required repairs shall be performed by an approved backflow prevention assembly technician as specified in this article.

b. Any backflow prevention assembly that is unable to be repaired shall be replaced immediately. At the completion of the repairs or replacement, the backflow prevention assembly shall be tested and tagged by an approved backflow prevention assembly technician as required by this article.

(2) Until such repairs or replacements are completed, the service connection shall be deactivated if deemed necessary by the department to protect the public health, safety, and welfare.

(c) **Testing equipment and methods.**

(1) Test equipment. Approved backflow prevention assembly technicians shall test backflow prevention assemblies using equipment recommended by such assembly's manufacturer and approved by the department.

(2) Test methods. Only AWWA and FCCC methods shall be used when testing backflow prevention assemblies.

(3) Calibration. Approved backflow prevention assembly technicians shall have their testing instruments certified for accuracy at least once every year or as often as the equipment manufacturer recommends, whichever is more frequent. The approved technician shall forward a copy of the instrument's calibration report to the department. The department shall deem unacceptable testing reports prepared by approved technicians if such annual calibration reports are not received by the department. Calibration reports shall only be accepted from sources approved by the department. The department shall approve testing sources based on manufacturer and industry standards.

(d) **Reporting.** Facility owners are directly responsible for all reports and reporting procedures regarding backflow prevention assemblies protecting the county's water system. The facility owner may designate an agent to act on behalf of the facility owner, but in no way does such action alleviate the facility owner’s responsibility.

(1) Reporting scheduled tests and repairs. Reports for initial certification tests, scheduled tests, repairs, and replacements of a facility's backflow prevention assembly must be completed by an approved backflow prevention assembly
technician as required by this article. Such reports shall be forwarded to the
department by the approved technician electronically through the department's
website. The approved technician shall transmit the completed reports to the
department as specified in this article no later than fifteen (15) days following the
test, repair, or replacement of the backflow prevention assembly.

(2) Reporting of nonscheduled repairs or replacements. Any backflow prevention
assembly which has been damaged, is discharging abnormally, or fails any test
shall be reported immediately by the facility owner as follows:
a. Notify the department. If the department's offices are closed, notify the
   after-hours on-call personnel.
b. Contact an approved backflow prevention assembly technician from the
   approved list for immediate repairs.

(e) Qualifications of approved backflow prevention assembly technicians.

(1) Backflow prevention assemblies on potable water lines shall be
installed, tested, maintained, repaired, replaced, and relocated by an
approved backflow prevention assembly technician on the approved
list who holds a valid license as a plumbing contractor or who works
under the direct supervision of a plumbing contractor.

(2) Backflow prevention assemblies on fire system lines shall be installed, tested,
maintained, repaired, replaced, and relocated by an approved backflow
prevention assembly technician on the approved list who holds a valid minimum
certificate as a fire protection system contractor V.

(Ord. No. 13-35, § 8, 10-22-13)

Sec. 2-31-308. - Termination of service.

Any facility with a backflow prevention assembly receiving water service from the county's public
water system that fails to perform the required testing or complete required repairs or replacement of
backflow prevention assemblies as directed by this article, the department, or an approved backflow
assembly technician shall be subject to termination of water service following written notice to the facility
owner and any other facility affected by termination of such service. Such termination may continue until
all violations of this article are corrected. In the event of termination of water service, the facility owner
or customer shall be responsible for payment of all applicable charges for utility services established in
the county's utility rate resolution.

(Ord. No. 13-35, § 9, 10-22-13)
Sec. 2-31-309. - Enforcement.

(a) Any violation of this article may be enforced as provided in Section 125.69, Florida Statutes. In addition, the county may bring suit for damages for any violation of this article, and to restrain, enjoin, or otherwise prevent a violation of or mandate compliance with this article.

(b) Violations of this article may be enforced as provided in Chapter 162, Part I, Florida Statutes, and Section 162.21, Florida Statutes.

(c) In addition to any other action, violations of this article may be enforced against approved backflow assembly technicians by filing complaints with the county or the appropriate state agency responsible for issuing licenses or certificates.

(d) In addition to any other action, failure to correct any cross-connection or perform any required testing or complete required repairs of any backflow prevention assembly following written notice to the facility owner by the county may result in completion of the testing or repairs or correction of the cross-connection by the county under extraordinary circumstances to prevent backflow of contaminants into the water system. In the event of such action by the county, all appropriate charges established by resolution of the board will be billed to the facility owner.

(Ord. No. 13-35, § 10, 10-22-13)

Sec. 2-31-310. - Rates, fees, and charges.

The board by resolution may establish rates, fees, and charges for the administration of this article. The county shall be responsible for collecting any rates, fees, or charges established by the board in connection with the implementation and maintenance of the cross-connection control program authorized by this article.

(Ord. No. 13-35, § 11, 10-22-13)