

RESOLUTION R-26-040

**A RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS
OF MANATEE COUNTY, FLORIDA, REVISING THE CROSS
CONNECTION CONTROL MANUAL; SUPERSEDING RESOLUTION
R-20-146; PROVIDING FOR SEVERABILITY; AND PROVIDING AN
EFFECTIVE DATE.**

WHEREAS, Section 2-31-303 of the Manatee County Code, authorizes the Board of County Commissioners of Manatee County (Board) to adopt by resolution a Cross Connection Control Manual, in conformance with Rule 62-555.360, Florida Administrative Code; and

WHEREAS, on October 27, 2020, the Board adopted the *Manatee County Utilities Department Cross Connection Control Manual (Manual)* by Resolution R-20-146; and

WHEREAS, the Board intends that the County's cross connection control program satisfies the requirements of the federal Safe Drinking Water Act, codified in Title XIV of the Public Health Service Act, 42 U.S.C. §§ 300f, *et seq.*, and the Florida Safe Drinking Water Act, codified in Part VI, Chapter 403, Florida Statutes; and

WHEREAS, Rule 62-555.360, Florida Administrative Code, establishes minimum standards for cross connection controls and cross connection control manuals, which by this reference the Board recognizes and directs that the *Manual* must meet the minimum standards set forth in Rule 62-555.360, Florida Administrative Code; and

WHEREAS, the *Manual* sets forth the technical specifications and requirements for the installation, maintenance and testing of backflow prevention assemblies to protect Manatee County's (County) public water system from potential contamination from cross connections and the backflow of non-potable water into the County's public water system; and

WHEREAS, due to state and federal regulatory changes, the Board finds it in the best interest of the public to revise the Manual to incorporate all applicable state and federal requirements.

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of Manatee County, Florida, that:

1. Incorporation of Recitals. The recitals set forth above are hereby adopted as findings of this Board and are incorporated herein by reference.

2. Modification of the *Manual*. The Board hereby modifies and revises the *Manual* and adopts the new version of the *Manual* attached hereto as Exhibit A and incorporated herein. The *Manual* attached as Exhibit A shall supersede and fully replace the Manual that was approved by Resolution R-20-146.

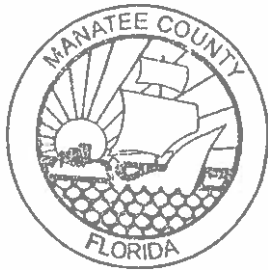
3. Administration and Enforcement of the *Manual*. Pursuant to Section 2-31-304, Manatee County Code of Ordinances, the *Manual* shall be administered and enforced by the Utilities Department on behalf of the Board.

4. Superseding Conflicting Resolutions. The provisions of this Resolution shall supersede the provisions of any other rule, policy, or Resolution that is in conflict with and cannot be harmonized or reconciled with the provisions of this Resolution. Nothing herein shall be construed to modify Article X, Manatee County Code of Ordinances

5. Severability. If any section, subsection, sentence, clause, provision, or word of this Resolution is held invalid or unconstitutional by a court of competent jurisdiction, same shall be severable and the remainder of this Resolution shall not be affected by such invalidity or unconstitutionality, such that any remainder of the Resolution shall withstand any severed provision, as the Board would have adopted the Resolution and its regulatory scheme even absent the invalid part.

6. Effective Date. This Resolution shall become effective February 1, 2027, and shall remain in effect until further action by the Board.

20th October, 2026. DULY ADOPTED with a quorum present and voting this 20th day of



**BOARD OF COUNTY COMMISSIONERS
MANATEE COUNTY, FLORIDA**

By: Tal
Tal Siddique, Chairperson

**ATTEST: ANGELINA COLONNESO
CLERK OF THE CIRCUIT COURT AND COMPTROLLER**

By: Angeline Colonneso
Deputy Clerk

EXHIBIT A

Cross Connection Control Manual

Manatee County Utilities Department

Cross Connection Control Manual



PREPARED BY MANATEE COUNTY UTILITIES DEPARTMENT
4520 66th ST W - BRADENTON, FL 34210 (941) 792-8811

PROGRAM APPROVED BY:
STATE OF FLORIDA
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES, FEBRUARY 10, 1992

Effective Date: February 1, 2027



TABLE OF CONTENTS

I. PROTECTING THE COUNTY'S PUBLIC WATER SYSTEM

- A. Background
- B. Authority

II. DEFINITIONS

III. CROSS CONNECTION BACKFLOW PREVENTION PROGRAM POLICY AND REQUIREMENTS

- A. Backflow Prevention Requirements for Facilities Connected to Water Service after July 20, 1987
- B. Backflow Prevention Requirements for Facilities Connected to Water Service before July 20, 1987
- C. Type of Backflow Preventer Required
- D. Hazard Classifications
- E. Backflow Preventer Requirements and Design Standards
- F. Installation Requirements
- G. Testing, Service, and Reporting Requirements

IV. CROSS CONNECTION BACKFLOW PREVENTION PROGRAM ADMINISTRATION

V. CROSS CONNECTION BACKFLOW PREVENTION PROGRAM RESPONSIBILITIES

- A. Facility Owners
- B. Certified Backflow Prevention Assembly Service Providers
- C. Pest Control Operators

VI. QUALIFICATIONS OF CERTIFIED BACKFLOW PREVENTION ASSEMBLY SERVICE PROVIDERS

VII. EMERGENCY ACTION PLAN

APPENDIX

- 1) State of Florida Letter of Approval Cross Connection Control Program (Page A-1)
- 2) Manatee County Backflow Prevention Service Provider Registration (Page A-2)
- 3) Signature Authorization Form for Certified Backflow Prevention Assembly Service Provider (Page A-3)
- 4) Required Backflow Preventers (Pages A4-A6)
- 5) Backflow Prevention Assembly Tag Specifications (Page A-7)
- 6) Petition to Remove a Backflow Prevention Assembly (Page A-8)
- 7) Customer Complaint Form (Page A-9)
- 8) Location of Designated Reclaimed Water Filling Stations (Page A-10)
- 9) Code of Conduct for Certified Backflow Prevention Assembly Service Providers (Pages A11-A13)

I. PROTECTING THE COUNTY'S PUBLIC WATER SYSTEM

The purpose of this Manual is to protect the County's Public Water System from potential Contamination resulting from cross connections and backflow of non-potable water into the County's Public Water System.

A. Background

A cross connection occurs in a plumbing system when the potable water supply is connected to a non-potable water source. Sources of non-potable water include irrigation systems and auxiliary water sources, such as reclaimed water, Surface waters, and wells. A cross connection that is not protected by an appropriate backflow preventer can experience a backflow of water, which could then contaminate the public water supply.

The Manatee County Cross Connection Control Program (CCCP) safeguards the County's Public Water System from unintentional Contamination. A backflow prevention assembly or device is a key component to prevent unwanted substances from entering the County's distribution system. Backflow is a reversal of the normal direction of water 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. Backflow may occur as the result of back-pressure, back-siphonage, or both.

B. Authority

The County's CCCP is required to satisfy requirements of the federal Safe Drinking Water Act, codified in Title XIV of the Public Health Service Act, 42 U.S.C. §§ 300f, *et seq.* The federal law authorizes delegation of the administration and enforcement of drinking water standards to state governments. The Florida Safe Drinking Water Act, Part VI of Chapter 403, Florida Statutes, requires the Florida Department of Environmental Protection to adopt and enforce the State's primary and secondary drinking water standards. The State's regulations require each community water system to establish and implement a cross connection control program utilizing backflow protection at or for service connections to the community water system. Chapter 62-555, Florida Administrative Code, require that the program include a written plan that is developed using recommended practices of the American Water Works Association (often referred to as the "AWWA Manual M-14").

Manatee County established its CCCP through the adoption of Resolution R-87-125, which became effective on July 20, 1987. Effective January 1, 2014, the Board of County Commissioners adopted the County's Cross Connection Backflow Prevention Ordinance No. 13-35, which replaced Resolution R-87-125 and was codified as Section 2-31-301, *et seq.*, Manatee County Code of Ordinances. Effective January 1, 2021, the Board of County Commissioners adopted Ordinance No. 20-44, which replaced Ordinance No. 13-35. Ordinance No. 20-44 authorized the Department to specify the details of the CCCP in this Manual. The Board of County Commissioners adopted the CCCP Manual by Resolution R-20-146. Resolution R-26-040 revised this Manual.

II. DEFINITIONS

For the purposes of this Manual, the definitions contained in this section 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.

ABPA shall mean the American Backflow Prevention Association.

Air gap 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. An approved air gap 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.

Approved shall mean accepted by the County as meeting an applicable standard, specification or requirement or as suitable for the proposed use.

ASSE shall mean the American Society of Sanitary Engineers.

Auxiliary water source(s) shall mean any water source on or available to a Facility other than the County's Public Water System. Auxiliary water sources include water from another Public Water System, any natural source such as a well, spring, river, stream, pond, lake, bay, harbor, sea, or used water, reclaimed water, irrigation quality water, or industrial fluids.

AWWA shall mean the American Water Works Association.

AWWA Manual M-14 shall mean the American Water Works Association Manual of Water Supply Practices–M14, Backflow Prevention and Cross-Connection Control: Recommended Practices. Third Edition.

Backflow prevention assembly shall mean a mechanical device approved to prevent the backflow of non-potable water into a potable water supply system through a cross connection by meeting either (1) the standards set forth by the AWWA, the ASSE, the FCCC, or the Utility Standards, whichever is most stringent, approved for the prevention of backflow by the FCCC, and is published in the FCCC's list of Approved Backflow Prevention Assemblies, or (2) the applicable Utility Standards or the requirements of the Manatee County CCCP in effect at the time of original installation and approved by the County at the time of original installation.

Backflow preventer is an assembly, device, or method that prevents the backflow of water into potable water supply systems.

Backflow prevention assembly test equipment shall mean electronic or mechanical instruments recommended by the manufacturer and Approved by the Department to field-test the operational performance of a backflow prevention assembly.

Backflow prevention device is a non-testable backflow preventer.

Back-pressure is a condition where the pressure in a Facility's system is higher than the incoming supply pressure.

Back-siphonage is a condition where the incoming supply pressure in a piping system is reduced such that flow is induced from the Facility's system.

Certificate shall mean a certificate of competency as a Contractor V or higher issued by the State Fire Marshal as provided in Chapter 633, Florida Statutes.

Community Water System (CWS) shall mean a public water system owned and operated by the Manatee County Utilities Department as defined in Section 403.852(3), Florida Statutes (F.S.) and Rule 62-550.200, Florida Administrative Code (F.A.C).

Contamination shall mean 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.

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

Contractor V or higher shall have the same definition as set forth in Section 633.102(3)(e), Florida Statutes, as amended.

Cross connection shall mean any physical arrangement whereby the County's Public Water System is connected, directly or indirectly, with any other water supply system, 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 County's 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 Manual.

Degree of hazard shall mean 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.

Department shall mean Manatee County Utilities Department.

Double check detector backflow prevention assembly (DCDA) shall mean a backflow prevention assembly consisting of 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 water tightness of each check valve with a bypass (detector) containing an approved water meter and an approved DC to detect leaks or unauthorized use of water. DCDAs must be approved by the FCCC and the Department.

Double check valve assembly (DC) shall mean a backflow prevention assembly consisting of two (2) internally loaded independently operating 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 water tightness 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. DCs must be approved by the FCCC and the Department.

Dual Check Device (DuC) shall mean a backflow preventer device containing two internally loaded, independently operating check valves.

Facility shall mean 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.

Facility Owner(s) shall mean the owner(s) 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.

Facility's system shall mean 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, auxiliary water sources, or both.

FDEP shall mean Florida Department of Environmental Protection.

FCCC shall mean the Foundation for Cross-Connection Control and Hydraulic Research.

Fire protection system shall have the same definition as set forth in Section 633.102(11), Florida Statutes, as amended.

Flood hazard area shall have the same meaning as set forth in Section 2-10-22, Manatee County Code of Ordinances, and as designated on the current flood insurance rate maps for the County adopted by the Manatee County Board of County Commissioners.

FW&PCOA shall mean the Florida Water and Pollution Control Operators Association.

Hazard shall mean an actual 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.

Industrial fluids shall mean 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.

License shall mean a certificate of competency issued by the State or a local license issued by the County and registered with the State as provided in Part I of Chapter 489, Florida Statutes.

List of certified backflow prevention assembly service providers shall mean the list of backflow prevention assembly service providers, who have been determined by the Department to meet the criteria of a certified backflow prevention assembly service provider based on their submission of qualifications for their certifications and the most recent calibration results on their testing equipment. Certifications, licenses, testing equipment calibration results, and general liability insurance shall be maintained and up to date; failure to submit documentation to the Department may result in removal from the list of certified backflow prevention assembly service providers. All backflow prevention assembly service providers meeting these requirements are permitted 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 list of certified backflow prevention assembly service providers, qualified providers must comply with the requirements specified in this Manual and the requirements under which they were certified.

Multistory facility shall mean a building with five or more floors.

Non-health hazard shall mean an actual 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.

Non-potable water shall mean water that is not safe for human consumption or that is of questionable quality.

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

Pest control operator shall mean a certified operator as defined by Section 482.021(4), Florida Statutes.

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

Pollution hazard shall mean 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.

Potable water shall mean water that is safe for human consumption as determined by FDEP.

Public Water System shall mean a public potable water supply or system which has been approved by the FDEP and which is operating under a valid FDEP operating permit.

Reduced pressure principle backflow prevention assembly (RP) shall mean a backflow prevention assembly consisting of 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. RP must be approved by the FCCC and the Department.

Reduced pressure principle detector backflow prevention assembly (RPD) shall mean a backflow prevention assembly consisting of 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 with a bypass (detector) arrangement consisting of an approved water meter and an approved RPD. RPD must be approved by the FCCC and the Department.

Reclaimed water shall mean water that has received at least advanced secondary treatment and basic disinfection and is reused after flowing out of a domestic wastewater treatment Facility.

Service connection shall mean:

- (1) The terminal end of a connection from the Public Water System where the sanitary control of the potable water from the County's Public Water System 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.

Surface water shall mean 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) percent.

System hazard shall mean 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.

UF/TREEO shall mean the University of Florida Training, Research and Education for Environmental Occupations.

Underground Utility and Excavation Contractor shall have the same definition set forth in Section 489.105(3)(n), Florida Statutes.

Used water shall mean 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 County's Public Water System.

Utility Standards shall mean the current version of the document entitled "Manatee County Public Works Utility Standards," approved by the Board of County Commissioners.

III. CROSS CONNECTION BACKFLOW PREVENTION PROGRAM POLICY AND REQUIREMENTS

No service connection that creates any potential hazard to the County's Public Water System shall be installed or maintained unless the County's Public Water System is protected by a Backflow preventer as required by this Manual. Service of water to any Facility shall be discontinued by the County if a Backflow prevention assembly is installed, tested, or maintained in a manner that fails to comply with this Manual, or if there is evidence of tampering with a Backflow prevention assembly or device. Service shall not be restored until such conditions or defects are corrected to the Department's satisfaction.

A. Backflow Prevention Requirements for Facilities Connected to Water Service after July 20, 1987

An appropriate and approved backflow preventer shall be installed and maintained as part of each service connection existing after July 20, 1987, wherever and whenever any of the following conditions are present:

1. An auxiliary water source exists or is installed.
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. Unknown internal plumbing or piping arrangements exist, which make it impracticable or impossible to ascertain whether a cross connection exist.
4. A commercial or industrial Facility, or a residential multistory or multifamily Facility exists or is constructed.
5. The property is located in a flood hazard area.
6. An irrigation system exists or is installed.
7. Any cross connection is found.

B. Backflow Prevention Requirements for Facilities Connected to Water Service before July 20, 1987

Facilities connected to water service prior to July 20, 1987 were granted certain exemptions from installing and maintaining a backflow prevention assembly under Manatee County Ordinance 13-35. Ordinance 20-44, which repealed Ordinance 13-35, removed those exemptions. The Department is authorized to administer and enforce the following requirements:

1. Each service connection existing on or before July 20, 1987 shall be required to install and maintain an appropriate and approved Backflow preventer wherever and whenever any of the following conditions are present:
 - a. Any cross connection is found.

- b. An irrigation system is installed or renovated.
 - c. An auxiliary water source is installed or renovated.
 - d. A plumbing permit is required for any improvement, renovation, or repairs at any Facility in which any of the following conditions exist, irrespective of permit issuance:
 - i. An auxiliary water source exists.
 - ii. Industrial fluids or any other substances are handled in such a manner as to create a hazard to the County's Public Water System.
 - iii. Unknown internal plumbing or piping arrangements exist, which make it impracticable or impossible to ascertain whether cross connections exist.
 - iv. A commercial or industrial Facility, or residential multistory or multifamily Facility exists.
 - v. The property is located in a flood hazard area.
 - vi. An irrigation system exists.
2. If a Facility is not required to install and maintain a backflow preventer due to conditions listed in 1.a – 1.d above, an appropriate and approved backflow preventer shall be installed by the owner within 90 days of written notice from the Department and maintained as part of each service connection existing on or before July 20, 1987 wherever and whenever any of the following conditions are present:
- a. An auxiliary water source 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. Unknown internal plumbing or piping arrangements exist, which make it impracticable or impossible to ascertain whether cross connections exist.
 - d. A commercial or industrial Facility, or residential multistory or multifamily Facility exists.
 - e. The property is located in a flood hazard area.
 - f. An irrigation system exists.

C. Type of Backflow Preventer Required

The required backflow prevention assemblies or devices for water service and fire protection services are set forth in the Appendix 4 to this Manual, pages A4-A5.

A reduced pressure principle backflow prevention assembly is suitable to protect against both low

and high hazards. A double check valve assembly and dual check device are suitable to protect against low hazards only. Therefore, for the purposes of this Manual, reduced pressure principle backflow prevention assembly provides the highest degree of protection excluding an air gap.

The type of backflow preventer required shall depend upon the degree of hazard that may exist as follows:

1. In cases where commercial and industrial facilities operate, the County's Public Water System shall be protected by an approved reduced pressure principle backflow prevention assembly.
2. In cases where there is an auxiliary water source that is surface water, the County's Public Water System shall be protected by an approved dual check valve backflow prevention device.
3. In cases where there is an auxiliary water source that is groundwater, the County's Public Water System shall be protected by an approved dual check valve backflow prevention device.
4. In cases where there is an auxiliary water source that is reclaimed water, the County's Public Water System shall be protected by an approved reduced pressure principle backflow prevention assembly.
5. In cases where there is an in-ground irrigation system connected to the County's potable water system, the County's Public Water System shall be protected by an approved reduced pressure principle backflow prevention assembly.
6. In cases where there is an in-ground irrigation system, connected to either surface water source or supplied by reclaimed water, and not connected to the County's potable water system, the County's Public Water System shall be protected by an approved reduced pressure principle backflow prevention assembly.
7. In cases where there is an in-ground irrigation system supplied by a well, and not connected to the County's potable water system, the County's Public Water System shall be protected by an approved reduced pressure principle backflow prevention assembly.
8. In cases of any Facility located in a flood hazard area, the County's Public Water System shall be protected, at minimum, by an approved dual check valve backflow prevention device.
9. In cases where a building is five stories or higher, the County's public water system shall be protected, at minimum, by an approved reduced pressure principle backflow

prevention assembly. A double check valve assembly is permissible only when no potable water piping is connected to the suction side of any booster pump.

10. In cases where multifamily residential facilities with either a single service connection or individual service connections exist, the County's public water system shall be protected by an approved dual check valve backflow prevention device.
11. In cases where there is a solar domestic hot-water system, the County's public water system shall be protected by an approved dual check valve backflow prevention device.
12. In cases where customers are supplied with potable water via temporary service connection from CWS, the County's public water system shall be protected by an approved dual check valve backflow prevention device.
13. 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 an approved reduced pressure principle backflow prevention assembly.
14. 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 an approved reduced pressure principle backflow prevention assembly.
15. 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 reduced pressure principle backflow prevention assembly.
16. In cases of any Facility where the Department determines an undue health threat is posed because of the presence of extremely toxic substances, the County's Public Water System shall be protected by an approved reduced pressure principle backflow prevention assembly.
17. In case of any cross connection (created by the customer or not) or backflow is found, the County's Public Water System shall be protected at the point of connection by an approved reduced pressure principle backflow prevention assembly.
18. In cases of any Facility where two (2) or more conditions listed in paragraphs 1 through 17 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.

D. Hazard Classifications

Unless otherwise specified in this Manual, the Department shall use the 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 hazard area, an appropriate and approved backflow preventer shall be installed as required by this Manual.

Multifamily residential facilities, including duplexes and condominiums, may be protected with an approved dual check device at the service connection unless on-site conditions or systems (such as irrigation systems, auxiliary water sources, or other hazardous operations) require a higher level of protection. Where such conditions exist, an approved reduced pressure principle backflow prevention assembly shall be installed as required by this Manual. Dual check devices shall not be used on service connections 1.5 inches and larger. Backflow prevention assemblies on service connections 1.5 inches and larger shall be installed above ground in accordance with Manatee County Utility Standards.

Multistory facilities shall have an approved reduced pressure principle backflow prevention assembly installed as required by this Manual.

Commercial and industrial Facilities shall have an approved reduced pressure principle backflow prevention assembly installed, as required by this Manual.

In some instances, it may be difficult or impossible to accurately determine a Facility's cross connection status because plumbing plans of the Facility's potable water system are nonexistent, unreliable, or unobtainable. In instances where the conditions that require a backflow prevention assembly are potentially present, but a cross connection survey is not feasible, an approved reduced pressure assembly shall be installed.

Facility Owners shall be responsible for monitoring 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 Manual. 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/or improved level of protection, pursuant to this Manual, and reported the information to the Department.

E. Backflow Preventer Requirements and Design Standards

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.
5. Backflow prevention assemblies installed on or after January 1, 2014 shall be lead free as defined in the Reduction of Lead in Drinking Water Act, Section 1417 of the Safe Drinking Water Act, 42 U.S.C. § 300g-6, as may be amended, and in compliance with all applicable regulations.

Approved Dual Check devices (DuCs):

1. Devices shall be installed in a standard utility box with cover at grade.
2. Device and utility box shall be installed immediately downstream of the water meter.
3. Utility meter box and dual check valves shall have clear opening for access from street.
4. Backflow prevention devices installed on or after January 1, 2014 shall be lead free as defined in the Reduction of Lead in Drinking Water Act, Section 1417 of the Safe Drinking Water Act, 42 U.S.C. § 300g-6, as may be amended, and in compliance with all applicable regulations.

In addition, the design of all Facilities' systems 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. The design of all backflow preventers shall utilize the current edition of the AWWA standards and guidelines and FCCC approved backflow preventers, unless otherwise specified in this Manual or approved by the Department.

Facility Owners 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 preventer. Facility Owners shall be responsible for installing or requesting a parallel approved backflow preventer. An unprotected bypass around a backflow prevention assembly for use when such assembly needs testing, repair, or replacement is prohibited.

Backflow preventers must be accessible to County employees at all times. A minimum distance from landscaping as specified in the Utility Standards, is required for all backflow preventer installations. A minimum one-foot (1') distance from landscaping shall be maintained thereafter.

F. Installation Requirements

All backflow preventer installations shall comply with the requirements specified in the current edition of the Florida Plumbing Code or the Utility Standards, whichever is more stringent.

Backflow prevention assemblies on potable water lines must be installed and tested by a certified backflow prevention assembly service provider on the approved list, who holds a valid license as a Plumbing Contractor or who works under the direct supervision of a Plumbing Contractor, except in the following two limited situations:

1. Facility Owners may install approved backflow preventers on their own property, if the installation meets the requirements of this Manual. The initial test of a backflow prevention assembly installed by a Facility Owner must be conducted by a certified backflow prevention assembly service provider 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 potable water lines serving commercial properties may be installed and initially tested by a certified backflow prevention assembly service provider on the approved list, who holds a valid license as an Underground Utility and Excavation Contractor or who works under the direct supervision of an Underground Utility and Excavation Contractor, if the Underground Utility and Excavation Contractor is performing work as part of a larger construction project at the commercial property, and the installation meets the requirements of this Manual.

Backflow prevention assemblies on fire system lines must be installed and tested by a certified backflow prevention assembly service provider on the approved list, who holds a valid minimum certificate as a fire protection system Contractor V or higher.

All approved backflow prevention assemblies shall be installed above final finished grade, unless otherwise approved by the Department.

Approved backflow preventers shall not be installed above final finished grade in any type of vault, unless such vault is constructed to allow at least thirty percent (30%) 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.

Approved backflow preventers shall not be installed in any position other than horizontal, unless the assembly or device has received approval for such installation by the manufacturer and the FCCC.

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

All approved backflow preventers shall be installed at a height consistent with the Utility Standards.

At the time of installation, approved backflow prevention assemblies shall be tested, then tagged and certified. All tests, tagging, and certification reports must be completed by a certified backflow prevention assembly service provider as required by this Manual.

A dual check valve shall be installed based on manufacturer-approved orientation. A dual check valve should be sized hydraulically, considering flow rate requirements, temperature application, and pressure loss through the device as specified by the manufacturer. Precautions shall be made for inadvertently creating a closed plumbing system; therefore, a device must be installed by a certified backflow prevention assembly service provider as required by this Manual. An appropriate device for thermal expansion control is required downstream of the DuC device in accordance with the Florida Building Code, Plumbing, 603.3 Thermal Expansion Control.

A permit is required for new installations of backflow preventers. After a Facility's approved backflow preventer has been installed and initially tested (if an assembly), certified, and approved, the Facility Owner shall contact the County to arrange for final inspection. The County inspector shall make a site

inspection of the new backflow preventer. Until the Facility's approved backflow preventer passes the final inspection, the service connection shall not be activated.

Any time a replacement is required for a backflow preventer, such new approved backflow prevention assembly or device shall comply with all provisions of this Manual.

All backflow preventers installed on or after July 20, 1987, and existing as of the effective date of this Manual that do not meet the requirements of this Manual, but were approved by the County at the time of original installation and that have been properly maintained, are exempt from the installation standards of this Manual, provided that any such backflow preventer satisfactorily protects the County's Public Water System. Whenever any such existing backflow preventer is moved from its present location or requires replacement, the backflow preventer shall be replaced by an approved backflow prevention assembly or device that meets all the requirements of this Manual.

Notwithstanding the foregoing, a property owner may apply in writing to the Utilities Department for an exemption or alternative compliance determination from the requirements of this section. Such application shall set forth the specific basis for the request and demonstrate that the proposed alternative will provide a level of protection to the public water system equal to or greater than that required under the County's Cross-Connection Control Manual. The Utilities Director, or designee, shall have the authority to approve, approve with conditions, or deny such request.

G. Testing, Service, and Reporting Requirements

To be in compliance with County requirements, backflow prevention assemblies must:

1. Be tested immediately following installation or repair;
2. Be tested:
at least once every year - non-residential service connections;
at least biennially (every 2 years) - residential service connections.
3. Be tested only by a certified backflow prevention assembly service provider in accordance with this Manual;
4. Be tested utilizing procedures approved by the AWWA or its equivalent and the FCCC;
5. Be tested with test equipment approved by the AWWA or its equivalent and the Department, such equipment to be calibrated within the last twelve (12) months;
6. 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 certified backflow prevention assembly service provider, the month of the test, and the year of expiration, with a tag that is sized to industry standards. No backflow prevention assembly shall be tagged before being tested; and

7. Be reported to the Department no later than seven (7) days following the test.

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

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

Repairs, Replacements and Failed or Expired Tests

Certified backflow prevention assembly service providers shall observe new installations and replacements of backflow prevention assemblies to ensure the assembly is the correct type of protection for the degree of hazard and properly installed in accordance with the CCC Manual and Utility Standards installation requirements. If the newly installed or replaced assembly is not the correct type of protection, or installation requirements are not proper, the backflow prevention assembly service provider shall report a failed field test and note the discrepancy on the backflow preventer test report form.

Backflow prevention assemblies that fail a required test shall be reported to the Department within one (1) business day of the test. Required repairs shall be performed by a certified backflow prevention assembly service provider. Facility Owners may repair a backflow prevention assembly on their own property, provided that at the completion of the repairs, the backflow prevention assembly is tested and tagged by a certified backflow prevention assembly service provider and test results are reported to the Department and Facility Owner within one (1) business day.

Any backflow prevention assembly that is unable to be repaired shall be replaced immediately. At the completion of the replacement, the backflow prevention assembly shall be tested and tagged by a certified backflow prevention assembly service provider consistent with the installation requirements of this Manual.

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.

Upon discovery of a prohibited or inappropriately protected cross-connection, public water systems either shall ensure that the cross-connection is eliminated, shall ensure that appropriate backflow protection is installed to prevent backflow into the public water system, or shall discontinue water service.” Fla. Admin. Code R. 62-555.360(3).

Non-testable Dual Check Devices must be replaced no later than every 10 years.

Testing Equipment and Methods

Certified backflow prevention assembly service providers shall test backflow prevention assemblies using equipment recommended by such assembly's manufacturer and approved by the Department.

Only AWWA and FCCC methods shall be used when testing backflow prevention assemblies.

Certified backflow prevention assembly service providers 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 certified backflow prevention assembly service provider shall forward a copy of the instrument's calibration report to the Department. The Department shall deem unacceptable testing reports prepared by certified backflow prevention assembly service providers 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.

Reporting Responsibilities

Facility Owners are directly responsible for all reports and reporting procedures regarding backflow preventers installed to protect the County's Public 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.

Reports for initial certification tests, scheduled tests, repairs, and replacements of a Facility's backflow preventer must be completed by a certified backflow prevention assembly service provider as required by this Manual. Such reports shall be forwarded to the Department by the certified backflow prevention assembly service provider electronically through the Department's website. The certified backflow prevention assembly service provider shall transmit all completed reports to the Department no later than seven (7) days following the annual test of the backflow prevention assembly. At the completion of the repairs and new installations, the backflow prevention assembly shall be tested and tagged by a certified backflow prevention assembly service provider as required by this Manual and test results shall be reported to the Department within one (1) business day of the testing. The certified backflow prevention assembly service provider shall notify the Facility Owner(s) of any failed test results within one (1) business day following the test.

Facility Owners shall notify the Department within one (1) business day if their backflow preventer has been damaged, is discharging abnormally, or has failed any tests, as follows:

1. Notify the Department by emailing water.saver@mymanatee.org or by calling (941)792-8811 Ext. 5267 or Ext. 5283. If the Department's offices are closed, notify the after-hours on-call personnel.
2. Contact a certified backflow prevention assembly service provider from the approved list for immediate repairs, replacement and testing of the assembly or device.

IV. CROSS CONNECTION BACKFLOW PREVENTION PROGRAM ADMINISTRATION

The Department shall include staff of qualified personnel to perform and/or oversee the following services as required by this Manual:

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 Manual for certified backflow prevention assembly service providers;
8. Maintenance of the approved list of certified backflow prevention assembly service providers and removal from the list of any service provider whose conduct is contrary to the requirements of this Manual, the Code of Conduct, or the best interest of the County or its Public Water System; and
9. Inspection, testing, maintenance, repair, replacement, and submission of reports relating to backflow preventers at Facilities.

The Department shall review and approve the information and data submitted by Facility Owners and approved backflow prevention assembly service providers for the installation, testing, repair, replacement, and relocation of backflow preventers required under this Manual or that existed prior to the effective date of this Manual.

The Department shall be responsible for evaluating the hazard posed by the Facility's system or Facility's use.

The Department may deny or disconnect a service connection in which:

1. a hazard exists to the County's Public Water System, unless otherwise prohibited by this Manual or the Manatee County Code; or
2. the Facility Owner fails to install, test, operate, maintain, repair, or replace an appropriate and approved backflow preventer in accordance with the County Code and this Manual.

The Department may inspect all new approved backflow preventer installations for compliance with the AWWA Manual M-14, the Utility Standards, and this Manual.

The Department shall not accept any tests or reports for any backflow prevention assembly, unless submitted by an approved backflow prevention assembly service provider from the approved list, consistent with the requirements of this Manual. The Department shall compile and maintain all significant data resulting from reports submitted under this Manual.

The Department shall require additional data on any report deemed necessary, prudent, or helpful in the administration of this Manual.

V. CROSS CONNECTION BACKFLOW PREVENTION PROGRAM RESPONSIBILITIES

A. Facility Owners

The Facility Owner shall be responsible for ensuring, by installation of an appropriate and approved backflow prevention assembly or device, that water from any other water source or any other harmful substance does not enter the County's Public Water System.

Facility Owners whose Facilities pose a hazard to the County's Public Water System shall comply with provisions of this Manual and act pursuant to the directions of the Department in order to prevent or decrease Contamination of the public water supply.

Upon order by the Department, the Facility Owner shall install or cause to be installed an approved backflow prevention assembly or device and shall maintain such backflow preventer at the Facility Owner's expense.

The Facility Owner shall be directly responsible and wholly liable for all procedures regarding the Facility's backflow prevention assembly and/or device.

No Facility Owner shall alter the backflow preventer protecting the County's Public Water System, unless such alteration is approved by the Department.

No Facility Owner shall circumvent the Facility's backflow preventer protecting the County's Public Water System.

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.

The Facility Owner shall immediately report to the Department any malfunction or damage which could affect the backflow preventer's ability to protect the County's Public Water System.

The Facility Owner shall be responsible for arranging all installations, tests, maintenance, repairs, replacements, and relocations of backflow prevention assemblies and devices in accordance with this Manual 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 preventer protecting the County's Public Water System on file at the Facility's location for at least one year.

The Facility Owner shall be responsible for ensuring that each backflow prevention assembly is tested as required by this Manual.

The Facility Owner shall be responsible for ensuring that each backflow preventer is replaced timely as required by this Manual.

The Facility Owner shall be responsible for reporting to the Department any installations, tests, repairs, replacements, and relocations of backflow prevention assemblies and devices at the Facility.

The Facility Owner shall not relocate or remove a backflow prevention assembly or device prior to receiving written approval from the Cross Connection Control Program.

A failure on the part of the Facility Owner to comply with the regulations in this Cross Connection Control Manual or in Chapter 2-31 of the Manatee County Code could result in a disconnection or denial of water service; a code enforcement action; a civil lawsuit for monetary damages; an action for injunctive relief; or other legal action for fees or costs.

B. Certified Backflow Prevention Assembly Service Providers

Certified backflow prevention assembly service providers shall ensure that all installations, tests, maintenance, repairs, replacements, and relocations completed on any backflow prevention assembly or device protecting the County's Public Water System are performed in compliance with manufacturer's recommendations, the AWWA Manual M-14, the Utility Standards, and this Manual.

Certified backflow prevention assembly service providers shall submit to the Department all information relating to installations, tests, repairs, replacements, and relocations on any backflow prevention assembly or devices protecting the County's Public Water System as requested by the Department.

Certified backflow prevention assembly service providers shall ensure that all information submitted to the Department is reliable and accurate.

Certified backflow prevention assembly service providers shall maintain copies of all documentation and results of all tests, repairs, and replacements on backflow prevention assemblies and devices protecting the County's Public Water System and any related correspondence for at least one year.

Certified backflow prevention assembly service providers shall only perform those activities for which their certification is valid and approved as specified in this Manual. Reports submitted by non-certified or non-approved personnel shall not be accepted by the Department.

Certified backflow prevention assembly service providers shall notify Facility Owners if any backflow prevention assembly serving their property fails a test within one (1) business day of the test date.

Certified backflow prevention assembly service providers shall comply with the AWWA Manual M-14, the Utility Standards, and all provisions and requirements of this Manual.

Certified backflow prevention assembly service providers shall not relocate or remove a backflow prevention assembly or device prior to receiving written approval from the Department's Cross Connection Control Program.

Code of Conduct

Certified backflow prevention assembly service providers shall sign and abide by the Department's Code of Conduct. The Code of Conduct provides for accountability to practice the standardized procedures as set forth in this Manual while establishing an acceptable standard of care for all MCUD water customers. The Code of Conduct can be found in Appendix 9 (pages A10-A-12) of this Manual.

Certified backflow prevention assembly service providers who fail to comply with the Manatee County Cross Connection Control Manual and the Code of Conduct and may be subject to disciplinary action. The Manatee County Utilities Department will determine the appropriate level of disciplinary action, depending on the frequency, nature and severity of the offense, which may include the following:

- (1) Verbal consultation or email correspondence to address code violation.
- (2) Written warning issued to the certified backflow prevention assembly service provider.
- (3) Suspension of testing privileges in Manatee County, which includes removal from the list of certified backflow prevention assembly service providers and revoking access to Department's reporting website, until specified corrective actions have been completed.
- (4) Revocation of testing privileges in Manatee County which includes removal from the list of certified backflow prevention assembly service providers and revoking access to Department's reporting website.

When disciplinary action is imposed on a certified backflow prevention service provider, the Department will clearly state what violation has occurred, along with what actions are required to return to compliance, including the deadline for compliance.

C. Pest Control Operators

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.

To be a protected potable water location, there must be overhead piping arrangements with installed reduced pressure backflow prevention assembly 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 principle backflow prevention assembly must be installed on the fill line.

VI. QUALIFICATIONS OF CERTIFIED BACKFLOW PREVENTION ASSEMBLY SERVICE PROVIDERS

A certified backflow prevention assembly service provider must hold, at a minimum, a valid and current certification from the UF/TREEO, FW&PCOA, ABPA, or equivalent minimum thirty-two (32) hour certification program as a certified backflow prevention assembly service provider, and

1. 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. a valid and current certificate as a fire protection system Contractor V or higher for fire system lines; or
3. a valid and current license as an Underground Utility and Excavation Contractor or work under the direct supervision of an Underground Utility and Excavation Contractor for potable water lines serving commercial properties, if the Underground Utility and Excavation Contractor is performing work as part of a larger construction project at the commercial property.

To be on the approved list maintained by the Department, the certified backflow prevention assembly service provider must read and execute a copy of the Code of Conduct (included in the Appendix of this Manual) and submit such executed copy and all other proper documentation to the Department.

A certified backflow prevention assembly service provider on the approved list who holds a valid license as a Plumbing Contractor or who works under the direct supervision of a Plumbing Contractor may install, test, repair, replace or relocate backflow prevention assemblies on potable water lines.

A certified backflow prevention assembly service provider on the approved list who holds a valid certificate as a fire protection system Contractor V or higher or who works under the direct supervision of a fire protection system Contractor V or higher may install, test, repair, replace or relocate backflow prevention assemblies for fire system lines.

A certified backflow prevention assembly service provider on the approved list who holds a license as an Underground Utility and Excavation Contractor or who works under the direct supervision of an Underground Utility and Excavation Contractor may install, replace, relocate, and test, backflow prevention assemblies on potable water lines serving commercial properties, if the Underground Utility and Excavation Contractor is performing work as part of a larger construction project at the commercial property. An Underground Utility and Excavation Contractor may only conduct the initial test of backflow prevention assemblies installed by that contractor.

Conduct that fails to comply with the requirements of this Manual, the Code of Conduct, or the best interest of the County or its Public Water System shall be grounds for removal from the list of certified backflow prevention assembly service providers or termination of any County contracts for the provision of services under this Manual.

All persons providing services to the County or the Facility specified in this Manual shall comply with all provisions and requirements of this Manual.

VII. EMERGENCY ACTION PLAN

Although Manatee County Utilities Department Cross Connection Control Program takes precautions to prevent any cross connection between the County's Public Water System and non-potable water, emergencies do occur. When they do, they require quick, correct and decisive responses. Certified Backflow Prevention Assembly Service Providers are expected to adhere to the following guidelines:

1. Report any existing cross connection immediately to the Cross Connection Control Program (941) 792-8811 ext. 5267 or ext. 5283 Monday – Friday between the hours of 7:00 am and 4:00 pm. If needed, turn the water off at the backflow prevention assembly shut off valve(s).
2. If an emergency requires immediate water meter turn off after hours, on weekends or holidays call (941) 792-8811 and choose an emergency assistance option. In addition, an email shall be sent to water.saver@mymanatee.org within 24 hours describing existing issues and any corrective action scheduled and/or implemented.
3. If there is an actual or possible cross connection with a fire line supply, **DO NOT TURN WATER OFF UNDER ANY CIRCUMSTANCES**. Notify the Cross Connection Control Program who will then notify the appropriate Fire District.
4. The CCCP Compliance Officer will be dispatched during regular business hours and take appropriate action as conditions warrant. Once the cross connection has been eliminated, water service may be restored.
5. Any property found to have a confirmed cross connection will be required to install and maintain a backflow preventer regardless of existing conditions or degree of hazard on the property once the cross connection has been eliminated.
6. All confirmed cross connections will be entered into the required Cross Connection Log and reported to Florida Department of Environmental Protection for inclusion in the Cross Connection Control Program Annual Report Form 62-555.900(1).



APPENDIX

- 1) State of Florida Letter of Approval Cross Connection Control Program (Page A-1)
- 2) Manatee County Backflow Prevention Service Provider Registration (Page A-2)
- 3) Signature Authorization Form for Certified Backflow Prevention Assembly Service Provider (Page A-3)
- 4) Required Backflow Prevention Assemblies (Pages A-4 – A-5)
- 5) Backflow Prevention Assembly Tag Specifications (Page A-6)
- 6) Petition to Remove a Backflow Prevention Assembly (Page A-7)
- 7) Customer Complaint Form (Page A-8)
- 8) Location of Designated Protected Potable Water and Reclaimed Water Filling Stations (Page A-9)
- 9) Code of Conduct for Certified Backflow Prevention Assembly Service Providers (Pages A-10 – A-12)



STATE OF FLORIDA
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

February 10, 1992

In the matter of a cross-connection control program:

Public Water System Name: Manatee County Public Works Department

PWSID NO.: 6411132

Ms. Vicky Zimarino
Manatee County Public Works Department
4501 66th St. W.
Bradenton, FL 34209

Dear Ms. Zimarino:

Rule 17-610.470(1), Florida Administrative Code (F.A.C.), requires that cross-connection control programs be developed for public water systems that serve areas that also are provided reclaimed water under a reuse system permitted under Part III of Chapter 17-610, F.A.C. Rule 17-610.491, F.A.C. requires that such cross-connection control programs be accepted by the Department before the reuse system is placed into operation.

On January 28, 1992, the Department received the cross-connection control program for the Manatee County public water system. Because the requirements of Rule 17-555.360 and Chapter 17-610, F.A.C., related to reuse systems have been met, the Department accepts this cross-connection control program.

If you have any questions about this acceptance of the Manatee County cross-connection control program, please call Kathy Kimes at 748-0666.

Sincerely,

Kathy Kimes,
Engineering Supervisor

cc: Reuse System Permittee, MCPWD
DER Drinking Water Section/Tallahassee
DER District Office

DISTRICT SIX
HRS MANATEE COUNTY PUBLIC HEALTH UNIT
410 SIXTH AVENUE EAST, BRADENTON, FLORIDA 34208-1986

(813) 748-0666 FAX-(813) 747-7347

LAWTON CHILES, GOVERNOR



Utilities
Water Compliance
4520 66th Street West
Bradenton, FL 34210
Phone: (941) 792-8811
www.mymanatee.org/backflow

Manatee County Backflow Prevention Assembly Service Provider Registration

Thank you for your interest in providing backflow prevention assembly testing services in Manatee County. Our Cross Connection Control program is guided by the Safe Drinking Water Act, Florida Administrative code 62.550 and 62.555, Article X of Chapter 2-31 Manatee County of Ordinance, Recommended Practice for Backflow Prevention and Cross-Connection Control AWWA M-14 Manual, and Manatee County Land Development Code Chapter 8. We recommend that you familiarize yourself with these documents.

Please complete this form and return it with all required documents by mail or email water.saver@mymanatee.org. Once we process your documents you will receive an email with instructions to create a tester's profile on the backflow test reporting website. *Please note test reports are only accepted electronically through the website. Any reports submitted by mail, e-mail or fax will be rejected.* Website address: www.mymanatee.org/backflow.

Company Name: _____

Preferred Contact Phone Number: _____

Preferred Contact E-mail: _____

Would you like your company to be advertised on our public certified backflow prevention assembly service providers list? ☐ Yes ☐ No

Please provide a copy of the following documents:

- ☐ Plumbing License and/or Fire Marshal Certificate*
- ☐ Certificate of Liability Insurance
- ☐ Test Kit Calibration Report

**Current ordinance requires a plumbing license for all potable backflow prevention assembly testing and a fire marshal certificate for Fireline backflow assembly testing.*

If you have any questions or concerns, please contact us at water.saver@mymanatee.org or 941-792-8811 ext. 5283 or ext. 5267.



WEBPAGE AUTHORIZED AGENT FORM
MANATEE COUNTY UTILITY OPERATIONS DEPARTMENT
CROSS CONNECTION CONTROL OFFICE
4520 66TH ST. W. BRADENTON, FLORIDA 34210
OFFICE (941) 792-8811, EXT. 5283 OR 5267

SIGNATURE AUTHORIZATION

Date: _____

This authorization expires according to the following category expiration dates: plumbing license, fire marshal certificate, backflow prevention assembly tester and repair certification, and the calibration of equipment.

I, _____ of _____
(Print Tester's Name) (Print Name of Company)
at _____
(Company Address, City, State and Zip)

having personally appeared and presented identification, do hereby notify the Manatee County Cross Connection Control office that the signature below is my true signature for the purpose of being authorized to enter the secured Manatee County website for the purpose of inputting backflow prevention assembly certification data. I further acknowledge that the data I input will become a legal document. I also acknowledge that the below listed information is on file and updated with the Manatee County Cross Connection office.

Tester's Signature: _____

Backflow Prevention Certification Number: _____ Expiration Date: _____

Telephone Number: _____ Fax: _____

Tester's Email Address: _____

Florida Plumbing/Fire Marshal License Number: _____ Expiration date: _____

Test Kit: Make: _____ Model: _____

Calibration Date: _____ Serial Number: _____

General Insurance Carrier: _____ Policy Expiration Date: _____

NOTICE: THE LICENSED TESTER SIGNATURE IS TO BE NOTARIZED

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization, this _____ day of _____, 20, by _____ [name of person acknowledging], who is personally known to me or who has produced _____ [type of identification] as identification.

NOTARY PUBLIC

Printed Name
My Commission Expires: _____

REQUIRED BACKFLOW PREVENTERS

Approved Backflow Preventers

Manufacturers and models of approved backflow preventers for each type of assembly or device are listed in the most recent document “List of Approved Backflow Prevention Assemblies” distributed by Foundation for Cross-Connection and Hydraulic Research, University of Southern California.

Potable Water Service

An approved backflow preventer must be installed on each potable water service connection to any premises containing specific types of facilities. Listed below are examples of facilities and the minimum protection required to be installed for each type of facility. This list represents the minimum requirements and should not be construed as a complete record of all facilities. The minimum approved backflow preventer for unlisted facilities will be determined on a case-by-case basis by the CCCP.

List of Hazards and Required Minimum Protection

Description of Premises ¹	Assessment of Hazard	Minimum Backflow Protection ²
Commercial or Industrial facility	Health / Non-health	RP
Auxiliary water sources are surface water, including natural sources such as spring, river, stream, pond, lake, bay, harbor, or sea	Non-health	DuC ^{3,4}
Auxiliary water source that is groundwater	Non-health	DuC ^{3,4}
Auxiliary water source that is reclaimed water ⁵	Health	RP
In-ground irrigation system – connected to potable water	Health	RP / PVB ⁶
In-ground irrigation system – not connected to potable water – surface water or reclaimed water supplied ⁷	Health	RP
In-ground irrigation system – not connected to potable water supply – well supplied	Health	RP
Facility located within a flood hazard area	Non-health	DuC ^{3,4}
Multistory facilities with five or more floors at or above ground level	Non-health	RP / DCVA ⁸
Multifamily residential facilities with single service connections or individual service connections	Non-health	DuC ^{3,4}
Solar domestic hot water system	Health / Non-health	DuC ^{3,4}
Customer supplied with potable water via temporary service connection from CWS	Health / Non-health	DuC ^{3,4}
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.	Health / Non-health	RP
If any cross connection is discovered	Health / Non-health	RP

¹In cases of any Facility where two (2) or more conditions listed in the Table 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.

²Means of backflow protection, listed in an increasing level of protection, include the following: DuC, DC; a pressure vacuum breaker assembly (PVB); RP; and an air gap. A PVB may not be used if backpressure could develop in the downstream piping.

³Residential plumbing systems with service connection size below 2" are subject to adverse effects of thermal expansion. DuCs do not provide any provision for protection of customers' plumbing from thermal expansion. The downstream plumbing protection remains the owner's responsibility. In case the DuC valve is installed at point of connection to the CWS, the owner shall install and maintain a thermal expansion control device downstream of DuC as per Florida Building Code (FBC), Plumbing, 607.3 to protect internal plumbing.

⁴A Dual Check valve (DuC) may be approved only if there is no known cross-connection between the plumbing system and the auxiliary water system on the customer's premises. Upon discovery of any cross-connection between the owner's plumbing system and any auxiliary water system on the customer's premises, the water service to the property shall be disconnected until the cross-connection is eliminated by the owner and the Reduces Pressure type backflow protection is installed at the service connection.

⁵AWWA Manual M-14 designates reclaimed water sites as high-hazard due to potential health impacts as a result of impurities and pathogens. Reclaimed water lines should be separated from potable water lines following same requirements for separation of potable water lines from sewage lines and air gap separation or Reduced Pressure type backflow prevention assembly shall be installed on each potable water line entering a reclaimed water site.

⁶Pressure Vacuum Breaker (PVB) may not be used if backpressure could develop in the downstream piping due to thermal expansion or pumping equipment. RP protection is required if backpressure could develop in the downstream piping.

⁷Irrigation water supplied by direct reclaimed water source or by centralized community irrigation systems that utilize an arrangement of retention ponds that could be supplemented by reclaimed water, well water, or other sources.

⁸Double-check if the customer has no potable water distribution lines connected to the suction side of a booster pump; or RP if the customer has one or more potable water distribution lines connected to the suction side of a booster pump.

Fire Protection Service

An approved backflow prevention assembly must be installed on each fire protection service to any premises where the fire protection system contains any of the components listed below, unless the CCCP determines that no actual or potential hazard to the public water system exists. Fire systems

are divided into six (6) general classes. Listed below are descriptions of the classes and the minimum protection to be provided for each class.

Class	Description	Minimum Protection
1	Closed automatic fire system with no pump connection (i.e., 20 heads or less)	None
2	Closed automatic fire system with pump connection	DC
3	Closed automatic fire system with pump connection and auxiliary water supply on or available to premises or located within 1,700 feet from pump connection	RP
4	Closed automatic fire system with closed pressure tank supply (jockey pump may be interconnected with domestic water supply and/or air compressor connection)	RP
5	Closed automatic sprinkler system interconnected with auxiliary water system	RP
6	Fire system used for combined purpose of supplying automatic sprinklers, hose lines, fire hydrants and standpipes and domestic water for industrial purposes:	RP
6(a)	Self-draining fire hydrant on premises presenting health or system hazard (i.e., bulk storage yard, chemical plant, fuel storage plant, sewage treatment plant, stockyard or similar facility)	RP
6(b)	Self-draining fire hydrant on premises presenting pollution hazard (i.e., multi-Family residential building, fabrication plant, office building or similar facility)	DC

Backflow Prevention Assembly Tag Specifications

Tested and Certified By:						
JAN	Backflow Testing Company					DEC
FEB	123 Main Street					NOV
MAR	Bradenton, FL					OCT
APR	941-123-4567					SEP
MAY	State Cert # CFC 999999					AUG
JUN	Backflow Cert # T10-15-999					JUL
ANNUAL TEST OF BACKFLOW PREVENTER						
DO NOT REMOVE						
Test valid 1 year from dated punch						
26	27	28	29	30	31	32

Required Information:

- Company Name;
- Address;
- Plumber's License Number/Fire Marshal Certificate Number;
- Phone Number;
- Date of Test or Expiration Date (it has to clearly specify which date is listed).

Size: 2 ¾" x 4 ½", 0.015" to .03" Thick

Material: No adhesive tags allowed.



PETITION TO REMOVE A BACKFLOW PREVENTION ASSEMBLY

Cross Connection Control Office
4520 66th St. W., Bradenton, FL 34210
Phone: (941) 792-8811 EXT 5267
Email: water.saver@mymanatee.org

Date: _____

Customer's Name: _____ Account Number: _____

Property Address: _____

Customer's Contact Information: Phone: _____ Email: _____

Are you a property owner? *(only the property owner is authorized submit this form)* Yes ☐ No ☐

Reason for a backflow preventer removal? _____

Do your outside hose spigots have vacuum breakers installed? Yes ☐ No ☐ Don't know ☐

(all hose spigots are to have vacuum breakers installed as required by Florida Building Code P2902.4.3)

Does your property have any of the following?

- An in-ground irrigation system _____ Yes ☐ No ☐
- A secondary source of water, such as reclaimed water or well _____ Yes ☐ No ☐
- A fountain with a dedicated fill pipe _____ Yes ☐ No ☐
- A fire sprinkler system _____ Yes ☐ No ☐
- A flood zone designation _____ Yes ☐ No ☐
- Property that abuts or includes a body of water, including river, bay, lake or pond _____ Yes ☐ No ☐
- A solar water heating system _____ Yes ☐ No ☐
- A commercial, industrial, multistory or multifamily residential facility _____ Yes ☐ No ☐

Property Owner's Signature: _____

Petition will be processed within 30 days of submission

For Department's Use Only Date received: _____ Ready for Inspection: _____

Initial Inspection: Petition Approved ☐ Conditionally Approved ☐ Petition Denied ☐

Comments: _____

Reviewer: _____ Date: _____

Follow Up Inspection (if needed): Petition Approved ☐ Petition Denied ☐

Comments: _____

Reviewer: _____ Date: _____

Final Inspection: Petition Conditions Met ☐ Petition Conditions Not Met ☐

Reviewer: _____ Date: _____

Comments: _____



BACKFLOW PREVENTION ASSEMBLY SERVICE PROVIDER COMPLAINT FORM

Cross Connection Control Office
4520 66th St. W., Bradenton, FL 34210
Phone: (941) 792-8811 EXT 5267
Email: water.saver@mymanatee.org

Date: _____

Customer's Name: _____ Account Number: _____

Property Address: _____

Customer's Contact Information: Phone: _____ Email: _____

Property Owner's Signature: _____

COMPLAINT

Service Provider: _____

Date of Service: _____

Nature of Complaint: _____

Pertinent documents attached: Yes _____ No _____

Requested Resolution: _____

Signature: _____

*All complaints filed with the MCUD Cross Connection Control Program
will be kept on file for one year and are a matter of public record.*

For Department's Use Only Date received: _____ Date Filed: _____

Comments: _____

Reviewer: _____ Date: _____



Location of Designated Reclaimed Water Filling Station

**Contact MCUD Finance to set up account at 941-792-8811
ext. 5227**

Southeast Water Reclamation Facility (SEWRF) 3331 Lena Road, Bradenton, FL 34211



Southwest Water Reclamation Facility (SWWRF) 5101 65th St West, Bradenton, FL 34210



Manatee County Utilities Department Code of Conduct

The Manatee County Utilities Department (MCUD) is responsible for protecting the public water distribution system. MCUD must take all reasonable precautions to protect the potable water supply from potential contamination from hazards originating from a customer's premises. To this end, and in accordance with Rule 62-555.360, Florida Administrative Code, MCUD has created this Code of Conduct, which is authorized by and incorporated into this Cross Connection Control (CCC) Manual. The Code of Conduct must be signed by certified backflow prevention assembly service providers who wish to be included in MCUD's approved list of certified providers.

Pursuant to the Code of Conduct, certified backflow prevention assembly service providers must follow standardized procedures set forth in the CCC Manual, while establishing an acceptable standard of care for all MCUD water customers, as set forth herein:

- A. Certified backflow prevention assembly service providers shall maintain the technical qualifications as required by the CCC Manual.
- B. Certified backflow prevention assembly service providers shall only record data and submit test forms for assemblies they have tested. A service provider shall not record any falsified data on the Backflow Preventer Test Report.
- C. Certified backflow prevention assembly service providers shall tag tested assemblies as required by the CCC Manual. A service provider shall not remove another service provider's tag from a functioning assembly with a current certification.
- D. Certified backflow prevention assembly service providers shall not perform any unnecessary tests or installations or make any unnecessary repairs or replacements.
- E. Certified backflow prevention assembly service providers shall record all backflow assembly test data via Web-Entry. The submitted test form shall comply with the reporting requirements of the CCC Manual.
- F. When backflow prevention assembly repairs are necessary, the certified backflow prevention assembly service provider shall only utilize original factory repair parts as manufactured for the assembly. All repairs and replacements shall be recorded and submitted as provided for in the CCC Manual.
- G. Certified backflow prevention assembly service providers shall not install a new backflow preventer without a permit. Installations, relocations, and variances shall meet the installation requirements in the CCC Manual.
- H. Certified backflow prevention assembly service providers shall submit all annual recertifications no later than seven (7) days from the test date. At the completion of the repairs and new installations, the backflow prevention assembly shall be tested and tagged by a certified backflow prevention assembly service provider as required by this Manual and test results shall be reported to MCUD within one (1) business day. The certified backflow prevention assembly service provider shall notify the Facility Owner(s) of any failed test results within one (1) business day of the test.
- I. Certified backflow prevention assembly service providers shall have the test kit checked for accuracy at least once a year or when in need of calibration. The backflow prevention assembly service provider will make the test kit available to the CCC for inspection. Test reports submitted with an expired test kit will not be accepted.
- J. Certified backflow prevention assembly service providers shall observe new installations and replacements of backflow prevention assemblies to ensure the assembly is the correct type of A-11 protection for the degree of hazard and properly installed in accordance with the CCC Manual and Utility Standards installation requirements. If the newly installed or replaced assembly is not the correct type of protection, or installation requirements are not proper, the backflow prevention assembly service provider shall fail the field test and note the discrepancy on the backflow preventer test report form.

- K. Certified backflow prevention assembly service providers have neither the responsibility nor the authority to represent or enforce MCUD's CCC Program. Enforcement lies solely with MCUD and Code Enforcement officials.
- L. Certified backflow prevention assembly service providers shall comply with the CCC Manual in the exercise of their responsibilities as covered by these rules and practices. The service provider shall supply any requested information and appear on the site of the assembly when requested.
- M. It is the certified backflow prevention assembly service provider's responsibility to inform MCUD of any changes in their address, phone numbers, email, certification status, etc.
- N. Certified backflow prevention assembly service providers shall correspond with the Utilities Department as follows:

Mail: Manatee County Utilities Department
ATTN: Cross Connection Control Program
4520 66th Street West
Bradenton, Florida 34210
Email: water.saver@mymanatee.org
Phone: 941-792-8811

O. Certified backflow prevention assembly service providers who fail to comply with this Code of Conduct and the Manatee County CCC Manual may be subject to disciplinary action. MCUD will determine the appropriate level of disciplinary action, depending on the frequency, nature and severity of the offense, which may include the following:

- (1) Verbal consultation or email correspondence to address code violation.
- (2) Written warning issued to the certified backflow prevention assembly service provider.
- (3) Suspension of testing privileges in Manatee County, which includes removal from the list of certified backflow prevention assembly service providers and revoking access to Department's reporting website, until specified corrective actions have been completed.
- (4) Revocation of testing privileges in Manatee County, which includes removal from the list of certified backflow prevention assembly service providers and revoking access to Department's reporting website.

Please complete and sign the Acknowledgement on the following page, in the presence of a notary, and return to:

Mail: Manatee County Utilities Department
ATTN: Cross Connection Control Program
4520 66th Street West
Bradenton, Florida 34210
Email: water.saver@mymanatee.org

ACKNOWLEDGEMENT

I hereby certify that I have thoroughly read, understand and agree to fully conform to the standards of the Code of Conduct and the Manatee County Cross Connection Control Manual (Manual). My failure to conform to the Code of Conduct and the Manual's standards may lead to my removal from the approved list of certified backflow prevention assembly providers maintained by the Manatee County Utilities Department, as well as revocation of testing privileges in Manatee County.

Signature

Date

Printed Name

License / Certificate Number

Business Name

Tester's Telephone Number

Mailing Address

City

State

ZIP

STATE OF _____

COUNTY OF _____

Before me, a Notary Public, the foregoing instrument was acknowledged by means of

☐ physical presence, or

☐ online notarization

this _____ day of _____ 20____, by *[insert name]*, who,

☐ is personally known to me or

☐ has produced _____ as identification.

[CHECK APPLICABLE BOXES TO SATISFY IDENTIFICATION REQUIREMENT OF
SECTION 117.05, FLORIDA STATUTES]

Signature of Notary Public

My Commission Expires: _____

(Legibly print, type, or stamp commissioned name of Notary Public and affix official notary seal below.)