



Greater
Pine Island
Water Association, Inc.

CROSS-CONNECTION CONTROL PROGRAM

AUGUST 31, 2009

Greater Pine Island Water Association Inc. (GPIWA) Cross-Connection Control Program

I. Purpose

- A. To protect the public potable water supply served by GPIWA from the possibility of contamination or pollutants by isolating, within its customer's internal distribution system, such contaminants or pollutants which could backflow or back-siphon into the public water system.
- B. To promote the elimination or control of existing cross-connection, actual or potential, between its customers in-plant potable water system, and non-potable systems.
- C. To provide a continuing cross-connection control program which will effectively prevent the contamination or pollution of GPIWA's potable water system by cross-connection.

II. Authority

- A. The authority to enact a cross-connection program has been given to the water purveyor by laws such as the Federal Safe Drinking Water Act of 1974, Florida Administrative Code Chapters 62-555.360, and referenced by AWWA Manual M14. These laws give the water purveyor the primary responsibility for preventing water from unapproved sources, or any other substances, from entering the public potable water system.

III. Responsibility

- A. GPIWA in its entirety shall be responsible for the protection of the public potable water distribution system from contamination or pollution due to the backflow or backsiphonage of contaminants or pollutants through its water service connections.
- B. GPIWA will insure backflow prevention devices will be required on all service connections within its service area starting with commercial services with the highest degree of hazard.

IV. Definitions

- A. **Approved** - Accepted by the General Manager and/or Board of Directors of GPIWA as meeting an applicable specification stated or cited in this regulation, or as suitable for the proposed use.
- B. **Auxiliary Water Supply** - Any water supply, on or available, to the premises other than the purveyor's approved public potable water supply.

- C. **Backflow** - The flow of water or other liquids, mixtures or substances, under positive or reduced pressure in the distribution pipes of a potable water supply from any source other than its intended source.
- D. **Backflow Preventer** – An approved device/s or means designed accordingly dependent on the degree of hazard to prevent backflow or backsiphonage into a potable water system.
- E. **Backflow Technician** - A person who holds one or all of the licenses below and whose training is recognized by the Florida Section of AWWA (American Water Works Association) and hold a current license having been (re) certified within the past 2 years.
1. Tester Technician – A person who holds a current license allowing him to test backflow devices.
 2. Repair Technician - A plumber who holds a current license to repair backflow devices.
 3. Surveyor and Inspection Technician – A person licensed to inspect properties and building for possible cross-connection to recommend the type of device required.
- F. **Backpressure** - A condition in which the water pressure is greater within the customer's piping than the pressure being supplied by the water purveyor's system.
- G. **Backsiphonage** - The flow of water or other liquids, mixtures or substances into the distribution pipes of a potable water supply system from any source other than its intended source caused by the sudden reduction of pressure in the potable water supply system.
- H. **Containment** - A method of backflow prevention, which requires an approved backflow prevention device between the public potable water system and the customer owned water service entrance piping.
- I. **Contaminant** - A substance that will impair the quality of the water to a degree that it creates a health hazard to the public that could lead to poisoning or the spread of disease.
- J. **Cross-Connection** - Any actual or potential connection between the public potable water supply and any unknown non-potable source that could possibly enter the potable water system.
- K. **Fixture Isolation** - A method of backflow prevention in which a backflow preventer is located to correct a cross connection at an in-plant location rather than at a water service entrance.
- L. **Greater Pine Island Water Association Inc.** – Any of the following terms used within this document, GPIWA, or water purveyor.
- M. **Owner** – Any person that can act on the owner's behalf, or who has legal title to allow entrance to a property upon which a cross-connection inspection is to be made, or upon which a cross-connection is present.

- N. **Pollutant** - A foreign substance, that if permitted to get into the public water system, will degrade its quality so as to constitute a hazard, or impair the usefulness or quality of the water to a degree which does not create an actual hazard to the public health but which does adversely and unreasonably effect such water for domestic use.
- O. **Water Service Entrance** - That point in the owner's water system beyond the sanitary control of GPIWA, generally considered being the outlet end of the water meter and always before any unprotected branch.

V. Commercial Customers

- A. It will be the responsibility of all commercial customers to purchase, install and maintain on a yearly basis the required type of backflow prevention device at their own expense.
- B. Commercial customers will allow GPIWA to perform an initial inspection of premises and inform the owner by letter of any corrective action deemed necessary, the method of achieving the correction, and the time allowed for the corrections to be made. Ordinarily, (90) ninety days will be allowed, however, this time may be shortened depending upon the degree of hazard involved and the history of the device(s) in question that may have been installed prior to this program. The Owner may contact GPIWA in writing of extenuating circumstances as to why the correction cannot be made within the allotted time. GPIWA may grant a time extension to the Owner; in no case will the extension exceed an additional (30) thirty days depending on the degree of hazard.
- C. GPIWA shall inform the Owner by letter after the second inspection, of failure to comply within the time restraints of the initial inspection letter of compliance. Upon request by the owner and before (minimum of no less than 5 working days) the date set forth in the second notification before termination of service, GPIWA may grant up to an additional fifteen (15) days for the Owner to make the necessary corrections dependent on the degree of hazard. In the event, the Owner has not filed for an extension, or was not granted an extension, and has failed to comply with the first or second letters of notification, upon the third inspection **no further notifications will be sent**, the water service to the Owner's premises will be terminated within a period not to exceed 48 hours. Water service to the Owner's property will not be reinstated until the proper device(s) has been installed, tested, and GPIWA has received all forms completed and approved by a certified backflow technician.
- D. If GPIWA determines at any time that a serious threat to the public health exists, the water service will be terminated immediately until the proper device(s) has been installed.

VI. Residential Customers

- A. At a minimum, all residential customers will have a dual check backflow prevention device installed directly after the meter.
- B. Residential customers having a fire sprinkler system or any type of irrigation system will be required to install a reduced pressure principle backflow prevention device better known as a RPZ. These devices are required to be certified on a yearly basis. **Residential customers requiring this type of device fall under the same category as commercial customers and should refer to Section V Commercial Customers.**
- C. The customer must report to GPIWA that such a device has been installed.

VII. Administration

- A. GPIWA will setup, and administrate a cross-connection control program, to include but not limited to:
 - 1. GPIWA will setup and maintain a database that will list all devices/type of device(s) and location of each device within its distribution system.
 - 2. GPIWA will mail notifications to all customers who have or must have a device installed that requires yearly certification as to when a device is due for recertification or must be installed by. GPIWA will maintain and have on file and mailed with each notification, an updated list of certified backflow testers.
 - 3. GPIWA will ensure all backflow prevention devices other than residential dual checks will be tested on a yearly basis and dual checks replaced every 5 years.
 - 4. GPIWA will keep current and archive all records as required by the State of Florida Department of Environmental Protection and/or other governing agencies.

VIII. Requirements

- A. GPIWA
 - 1. GPIWA will not allow any cross-connections within its potable water system to remain unless it is protected by an approved backflow control device.
 - 2. On all new or retro fitted installations other than residential dual check valves, GPIWA will provide all required information and forms for a satisfactory installation. If deemed necessary by GPIWA or requested by

the Owner a second onsite inspection of the proposed location and/or inspection of the installed device will be conducted.

3. For devices installed prior to the start of this program commercial or residential, GPIWA will perform evaluation of the device and premises to evaluate the hazard potential. After the evaluation of the device and premises, GPIWA will inform the Owner by letter of any corrective action deemed necessary, the method of achieving the correction, and the time allotted the correction to be made depending on the degree of potential hazard(s). Depending on the degree or potential hazard discovered during inspection, GPIWA will require immediate action be taken by the Owner.
4. GPIWA will immediately terminate water service if it is determined at any time that a serious threat to the public health exists due to a cross-connection.
5. GPIWA will not test, install or perform maintenance on, or be responsible for yearly recertification of any backflow prevention device privately owned. GPIWA shall have on file, a list of private contractors who are certified backflow device testers, installers, and repair technicians. GPIWA will be responsible for insuring all privately owned devices are properly maintained by the Owner. All charges for the purchase, installation, repair or testing will be incurred by the Owner of the building or property.
6. GPIWA will specify type of backflow device that will be required. GPIWA will supply a list of recommended manufacturers of backflow devices that are AWWA approved and known to give good service.
7. GPIWA will begin initial premise inspections and preexisting device evaluation of its commercial accounts to determine the nature of existing or potential hazards following the approval of this program by the General Manager and/or The Board of Directors. Initial focus will be on commercial customers that have, or have the potential of a high hazard situation.

B. Owner

1. The Owner will be responsible for the elimination of all existing and potential cross-connections past his water service entrance on his premises.
2. The Owner, after having been informed by a letter from GPIWA, shall comply with all requirements of the notification.
3. The Owner shall be responsible for all costs incurred in the purchase, installation, repair and yearly recertification of all backflow devices other than a dual check used only on a residential dwelling.

4. The Owner shall not install a bypass around any backflow preventer unless there is a backflow preventer of the same type on the bypass. Owners who cannot shut down operation for testing of the device(s) must supply additional devices necessary to allow testing to take place.
5. If required by GPIWA the Owner shall have a backflow preventer(s) installed in a manner approved by AWWA (M14), Southern Plumbing Codes, and/or any applicable State/County codes.
6. The Owner shall only install the type of backflow preventer(s) that has been previously approved by GPIWA.
7. Any residential Owner must report to GPIWA if they have a private well or other private water source other than the water supplied by GPIWA. Any Owner failing to report a private well or other private water source (irrigation systems) in a timely manner could have GPIWA water service terminated. The Owner will be required to have installed and maintain a reduced pressure principle backflow prevention device(s) better known as a RPZ at the service entrance if a private well or water source is present.
8. The Owner shall be responsible for all costs involved in the purchase, installation, annual testing of the device, and repairs/re-inspection of the device in the case that the device fails to operate correctly.
9. The Owner will also be responsible for all costs involved for non-compliance of a device not being installed in a timely manner and /or termination of service.

IX. Degree of Hazard

- A. GPIWA recognizes the threat to the public water system arising from cross-connections. All threats will be classified by degree of hazard or potential hazard. All hazards will require the installation of an approved reduced pressure principle backflow prevention device(s) better known as a RPZ.

X. Existing In-Use Backflow Prevention Device(s)

- A. Any existing backflow preventer shall be allowed by GPIWA to continue in service unless the degree of hazard is such as to supersede the effectiveness of the present backflow preventer, at which time an RPZ will be required.

XI. Annual Testing

- A. Reduced pressure principle backflow prevention device(s) better known as a RPZ shall be tested and inspected annually.
- B. Annual testing shall be performed by a certified tester recognized by AWWA or FWPCOA and having a current license.

- C. Any backflow control device requiring annual testing which fails during its test will be repaired or replaced immediately. When repairs are necessary, upon completion of the repair the device will be re-tested to insure correct operation. If the backflow control device fails the test and cannot be repaired or replaced immediately, a substitute device must be installed. If a substitute cannot be found it is the responsibility of the tester to notify GPIWA immediately of the situation. It will be the responsibility of GPIWA to decide if the service to the property is to be terminated depending on the degree of hazard until repairs have been made or a new device installed. In situations where the hazard is not a threat to public health, a compliance date of not more than thirty (30) days after the test date will be established for repairs or replacement of the device to be made. If repair has not been completed in the allotted time, service will be terminated to the property and a turn off fee will be charged to the Owner and paid for before service can be restored. All such activities must be recorded on the annual testers report form. To insure uninterrupted service should a repair need to be made it is recommended the Owner purchase spare parts, repair tools, or a replacement device. For businesses that must have a continuous water supply, a parallel installation of two (2) devices also is an effective means of the Owner insuring uninterrupted water service during testing or repair of devices and is strongly recommended when the Owner desires such continuity.
- D. Any backflow prevention device where there is a history of test failures may be required to test on a semi-annual basis or the device to be replaced, if the degree of hazard warrants it. Cost of the additional testing or device replacement will be at the Owner's expense.

XII. Records and Reports

A. Records

The GPIWA will initiate and maintain the following:

- 1. Master files of a commercial customer's initial premises inspection, the degree of hazard, device type, installation date, initial test results, annual test results, and all repairs or replacement of the device.
- 2. Master files of all residential backflow devices, installation date, and rebuild or replacement dates.
- 3. Maintain list of backflow technicians who are certified to test backflow devices and holds a current license obtained from an AWWA approved course/school.

B. Reports

1. Test Results, Initial Installation, Annual Testing

- a. An initial installation report of the backflow device being installed must be completed and sent to GPIWA within the allotted time. Reports not received within that time frame could have water service terminated to their premises. The Owner should keep a

copy/record of all test results, repairs/replacement of their device to avoid any problems due to mail service etc.

- b. An annual test result report of the installed device must be completed and sent to GPIWA within the allotted time. Reports not received within that time frame could have water service terminated to their premises. The Owner should keep a copy/record of all test results, repairs/replacement of their device to avoid any problems due to mail service etc.
- c. All device test result reports must be completed by a certified backflow technician whose license is recognized by AWWA.

XIII. Fees and Charges

A. Commercial

1. Because the installation, repair, replacement and annual testing are the responsibility of the Owner of a commercial building there will be no fees charged by GPIWA.
2. If an Owner has ignored and/or is delinquent on the installation, testing, repair or replacement of a backflow device that would cause GPIWA to terminate water service to his premises, GPIWA will charge the same fees as if the service had been terminated for non-payment.
3. GPIWA has no control over the fees charged by plumbers and/or other licensed and/or certified persons that install, test, or repair backflow devices. **GPIWA does not offer this service.** GPIWA does not recommend any one person offering these services. The list of certified persons is offered as a courtesy only.

XIV. Addendum

A. Residential Dual

1. Installation of a residential dual check device on a retrofit basis on existing service lines will be instituted at a time and possibly a potential cost to the homeowner as deemed necessary.
2. **NOTICE:** The Owner must be aware that installation of a residential dual check valve may result in a potential closed plumbing system within his residence. GPIWA takes no responsibility other than to notify its customers. As such, provisions may have to be made and paid for by the Owner to provide for thermal expansion within his closed loop system,

i.e., the installation of thermal expansion devices and/or pressure relief valves must be installed by a licensed plumber.

B. Commercial Building

1. Effective the date of the acceptance of this Cross-Connection Control Program for the customers of the Greater Pine Island Water Association Inc. all new commercial buildings will be required to install a reduced pressure principle device (RPZ) immediately downstream of the water meter.
2. Installation of a RPZ device on a retrofit basis on existing service lines will be instituted after an initial inspection and installation dates will vary dependent on the degree of hazard. All costs for such retrofit is at the Owner's expense and must be installed by a licensed plumber.

C. Residential Fire Systems and Irrigation Systems

1. Effective the date of the acceptance of this Cross-Connection Control Program for the customers of the Greater Pine Island Water Association Inc. all new installations of a simple flow through fire system or irrigation system on a residential dwelling will be required to install a dual check valve device. If connected directly to the water main the device must be installed immediately downstream of the connection on the customer's property. If the system is connected after the meter, an upgrade from a dual check device to a double check device must be made. All such upgrades are at the Owner's expense. GPIWA takes no responsibility in the costs associated for the required yearly maintenance of these devices.

XV. Types of Devices and Manufactures

- A. Reduced Pressure Zone (RPZ): This device will be used on all commercial buildings, fire systems that utilize their own storage or mix chemicals used in high hazard situations or in a commercial building where the situation could change resulting in an unknown hazard. GPIWA strongly recommends that all new retrofit installations of reduced pressure principle include the installation of strainers located immediately upstream of the backflow device. The installation of strainers will preclude the fouling of backflow devices due to both foreseen and unforeseen circumstances occurring to the water supply system such as water main repairs, water main breaks, fires, periodic cleaning and flushing of mains, etc. These occurrences may "stir up" debris within the water main that will cause fouling of backflow devices installed without the benefit of strainers.

- B. Dual Inline Check Valve: This device will be used on all residential homes with no potential hazards to public health.

XVI. Manufacturers

- A. Although there are many manufacturers of RPZ backflow prevention devices, some more expensive and some less expensive, GPIWA recommends devices manufactured by **Wilkins or an approved equal** for durability, reliability and ease of repair.

EXHIBIT A

LIST OF APPROVED BACKFLOW TECHNICIANS

1. Joel's Plumbing 239-283-7888
5582 Doug Taylor Circle
St. James City, FL 3956

2. Kenneth Cutlip Plumbing 239-945-2988
5816 SW 1st Place
Cape Coral, FL

3. Avis Plumbing 239-481-1511
831 SW 44th Street
Cape Coral, FL

4. Bergau Brothers, Inc. 239-574-6556
401 NE 15th Ave
Cape Coral, FL

Disclaimer: The Greater Pine Island Water Association, Inc. (GPIWA) makes no representation regarding the abilities, performance, or quality of service of the backflow prevention assembly testers listed above, nor does GPIWA assume or accept any responsibilities for the actions of these backflow prevention assembly testers. This posting only contains those Certified Testers that have authorized their name to be published.

To the best of GPIWA's knowledge, this information on this list for each tester is believed to be accurate. From time to time the information in this listing may be updated with new information and/or changes.