Fulton County
Department of Water Resources
Backflow Prevention Program

POLICY AND PROCEDURES

SECTION I. DEFINITIONS, INTENT, PURPOSE AND CONTROL

1. DEFINITIONS:

For purposes of this document the following definitions will be used:

1. Hazardous Contaminants – Will be defined the same as those contaminants listed in the National Primary Drinking Water Standard. Primary standards protect public health by limiting the levels of contaminants in drinking water.
2. Non-hazardous Pollutants – Will be defined the same as those contaminants listed in the National Secondary Drinking Regulations. National Secondary Drinking Water Regulations are guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.
3. Customer – The owner, occupier or lessor of a property or structure to which potable water is served by the Fulton County Water Distribution System. The term "customer" is all inclusive meaning residential, commercial, industrial, institutional, government, irrigation, or other.

2. INTENT:

To identify all customers' (residential, commercial, industrial, institutional, government, irrigation, or other) water systems that have connections to, or the potential for connection to, apparatus, vessels, etc., that could have impurities in varying degrees and, if not properly controlled and contained, could contaminate or pollute both the customer's water system and the public potable water system. It is also the intent to apply the concept that the type of protection required shall be determined by whether the impurities are hazardous contaminants (high hazard) or non-hazardous pollutants (medium hazard). Any property with water service provided by Fulton County that also has water provided for any other service (irrigation, etc) that is provided by any other source including a well, pump from surface water, reuse water, etc., shall be classified as a hazard for the purpose of backflow prevention. Those domestic customers that only consume water for indoor and minimal ancillary outdoor use without permanently installed irrigation systems are deemed to present minimal or no potential hazard (low hazard). Fulton County may not require protection on low hazard customers at the discretion of the Director of the Department of Water Resources.

3. APPLICABILITY

The requirements of this Backflow Prevention and Cross Connection Control Program are applicable to all Fulton County water customers, existing and new, residential, commercial, institutional, governmental, industrial, irrigation, or other. There is no "grandfathering" of existing customers.

4. PURPOSE:

(A) To assist the customer in protecting the customer's own potable water system against actual or potential backflow and/or backsiphonage of any contamination or pollutant by controlling each cross-connection or potential cross-connection on said premises.

(B) To protect the Fulton County public potable water system against actual or potential backflow by containing within a customer's premises, any contamination or pollutant that has entered or may enter the customer's potable water system through an undiscovered or uncontrolled cross-connection on said premises. This will be known as containment, meaning the ability to contain and isolate impurities within a given system.

(C) To eliminate uncontrolled cross-connections to non-potable systems as well as uncontrolled interconnections to any potable water systems by installing appropriate backflow preventers or device ("BFP" or "BFD") to isolate or contain such systems from that of Fulton County.

(D) To establish, coordinate, execute and maintain a total Backflow Prevention Program.

5. CONTROL:

Requires cooperation between Fulton County, the County Building and Plumbing Inspector, the Public Health Department, the Fire Department, and the Customer in the execution of and adherence to the duties and responsibilities of each as set forth by this policy, these procedures and other applicable codes and regulations.

SECTION II. RESPONSIBILITIES:

1. FULTON COUNTY (PURVEYOR):

The Fulton County Department of Water Resources, as authorized by the Board of Commissioners, is primarily responsible for preventing the contamination and pollution of the Fulton County public potable water system by instituting a program of **"Backflow Prevention by Containment."** Such responsibility begins at the point of origin of the potable water supply, including all of the distribution system and ends at the service connection to the customer's water system. The required customer supplied backflow prevention device, at the service connection, shall provide the level of protection as determined by Fulton County. In addition, Fulton County shall exercise

reasonable vigilance to ensure that the customer adheres to this policy and the procedures as stated and outlined herein.

2. BUILDING AND PLUMBING INSPECTOR:

The County Building and Plumbing Inspector is primarily responsible for enforcing the plumbing code to prevent contamination and pollution within the customer's water system. When necessary, an onsite assessment by Fulton County's backflow prevention personnel may be necessary to evaluate the type of water use on site for determination of proper service connection protection.

3. CUSTOMER (CONSUMER):

The customer has the dual responsibility for protecting the potable water within his own system from degradation due to conditions originating on his premises, by complying with the plumbing code, and also by protecting the quality of water in Fulton County's public potable water system against any potential or actual degradation generated on or from said premises through uncontrolled cross-connections, by backflow prevention at the service connection. Fulton County through evaluation, established standards and codes, will determine the type of backflow protection that is required at the customer's service connection. The customer, unless otherwise notified, shall be responsible for the cost of procurement, installation, testing and maintenance of said backflow preventer and/or related appurtenances. The customer is also responsible and shall indemnify Fulton County for any damage or harm to its potable water system as a result of the customer's installation, maintenance or testing of the BFD.

4. PUBLIC HEALTH DEPARTMENT:

The Fulton County Health Department is primarily responsible for enforcing health regulations to prevent contamination and pollution within the customer's water system, and for conducting epidemiological investigations of water borne illnesses or outbreaks. The Health Department is the responsible party for deciding if contamination in the public water supply presents a danger to the public.

SECTION III. IMPLEMENTATION AND ENFORCEMENT:

1. This policy and these procedures shall become effective immediately upon approval by the Fulton County Board of Commissioners and the Georgia Department of Natural Resources, Environmental Protection Division for **Backflow Prevention by Containment,** in conjunction with existing Plumbing Code requirements related to backflow prevention by cross connection control for all potable water, irrigation and fire protection systems, and/or other water systems within the Fulton County water service area.

2. Priority schedules shall be established and evaluations made by Fulton County for the customer's installation (new or existing) or retrofit requirements at the service connection. Fulton County, however, shall not be responsible for correction of cross-connections which

may exist within a customer's premises. At a minimum, the evaluation or inspection shall consider:

(A) The existence of potential and actual cross-connections;
(B) The nature of the business, equipment, machinery and materials handled on the property;
(C) The probability of backflow occurring;
(D) The degree of piping system complexity;
(E) The potential for system modification.

The program shall be implemented to ensure that the customers with a high hazard potential are contained first and customers with a medium hazard potential contained second. Low hazard connections may not require backflow protection at the discretion of the Director of the Department of Water Resources. All customers, existing and new, will be evaluated and included in the appropriate hazard classification. These classifications are not all inclusive. If a customer is covered by more than one category, then the more stringent applies. Fulton County reserves the right to downgrade the backflow preventer required for any service connection when no high hazard cross connections exist within the premises. The hazard classes are as follows:

(A) HIGH HAZARDS (CONTAMINATION OR HEALTH HAZARD):

(1) *Agriculture*; where fertilizers, herbicides and pesticides are used
(2) *Cooling Systems/Boilers*; where chemicals are used to protect the system from degradation
(3) *Industry*; including but not limited to, plating facilities, chemical manufacturing, dye plants, oil and gas production, storage or transmission properties, paper and paper products plants, battery plants, automobile part manufacturing, metal manufacturing, cleaning, processing and fabricating, cloth and fabric treatment or manufacturing
(4) *Medical Facilities;* including but not limited to, hospitals, medical buildings, dentists, veterinary buildings or facilities, nursing homes, clinics, and sanitariums
(5) *Mortuary;* Morgues, mortuaries, and autopsy facilities
(6) *Carwashes*
(7) *Printing Shops and Photography*
(8) *Laundries and Dry Cleaning*
(9) *Beauty Parlors, Hair Salons and Barber Shops*
(10) *Laboratories,* including dental and veterinary
(11) *Exterminating Companies*
(12) *Lawn Care Companies / Nurseries*
(13) *All customer properties where a well (active or inactive) exists and a violation of the requirements of Fulton County Code of Ordinances Chapter 34 Health and Sanitation, Article IV Drinking Water Supply exist or where water is provided for any other service (irrigation, etc) by any other source including pumping from surface water, reuse water, etc.*

(B) MEDIUM HAZARDS (POLLUTION OR NUISANCE HAZARDS):

(1) *Buildings*; Apartments when service connection serves 15 or more units, hotels, mobile home parks, multistoried commercial offices, shopping centers
(2) *Food Services*; including but not limited to, food processing, dairies, cold storage, bottling plants and restaurants (high hazard where health hazard exists)
(3) *Irrigation and Sprinkler Systems* (high hazard where chemicals are injected)
(4) *Schools and Colleges*
(5) *Industry,* other than that listed under high hazards which pose no current, evaluated health threat
(6) *Service Stations and Garages*
(7) *Residential or commercial properties where a well (active or inactive) exists and no violation exist of the requirements of Fulton County Code of Ordinances Chapter 34 Health and Sanitation, Article IV Drinking Water Supply.*

(C) LOW HAZARDS

(1) *Residential*; single and multi-family with service connections serving less than 15 units with no installed irrigation or sprinkler systems
(2) *Commercial Offices*; single level without any medium or high hazard occupants

3. Enforcement of this policy and procedures shall be administered by the Fulton County Department of Water Resources and/or its designee, and shall follow the guidelines as outlined in herein and in Fulton County ordinances.

4. Failure to install and/or test the appropriate backflow preventer, after a 60day notification period for all high and medium hazard class service connections, may result in the termination of water service.

5. If there is contamination found to exist in a line connected to, or that in the judgment of the Director of the Department of Water Resources, could reasonably be connected to the public water supply, then service would be immediately terminated until in the judgment of the Director of the Department of Water Resources 1) the source of contamination is determined and eliminated and/or 2) the other water source (if any) is permanently eliminated, e.g., an RPZ backflow preventer is installed.

SECTION IV. INSPECTION OF FACILITIES:

1. The customer, upon request, shall furnish to Fulton County, any pertinent information regarding the customer's water system and/or business activities on such premises where backflow and/or backsiphonage are deemed possible through uncontrolled plumbing connections and/or cross-connections.

2. Nothing herein shall relieve the customer of the responsibility for conducting or causing to be conducted periodic surveys of water use practiced on the premises to determine whether

there are actual or potential uncontrolled cross-connections within the customer's water system through which contaminants or pollutants could flow back into his own or the Fulton County potable water system. If the customer fails to provide requested pertinent information or if the premise is classified as restricted or there is high security with no admittance, maximum protection at the service connection shall be required.

3. Facilities considered to pose an actual or potential contamination and/or pollution threat to the public potable water system shall be subject to inspection by Fulton County and, when deemed necessary, in accompaniment with a representative from the plumbing inspection, health and/or fire departments. Inspections will focus on plumbing outlets and potential contaminating or polluting substances within a facility. Inspections will be scheduled at a time set by Fulton County after coordination with the customer. Using information gathered, Fulton County will determine the degree of potential backflow hazard and specify the type of backflow protection required at the customer's service connection and/or within the customers private water system.

4. While in the course of a routine inspection or special investigation, the Inspector discovers a condition of imminent or actual system contamination, Fulton County may immediately discontinue service to the facility. Service will not be restored until the hazardous condition has been corrected and re-inspected.

5. In the event of accidental contamination or pollution of the public potable water system, the customer, if he/she is so aware, shall immediately notify Fulton County so that appropriate emergency measures can be implemented.

6. If a customer fails to fully comply with this policy and after reasonable notice to the customer of a violation, water service shall be discontinued and any other precautionary measures that are deemed necessary may be implemented.

SECTION V. APPLICATION PROCEDURES

1. Upon application for service, an application/questionnaire for backflow prevention shall be completed for new and change over service accounts. This is to ensure that the proper device is installed and tested by the customer for the type of hazard the property represents. It also ensures that the customer is properly educated as to backflow prevention/cross-connection control and his/her responsibilities for compliance. This application must be fully completed and forwarded to the Fulton County Backflow Prevention Coordinator.

2. The customer must provide, at the time of application, all information necessary to complete the application. This information shall include:

(A) Type of service; (i.e. residential, industry, carwash, health facility, laundry, irrigation, sprinkler, etc.);
(B) Name of business;
(C) Name of contact person;
(D) Mailing address; Service address;

(E) Telephone number;
(F) Size of service connection;
(G) Date of application;
(H) Customer signature.

3. If Fulton County, upon inspection and investigation, determines that a customer has intentionally provided false or erroneous information on his or her application, the water service may be immediately discontinued until such time as the correct information or measures are taken. Notwithstanding, the customer will be responsible for any re-connection charges or fees.

4. Each application will have a statement explaining the Backflow Prevention Program. It will also notify the customer that he/she will be contacted by Backflow Prevention personnel to inform them of the requirements for their facility.

5. The statement will read as follows:

It is the responsibility of Fulton County to supply our customers with high quality, safe potable water. For this reason, and to comply with the adopted Georgia State Plumbing Code and the Georgia Rules for Safe Drinking Water, Fulton County has developed a backflow prevention program. **This program recognizes that all water users have plumbing fixtures with the potential for allowing contaminants or impurities to accidentally enter the potable water system. The purpose of the program is to protect the public from backflow of contaminated water into the potable water system, by requiring the installation of a backflow preventer on the customer's side of the service connection. Fulton County will contact you to notify you of the requirements for your facility. Each customer, unless otherwise notified, shall be responsible for the installation and all cost associated with test and maintenance requirements for the backflow preventer(s) and/or related appurtenance(s).**

The Customer is required to amend the application upon one or more of the following occurrences:

a. Business activity change
b. Structural change (requiring plumbing modifications)
c. Change of leasee

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<Customer's signature>

6. Fulton County Development Services Division of the Department of Planning and Community Services (DSD) shall contact the Backflow Prevention Coordinator upon receiving any new construction plans or drawings. The Backflow Prevention Coordinator

will assess the plans and determine what type of hazard the new facility will pose and specify the protective device for the service. The appropriate building permit application form must be completed at the DSD (Appendix D – Program Documentation) to acquire a location identification number.

7. Fire service applications shall be handled in the same manner as a normal service application. The application shall indicate that fire service is being requested. The Backflow Prevention Coordinator will consult with the Fulton County Fire Department and determine what backflow preventer is specified for that service then notify DSD.

SECTION VI. WATER FROM OTHER SOURCES AND FIRE HYDRANTS:

1. In no case shall the plumbing on a premise be installed or interconnected so that water in the Fulton County potable water system, Fulton County reuse water system, or a private water supply in any way become intermingled.

2. Upon discovery of an uncontrolled interconnection on any premises being furnished water by the Fulton County potable water system, the owner of said premises shall be notified that the interconnection must be removed or controlled by a backflow preventer within thirty (30) days, and that failure to remove or correct the interconnection will result in discontinued water service. The water service will not be reconnected until backflow protection is installed at the service connection.

3. All hydrant meters shall be used with an appropriate backflow preventer (see Appendix E – Backflow Preventer Selection and Specifications).

4. All vehicles that use hydrants to fill or flush their equipment (i.e. fire trucks, street sweepers, spray trucks, etc.) must be equipped with an appropriate backflow preventer or an approved air gap (see Appendix E - Backflow Preventer Selection and Specifications). This requirement and proper use of fire hydrants will be discussed and information provided to the customer during the meter application/installation process. Spot checks of vehicles will be made in the field to verify proper compliance. In the event of non-compliance, fire hydrant meter usage will be revoked.

5. Where private water supply wells exist or are installed on any property served by the public water supply the location shall be deemed a hazard requiring backflow prevention. Should any of the requirements of Fulton County Code of Ordinances Chapter 34 Health and Sanitation, Article IV Drinking Water Supply be in violation, the site shall be deemed a High Hazard area with regard to backflow prevention requirements. Should all criteria be met the site will be deemed a medium hazard. Property owners shall be responsible for producing documentation from the Fulton County Department of Health and Wellness that all criteria are met. Documentation of approval of the well by the Department of Health and Wellness shall satisfy this requirement.

6. Any property with water service provided by Fulton County that also has water provided for any other service (irrigation, etc) that is provided by any other source including

pumping from surface water, reuse water, etc., shall be classified as a high hazard for the purpose of backflow prevention.

SECTION VII. SELECTION OF BACKFLOW PREVENTERS (SEE APPENDIX E - Backflow Preventer Selection and Specifications**):**

1. Vacuum breakers and backflow preventers shall be selected for protection of the water system by containment on the basis of the hazard class involved and the types of cross-connections. Selection of the type and approval of the manufacturer and model of the backflow preventers will be by Fulton County. The impurities shall be classified as contaminants (hazardous) or pollutants (non-hazardous) and the types of cross-connections by pressure or non-pressure as follows: (see Appendix G - Terminology)

(a) **Cross-connection, Non-pressure type:** This type of connection, when not protected by a minimum air gap, shall be protected by an appropriate vacuum breaker or an appropriate backflow preventer.

(b) **Cross-connection, Pressure type:** This type of connection shall be protected by an appropriate backflow preventer only. CAUTION: Vacuum breakers shall not be used alone on a pressure type cross-connection.

NOTE: Because an irrigation system serves in an environment that is open to the atmosphere, it would not be classified as a pressure type cross-connection. However, due to the special nature of the installation, minimum protection against backflow shall include a double check backflow preventer. If chemicals are injected into the system, minimum protection shall include a reduced pressure principle backflow preventer, as per Chapter 6, Georgia Amendments to the Standard Plumbing Code – 2000 Edition, Code, Section 608.16.15 (see Appendix E - Backflow Preventer Selection and Specifications).

2. Vacuum breakers shall be corrosion resistant. Other backflow prevention devices, including accessories, components and fittings in sizes 2" and smaller, shall be bronze with threaded connections. Sizes 3" and larger shall be bronze or fused epoxy coated iron inside and out. Pressure type vacuum breakers also require test cocks for testing purposes (see Appendix E - Backflow Preventer Selection and Specifications).

3. Reduced pressure zone assemblies shall be used on all high hazard service connections, except where a sufficient air gap has been provided. These assemblies shall include either ball valves with Teflon seats or gate valves with resilient seats. These assemblies also require test cocks for testing purposes (see Appendix E - Backflow Preventer Selection and Specifications).

4. Double check valve assemblies shall be used on medium hazard service connections, except where internal conditions of the facility require that this service be considered a high hazard service connection. These assemblies shall include either ball valves with Teflon seats or

gate valves with resilient seats. These assemblies also require test cocks for testing purposes (see Appendix E - Backflow Preventer Selection and Specifications).

5. Each backflow preventer shall have a brass identification tag securely attached with corrosion resistant mechanical fasteners. The tag should include the manufacturer's name, size, model number, serial number, maximum working pressure, and temperature. In addition, the direction of flow shall be clearly marked.

6. Fire protection systems are broken down into six (6) classes. The following approved devices are for new construction. Existing fire services will be evaluated on a case-by-case basis. Below are the classes and the required protection for each class as referred in the *AWWA Manual M-14*:

(A) **Class 1 -** Direct connections from the public water mains; no pumps, tanks or reservoirs; no physical connection from other water supplies; no antifreeze or other additives of any kind; all sprinkler drains discharging to atmosphere, dry wells, or other safe outlets. **Approved device: Double Detector Check Valve Assembly.**

(B) **Class 2 -** Same as class 1 except that booster pumps may be installed in the connections from the street mains. **Approved device: Double Detector Check Valve Assembly.**

(C) **Class 3 -** Direct connection from public water supply mains, plus one or more of the following: elevated storage tanks, fire pumps taking suction from above ground covered reservoirs / tanks or pressure tanks. **Approved device: Double Detector Check Valve Assembly.**

(D) **Class 4 -** Directly supplied from public water mains, similar to Class 1 and Class 2, with an auxiliary water supply dedicated to fire department use and available to the premises, such as auxiliary supply located within 1700 ft. of the pumper connection. **Approved device: Reduced Pressure Detector Check Valve Assembly.**

(E) **Class 5 -** Directly supplied from public water mains and interconnected with auxiliary supplies, such as pumps taking suction from reservoirs exposed to contamination, rivers, ponds, driven wells, mills or other industrial water systems, or where antifreeze or other additives are used. **Approved device: Reduced Pressure Detector Check Valve Assembly.**

(F) **Class 6 -** Combined industrial and fire protection systems supplied from the public water mains only, with or without gravity storage or pump suction tanks. **Approved device: Reduced Pressure Detector Check Valve Assembly.**

SECTION VIII. APPROVAL OF DEVICES:

All backflow preventers must be approved by Fulton County in accordance with the applicable standards of the American Society of Sanitary Engineering, the American National Standard Institute, the American Water Works Association, the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research, the Standard Plumbing Codes and the Fulton County Backflow Prevention Program. All internal backflow preventers which are installed for protection of the customer's water system shall be approved by the Fulton County's Building and Plumbing Inspector in accordance with the County's plumbing code.

SECTION IX. LOCATION AND INSTALLATION OF BACKFLOW PREVENTERS (SEE APPENDIX E - Backflow Preventer Selection and Specifications):

1. Location of all backflow prevention devices shall be in an area that provides a safe working environment for testing and maintenance. This area shall be readily accessible and free from extreme cold, heat and/or electrical hazards. For example, the backflow preventer should not be located close to a furnace, above moving machinery, sealed behind a wall, etc. The customer will be responsible for the proper location and installation in compliance with this policy, all applicable codes, and/or Fulton County Department of Water Resources' or its designee's requirements.

2. Installation of all backflow preventers shall be in accordance with the Standard Plumbing Code, the following procedures and any other applicable codes or regulations.

   (A) When a double check valve backflow preventer is installed in the containment concept, it shall be installed as close to the service connection as practical in an approved meter box or covered vault.

   (B) Reduced pressure principle (RP) backflow preventer installed in the containment concept at the service connection, shall be above ground in a structure that is protected from freezing. In lieu of the above ground installation at the service connection, and at the request of the owner, Fulton County may allow the RP to be installed immediately inside the building, provided the owner certifies that no tap or connection of any type may be made on the line between the backflow preventer and the meter. If the backflow preventer is installed in the basement of a building, a minimum clearance of 12 inches is required between the discharge port and the floor of the basement. Adequate drainage, as prescribed by the manufacturer, shall be provided in order to prevent flooding in the event of an RP discharge.

3. Facilities that must have continuous uninterrupted water supply shall install backflow devices in parallel for testing and maintenance purposes. In no case shall a bypass arrangement be installed or maintained unless also equipped with an approved backflow preventer.

4. Vacuum breakers and backflow preventers equipped with atmospheric vents or with relief openings shall be so installed and so located as to prevent any vent or any relief opening from being submerged. They shall be installed in the position as recommended by the manufacturer and as prescribed in the following:

   (A) **Vacuum Breaker, Atmospheric Type (AVB):** This backflow preventer shall be at least six (6) inches above the highest outlet or the overflow level on the non-potable system. It shall be installed downstream of the last shut off valve. It shall not be subjected to continuous pressure for more than 12 hours. Designed for backsiphonage only on single fixtures.

   (B) **Vacuum Breaker, Pressure Type (PVB):** This backflow preventer shall be installed at least twelve (12) inches above the highest outlet or the overflow level on the non-potable system. It may be installed upstream of the last shut off valve. Designed for backsiphonage only.

   (C) **Vacuum Breaker, Hose Type (HVB):** This backflow preventer shall be installed directly on the hose threads, if not an integral part of the valve. It may not be subjected to continuous pressure, static or flowing, nor shall it be attached to a freezeless type hydrant unless it is a model specifically designed for this service**. CAUTION: Freezeless hydrants require manual winterization except those models with integral vacuum breaker and automatic drainage features.**

   (D) **Backflow Preventer, Double Check Valve (DCV):** This backflow preventer shall not be buried in the earth, but may be installed below grade in a pit provided ball valve test cocks fitted with brass plugs are used. Assembly bolts on bronze DCV's installed in pits shall be resistant to electrolysis. A full port ball valve or gate valve with resilient seats shall be near the inlet and outlet sides of the device.

   (E) **Backflow Preventer with Intermediate Atmospheric Vent (IAV):** This backflow preventer shall not be installed below grade. Where relief port discharge could cause water damage, it shall be piped via an air gap, or funnel at the vent/relief port to a floor drain or other approved location. A positive shut off valve and union shall be near the inlet and outlet sides of the device.

   (F) **Backflow Preventer; Reduced Pressure Principle (RP):** This backflow preventer shall not be installed below grade. Where relief port discharge could cause water damage, it shall be piped via an air gap, or funnel at the vent/relief port to a floor drain or other approved location. A full port ball valve or gate valve with resilient seats shall be near the inlet and outlet sides of the device.

   (F) **Air Gap:** Separation shall be two (2) times the diameter of the pipe above flood rim with a one inch minimum distance.

!*!*!*!*!*SPECIAL CAUTION*!*!*!*!*!

THERMAL EXPANSION - When water is heated and stored in a distribution system or a branch of the system that has been closed by the installation of a backflow prevention device or any other checking device, an approved auxiliary relief valve, or expansion chamber should be installed to limit thermal expansion. The installation of such a device shall be in accordance with State Plumbing Code and shall be the responsibility of the customer. It is the customer's responsibility to determine whether thermal expansion is a possibility. Fulton County is not responsible for damages occurring within the customer's water system.

!*!*!*!*!*SPECIAL CAUTION*!*!*!*!*!

SECTION X. TESTS, MAINTENANCE AND REPAIRS:

1. All backflow preventers, both new and existing and all parts thereof, shall be maintained in a safe condition and good working order.

2. The customer shall be responsible for the cost of testing, maintaining, and repairing all backflow preventers at the service connection and on his/her own private system.

3. Tests, maintenance and repairs are to be made in accordance with the following schedule or more frequently where inspections indicate a need or are specified in the manufacturer's instructions. The dates for test and maintenance are to be determined and administered by Fulton County.

(A) **Fixed Air Gap Separations -** shall be inspected at the time of installation and at least annually thereafter.

(B) **Pressure Vacuum Breakers -** shall be inspected and tested at the time of installation and at least annually thereafter.

(C) **Double Check Backflow Protector Assembly -** shall be inspected and tested at the time of installation and at least annually thereafter.

(D) **Reduced Pressure Backflow Protector Assembly -** shall be inspected and tested at the time of installation and at least annually thereafter.

4. Test procedures for all backflow preventers shall be as outlined by the current edition of the *University of Southern California Foundation for Cross Connection Control and Hydraulic Research (FCCCHR) Manual,* and the *AWWA Manual M-14*.

5. Testing must be performed by certified, trained professionals who understand the design and intended operation of the device(s) being tested. Testers shall provide Fulton County all required documentation of qualification.

6. Repairs and installation must be performed by a licensed plumber who is trained and certified to enter the device as prescribed by the Georgia State Plumbing Code Annotated.

7. A test and maintenance form for each RP, DC and PVB device shall be provided by Fulton County and a copy maintained by the customer. Following each test or repair, a report (original) shall be sent to Fulton County, and must include the following information (see Appendix E - Backflow Preventer Selection and Specifications).

(A) Account name and number;

(B) Mailing and service addresses;

(C) Contact name and telephone number;

(D) Backflow preventer type, manufacturer, model, size and serial number;

(E) Date of installation;

(F) Date of test or visual inspection;

(G) Name and certification number of authorized person performing test;

(H) Name and license number of authorized person performing maintenance and/or repairs;

(I) Test results;

(J) Description of repairs or servicing required;

(K) Date repairs completed.

8. All backflow preventers and reports shall be subject to periodic inspection by a representative of Fulton County.

9. If Fulton County, upon inspection and investigation, determines that a customer has intentionally provided false or erroneous information on his or her application, the water service may be immediately discontinued until such time as the correct information or measures are taken. Notwithstanding, the customer will be responsible for any re-connection charges or fees.

10. If a backflow preventer is found to be inoperative or malfunctioning, the customer will be given a reasonable time, not to exceed 60 days, to complete corrections required by the inspector or representative. With the exception of cases involving actual or imminent system contamination, the water service will be discontinued immediately and will not be reinstated until the corrections have been completed.

11. If the corrective measures have not been taken in the allotted time, water service may be terminated and/or applicable fines imposed per Fulton County ordinances. The customer shall receive a certified letter of intent to terminate services. Termination procedures may be initiated ten (10) days after receipt. If the customer completes the corrections prior to the deadline, termination of service will not take place. The customer will be responsible for any fees or charges normally assessed for re-establishment of water service if the corrective measures have not been taken within the allotted time.

12. A list of approved testers and installers is maintained by the Backflow Prevention Section and will be provided upon request.

SECTION XI. ADDITIONAL INFORMATION:

Any questions regarding this policy and/or these procedures may be directed to the Backflow Prevention Coordinator of the Fulton County Department of Water Resources.