

**ORDINANCE NO. 0513**

**ORDINANCE OF THE BOARD OF COMMISSIONERS OF COLUMBIA COUNTY,  
GEORGIA REPEALING SECTIONS 86-39 THROUGH 86-46 AND CREATING A NEW  
SECTION 86-39, REGULATING THE USE OF CROSS-CONNECTIONS IN THE  
COLUMBIA COUNTY WATER SYSTEMS, AND ESTABLISHING AN EFFECTIVE  
DATE FOR THE SAME**

**THIS ORDINANCE** adopted by the Board of Commissioners of Columbia County,  
Georgia.

**WHEREAS**, the Board desires to:

- A. Protect the public potable water supply served by the Columbia County Water Utility from the possibility of contamination or pollution by containments, within its customers internal distribution system, such contaminants or pollutants which could backflow or back-siphon into the public water system.
- B. Promote the elimination or control of existing cross-connections, actual or potential, between its customers in-plant potable water system, and non-potable systems ("Cross-Connections").
- C. Provide for the maintenance of a continuing program of Cross-Connection control which will effectively prevent the contamination or pollution of all potable water systems by Cross-Connection.

**NOW, THEREFORE, BE IT ORDAINED** by the Board, and it is hereby ordained by authority of same as follows:

Section 1. Deletion of Sections 86-39 through 86-46 of Chapter 86, Article II of the Code of Ordinances of Columbia County, Georgia.

Section 2. Creation of a new Section 86-39. "Cross-Connections", of the Code of Ordinances of Columbia County, Georgia is hereby created which shall read as described in Exhibit "A";

Section 3. All ordinances or portions of ordinances which are in conflict with this ordinance are hereby repealed to the extent necessary to eliminate such conflict.

Section 4. This ordinance shall become effective immediately upon its adoption.

ADOPTED January 3, 2006.

**BOARD OF COMMISSIONERS OF  
COLUMBIA COUNTY, GEORGIA**

By: *Ron C. Cook*  
Its Chairman

Attest: *Phel J. Dent*  
Its Clerk

[COUNTY SEAL]

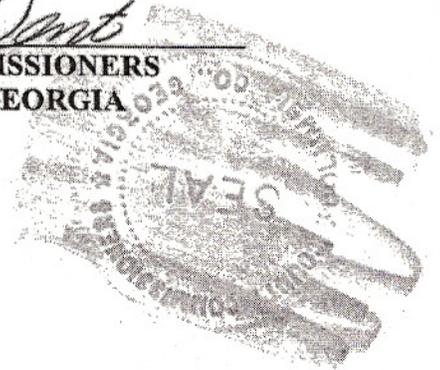


**CLERK'S CERTIFICATE**

I, Phebe Dent, Clerk of the Board of Commissioners of Columbia County, Georgia, (the "Board") **DO HEREBY CERTIFY** that the foregoing pages of typewritten matter constitute a true and correct copy of an Ordinance, adopted by the Board of Commissioners at a regular meeting of the Board of Commissioners duly held on January 3, 2006 at 6:30 p.m., open to the public and in which a quorum was present and acting throughout, and that the original of said Ordinance appears of record in the Ordinance Book of the Board and has been placed onto a CD Rom, which is in my custody and control. It will also be microfilmed as part of the Board of Commissioners minutes.

Given under my hand and seal of the Board, this 3 day of January, 2006.

Phebe A. Dent  
CLERK, BOARD OF COMMISSIONERS  
OF COLUMBIA COUNTY, GEORGIA



## **Cross Connections Exhibit "A"**

### **I. Purpose**

- A. To protect the public potable water supply served by the Columbia County Water Utility from the possibility of contamination or pollution by containment, within its customers 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-connections, actual or potential, between its customers in-plant potable water system, and non-potable systems.
- C. To provide for the maintenance of a continuing program of cross-connection control which will effectively prevent the contamination or pollution of all potable water systems by cross-connection

### **II. Authority**

- A. The Federal Safe Drinking Water Act of 1974, and the statutes of the State of Georgia Chapters 391-3-5 .13 the water purveyor has the primary responsibility for preventing water from unapproved sources, or any other substances, from entering the public potable water system.
- B. Columbia County Water Utility, Rules and Regulations, adopted.

### **III. Responsibility**

The Director of the Water Utility 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 the water service connection. If, in the judgment of the Director of the Water Utility, an approved backflow device is required at the county's water service connection to any customer's premises, the Director, or his delegated agent, shall give notice in writing to said customer to install an approved backflow prevention device at each service connection to his premises. The customer shall, within (90) days install such approved device, or devices, at his own expense, and failure or refusal, or inability on the part of the customer to install said device or devices within ninety (90) days, shall constitute a ground for discontinuing water service to the premises until such device or devices have been properly installed. Backflow assemblies are to be installed by a Licensed Plumber, Licensed Fire Protection System Installer, and/or Licensed Underground Utility Contractor on all new installations only. Backflow assemblies that are retrofits and upgrades must be installed by a Licensed Plumber. All repairs are to be made by a licensed Master Plumber or someone certified by the State of Georgia in backflow device repair. The device requires an Initial test within five days of installation and then annually tested by a Certified Backflow Tester to assure that it is functioning correctly and forwarded to the Compliance Office.

#### IV. Definitions

##### A. Approved

Accepted by the Director of the Water Utility 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

A device or means designed to prevent backflow or backsiphonage. Most commonly categorized as air gap, reduced pressure principle device, double check valve assembly, pressure vacuum breaker, atmospheric vacuum breaker, hose bibb vacuum breaker, residential dual check, double check with intermediate atmospheric vent, and barometric loop.

##### D.1 Air Gap

A physical separation sufficient to prevent backflow between the free-flowing discharge end of the potable water system and any other system. Physically defined as a distance equal to twice the diameter of the supply side pipe diameter but never less than one (1) inch.

##### D.2 Atmospheric Vacuum Breaker

A device which prevents backsiphonage by creating an atmospheric vent when there is either a negative pressure or sub-atmospheric pressure in a water system.

##### D.3 Double Check Valve Assembly

An assembly of two (2) independently operating spring loaded check valves with tightly closing shut off valves on each side of the check valves, plus properly located test cocks for the testing of each check valve.

##### D.4 Hose Bibb Vacuum Breaker

A device which is permanently attached to a hose bibb and which acts as an atmospheric vacuum breaker.

#### D.5 Pressure Vacuum Breaker

A device containing one or two independently operated spring loaded check valves and an independently operated spring loaded air inlet valve located on the discharge side of the check or checks. Device includes tightly closing shut-off valves on each side of the check valves and properly located test cocks for the testing of the check valve(s).

#### D.6 Reduced Pressure Principle Backflow Preventer

An assembly consisting of two (2) independently operating approved check valves with an automatically operating differential relief valve located between the two (2) check valves, tightly closing shut-off valves on each side of the check valves plus properly located test cocks for the testing of the check valves and the relief valve.

#### D.7 Residential Dual Check

An assembly of two (2) spring loaded, independently operating check valves without tightly closing shut-off valves and test cocks. Generally employed immediately downstream of the water meter to act as a containment device.

#### E. Backpressure

A condition in which the owners system pressure is greater than the suppliers system pressure.

#### F. 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.

#### G. Commissioners

Columbia County Board of Commissioners.

#### H. Containment

A method of backflow prevention which requires a backflow prevention preventer at the water service entrance.

#### I. Contaminant

A substance that will impair the quality of the water to a degree that it creates a serious health hazard to the public leading to poisoning or the spread of disease.

#### J. Cross-Connection

Any actual or potential connection between the public water supply and a source of contamination or pollution.

K. Department

Columbia County Water Utility.

L. DNR

Department of Natural Resource

M. EPD

Environmental Protection Division

N. 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.

O. Owner

Any person, who has legal title to, or license to operate or habitat in, a property upon which a cross-connection inspection is to be made or upon which a cross-connection is present.

P. Person

Any individual, partnership, company, public or private corporation, political subdivision or agency of the State Department, agency or instrumentality or the United States or any other legal entity.

Q. Permit

A document issued by the Columbia County Water Utility Compliance Office which allows the use of a backflow preventer.

R. Pollutant

A foreign substance, that if permitted to get into the public water system, will degrade its quality so as to constitute a moderate 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.

S. Water Service Entrance

That point in the owners water system beyond the sanitary control of the District; generally considered to be the outlet end of the water meter and always before any unprotected branch.

T. Director of Water Utility

The Director, or his delegated representative in charge of the Columbia County Water Utility, is invested with the authority and responsibility for the implementation of a cross-connection control program and for the enforcement of the provisions of the Ordinance.

## V. Administration

A. The Columbia County Water Utility will operate a cross-connection control program, to include the keeping of necessary records, which fulfills the requirements of the Commission's Cross-Connection Regulations and is approved by the Commission.

B. The Owner shall allow his property to be inspected for possible cross-connections and shall follow the provisions of the Department's program and the Commission's Regulations if a cross-connection is permitted.

C. If the Columbia County Water Utility requires that the public supply be protected by containment, the Owner shall be responsible for water quality beyond the outlet end of the containment device and should utilize fixture outlet protection for that purpose. He may utilize public health officials, or personnel from the Columbia County Water Utility, or their delegated representatives, to assist him in the survey of his facilities and to assist him in the selection of proper fixture outlet devices, and the proper installation of these devices.

## VI. Requirements

### A. Columbia County Water Utility

1. On new installations, the Columbia County Water Utility will provide on-site evaluation and/or inspection of plans in order to determine the type of backflow preventer, if any, that will be required, will issue permit, and perform inspection and testing. In any case, a minimum of a double check valve with a wye strainer will be required in any new commercial construction and a minimum of a dual check on any residential.
2. For premises existing prior to the start of this program, the Columbia County Water Utility will perform evaluations and inspections of plans and/or 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 correction to be made. Ordinarily, ninety (90) days will be allowed, however, this time period may be shortened depending upon the degree of hazard involved and the history of the device(s) in question.
3. The Columbia County Water Utility will not allow any cross-connection to remain unless it is protected by an approved backflow preventer for which a permit has been issued and which will be regularly tested to insure satisfactory operation.
4. If the Columbia County Water Utility determines at any time that a serious threat to the public health exists, the water service will be terminated immediately.
5. The Columbia County Water Utility shall have on file, a list of Private Contractors who are certified backflow device testers. All charges for these tests will be paid by the Owner of the building or property.
6. The Columbia County Water Utility requires all reduced pressure principle devices and double check valve backflow preventers 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. Owner

1. The Owner shall be responsible for the elimination or protection of all cross-connections on his premises.
2. The Owner, after having been informed by a letter from the Department, shall at his expense, install, maintain, and test, or have tested, any and all backflow preventers on his premises.
3. The Owner shall correct any malfunction of the backflow preventer which is revealed by periodic testing.
4. The Owner shall inform the Columbia County Water Utility of any proposed or modified cross-connections and also any existing cross-connections of which the Owner is aware but has not been found by the Department.
5. 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.
6. The Owner shall install backflow preventers in a manner approved by the Columbia County Water Utility.
7. The Owner shall install only backflow preventers approved by the Columbia County Water Utility or the EPD.
8. Any Owner having a private well or other private water source, must have a permit if the well or source is cross-connected to the Columbia County Water Utility's system. Permission to cross-connect may be denied by the Columbia County Water Utility. The Owner may be required to install a backflow preventer at the service entrance if a private water source is maintained, even if it is not cross-connected to the Columbia County Water Utility's system.
9. In the event the Owner installs plumbing to provide potable water for domestic purposes which is on the Columbia County Water Utility's side of the backflow preventer, such plumbing must have its own backflow preventer installed.
10. The Owner shall be responsible for the payment of all fees for permits, annual or semi-annual device testing, retesting in the case that the device fails to operate correctly, and second re-inspections for non-compliance with the Columbia County Water Utility.

## VII. Degree of Hazard

The Columbia County Water Utility recognizes the threat to the public water system arising from cross-connections. All threats will be classified by degree of hazard and will require the installation of approved reduced pressure principle backflow prevention devices or double check valves.

## VIII. Permits

The Columbia County Water Utility shall not permit a cross-connection within the public water supply system unless it is considered necessary and that it cannot be eliminated.

- A. Cross-connection permits that are required for each backflow prevention device are obtained from the Columbia County Water Utility.
- B. Permits shall be renewed annually and are non-transferable. Permits are subject to revocation and become immediately revoked if the Owner should so change the type of cross-connection or degree of hazard associated with the service.
- C. An Initial Inspection permit is required on new residential dual check backflow preventer.

## **IX. Existing in-use backflow prevention devices.**

Any existing backflow preventer shall be allowed by the Columbia County Water Utility to continue in service unless the degree of hazard is such as to supercede the effectiveness of the present backflow preventer, or result in an unreasonable risk to the public health. Where the degree of hazard has increased, as in the case of a residential installation converting to a business establishment, any existing backflow preventer must be upgraded to a reduced pressure principle device, or a reduced pressure principle device must be installed in the event that no backflow device was present.

## **X. Periodic Testing**

- A. All backflow devices shall be tested and inspected at least annually.
- B. Testing must be performed by Licensed Backflow Tester approved by the State of Georgia.
- C. Any backflow preventer which fails during a periodic test will be repaired or replaced at owner's expense. When repairs are necessary, upon completion of the repair the device will be re-tested at owner's expense to insure correct operation. High hazard situations will not be allowed to continue unprotected if the backflow preventer fails the test and cannot be repaired immediately. In other situations, a compliance date of not more than thirty (30) days after the test date will be established. The owner is responsible for spare parts, repair tools, or a replacement device. Parallel installation of two (2) devices is an effective means of the owner insuring that uninterrupted water service during testing or repair of devices and is strongly recommended when the owner desires such continuity. Backflow prevention devices will be tested more frequently than specified in (A). above, in cases where there is a history of test failures and the Columbia County Water Utility feels that due to the degree of hazard involved, additional testing is warranted. Cost of the additional tests will be born by the owner.

## **XI. Records and Reports**

### **A. Records**

The Columbia County Water Utility will initiate and maintain the following:

- 1. Master files on customer cross-connection tests and/or inspections.
- 2. Master files on cross-connection permits.
- 3. Copies of permits and permit applications.
- 4. Copies of lists and summaries supplied to the EPD.

### **B. Reports**

The Columbia County Water Utility will submit the following to the EPD.

- 1. Initial listing of low hazard cross-connections to the State.
- 2. Initial listing of high hazard cross-connections to the State.
- 3. Annual update lists of items 1 and 2 above.
- 4. Annual summary of cross-connection inspections to the State.

## **XII. Fees and Charges**

A. The Columbia County Board of Commissioners has established fees under this ordinance or charges for the following services or permits:

- 1. Initial Inspection fees
- 2. Annual Inspection fees
- 3. Water Trucks and Tank Permit Fee
- 4. Citations and violations

B. A list of the fees is on file at the Clerk of court and the Columbia County Water Utility.

C. The fees for such inspections shall be issued for a period of one (1) year. All permits will expire at 12:00 midnight on the date specified on the permit as determined by the Columbia County Water Utility.

D. Citations and violations for lack of compliance will be determined and applied to the inspection fee.

#### **Water Trucks and Tanks Inspection and Permit Fee**

A. Water Trucks and Tanks shall be inspected annually by Columbia County Water Utility and be issued a permit # and decal that shall be placed on the tank.

B. Water Trucks and Tanks shall have a RPZ backflow Assembly or an Air Gap two times the diameter of the fill pipe and not less than 1 inch.

C. The fees for such inspections shall be issued for a period of one (1) year. All permits will expire at 12:00 midnight on the date specified on the permit as determined by the Columbia County Water Utility.

D. Citations for lack of compliance will be determined.

E. The Columbia County Board of Commissioners has established fees under this ordinance or charges for the following services or permits:

1. Potable Water Trucks Inspection
2. Non-Potable Water Trucks Inspection
3. Mobile Tanks Inspection

F. A list of the fees is on file at the Clerk of Commission and the business office of Columbia County Water Utility.

As an condition precedent to the granting of a permit, the permitted under this section will agree to hold harmless the County and the County's employees from any liabilities arising from the permit holder's operations under this permit.

The Columbia County Water Utility may adopt, by separate ordinance, charges, surcharges, and fees for application, operation, enforcement, administration, and reimbursement of costs incurred pursuant to this Ordinance, which shall be on file at the Clerk of Board of Commissioners and the Business office of the Columbia County Water Utility.