No. 14 –

AN ORDINANCE

AN ORDINANCE AMENDING THE CODE OF GRIFFIN, GEORGIA AT CHAPTER 94, UTILITIES, ARTICLE VI, WATER, BY DELETING PRESENT SECTIONS 94-301 THROUGH 94-310 AND ENACTING IN LIEU THEREOF NEW REGULATIONS ESTABLISHING A CROSS-CONNECTION CONTROL PROGRAM FOR THE CITY OF GRIFFIN PUBLIC WATER SYSTEM; TO PROVIDE AN EFFECTIVE DATE; TO PROVIDE FOR SEVERABILITY; TO RESTATE AND REAFFIRM THE CODE OF GRIFFIN, GEORGIA, AS MODIFIED HEREBY; TO REPEAL ALL CODE PROVISIONS, ORDINANCES, OR PARTS THEREOF, IN CONFLICT HEREWITH; AND FOR OTHER PURPOSES.

BE IT ORDAINED BY THE BOARD OF COMMISSIONERS OF THE CITY OF GRIFFIN, GEORGIA, AND IT IS ESTABLISHED AS FOLLOWS:

Section 1. The Code of Griffin, Georgia is hereby amended at Chapter 94, UTILITIES, Article VI, WATER, by deleting current Code Sections 94-301 through 94-310, in their entirety, and enacting in lieu thereof the following:

"**Sec. 94-301. LEGAL COMPLIANCE.**

The City of Griffin Public Water System operates in compliance with O.C.G.A. §12-5-170, *et seq.*, "The Georgia Safe Drinking Water Act"; Rules and Regulations of the State of Georgia, §391-3-5-.13, which pertains to safe drinking water standards; and Permit No. CS2550000, issued February 2, 2006, Permit to Operate a Public Water System.

Sec. 94-302. CROSS-CONNECTION CONTROL PROGRAM

(a) GENERAL DESCRIPTION OF BACKFLOW AND BACKFLOW PREVENTION

(1) Water distribution systems are designed with the intention of the water flowing in a certain direction from the distribution system to the customer. However, hydraulic conditions within the system may deviate from the "normal" conditions, causing the water to flow in the opposite direction. Therefore, it is possible (and common) for the water to flow in the opposite direction in an unprotected system. This is called "backflow."

(2) Backflow occurs when the pressure in the distribution system drops, siphoning water from the customer's system into the

distribution system. This would also siphon any substance which may be in contact with the water system through a cross-connection. This type of backflow is called "backsiphonage" and may occur when there is an unusually high use of water or undersized piping in an area. For example, during fire fighting, or when a main water line breaks, water is "sucked" to the point of high usage, possibly drawing non-potable substances with it, filling the water line with these substances. Backsiphonage may occur through cross-connection such as a hose from a maintenance sink in a mop bucket, or a below-the-rim water inlet to a tank containing a toxic solution.

(3) Some water customers have non-potable materials on the premises under pressure. When an unprotected water line is attached to the container or pipes holding the pressurized material, the material may be "pumped" back into the potable water system. This type of backflow is called "backpressure." Backpressure may occur through a cross-connection such as a make-up water line, which is connected, to a recirculating system containing soap, acid, antifreeze or any other non-potable substance.

(4) Because of these potential dangers to the water consumer, it is necessary to control cross-connections. There are several types of mechanical assemblies which serve as backflow preventers. Different types of backflow preventers are designed to work under backsiphonage or backpressure conditions. Some are acceptable for low-hazard (or non-health hazard) conditions.

(5) This article regulates the proper use of backflow prevention devices and assemblies.

(b) RESPONSIBILITY

(1) The Director of the Water & Wastewater Department has the primary responsibility for protecting the public water system against backflow and back-siphonage. This responsibility begins at the water supply source, includes all of the public water distribution system, and generally ends at the point of water delivery to the customer's premises or system. The City Water & Wastewater Department is not responsible for abatement of cross-connections within a customer's premises but rather undertakes reasonable precautions to protect the public water

system from backflow through illegal cross-connections. Taking reasonable precautions includes ensuring that proper backflow preventers are installed and maintained by the customer, at its sole expense, at the point of service connection.

(2) The installation of a backflow preventer at a service connection in accordance with this section may not negate the need for additional backflow preventers at points of water use within the customer's potable water system.

(3) Authority is hereby delegated to the Director to promulgate and adopt a Manual setting forth a Cross-Connection Control Program for the elimination and prevention of all cross-connections, in accordance with this article. Such program shall conform to the standards of the American Water Works Association, Manual 14, and the U.S. Environmental Protection Agency Cross-Connection Manual. Said Manual shall be submitted to the Georgia Environmental Protection Division of the Department of Natural Resources upon completion.

Sec. 94-303. DEFINITIONS.

As used in this article, the terms defined below shall have the specific meaning ascribed in this section.

Approved: Accepted, after review, by the City Water & Wastewater Department.

Assembly: A mechanical backflow preventer (e.g., PVB, DC, RP, etc.), used to prevent the backward flow of contaminants or pollutants into a potable water distribution system. An assembly has a resilient seated, full-flow shut-off valve before and after the backflow preventer making it testable in-line. (The assembly is shipped with the shut-off valves attached to the backflow preventer). An assembly is labeled with the manufacturer's symbol, the size and model number, the working pressure and the direction of flow. Parts for the approved assembly are provided for a minimum of seven years after sale of the assembly. The Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California approves backflow prevention assemblies.

Auxiliary Water Supply: Any water supply on or available to the premises other than the City Public Water System. These auxiliary waters may include water from another purveyor's public potable water or any natural source (s) such as well, spring, river, stream, harbor, etc., or "used waters" or "industrial fluids". These waters may be polluted

or contaminated or they may be objectionable and constitute an unacceptable water source over which the City does not have sanitary control.

Backflow: The undesirable reversal of flow of water or other substances through a cross-connection and into the piping of a public water system or customer's potable water system. This includes backflow from backsiphonage or backpressure.

Backflow Preventer: A device assembly, or means designed to prevent backflow, including:

1. Air-Gap (AG): The unobstructed vertical distance through the free atmosphere between: the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture, or other device; and the flood level rim of such vessel. An approved AG shall be at least double the diameter of the supply pipe, measured vertically, above the top of the rim of the vessel; and, in no case less than one inch. When an AG is used at the service connection to prevent the contamination or pollution of the public potable water system, an emergency by-pass shall be installed around the AG system and an approved reduced pressure principle device shall be installed on the by-pass system.

2. Reduced Pressure Principle Assembly (RP): An assembly of two independently operating approved check valves with an automatically operating differential relief valve between the two check valves, tightly closing shut-off valves on either side of the check valves, plus properly located test cocks for the testing of the check and relief valves. The entire assembly shall meet the design and performance specifications and approval of a recognized and City approved testing agency for backflow prevention assemblies. The device shall operate to maintain the pressure in the zone between the two check valves at a level less than the pressure on the public water supply side of the device. At cessation of normal flow, the pressure between the two check valves shall be less than the pressure on the public water supply side of the device. In case of leakage of either of the check valves, the differential relief valve shall operate to maintain the reduced pressure in the zone between the check valves by discharging to the atmosphere. When the inlet pressure is two pound per square inch or less, the relief valve shall open to the atmosphere. To be approved, these devices must be readily accessible for in-line maintenance and testing and be installed in a location where no part of the device will be submerged.

3. Double Check Valve Assembly (DC): An assembly of two independently operating approved check valves with tightly shut off valves on each side of the check valves, plus properly located test cocks for the testing of each check valve. The entire assembly shall meet the design and performance specifications and approval of a recognized and City approved testing agency for backflow prevention devices. To be

approved, these devices must be readily accessible for in-line maintenance and testing.

4. Pressure Vacuum Breaker Assembly (PVB): An assembly consisting of one independently operating spring loaded check valve, an independently operating, spring loaded air-inlet valve, 2 test cocks and 2 shut off valves. This assembly is designed to prevent backsiphonage. It cannot be used where it may be subjected to back pressure. It can be operated under continuous pressure.

5. Spill-Resistant Pressure Vacuum Breaker Assembly (SVB): An assembly containing an independently operating internally loaded check valve and independently operating loaded air inlet valve located on the discharge side of the check valve. The assembly is to be equipped with a properly located resilient seated test cock, a properly located bleed/vent valve, and tightly closing resilient seated shutoff valves attached at each end of the assembly. This assembly is designed to protect against a non-health hazard (i.e., pollutant) or a health hazard (i.e., contaminant) under a backsiphonage condition only.

6. Atmospheric Vacuum Breaker (AVB): A mechanical backflow prevention device consisting of a float check valve and an air inlet port designed to prevent backsiphonage by allowing air to enter the downstream water line. This unit does not provide protection against backpressure or continuous pressure. (A shut-off valve is not allowed down stream from the device to prevent the device from being subjected to continuous pressure).

7. Residential Dual Check (RDC): A compact unit manufactured with two independent spring actuated check valves. The residential dual check is acceptable only: as on a residential system that has no irrigation or anything that may be close to anything in Table 1 Appendix A.

Backflow Prevention Inspector: The employee tasked by the Director to inspect and test back flow preventers, who possesses the qualifications of and certification by the Georgia Statewide Backflow Prevention Assembly Certification Program.

City: The City of Griffin, Georgia, its officers, employees, and authorized agents.

Contamination: An impairment of the quality of the potable water by sewage, industrial fluids or waste liquids, compounds or other materials to a degree which creates an actual or potential hazard to the public health through poisoning or through the spread of disease.

Cross-Connection: Any physical arrangement whereby a public water supply 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 waste, or liquid of unknown or unsafe quality which may be capable of imparting contamination to the public water supply as

the result of backflow. By-pass arrangements, jumper connections, removable sections, swivel or changeable devices, and other temporary or permanent devices through which or because of which backflow could occur are considered to be cross-connections.

Cross-Connections-Controlled: A connection between a potable water system and a non-potable water system with an approved backflow prevention assembly properly installed that will continuously afford the protection commensurate with the degree of hazard.

Department: The Water & Wastewater Department of the City of Griffin, Georgia.

Device: A mechanical backflow preventer without the shut-off valves. An atmospheric vacuum breaker is a device. It does not have shut-off valves on either side of the backflow prevention mechanism. In addition, any backflow prevention assembly without the shut off valves is called a device. The American Water Works Association (AWWA) and the American Society of Sanitary Engineers (ASSE) approve backflow prevention devices.

Director: The Director of the City's Water & Wastewater Department.

Pollution: Means the presence of any foreign substance (organic, inorganic, or biological) in water which tends to 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 affect such waters for domestic use.

Water, Potable: Any water that, according to recognized standards is safe for human consumption.

Water, Nonpotable: Water that is not safe for human consumption or which is of questionable potability.

Water Service Connection: The terminal end of a service connection from the public potable water system; i.e., where the City loses jurisdiction and sanitary control over the water at its point of delivery to the customer's water system. If a meter is installed at the end of the service connection, then the service connection shall mean the downstream end of the meter. There should be no unprotected takeoffs from the service line ahead of any meter or backflow prevention device located at the point of delivery to the customer's water system. Service connections shall also include water service connections from a fire hydrant and all other temporary or emergency water service connections from the public potable water systems.

Sec. 94-304. CROSS-CONNECTIONS PROHIBITED; CONTAMINATION PREVENTION.

(a) PROHIBITIONS. No person shall construct, maintain or operate a physical arrangement whereby the City of Griffin Public Water System is or may be connected directly or indirectly with a non-potable water

system or non-permitted water system, sewer, drain, conduit, pool, storage reservoir, plumbing fixture, or other device which contains or may contain contaminated water, liquid, gasses, sewage or other waste of unknown or unsafe quality, which may be capable of imparting contamination to the public water system as the results of backflow, bypass arrangements, jumper connections, removable sections, swivel or changeover devices, or other temporary, permanent or potential connections through which or because of which back-flow or back-siphonage could or would occur.

(1) All new structures desiring water service from the public water system, or additions to or expansion of existing residential service, will be required to install an approved backflow prevention device, at the customer's sole expense, at the point of customer service connection. New non-residential customers shall complete a cross-connection control questionnaire provided by the City.

(2) Site plans for new construction, additions, or renovations shall be reviewed by the Director and recommendations for change or installation of an approved device shall be attached and submitted to the City's Project Review Committee for recommendation.

(3) Based on the risk assessment, the Department shall require appropriate backflow prevention devices be installed at the customer's sole expense as a condition for water service. The devices shall be installed by a state licensed plumber retained by the person requesting service from the City before making a water service connection to the City Public Water System.

(4) Upon receipt of service order for non-residential water meter installation, the Director shall make inquiries as to the type of facilities and equipment to be attached to the water service.

(b) CONTAMINATION PREVENTION. A supplier of water or any person having possession or control of facilities which may cause the contamination of a public water system has the responsibility to prevent water from unapproved sources or any contaminants from entering the public water supply or public water system by physical arrangement prohibited by subsection (a) above. For purposes of this section, any person connecting to or purchasing water from a public water system and reselling it to others is considered a supplier of water so purchased as well as a consumer, and is also responsible for the quality of such water.

(c) PROCEDURE TO REVIEW EXISTING SERVICE CONNECTIONS. The Department shall evaluate every existing water service connection by

December 31, 2015, and shall re-evaluate each non-residential water service connection at least once every three years thereafter and whenever there is a change in the customer of record; residential water service connections shall be re-evaluated every five years and whenever there is a change in the customer of record. Properties where cross-connections are reasonably suspected may be inspected at any time to determine if a cross-connection exists.

(1) The customers receiving service at the suspected properties shall be contacted in advance to secure an appointment for inspection of the premises and will be requested to accompany the Backflow Prevention Inspector during the tour of the premises.

(2) An inspection form will be completed by the Inspector. The customer shall be made aware of any corrective measures that may be required.

(3) All official letters of notification shall be sent to the customer indicating what corrective measures must be taken.

(4) Upon completion of the requirements in the notification letter, the customer shall immediately notify the Inspector to schedule a date for re-inspection.

(d) CROSS-CONNECTION RECORDS.

(1) The Department shall maintain a written inventory of all backflow preventers that are in place on its system. This inventory shall include the location, type, manufacturer, model, size, and installation date of each backflow preventer.

(2) The Department shall maintain backflow prevention records for a minimum of 3 years. These records shall include the most current hazard assessment; location and types of backflow protection and associated hazards; results of all backflow prevention assembly field testing and air gap

inspections; and repairs made to, or replacement or relocation of, backflow protection.

(e) PROCEDURES FOR DEALING WITH BACKFLOW COMPLAINTS AND BACKFLOW INCIDENTS

(1) The Department shall keep backflow incident reports, and records of testing, repairs, inspections, or water quality relating to cross-connections/ backflow incidents.

(2) Upon discovery of contamination of the public water supply from a cross-connection the Inspector shall immediately notify the following:

1. Director of the Department;
2. Spalding County Health Department;
3. Georgia Environmental Protection Division.

(3) The responding individuals shall determine the extent of contamination, by taking samples for testing, and shall take appropriate measures to clear the contamination from the public water supply. After clearing the contaminate from the public water supply, the Department shall perform a survey of the customer's lines to determine and eliminate the cause. A boiled water notice will be issued, if necessary, based upon identified contaminates from sample test results, if any, or lack of chlorine residual. The City shall have the right to disconnect the customer from the public water system and to require a backflow preventer to be installed, at the customer's' cost, as a condition for continued service.

(f) PROCEDURES FOR EDUCATING THE PUBLIC ABOUT CROSS-CONNECTION CONTROLS.

At least once every three years the Department shall conduct a public education activity aimed at improving general customer awareness about cross-connection control through methods such as: bill inserts, pamphlets or booklets, posters or billboards, public service announcements, articles or stories in the news media, seminars or workshops, or school lectures or presentations. Whenever a new service connection is made, or there is a

switch in the customer of record, the Department shall deliver to the new customer of record an educational pamphlet addressing the importance of the customer installing and/or maintaining anti-siphon toilet tank valves and hose bib vacuum breakers that conform to the Georgia State Minimum Standard Plumbing Code.

Sec. 94-305. NOTICE TO DISCONNECT FROM PUBLIC WATER SYSTEM.

Any person who now has cross-connections, auxiliary intakes, by-passes, or inter-connections in violation of this article shall be required, upon written notice from the Director, to disconnect such prohibited connections from the City Public Water System. Depending on the nature of the connection found and risk hazard imposed, the Director shall state in his notice the time within which the disconnection shall be completed. If the customer or person in control of the premises where a prohibited connection is found fails or refuses to disconnect such connection within the time specified, the Director may cause disconnection to occur at the customer's service connection, including removal of the meter. No reconnection to the public water system shall be permitted or occur until the Director is satisfied that corrective work has been performed that conforms to the Georgia State Minimum Standard Plumbing Code and certification from the customer that the work was performed by a state licensed plumber.

Sec. 94-306. NOTICE ON SECONDARY SOURCES.

The drinking water supply provided by the City Public Water System shall be further protected from possible contamination as specified herein. Any water outlet which could be used for human consumption or for drinking water purposes and which is not supplied by the City Public Water System shall be labeled conspicuously in the following manner:

CAUTION: WATER UNSAFE FOR DRINKING

Said warning shall be on a sign or decal at or near the water outlet. The minimum sign or decal shall have black letters one (1.0") inch high on a red background.

Sec. 94-307. Enforcement.

Any person who willfully fails or refuses to comply with the requirements of this article, after written notice of violation from the Director, shall be cited to appear before the Municipal Court and, upon conviction, shall be fined in an amount not to exceed $1,000.00; each day of continued violation, after citation, shall constitute a separate offense.

Enforcement by citation before the Municipal Court is supplemental of and in addition to any action deemed necessary by the Director to protect the City Public Water System, including disconnection of the customer at the point of service connection until a cross-connection, auxiliary, by-pass, or other prohibited interconnection is discontinued and the system conforms to the Georgia State Minimum Plumbing Code. If necessary, the Director shall have the authority to seek injunctive relief in the Superior Court of Spalding County, Georgia.

Secs. 94-308 – 94-310. Reserved."

Section 2. All ordinances and Code sections, or parts thereof, in conflict with the foregoing are expressly repealed.

Section 3. Should any provision of this ordinance be rendered invalid by any court of law, the remaining provisions shall continue in force and effect until amended or repealed by action of the municipal governing authority.

Section 4. Except as modified herein, The Code of Griffin, Georgia, is hereby reaffirmed and restated. The codifier is hereby granted editorial license to include this amendment in future supplements of said Code by appropriate section, division, article or chapter.

Section 5. This ordinance shall become effective immediately upon adoption on second and final reading.

First Reading: November 11, 2014

Second Reading: November 25, 2014