



STATE OF ARKANSAS
City of Brookland

ORDINANCE NO. 2005-2

CROSS CONNECTION CONTROL PROGRAM

Section 1.1. Intent.

In compliance with the State of Arkansas *Rules and Regulations Pertaining to Public Water Systems*, Section VII.E, the City of Brookland finds it necessary for the health, safety and welfare of the people served by the water division of the city utilities department to adopt cross-connection control standards which establish the requirements for the design, construction and maintenance of connections to the public water supply. These standards are supplemental to and do not supersede or modify the *Arkansas State Plumbing Code* (ASPC) and its latest revisions under which the city operates. This ordinance pertains to commercial and industrial establishments only. Single-family, residential dwelling units, unless involved in commercial operations, are exempt from the requirements of this ordinance except where they fall under the purview of the *Arkansas State Plumbing Code* (ASPC). [Cross reference – ASPC adopted July 21, 1987.]

Section 1.2. Purpose.

The purposes of this ordinance are:

- (1) To provide for the protection of the public potable water supply,
- (2) To isolate at the service connection any actual or potential pollution or contamination within the consumer's premises and
- (3) To provide a continuous, systematic and effective program of cross-connection control.

Section 1.3. Definitions (As used in this Article).

- *Backflow* shall mean a hydraulic condition, caused by a difference in pressures, in which non-potable water or other fluids flow into a potable water system.
- *Backflow preventer* shall mean a testable assembly to prevent backflow.
- *Double-Check Valve Assembly* (DC) means a complete assembly meeting AWWA Standard C510 and the requirements of the *Arkansas State Plumbing Code* consisting of two internally loaded, independently operating check valves between two tightly closing resilient-seated shutoff valves, with four (4) properly placed resilient seated test cocks.

- *Reduced-Pressure Principle Backflow Prevention Assembly (RP)* means a complete assembly meeting AWWA Standard C511 and the requirements of the *Arkansas State Plumbing Code* consisting of a hydraulically operating, mechanically independent differential relief valve located between two independently operating, internally loaded check valves that are located between two tightly closing resilient seated shutoff valves with four properly placed resilient-seated test cocks.
- *Air Gap (AG)* means a physical separation between two piping systems.

Section 1.4. Operating Criteria.

The water utility's *Cross-Connection Control Program: Handbook of Policies and Procedures* is hereby incorporated into this ordinance by reference. It is the primary responsibility of the water purveyor and/or the City of Brookland to evaluate the hazards inherent in supplying a consumer's water system; i.e., determine whether solid, liquid or gaseous pollutants or contaminants are, or may be, handled on the consumer's premise in such a manner as to possibly contaminate the public water system. When a hazard or potential hazard to the public water system is found on the consumer's premise, the consumer shall be required to install an approved backflow prevention assembly (BFP), or an air gap, at each public water service connection to the premise in accordance with this ordinance's requirements. The type of BFP shall depend on the degree of hazard involved. The degree of hazard shall be as described in AWWA M-14 manual or as described below.

- In the case of any premise where there is an auxiliary water supply, connected to the plumbing system, the public water system shall be protected from the possibility of backflow by a reduced-pressure principle backflow prevention assembly (RP) at the service connection.
- In the case of any premise where substances are handled that are objectionable, but not hazardous to human health, and the likelihood exists of it being introduced into the public water system by virtue of a backflow occurrence, the public water system shall be protected by an air gap or an approved double check valve assembly (DC).
- In the case of any premise where there is any material, hazardous to human health, which is handled in such a fashion as to create an actual or potential threat to the public water system by virtue of a backflow occurrence, the public water system shall be protected by an air gap or an approved reduced-pressure principle backflow prevention system (RP).
- In case of any premise where there are unprotected cross-connections, either actual or potential, the public water system shall be protected by an approved reduced-pressure principle back flow prevention assembly (RP) or an air gap at the service connection.
- In the case of any premise where, because of security requirements or other prohibitions or restrictions, it is impossible or impractical to make a complete cross-connection survey, the public water system shall be protected by the installation of an approved reduced-pressure principle backflow prevention assembly (RP) or an air gap at the service connection.

Section 1.5. Facilities requiring backflow protection.

The following is a partial list of facilities which ordinarily will require a reduced-pressure principal backflow prevention assembly (RP) or an air gap in accordance with the ASPC. Requirements are based upon the degree of hazard afforded the public potable water system.

- (1) Automatic car washes.
 - (2) Auxiliary water systems (interconnected with the public water system).
 - (3) Exterminators and veterinary clinics.
 - (4) Facilities with boilers, condenser water or chilled water systems.
 - (5) Fire systems containing chemical additives.
 - (6) Hospitals, medical clinics, dental clinics, health clinics, sanitariums, morgues, mortuaries, autopsy facilities, nursing and convalescent homes.
 - (7) Irrigation systems and lawn sprinkler systems.
 - (8) Laboratories (industrial, commercial, photography, medical and school.)
 - (9) Commercial laundries.
 - (10) Radiator and battery shops.
 - (11) Restricted, classified or other facilities closed to inspection.
 - (12) Sand, gravel and concrete plants.
 - (13) Wastewater treatment plants, pump stations and storm water pumping facilities.
 - (14) Marinas and dockside facilities.
 - (15) Commercial swimming pools.
 - (16) Commercial farms using pesticides and herbicides.
 - (17) Establishments holding livestock for sale or slaughter including cattle, horses, hogs, poultry, emus, ostriches, llamas, rabbits, etc.
 - (18) Others (with suspected high hazards).
- The following is a partial list of facilities which ordinarily will require a minimum of a double check valve assembly (DC) or an air gap in accordance with the ASPC:
 - (1) Tall buildings (over four stories) or any buildings with water booster pumps.
 - (2) Beauty parlors and barber shops.
 - (3) Hotels and motels.
 - (4) Restaurants, cafeterias, fast-food marts and other food handling facilities.
 - (5) Fire sprinkler systems (without chemicals).
 - (6) Others (with suspected medium hazards).

Section 1.6. Approval of backflow prevention devices.

Any backflow prevention assembly required herein shall be an approved type which is in compliance with requirements of the *Arkansas State Plumbing Code*.

Section 1.7. Non-compliance. Service to be discontinued. Notice. Consent to enter.

- (1) In emergency situations when the public potable water supply is being contaminated or is in immediate danger of contamination, the water service shall be discontinued by the water purveyor.
- (2) No water service connection shall be installed on the premises of any consumer unless the public potable water system is protected as required by this ordinance.
- (3) Delivery of water to premises of any consumer may be discontinued by the water purveyor and/or the City of Brookland if any protective device is required by this article has not been installed, or is defective, or has been removed or bypassed. Discontinued water service shall not be resumed until conditions at the consumer's premise have been abated or corrected to the satisfaction of the water purveyor.
- (4) Upon discovery of a violation of this ordinance, written notice shall be given to the consumer. If violations are not corrected by date and time as stated on the notice, the water supply will be discontinued and the violation may be referred to the administrative authority for action.
- (5) For the purpose of making any inspections or discharging the duties imposed by this article, the water purveyor and/or the City of Brookland, the State Health Department, and/or plumbing inspector shall have the right to enter upon the premises of any consumer. Each consumer, as a condition of the continued delivery to his premises of water from the public water supply, shall be considered as having stated his consent to the entry upon his premise of the water purveyor and/or superintendent, the State Health Department, and/or plumbing inspector for the purpose stated herein.

Section 1.8. Ownership.

Backflow prevention assemblies installed downstream of the water meter are owned by and are the responsibility of the customer of the water utility.

Section 1.9. Installation and costs.

Customers of the city water utility requiring backflow prevention assemblies shall pay all costs associated with installation and testing of the appropriate size and type of backflow preventer under private contract. For newly constructed facilities, backflow preventers shall be installed prior to the final plumbing inspection so that the device can be included as part of the inspection. Backflow prevention assemblies shall be installed in accordance with the requirements of the *Arkansas State Plumbing Code*.

Section 1.10. Testing and Maintenance.

The consumer will be responsible for the testing of the backflow prevention assembly by contract with a certified *Assembly Test Technician* within 10 days of installation and annually thereafter. The consumer shall furnish the water purveyor and/or city with a certificate of satisfactory testing by the anniversary date of the installation of the assembly. In stances where the water purveyor, city and/or the plumbing inspector

deems the hazard to be great enough, testing may be required at more frequent intervals. All costs of testing shall be paid by the consumer. Any repairs required as a result of inspections or testing shall be arranged for and paid by the consumer through private contract with a certified *Assembly Repair Technician*. Records of inspections, testing and/or repairs to backflow preventers shall be kept by the water purveyor and/or city and made available to the State Health Department upon request.

Section 1.11.

All new construction within the City of Brookland shall be effected upon the passage of this ordinance. All existing consumer premises shall be in compliance with this ordinance in accordance with the notification by the water utility.

Section 1.12.

Due to notification from Arkansas Department of Health on May 16, 2005, Brookland Waterworks had 45 days to establish ordinance for Cross Connection Control Program and an emergency is declared to exist. This Ordinance shall have full force and effect from and after its date of passage. Any ordinance or parts thereof in conflict with this ordinance is hereby repealed.

PASSED AND ADOPTED THIS 14TH DAY OF JUNE, 2005.



Mayor

ATTEST:



Recorder