

ORDINANCE NO. 08-06

TOWN OF HIGHFILL, BENTON COUNTY, ARKANSAS

AN ORDINANCE ESTABLISHING A BACKFLOW AND CROSS-CONNECTION CONTROL PROGRAM FOR THE TOWN OF HIGHFILL, ARKANSAS, TO INSURE COMPLIANCE WITH THE ARKANSAS STATE PLUMBING CODE AND APPLICABLE FEDERAL AND STATE SAFE DRINKING WATER ACT REGULATIONS; PROVIDING FOR REQUIREMENTS, REGULATIONS, INSPECTIONS AND TESTS RELATING THERETO; PROVIDING FOR THE ENFORCEMENT THEREOF AND THE DISCONTINUANCE OF WATER SERVICE FOR VIOLATIONS; PRESCRIBING OTHER MATTERS RELATING THERETO; AND DECLARING AN EMERGENCY TO EXIST.

WHEREAS, the Town Council of the Town of Highfill believes it to be in the best interest of the Town and its citizens to establish a Backflow and Cross-Connection Control Program for the Town of Highfill, Arkansas, in order to insure compliance with the Arkansas State Plumbing Code, the State of Arkansas Rules and Regulations Pertaining to Public Water Systems, The Minimum Standards for a Cross-Connection Control Program and applicable federal and state Safe Drinking Water Act regulations, and to provide for the requirements and regulations relating thereto.

NOW THEREFORE, BE IT ENACTED, by the Town Council of the Town of Highfill, as follows:

SECTION 1. PURPOSE

1.1 The purpose of this program and the regulations set forth herein shall be:

- a) To protect the public water system of the Town of Highfill, Arkansas ("Highfill"), and to assure safe drinking water is provided to customers through the elimination or control of backflow and cross-connections. Backflow will be controlled, and no cross-connections will exist, except in accordance herewith; and
- b) To promote the elimination or control of existing cross-connections, actual or potential, between the customer's internal potable water service and any non-potable water source, plumbing, fixtures, and agricultural, commercial, or industrial piping systems; and
- c) To provide for the maintenance of a continuing program of backflow prevention and of cross-connection control that will systematically and effectively prevent the contamination or pollution of all potable water systems.

SECTION 2. RESPONSIBILITY

- 2.1 **Water Supplier.** As a licensed public water purveyor, Highfill shall be responsible for the protection of the public potable water distribution system from contamination or pollution due to the backflow of contaminants or pollutants through the customer's water service connection point. If in the judgment of the Highfill water operator, or his designated representative, an approved backflow prevention assembly is required at any customer's water service connection, or on the customer's property within the customer's private part of the water system for the safety of the water system, the Highfill water operator, or his designated representative, shall give notice to said customer, preferably in writing, to install such an approved backflow-prevention assembly(s) at specific location(s) on his/her premises. The customer shall immediately install such approved assembly(s) at his/her own expense and failure, refusal, or inability on the part of the customer to install, have tested, and maintain said assembly(s) shall constitute grounds for discontinuing water service to the premises.
- 2.2 **Water User (Property Owner or Consumer).** The water user has the primary responsibility to keep contaminants out of the potable water system. This responsibility begins at the user connection and includes all water distribution piping on the premises. If a cross connection or a potential for a cross connection exists, the water user at the water user's expense, must install, have tested, and maintain approved backflow preventers as required by the Arkansas Department of Health or Highfill.

SECTION 3. DEFINITIONS

- 3.1 **Approved:** Accepted by the authority responsible as meeting an applicable specification stated or cited herein.
- 3.2 **Auxiliary Water Supply:** Any water supply on or available to the premises or other than the purveyors approved public water supply. These auxiliary waters may include water from another purveyor's public potable water supply or any natural source(s), such as a well, spring, river, and so forth. These waters may be contaminated or polluted, or they may be objectionable and constitute an unacceptable water source over which the water purveyor does not have sanitary control.
- 3.3 **Backflow:** The undesirable reversal of flow in a potable water distribution system because of a cross-connection.
- 3.4 **Backpressure:** A pressure, higher than the supply pressure, caused by a pump, compressor, elevated tank, boiler, or any other means that may cause backflow.
- 3.5 **Backsiphonage:** Backflow caused by negative or reduced pressure in the supply piping.
- 3.6 **Backflow Potential:** Commercial, Industrial, Agricultural, and similar facilities where:
- a) There are cross-connections or potential cross-connections; and/or

- b) There are auxiliary water supplies inter-connected to the potable water piping; and/or
 - c) A facility/operation has piping for transmitting liquids, other than potable water, where that piping is under pressure and could in any manner, because of proximity or cross-connection, be introduced into the public potable water system; and/or
 - d) Any facility/operation handling chemicals, insecticides, antibiotics, medications, and other similar potentially dangerous or hazardous items.
- 3.7 Backflow Preventer: An assembly or method designed to prevent backflow. Typically, air-gaps, reduced-pressure assemblies and/or double check valve assemblies are designed and used for this purpose.
- 3.8 Cross Connection: A connection or potential connection between any part of a potable water system and any other environment containing other substances in a manner that, under any circumstances would allow such substances to enter the potable water system.
- 3.9 Hazard: As related to a public water system, it is the evaluation of the potential risk to public health and the adverse effect of the hazard upon the potable water system.
- 3.10 Health Hazard: A cross connection or potential cross-connection involving any substance that could, if introduced into the potable water supply, cause death, illness, spread disease, or have a high probability of causing such effects.
- 3.11 Pollution: The presence of any foreign substance in water that tends to degrade its quality to constitute a non-health hazard or impair the usefulness of the water.
- 3.12 System Hazard: An actual or potential threat of severe damage to the physical properties of the public potable water system or the consumer's potable water system or of a pollution or contamination that would have a protracted effect on the quality of the potable water in the system.

SECTION 4. INSTALLATION REQUIREMENTS.

- 4.1 No water service connection to any premises shall be installed by Highfill, unless the water supply is protected as required by the Arkansas State Plumbing Code, State of Arkansas Rules and Regulations Pertaining to Public Water Systems, and Federal and State laws and regulations, and in conformance herewith. Service of water to any premises shall be discontinued by Highfill if a backflow prevention assembly required by these regulations and/or State regulations is not appropriately installed, tested, and maintained, or if it is found that a backflow prevention assembly has been removed or by-passed, or if an unprotected cross connection exists on the premises. Service will not be restored until such conditions or defects have been corrected to the satisfaction of Highfill.

- 4.2 If a customer, whose operation requires the installation and usage of an RP on-r his/her system, will task the water system to the point that he/she cannot achieve and maintain an acceptable "minimum" water pressure of 20 psi or higher, the customer may be required to install, at his/her own expense, an acceptable booster pump within his/her service system; otherwise the new (or if an existing operation) customer may be denied a public water service.

SECTION 5. INSPECTION, NON-COMPLIANCE AND SERVICE TO BE DISCONTINUED.

- 5.1 The customer's system shall be open for inspection at all reasonable times to authorized representatives of Highfill. Representatives shall be permitted access to any and all facilities/services that are connected to the potable water system, to determine whether cross connections or other structural or sanitary hazards, including violations or non-compliance of these regulations, and Health Department regulations, and codes may exist. When such a condition becomes known, Highfill shall deny or immediately discontinue service to the premises by providing for a physical break in the service line, usually by removal of the water meter, and locking of the meter valve and meter box, until the customer has corrected the condition(s) and is in satisfactory conformance with state and local statues relating to plumbing and water supplies and the regulations and codes adopted pursuant thereto and hereto. In addition, 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 Highfill.

SECTION 6. FACILITIES REQUIRING BACKFLOW PROTECTION

- 6.1 An approved backflow prevention assembly shall be installed on each service line, where required by hazardous determination or to maintain compliance with the rules and/or policies of Highfill, in the customer's water system at or near the property line or immediately inside the building being served but in all cases, before the first branch line leading off the service line whenever the following conditions exist:
- a) Auxiliary water supply
 - b) Industrial or commercial fluid systems
 - c) Known cross connections
 - d) Restricted access
- 6.2 An approved reduced pressure backflow prevention assembly shall be installed on all underground lawn irrigation and sprinkler systems in order to protect against backpressure and backsiphonage.
- 6.3 The type of protective assembly required under subsections 6.1.a., b. and c. and 6.2 shall depend upon the degree of hazard that exists as follows:

- a) In the case of any premises where there is an auxiliary water supply as stated in subsection 6.1.a of this section and it is not subject to any of the following rules, the public water system shall be protected by an approved air-gap separation or an approved reduced-pressure principle backflow prevention assembly.
- b) In the case of any premises where there is water or substance that would be objectionable but not hazardous to health, if introduced into the public water system, an approved double check valve assembly shall protect the public water system.
- c) In the case of any premises where there is any material dangerous to health that is handled in such a fashion as to create an actual or potential hazard to the public water system, the public water system shall be protected by an approved air-gap separation or an approved reduced-pressure principle backflow-prevention assembly. Examples of premises where these conditions will exist include sewage treatment and pumping facilities, chemical manufacturing plants, agricultural watering station, Asphalt Planes, Livestock facilities, sand and gravel facilities and farms handling or diluting pesticides, herbicides or insecticides.
- d) In the case of any premises where there are "uncontrolled" cross connections, either actual or potential, the public water system shall be protected by an approved air-gap separation or an approved reduced-pressure principal backflow-prevention assembly at the service connection.
- e) In the case of any premises where, because of security requirements or other prohibitions or restrictions, it is impossible or impractical to make a complete in-plant cross-connection survey, the public water system shall be protected against backflow from the premises by either an approved air-gap separation or an approved reduced-pressure principal backflow-prevention assembly on each service to the premises.
- f) In the case of any premises where, in the opinion of the Highfill water operator, or his designated representative, an undue health threat is posed because of the presence of extremely toxic substances, the Highfill water operator, or his designated representative, may require an air-gap at the service connection to protect the public water system. This requirement will be at the discretion of the Highfill water operator, or his designated representative, and is dependent on the degree of hazard.

SECTION 7. APPROVED DEVICES

- 7.1 Any backflow-prevention assembly required herein shall be a model and size approved by the Arkansas Department of Health. The term approved backflow assembly shall mean an assembly that has been manufactured in full conformance with the standards established by the American Water Works Association titled: "AWWA C510-05—Standard for Double Check Valve Backflow-Prevention Assembly", or the latest version

thereof, and “AWWA C511-05—Standard for Reduced-Pressure Principal Backflow-Prevention Assembly”, or the latest version thereof, and shall have met completely the laboratory and field performance specifications of the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California.

Highfill hereby adopts said AWWA and FCCHR standards and specifications. Final approval shall be evidenced by a "Certificate of Approval" issued by an approved testing laboratory certifying full compliance with said AWWA standards and FCCHR specifications.

The following Foundation has been recognized by the Arkansas Department of Health to test and certify backflow preventers:

Foundation for Cross-Connection Control and Hydraulic Research
University of Southern California-Viterbi School of Engineering
Kaprielian Hall #200
Los Angeles, CA 90089-2531

Testing laboratories, other than the laboratory listed above, will be added to an approved list as the Arkansas Department of Health qualifies them.

SECTION 8. TESTING

- 8.1 It shall be the duty of the customer-user at any premises where backflow-prevention assemblies are installed to have certified inspections and operational test made within ten (10) days of installation and at least once per year thereafter. In those instances where the Highfill water operator, or his designated representative, deems the hazard great enough, certified inspections may be required at more frequent intervals. These inspections and tests shall be at the expense of the water user and shall be performed by a certified tester approved by the Arkansas Department of Health and the Highfill water operator, or his designated representative. It shall be the duty of the customer-user to see that these tests are made in a timely manner. The customer-user shall notify the Highfill Water Department office in advance when the tests are to be undertaken so that Highfill Water Department employee(s) may witness the tests if so desired, these assemblies shall be repaired, overhauled, or replaced at the expense of the customer-user whenever said assemblies are found defective. Records of such inspections, tests, repairs, and overhaul shall be kept and a copy shall be provided to the Highfill Water Department office within ten (10) days.

SECTION 9. EXISTING BACKFLOW PREVENTION DEVICES

- 9.1 All presently installed backflow prevention assemblies that do not meet the requirements of this section but were approved assemblies for the purpose described herein at the time of installation and that have been properly maintained, shall, except for the inspection and maintenance requirements under section 8 above, be excluded from the requirements of these rules so long as the Highfill water operator is assured that they will satisfactorily

protect the utility system. Whenever the existing assembly is moved from the present location, or requires more than minimum maintenance, or when the Highfill water operator finds that the maintenance constitutes a hazard to health, the unit shall be replaced by an approved backflow-prevention assembly meeting the requirements of this section.

SECTION 10. INTENT

10.1 In compliance with the State of Arkansas *Rules and Regulations Pertaining to Public Water Systems*, Section VII. E, the Town of Highfill finds it necessary for the health, safety and welfare of the people served by the Highfill water department to adopt backflow and cross-connection control standards which establish the requirements for the design, construction and maintenance of connections to the public water supply subsequently the *Minimum Standards for a Cross-Connection Control Program*. 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).

SECTION 11. SEVERABILITY PROVISION

11.1 In the event that any section, paragraph, subdivision, clause, phrase, or other provision or portion of this Ordinance shall be adjudged invalid or unconstitutional, the same shall not affect the validity of this Ordinance as a whole, or any part or provision, other than the part so decided to be invalid or unconstitutional, and the remaining provisions of this Ordinance shall be construed as if such invalid, unenforceable or unconstitutional provision or provisions had never been contained herein.

SECTION 12. DECLARATION OF EMERGENCY

12.1 It is hereby found and determined that there is an immediate need to adopt backflow and cross-connection control standards which establish the requirements for the design, construction and maintenance of connections to the Highfill public water supply in order to protect the Highfill public water system from contamination or pollution and assure safe drinking water is provided to the system's customers. Therefore, an emergency is declared to exist, and this Ordinance being immediately necessary for the preservation and protection of the public water system and the public peace, health, safety and welfare of the Town of Highfill and its citizens, shall become effective immediately from and after the date of its passage, to take effect as provided by the terms of this Ordinance.

PASSED AND APPROVED this _____ day of _____, 2008.

APPROVED:

ATTEST:

Chris Holland, Mayor

Stacy Digby, Recorder

(SEAL)