DIVISION 2. WATER USE CODE [4]

Sec. 118-126. General provisions.
Sec. 118-127. Definitions.
Sec. 118-128. Backflow prevention.
Secs. 118-129—118-145. Reserved.

Sec. 118-126. General provisions.

(a) *Purpose.* This code sets forth standards and requirements for users of water provided by the city and enables the administrative authority to comply with all applicable federal and state laws. The objectives of this code are:

(1) To provide for the protection and maintenance of a sufficient and manageable water supply and distribution system for human consumption, sanitation, and fire protection; and for the conduct of business, watering of lawns, plants, and shrubbery, and for other uses;

(2) To protect the public water system of the city from cross connections in users' private water systems that would allow the backflow of nonpotable sources to contaminate or pollute the supply of potable water in the municipal system; and

(3) To provide for penalties for violations of the regulations established herein.

(b) *Applicability.* This code shall apply to all users of water provided by the city.

(c) *Administration.* Except as otherwise provided herein, the administrative authority, as defined in this code, shall administer, implement, and enforce the provisions of this code. Any powers granted to or duties imposed upon the administrative authority may be delegated by the administrative authority to its authorized representative.

(d) *Water system.*

(1) The water system shall be considered as made up of two parts, the municipal system and the user's system.

(2) The municipal system shall consist of the source facilities and the distributions system, and shall include all those municipal facilities of the water system, under the complete control of the city water commission, up to the point where the user's system begins.

(3) The source shall include all components of the facilities utilized in the production, treatment, storage, and delivery of water to the distribution system.

(4) The distribution system shall include the network of conduits used for the delivery of water from the source to the user's system.

(5) The user's system shall include those parts of the facilities beyond the termination of the municipal distribution system that are utilized to convey water to points of use.

(Ord. No. 3161, §§ 1, 2, 10-23-01)

Sec. 118-127. Definitions.

Unless a provision explicitly states otherwise, the following terms and phrases, as used in this

code, shall have the meanings hereinafter designated.

Administrative authority. The administrative authority is the water commission of the City of Springdale, its designated representatives, and officials from the Springdale building inspector's office. The administrative authority is vested with the responsibility to enforce provisions of this code.

Air gap. The unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet conveying water or waste to a tank, plumbing fixture or other assembly and the flood level rim of the receptacle. These vertical or physical separations must be at least twice the diameter of the water supply outlet and never less than one inch (25 mm).

Approved. Accepted by the administrative authority as meeting any applicable specifications as stated in this code or being suitable for the proposed use.

Auxiliary water supply. Any water supply on or available to the user's premises other than that supplied by the municipal water system of the city. Auxiliary waters may include water from another public water system or any natural sources such as a well, spring, river, stream, and so forth; used waters; or industrial fluids. These waters may be contaminated or polluted, 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 in a potable water distribution system as a result of a cross connection.

Backpressure. A pressure, higher than the supply pressure, caused by a pump, elevated tank, boiler, or any other means that may cause the backflow of water from a nonpotable water system to a potable water system.

Backsiphonage. Backflow caused by negative or reduced pressure in the supply piping.

Backflow-prevention assembly. An assembly or means designed to prevent backflow. Acceptable means and devices for backflow prevention include:

(1) Air gap;
(2) Reduced-pressure backflow-prevention assembly; and
(3) Double check valve assembly.

City water. Water supplied by the municipal water system of the City of Springdale, Arkansas.

City building inspector. Officials of the City of Springdale licensed by the state department of health to enforce provisions of the state plumbing code.

City water commission. The board of water works commissioners, established by City Ordinance Number 581, for the purpose of operating and maintaining the municipally owned water system of the City of Springdale, Arkansas.

Contamination. Any impairment of potable water supply by the introduction or admission of any foreign substance that degrades the quality and creates a health hazard.

Contract water users. All persons and entities who purchase water from city water utilities for individual use, resale, and/or redistribution.

Cross connection. A connection or potential connection between a 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. Other substances may be gases, liquids, or solids, such as chemicals, waste products, steam, water from other sources (potable or nonpotable), or any matter that may change the color or add odor to the water.

Cross-connection control by containment. The installation of an approved backflow-prevention assembly at the water service connection to any user's premises, where it is physically and economically unfeasible to find and permanently eliminate or control all actual or potential cross connections within the user's water system; or it shall mean the installation of an approved backflow-prevention assembly on the service line leading to and supplying a portion of a user's water system where there are actual or potential cross connections that cannot be effectively eliminated or controlled at the point of the cross connection.

Cross connections—Controlled. A connection between a potable water system and a nonpotable water system with an approved backflow-prevention assembly properly installed and maintained so that it will continuously afford the protection commensurate with the degree of hazard.

Double check valve assembly. The approved double check valve assembly consists of two internally loaded check valves, either spring loaded or weighted, installed as a unit between two tightly closing resilient-seated test cocks. This assembly shall only be used to protect against a non-health hazard (that is, a pollutant).

Hazard, degree of. The terms derived from an evaluation of the potential risk to public health and the adverse effect of the hazard upon the potable water system.

Hazard—Health. A cross connection or potential cross connection involving any substance that could, if introduced in the potable water supply, cause death, illness, spread disease, or have a high probability of causing such effects.

Hazard—Nonhealth. A cross connection or potential cross connection involving any substance that generally would not be a health hazard but would constitute a nuisance or be aesthetically objectionable, if introduced into the potable water system.

Hazard—Plumbing. A plumbing-type cross connection in a user's potable water system that has not been properly protected by an approved air gap or an approved backflow-prevention assembly.

Hazard—System. An actual or potential threat of:

(1) Severe damage to the physical properties of the public potable water system or the user's potable water system; or

(2) A pollution or contamination that would have a protracted effect on the quality of the potable water in the system.

Industrial fluid systems. Any system containing a fluid or solution that may be chemically, biologically, or otherwise contaminated or polluted in a form or concentration, such as would constitute a health, system, pollution, or plumbing hazard, if introduced into an approved water supply. This may include, but not be limited to: polluted or contaminated waters; all types of process waters, and used waters originating from the municipal water system that may have deteriorated in sanitary quality; chemicals in fluid form; plating acids and alkalines; circulating cooling waters connected to an open cooling tower, and/or cooling towers that are chemically or biologically treated or stabilized with toxic substances; contaminated natural water, such as wells, springs, streams, rivers, bays, harbors, seas, irrigation canals or systems, and so forth; oils, gases, glycerin, paraffins, caustic and acid solutions, and other liquids and gaseous fluids used in industrial or other purposes

or for fire-fighting purposes.

Nonpotable water. Water that is not safe for human consumption or that is of questionable quality.

Pollution. The presence of any foreign substance in water that tends to degrade its quality so as to constitute a non-health hazard or impair the usefulness of the water.

Potable water. Water that is safe for human consumption as defined by the state department of health and the U.S. Environmental Protection Agency.

Private water system. The user's water supply system of a building or premises that includes water-service pipe beyond the termination of the municipal water system, the water-distribution pipes and the necessary connecting pipes, fittings, control valves and all appurtenances in or adjacent to the building or premises.

Public water system. Facilities owned and maintained by the municipal water system utilized in the transmission, storage, distribution and metering of potable water.

Reduced-pressure backflow-prevention assembly. The approved reduced-pressure principle backflow-prevention assembly consists of two independently acting approved check valves together with a hydraulically operating mechanically independent pressure differential relief valve located between the check valves and below the first check valve. These units are located between two tightly closing resilient-seated shutoff valves as an assembly and equipped with properly located resilient-seated test cocks.

Service connection. The terminal end of a service connection from the municipal water system, that is, the point where the user assumes control of the water system providing service to the premises. For metered services, the service connection is a point immediately outside the meter box where the user has connected to the piping supplied by the municipal water system as a part of the meter setting. For unmetered fire protection systems, the service connection is the designated control valve owned and maintained by the municipal water system.

User/users of water, water user. Any individual, group, partnership, corporation, government entity, or organization receiving water supplied by the municipal water system of the City of Springdale.

(Ord. No. 3161, §§ 1, 2, 10-23-01)

Sec. 118-128. Backflow prevention.

(a) *Responsibility.* The city water commission is hereby authorized to implement and administer a cross-connection and backflow prevention program to protect potable water supplied in the municipal system of the city. By virtue of this authority, the city water commission and its authorized agents shall become the administrative authority responsible for the implementation and administration of a cross-connection and backflow prevention program for the city. The administrative authority is further authorized and delegated the responsibility to enforce provisions contained in this division and future amendments hereto.

(b) *Enforcement.* If, in the judgement of the administrative authority, an approved backflow prevention device is required to protect the quality of potable water supplied in the municipal system from nonpotable sources in the user's water system, the water user shall be given written notice to install an approved backflow prevention device or devices at one or more specified locations in the user's water system. The water user shall be required to immediately

install such approved backflow device(s) at one or more specified locations at the water user's expense. Failure, refusal, or inability of the water user to install, have tested, and maintain said backflow prevention devices shall constitute grounds for discontinuing water service until such requirements have been adequately satisfied.

(c) *Policy.* No water service connection to any premises shall be installed or maintained by the city water commission unless the water supply is protected as required by federal and state laws and regulations, and provisions of this code. Service of water to any premises shall be discontinued by the city water commission if a backflow-prevention assembly required by this division is not installed, tested, and maintained, or if it is found that a backflow-prevention assembly has been removed, bypassed, or if an unprotected cross connection exists on the premises. Services will not be restored until such conditions or defects are corrected.

(1) *Inspection.* The user's system shall be open for inspection at all reasonable times to authorized representatives of the administrative authority to determine the existence of cross connections or other structural or sanitary hazards, including violations of this division. When such a condition becomes known, the city water commission shall have the authority to deny or immediately discontinue service to the premises by providing for a physical break in the service line until the user has corrected the condition or conditions in conformance with federal and state statutes and regulations, city ordinances, standards relating to plumbing and water supplied and the regulations adopted pursuant thereto.

(2) *Auxiliary water supply.* Municipal water service shall not be provided to any premises when the user's water system is interconnected to an auxiliary water supply. When such a condition becomes known, the city water commission shall have the authority to deny or immediately discontinue service to the premises until such time the user has installed an approved air-gap separation to provide a physical break between the user's auxiliary water supply and the municipal water system. An air-gap separation shall be the only acceptable means to protect the backflow of auxiliary water through the service connection to the municipal water system, thereby limiting the degree of hazard that exists.

(3) *Type of backflow-prevention assembly required.* An approved backflow-prevention assembly shall be installed on each service line to a user'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 wherever the following conditions exist:

a. In the case of premises on which any industrial fluid systems or any other objectionable substances are handled in such a fashion as to create an actual or potential hazard to the municipal water system, the municipal water system shall be protected against backflow from the premises by installing an approved backflow-prevention assembly in the service line, appropriate to the degree of hazard. This shall include the handling of process water and waters originating from the municipal water system that have been subject to deterioration in quality.

b. In the case of premises having (1) internal cross connection that cannot be permanently corrected and controlled, or (2) intricate plumbing and piping arrangements or where entry to all portions of the premises is not readily accessible for inspection purposes, making it impractical or impossible to ascertain whether or not dangerous cross connections exist, the municipal water system shall be protected against backflow from the premises by installing an approved backflow-prevention assembly in the service line.

(4) *Type of backflow-prevention assembly required.* The type of backflow-prevention assembly required under subsection (3) shall depend upon the degree of hazard that

exists as follows:

a. In the case of premises where there are water and/or substance(s) that would be objectionable but not hazardous to health if introduced into the municipal water system, the municipal water system shall be protected against backflow by an approved double check valve assembly.

b. In the case of premises where there is material danger to health that is handled in such a fashion as to create an actual or potential hazard to the municipal water system, the municipal water system shall be protected against backflow by an approved air-gap separation or an approved reduced-pressure backflow-prevention assembly. Examples of premises where such conditions exist include sewage treatment plants, sewage pumping stations, chemical manufacturing plants, and metalplating facilities.

c. In the case of premises where there are cross connections, either actual or potential, the municipal water system shall be protected against backflow by an approved air-gap separation or an approved reduced-pressure principle backflow-prevention assembly at the service connection.

d. In the case of 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 municipal water system shall be protected against backflow from the premises by either an approved air-gap separation or an approved reduced-pressure backflow-prevention assembly on each service connection to the premises.

e. In the case of premises where, in the opinion of the administrative authority, an undue health threat is posed because of the presence of extremely toxic substances, the administrative authority may require an air-gap at the service connection to protect the municipal water system. This requirement will be at the discretion of the administrative authority and is dependent on the degree of hazard.

(5) *Approved backflow-prevention assembly.* Any backflow-prevention assembly required herein shall be a model and size approved by the administrative authority. The term "approved backflow-prevention assembly" shall mean an assembly that has been manufactured in full conformance with the standards established by the American Water Works Association and approved by the state department of health.

(6) *Certified inspections and operational tests.* It shall be the duty of the user at any premises where backflow-prevention assemblies are installed to have certified inspections and operational tests made at least once per year, and the unit overhauled at least every five years. In those instances where the administrative authority deems the hazard great enough, certified inspections may be required at more frequent intervals. These inspections are tests that shall be at the expense of the water user and shall be performed by the assembly manufacturer's representative or by a certified tester approved by the state department of health. It shall be the duty of the water user to see that these tests are made in a timely manner. The user shall notify the administrative authority in advance when the tests are to be undertaken so that representatives of the administrative authority may witness these tests if so desired. These assemblies shall be repaired, overhauled, or replaced at the expense of the water user whenever said assemblies are found to be defective. Records of such certified tests, repairs, and overhaul shall be kept for no less than five years, and a copy submitted to the administrative authority within ten working days of the tests or repairs.

(7) *Notification.* It shall be the duty of the water user at any premises being provided water service by the city water commission to notify the administrative authority of the installation of a new backflow-prevention assembly. Certified inspections and operational tests shall be made within ten working days of the date the new backflow-prevention assembly is placed into operation. The installation of all new backflow-prevention assemblies shall be inspected and their operation tested by the assembly manufacturer's representative, or by a certified tester approved by the state department of health. All fees and expenses for tests and inspections shall be at the expense of the water user.

(8) *Exclusion from requirements.* All presently installed backflow-prevention assemblies that do not meet the requirements of this division 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 subsection (6), be excluded from the requirements of these rules so long as the administrative authority is assured that they will satisfactorily protect the municipal water system. Whenever the existing assembly is moved from the present location, requires more than minimum maintenance, or when the administrative authority 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 division.

(9) *Annual fee.* The administrative authority is hereby authorized to collect an annual fee from each user of water maintaining a backflow-prevention assembly. The annual fees collected shall be used to offset the cost of establishing and maintaining a record system to permit and track backflow-prevention assemblies and their annual certification. The annual permit fee collected by the administrative authority shall not exceed the sum of ten dollars for each backflow-prevention assembly maintained by each user of water.

(Ord. No. 3161, §§ 1, 2, 10-23-01)

Secs. 118-129—118-145. Reserved.

FOOTNOTE(S):

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Editor's note— *Ord. No. 3161, §§ 1, 2, adopted Oct. 23, 2001, did not specifically amend the Code. The editor has treated said ordinance as repealing division 2, sections 118-126—118-134, and adding a new division 2, sections 118-126—118-128. Former division 2 pertained to similar material and derived from Ord. No. 305, §§ 1—9, 11, adopted March 1, 1949.* *(Back)*