

Chapter 705

WATER

Cross References — Merger of utility systems, see §700.010; utility services and rates, ch. 700, art. II — V; user charge system, ch. 715.

ARTICLE I

Regulations Limiting Water Use During Periods of Emergency ¹

Section 705.010. Purpose. [Ord. No. 1167 §1, 1-6-2003]

The purpose of this Article is to provide for the declaration of a water supply watch, warning or emergency and the implementation of voluntary and mandatory water conservation measures throughout the City in the event such a watch, warning or emergency is declared.

Section 705.020. Definitions. [Ord. No. 1167 §2, 1-6-2003]

As used in this Article, the following terms shall have these prescribed meanings:

CLASSES OF USES OF WATER — The following classes of uses of water are established:

1. *CLASS 1:* Water used for outdoor watering, either public or private, for gardens, lawns, trees, shrubs, plants, parks, golf courses, playing fields, swimming pools or other recreational areas; or the washing of motor vehicles, boats, trailers or the exterior of any building or structure.
2. *CLASS 2:* Water used for any commercial or industrial, including agricultural, purposes except water actually necessary to maintain the health and personal hygiene of bona fide employees while such employees are engaged in the performance of their duties at their place of employment.
3. *CLASS 3:* Domestic usage other than that which would be included in either Classes 1 or 2.
4. *CLASS 4:* Water necessary only to sustain human life and the lives of domestic pets and maintain standards of hygiene and sanitation.

CUSTOMER — The customer of record using water for any purpose from the City's water distribution system and for which either a regular charge is made or, in the case of coin sales, a cash charge is made at the site of delivery.

WASTE OF WATER — Includes, but is not limited to:

1. Permitting water to escape down a gutter, ditch or other surface drain; or

1. Editor's Note — Ord. no. 1167 §13, adopted January 6, 2003 repealed sections 705.010 — 705.080 and enacted the new provisions set out herein. Former sections 705.010 — 705.080 derived from CC 1985 §§14-401 — 14-408 and ord. no. 631, 7-21-1980.

2. Failure to repair a controllable leak of water due to defective plumbing.

WATER — Water available to the City of Mulvane for treatment by virtue of its water rights or any treated water introduced by the City into its water distribution system, including water offered for sale at any coin-operated site.

Section 705.030. Declaration of Water Watch. [Ord. No. 1167 §3, 1-6-2003]

Whenever the Mayor of the City finds that conditions indicate that the probability of a drought or some other condition causing a major water supply shortage is rising, the Mayor shall be empowered to declare by proclamation that a water watch exists and that the Mayor shall take steps to inform the public and ask for voluntary reductions in water use. Such a watch shall be deemed to continue until it is declared by proclamation of the Mayor to have ended.

Section 705.040. Declaration of Water Warning. [Ord. No. 1167 §4, 1-6-2003]

Whenever the Mayor of the City finds that drought conditions or some other condition causing a major water supply shortage are present and supplies are starting to decline, the Mayor shall be empowered to declare by proclamation that a water warning exists and that the Mayor will recommend restrictions on non-essential uses during the period of warning. Such a warning shall be deemed to continue until it is declared by proclamation of the Mayor to have ended.

Section 705.050. Declaration of Water Emergency. [Ord. No. 1167 §5, 1-6-2003]

Whenever the Mayor of the City finds that an emergency exists by reason of a shortage of water supply needed for essential uses, the Mayor shall be empowered to declare by proclamation that a water supply emergency exists and that the City of Mulvane will impose mandatory restrictions on water use during the period of the emergency. Such an emergency shall be deemed to continue until it is declared by proclamation of the Mayor to have ended.

Section 705.060. Voluntary Conservation Measures. [Ord. No. 1167 §6, 1-6-2003]

- A. Upon the declaration of a water watch or water warning as provided in Sections 705.030 and 705.040, the Mayor (or the City Administrator) is authorized to call on all water consumers to employ voluntary water conservation measures to limit or eliminate non-essential water uses including, but not limited to, limitations on the following uses:
 1. Class 1 uses of water.
 2. Waste of water.

Section 705.070. Mandatory Conservation Measures. [Ord. No. 1167 §7, 1-6-2003]

- A. Upon the declaration of a water supply emergency as provided in Section 705.050, the Mayor (or the City Administrator) is also authorized to implement certain mandatory water conservation measures including, but not limited to, the following:
 1. Suspension of new connections to the City's water distribution system, except connections of fire hydrants and those made pursuant to agreements entered into by the City prior to the effective date of the declaration of the emergency;

2. Restrictions on the uses of water in one (1) or more classes of water use, wholly or in part;
3. Restrictions on the sales of water at coin-operated facilities or sites;
4. The imposition of water rationing based on any reasonable formula including, but not limited to, the percentage of normal use and per capita or per consumer restrictions;
5. Complete or partial bans on the waste of water; and
6. Any combination of the foregoing measures.

Section 705.080. Emergency Water Rates. [Ord. No. 1167 §8, 1-6-2003]

- A. Upon the declaration of a water supply emergency as provided in Section 705.050, the Governing Body of the City shall have the power to adopt emergency water rates by ordinance designed to conserve water supplies. Such emergency rates may provide for, but are not limited to:
1. Higher charges for increasing usage per unit of use (increasing block rates);
 2. Uniform charges for water usage per unit of use (uniform unit rate); or
 3. Extra charges in excess of a specified level of water use (excess demand surcharge).

Section 705.082. Regulations. [Ord. No. 1167 §9, 1-6-2003]

During the effective period of any water supply emergency as provided for in Section 705.050, the Mayor (or City Manager or Water Superintendent) is empowered to promulgate such regulations as may be necessary to carry out the provisions of this Article, any water supply emergency resolution or emergency water rate ordinance. Such regulations shall be subject to the approval of the Governing Body at its next regular or special meeting.

Section 705.084. Violations, Disconnections and Penalties. [Ord. No. 1167 §10, 1-6-2003]

- A. If the Mayor, City Administrator, Water Superintendent or other City Official or officials charged with implementation and enforcement of this Article or a water supply emergency resolution team of any violation of any water use restrictions imposed pursuant to Sections 405.070 or 405.082 of this Article, a written notice of the violation shall be affixed to the property where the violation occurred and the customer of record any other person known to the City who is responsible for the violation or its correction shall be provided with either actual or mailed notice. Said notice shall describe the violation and order that it be corrected, cured or abated immediately or within such specified time as the City determines is reasonable under the circumstances. If the order is not complied with, the City may terminate water service to the customer subject to the following procedures:
1. The City shall give the customer notice by mail or actual notice that water service will be discontinued within a specified time due to the violation and that the customer will have the opportunity to appeal the termination by requesting a hearing scheduled before the City Governing Body or a City Official designated as a hearing officer by the Governing Body;

2. If such a hearing is requested by the customer charged with the violation, he/she shall be given a full opportunity to be heard before termination is ordered; and
 3. The Governing Body or hearing officer shall make findings of fact and order whether service should continue or be terminated.
- B. A fee of fifty dollars (\$50.00) shall be paid for the reconnection of any water service terminated pursuant to Subsection (A). In the event of subsequent violations, the reconnection fee shall be two hundred dollars (\$200.00) for the second (2nd) reconnection and three hundred dollars (\$300.00) for any additional reconnections.
- C. Violations of this Article shall be a municipal offense and may be prosecuted in Municipal Court. Any person so charged and found guilty in Municipal Court of violating the provisions of this Article shall be guilty of a municipal offense. Each day's violation shall constitute a separate offense. The penalty for an initial violation shall be a mandatory fine of one hundred dollars (\$100.00). In addition, such customer may be required by the court to serve a definite term of confinement in the City or County Jail which shall be fixed by the court and which shall not exceed thirty (30) days. The penalty for a second (2nd) or subsequent conviction shall be a mandatory fine of two hundred dollars (\$200.00). In addition, such customer shall serve a definite term of confinement in the City or County Jail which shall be fixed by the court and which shall not exceed thirty (30) days.

Section 705.086. Emergency Termination. [Ord. No. 1167 §11, 1-6-2003]

Nothing in this Article shall limit the ability of any properly authorized City Official from terminating the supply of water to any or all customers upon the determination of such City Official that emergency termination of water service is required to protect the health and safety of the public.

ARTICLE II
Cross-Connection Control

Section 705.090. General Information. [CC 1985 §14-701; Ord. No. 881, 9-5-1989]

- A. *Purpose.* The purpose of this Article is:
1. To protect the public potable water supply of City of Mulvane from pollution or contamination due to cross-connection;
 2. To prohibit and eliminate all cross-connections within the public potable water supply system; and
 3. To provide for the maintenance of a continuing effective cross-connection control program and thus protect the public health.
- B. *Responsibility.* The City of Mulvane shall be responsible for effectively conducting the cross-connection control program of the City of Mulvane public potable water supply. If, in the judgement of said City of Mulvane an approved backflow prevention device is required the Utility Superintendent or his/her agent will give notice in writing to the customer to install the proper device. The customer shall immediately install the proper device at the customers expense. Failure to comply shall be grounds for discontinuing

water service to said customer until the device is properly installed.

Section 705.100. Definitions. [CC 1985 §14-702; Ord. No. 881, 9-5-1989]

As used in this Article, the following words or phrases shall have these prescribed meanings:

AGENCY — The department of the municipal government or water purveyor invested with the responsibility for enforcement of this Article.

AIR GAP — The unobstructed vertical distance at least twice the diameter of the supply line and no less than one (1) inch, 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 the receptacle.

APPROVED DEVICE — Devices tested and accepted by a recognized testing laboratory approved by the Kansas Department of Health and Environment and the City of Mulvane.

BACKFLOW — The flow of water or other substances into the distribution system of a potable supply of water from any source other than its intended source. Backsiphonage is one type of backflow.

BACKFLOW PREVENTER — A device or means to prevent backflow.

BACKSIPHONAGE — The flow back of contaminated or polluted substances from a plumbing fixture or any vessel or source into the potable water supply system due to negative pressure in said system.

CONTAMINANT — Any substance that upon entering the potable water supply would render it a danger to the health or life of the consumer.

CROSS-CONNECTION — Any physical connection or arrangement between two otherwise separate piping systems, one of which contains potable water and the other which contains water or any substance of unknown or questionable quality whereby there may be flow from one system to the other.

DOUBLE-CHECK VALVE ASSEMBLY — A device consisting of two (2) internally loaded soft seated check valves with positive shut-off valves on both upstream and downstream ends, and properly located test ports.

DUAL-CHECK VALVE — A device consisting of two (2) internally loaded soft seated check valves. This device does not contain test ports and is acceptable for use only at the meter of residential customers.

FREE WATER SURFACE — A water surface at atmospheric pressure.

FLOOD LEVEL RIM — The edge of the receptacle from which water overflows.

FROST PROOF CLOSET — A hopper with no water in the bowl and with the trap and water supply control valve located below frost line.

KDHE — The Kansas Department of Health and Environment.

PLUMBING — The practice, materials and fixtures used in the installation, maintenance,

extension and alteration of all piping fixtures, appliances and appurtenances.

POLLUTION — 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 affect the water.

REDUCED PRESSURE ZONE BACKFLOW PREVENTER — An assembly of two (2) independently acting soft seated approved check valves together with a hydraulically operating mechanically independent differential pressure relief valve located between the check valves and at the same time below the first check valve. The unit shall contain properly located test cocks and resilient seated shut-off valves at each end of the assembly. To be approved these assemblies must be accessible for inspection and testing and be installed in an above ground location where no part of the assembly will be submerged.

TESTER — A trained technician certified in the testing and repair of backflow preventers.

VACUUM — Any absolute pressure less than that exerted by the atmosphere.

VACUUM BREAKER — A device that permits entrance of air into the water supply distribution line to prevent backsiphonage.

WATER, POTABLE — Water free from impurities in amounts sufficient to cause disease or harmful physiological effects. Its quality shall conform to Kansas Department of Health and Environment requirements for public water supplies.

WATER, NON-POTABLE — Water that is not safe for human consumption or that is of questionable potability.

Section 705.110. Requirements. [CC 1985 §14-703; Ord. No. 881, 9-5-1989]

- A. *General.* A public potable water supply system shall be designed, installed and maintained in such a manner as to prevent contamination from non potable sources through cross-connections or any piping connection to the system.
- B. *Cross-Connections Prohibited.* Cross-connections are prohibited except when and where, as approved by City of Mulvane, suitable backflow preventers are properly installed, tested and maintained to insure proper operation on a continuing basis.
- C. *Interconnections.* Interconnection between two (2) or more public water supplies shall be permitted only with the approval of the Kansas Department of Health and Environment. (K.S.A. 65-163(a))
- D. *Individual Water Supplies.* Connections between a private water supply and the public potable water are prohibited. (K.S.A. 65-163 (a))
- E. *Connections To Boilers.* Potable water connections to boiler feed water systems in which boiler water conditioning chemicals are or can be introduced shall be made through an air-gap or through a reduced pressure zone principle backflow preventer located in the potable water line before the point where such chemicals may be introduced.
- F. *Prohibited Connections.* Connection to the public potable water supply system for the

following is prohibited unless properly protected by the appropriate backflow prevention device.

1. Bidets.
 2. Operating, dissecting, embalming, and mortuary tables or similar equipment. In such installations the hose used for water supply shall terminate at least twelve (12) inches away from every point of the table or attachments.
 3. Pumps for non potable substances. Priming only through an air-gap.
 4. Building drains, sewers, or vent systems.
 5. Commercial buildings or industrial plants manufacturing or otherwise using polluting or contaminating substances.
 6. Any fixture of similar hazard.
- G. *Refrigeration Unit Condensers And Cooling Jackets.* Except when potable water provided for a refrigeration condenser or cooling jacket is entirely outside the piping or tank containing a toxic refrigerant, the inlet connection shall be provided with an approved backflow preventer. Heat-exchangers used to heat water for potable use shall be of the double wall type.
- H. *Protective Devices Required.* The type of protective device required under this Article shall be determined by the degree of hazard which exists as follows:
1. Premises having auxiliary water supply shall protect the public system by either an approved air-gap or an approved reduced pressure principle backflow prevention assembly.
 2. Premises having water or substances which would be non hazardous to the health and well being of the consumers shall protect the public system with no less than an approved double-check valve assembly.
 3. Premises where material dangerous to health is handled in a manner which creates an actual or potential hazard shall protect the public system by an approved air-gap or an approved reduced pressure principle backflow prevention assembly.
 4. Premises where cross-connections are uncontrolled shall protect the public water supply by installing an approved air-gap or an approved reduced pressure principle backflow prevention device at the service connection.
 5. Premises where because of security requirements or other prohibitions it is impossible to complete an in plant cross-connection inspection, the public system shall be protected by an approved air-gap or an approved reduced pressure principle backflow prevention assembly.

Premises which may fall into one or more of the above mentioned categories may be, but are not limited to the following:

1. Beverage bottling plants.
2. *Buildings*. Hotels, apartments, public or private buildings, or other structures having actual or potential cross-connections.
3. Car wash facilities.
4. Chemical manufacturing, handling, or processing plants.
5. Dairies and cold storage facilities.
6. Chemically contaminated water.
7. Film or photography processing laboratories.
8. Fire systems.
9. Hospitals, medical centers, morgues, mortuaries, autopsy facilities, clinics, or nursing and convalescent homes.
10. Irrigation systems.
11. Laundries.
12. Metal cleaning, processing, or fabricating plants.
13. Oil and gas production, storage, or transmission facilities.
14. Packing or food processing plants.
15. Paper and paper products plants.
16. Power Plants.
17. Radioactive materials plants or handling facilities.
18. Restricted or classified facilities.
19. Rubber plants.
20. Sand, gravel, or asphalt plants.
21. Schools or colleges.
22. Sewage and storm drainage facilities and reclaimed water systems.
23. Solar heating systems.
24. *Temporary service*. Fire hydrants, air valves, blow-offs and other outlets.
25. Water front marinas.

Section 705.120. Installation. [CC 1985 §14-704; Ord. No. 881, 9-5-1989]

A. Approved devices shall be installed at all fixtures and equipment where backflow or

backsiphonage may occur and where a minimum air-gap between the potable water outlet and the fixture or equipment flood-level rim cannot be maintained. Backflow and backsiphonage devices of all types shall be in an accessible location. Installation in pits or any other location not properly drained shall be prohibited, except that dual-check valves may be installed in the meter box.

- B. *Connections Not Subject To Backpressure.* Where a water connection is not subject to back pressure, a vacuum breaker shall be installed on the discharge side of the last valve on the line serving the fixture or equipment. A list of some conditions requiring protective devices of this kind are given in the following table titled "Cross-Connections Where Protective Devices are Required".

**Cross-Connections Where Protective Devices Are Required And
Critical Level (C — L) Settings For Vacuum Breakers.**

Fixtures or Equipment	Method of Installation
Aspirators and ejectors	C-L at least 6 inches above flood level of receptacle served.
Dental units	On models without built in vacuum breakers C-L at least 6 inches above flood level rim of bowl.
Commercial dish washing machine	C-L at least 6 inches above flood level of machine. Installed on both hot and cold water supply lines.
Garbage can cleaning machines	C-L at least 6 inches above flood level of machine. Installed on both hot and cold water supply lines.
Hose Outlets	C-L at least 6 inches above highest point on hose line.
Commercial laundry machines	C-L at least 6 inches above flood level of machine. Installed on both hot and cold water supply lines.
Lawn sprinklers	C-L at least 6 inches above highest sprinkler head or discharge outlet.
Steam tables	C-L at least 6 inches above flood level rim.
Tanks and vats	C-L at least 6 inches above flood level rim or line.
Through urinals	C-L at least 30 inches above perforated flush pipe.
Flush tanks	Equipment with approved ball cock, installed according to manufacturer's instructions.
Hose bibs	C-L at least 6 inches above flood level of receptacle served.

- C. *Connections Subject To Backpressure.* Where a potable water connection is made to a line, fixture, tank, vat, pump, or other equipment with a hazard of backflow or backsiphonage where the water connection is subject to backpressure, and an air-gap cannot be installed, the City of Mulvane may require the use of an approved reduced pressure principle backflow preventer. A partial list of such connections is shown in the following table "Partial List of Cross-Connections Subject to Back Pressure".

Partial List of Cross-Connections Subject to Back Pressure

Chemical lines	Pumps
Dock water outlets	Steam lines
Individual water supplies	Swimming pools
Industrial process water lines	Pressure tanks
Tanks and vats - bottom inlets	Hose bibs

- D. *Barometric Loop.* Water connections where an actual or potential backsiphonage hazard exists may in lieu of devices specified above be provided with a barometric loop. Barometric loops shall precede the point of connection.
- E. *Dual-Check Valve.* Dual-check valves may be installed at the meter. These valves shall be inspected and repaired not less frequent than every third (3rd) year. These valves shall be installed only in situations where the City of Mulvane is assured that only non contaminating substances are subject to backflow into the potable system.
- F. *Vacuum Breakers.* Atmospheric vacuum breakers shall be installed with the critical level at least six (6) inches above the flood rim of the fixture they serve and on the discharge side of the last control valve to the fixture. No shut off valve or faucet shall be installed beyond the atmospheric vacuum breaker. Pressure vacuum breakers shall be installed with the critical level at least twelve (12) inches above the flood rim but may have control valves down stream from the vacuum breaker. For closed equipment or vessels such as pressure sterilizers the top of the vessel shall be considered the flood level rim and a check valve shall be installed on the discharge side of the pressure vacuum breaker.

Section 705.130. Maintenance and Repair. [CC 1985 §14-705; Ord. No. 881, 9-5-1989]

- A. It shall be the responsibility of building and premise owners to maintain all backflow preventers and vacuum breakers within the building or on the premises in good working order and to make sure no piping or other arrangements have been installed for the purpose of bypassing the backflow devices. Testing and repair of these devices should be made by qualified technicians. (Qualified technicians are those technicians who have completed a Kansas Department of Health and Environment approved training course and have passed a written examination such as the American Backflow Prevention Association device testers examination.) The City of Mulvane shall certify the device testers after ascertaining the technician meets the above qualifications. The City of Mulvane will also assure the proper installation of all backflow preventers and will set appropriate testing and overhaul schedules for such devices. Testing intervals shall not exceed one (1) year and overhaul intervals shall not exceed (5) years.
- B. *Certified Tester/Repair Technicians.* All certified tester/repair technicians shall be re-certified at no less than three (3) year intervals. Persons certified as tester/repair technicians at the time of the adoption of this Article shall continue to be certified for a period of not more than three (3) years as determined by the City of Mulvane.

Section 705.140. Violation, Notice. [CC 1985 §14-706; Ord. No. 881, 9-5-1989]

The City of Mulvane shall notify the owner, or authorized agent of the owner, of a building or premises in which there is found a violation of this Article, of such violation. The City of Mulvane shall set a reasonable time for the owner to have the violation corrected. If the owner fails to correct the violation within the specified time the City of Mulvane shall cease delivery of water to the building or premises until the violation shall be satisfactorily corrected.