

CHAPTER XVI. WATER UTILITY

ARTICLE 1. WATER DEPARTMENT

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ARTICLE 1. WATER DEPARTMENT

16-101 WATER RATIONING: USE RESTRICTED OR STOPPED. The city reserves the right to restrict or prohibit the use of water and to specify the purposes for which it may be used whenever the governing body determines the public exigency so requires.

16-102 WATER RATIONING: IMPOSING RESTRICTIONS. Whenever the governing body determines that water use must be restricted or prohibited, they shall forthwith issue a proclamation of emergency through the news media and use other appropriate methods of making public the proclamation.

16-103 WATER RATIONING: WATER RESTRICTIONS. In the event a proclamation of emergency is issued, water usage will be restricted or prohibited first for uses in the following priority:

- (a) Water lawns, gardens, trees, shrubs, plants and water outside dwellings for such purposes as car, boat or trailer washing, exterior of dwellings;
- (b) Industrial uses of water, including but not limited to, car wash operations and packing plant operations;
- (c) Business use, other than industrial;
- (d) Home uses other than those set forth in subsection "a".

ARTICLE 2. WATER RATES

16-201 WATER RATES. The rates to be paid by customers within the city limits of the City of Washington, Kansas, for the use and consumption of water furnished or supplied by the city shall be as follows:

First 2,000 gallons or part thereof -----	Up to a 3/4" meter	\$10.00;
	Up to a 1" meter	\$11.00;
	Up to a 2" meter	\$15.00;
	3" and larger	\$20.00;

Each 1,000 gallons or part thereof over 2,000 and
 Under 5,000 gallons-----\$2.25 per 1,000;
 Each 1,000 gallons or part thereof over 5,000 and
 Under 15,000 gallons----- \$2.00 per 1,000;
 Each 1,000 gallons or part thereof
 Over 15,000 gallons-----\$1.75 per 1,000;

16-202 SAME; OUTSIDE CITY LIMITS. The rates to be paid by customers outside of the city limits of the City of Washington, Kansas, for the use of consumption of water furnished or supplied by said city shall be as follows:

First 2,000 gallons or part thereof -----Up to a 3/4" meter \$12.00;
 Up to a 1" meter \$13.00
 Up to a 2" meter \$19.00
 3" and larger \$25.00

Each 1,000 gallons or part thereof over 2,000 and
 Under 5,000 gallons ----- \$3.00 per 1,000;
 Each 1,000 gallons or part thereof over 5,000 and
 Under 15,000 gallons-----\$2.80 per 1,000;
 Each 1,000 gallons or part thereof over 15,000 gallons-----\$2.60 per 1,000.

16-203 ESTABLISHMENT OF CHARGES. It is determined and declared to be necessary and conducive to the protection of the public health, safety, welfare, and convenience of the city to collect charges from all users who use the water system of the city. The proceeds of such charges so derived will be used for the purpose of operating, maintaining, and retiring any debt of such public water works.

16-204 CHARGES TO FINANCE SYSTEM. The user charge system shall generate adequate annual revenues to pay costs of annual operation and maintenance, including replacement, and costs associated with debt retirement of bonded capital associated with financing the water works which the city may by ordinance, designate to be paid by the user charge system. That portion of the total user charge which is designated for operation and maintenance including replacement of the treatment works shall be established by this article.

16-205 ANNUAL REVIEW. The city will review the charge system every year and revise user charge rates as necessary to ensure that the system generates adequate revenues to pay the costs of operation and maintenance including replacement and that the system continues to provide for the proportional distribution of operating and maintenance including replacement costs among users and user classes.

16-206 BILLED MONTHLY. All users shall be billed monthly on the amount of water used with the exception of November, December, January and February. During these months the bills will be estimated with a true up in March of each year. All bills will be due on the 10th of each month unless the 10th falls on a weekend or holiday, when this occurs the bill will be due the following business day.

16-207 LATE CHARGE. A late penalty of ten (10) percent of the user charge will be added to each delinquent bill. A bill is considered delinquent after 5:00 P.M. of the due date. When any bill is 15 days in default, rendition of water service to such premises shall be discontinued until such bill is paid following due notice and opportunity for hearing. Due notice shall be given within five (5) days following the delinquent time requesting the delinquent contributor to appear at the next regular council meeting where he will be heard.

16-208 SAME; FINDINGS. Following the hearing provided for in Section 16-207, the governing body shall either affirm or adjust the monthly service charge. If the charge is affirmed, water service may be discontinued until all charges have been paid in full. Findings of the governing body shall be final and binding upon all parties concerned.

16-209 DISCONTINUANCE OF SERVICE: If a customer terminates service for any reason and then re-connects within the period of one year the monthly minimum charge shall apply for all months that service was discontinued.

ARTICLE 3. WATER CROSS CONNECTION CONTROL PROGRAM

16-301 CITY SUPERINTENDENT. The city superintendent shall be responsible for effectively conducting the cross connection control program of the City of Washington public potable water supply. If in the judgment of the city superintendent an approved backflow prevention device is required, the city superintendent or his/her agent shall give notice in writing to the customer to install the proper device at the customer's expense. Failure to comply shall constitute grounds for discontinuing or denying water service to said customer until the device is properly installed.

16-302 DEFINITIONS.

- (a) “Agency”: City of Washington.
- (b) “Air Gap”: The unobstructed vertical distance at least twice the diameter of the supply line and no less than one 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.
- (c) “Approved Device”: Shall mean devices tested and accepted by a recognized testing laboratory approved by the Kansas Department of Health and Environment and the City of Washington.
- (d) “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.
- (e) “Backflow Preventer”: A device or means to prevent backflow.
- (f) “Backsiphonage”: The flowing 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.
- (g) “Contaminant”: Any substance that upon entering the potable water supply would render it a danger to the health or life of the consumer.
- (h) “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 flow from one system to the other.
- (i) “Double Check Valve Assembly”: A device consisting of two internally loaded soft-seated check valves with positive shut-off valves on both upstream and downstream ends, and properly located test ports.
- (j) “Dual Check Valve”: A device consisting of two 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.
- (k) “Free Water Surface”: A water surface at atmospheric pressure.
- (l) “Flood Level Rim”: The edge of the receptacle from which water overflows.
- (m) “Frost Proof Closet”: A hopper with no water in the bowl and with the trap and water supply control valve located below frost line.
- (n) “KDHE”: The Kansas Department of Health and Environment.
- (o) “Plumbing”: The practice, materials and fixtures used in the installation maintenance, extension and alteration of all piping fixtures, appliances and appurtenances.

- (p) “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 not adversely affect the water.
- (q) “Reduced Pressure Zone Backflow Preventer”: An assembly of two independently acting soft-seated approved check valves together with a hydraulically operating mechanically independent deferential 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.
- (r) “Tester”: A trained technician certified in the testing and repair of preventers.
- (s) “Vacuum”: Any absolute pressure less than that exerted by the atmosphere.
- (t) “Vacuum Breaker”: A device that permits entrance check of air into the water supply distribution line to prevent backsiphonage.
- (u) “Water, Potable”: Water free from impurities in amount sufficient to cause disease or harmful physiological effects. Its quality shall conform to KDHE requirements for public water supplies.
- (v) “Water, Non- potable”: Water that is not safe for human consumption or that is of questionable portability.

16-303 REQUIREMENTS.

- (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 the city superintendent suitable backflow preventers are properly installed, tested and maintained to insure proper operation on a continuing basis.
- (c) Interconnections: Interconnections between two or more public water supplies shall be permitted only with the approval of the Kansas Department of Health and Environment.
- (d) Individual Water Supplies: Connections between a private water supply and the public potable water supply are prohibited.
- (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 its attachments.
 - 3. Pumps for non-potable substances.
 - 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 exchanges 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 ordinance 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 wherein, 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:

- (a) Beverage bottling plants;
- (b) Building- hotels, apartments, public or private buildings, or other structures having actual cross connections;
- (c) Car wash facilities;
- (d) Chemical manufacturing, handling, or processing plants;
- (e) Dairies and cold storage facilities;
- (f) Film or photography processing laboratories;
- (g) Fire sprinkler systems;
- (h) Hospitals, medical centers, morgues, mortuaries, autopsy facilities, medical clinics, or nursing and convalescent homes;
- (i) Irrigation or lawn watering systems;
- (j) Laundries and dry cleaners;
- (k) Metal cleaning, processing, or fabricating plants;
- (l) Oil and gas production, storage, or transmission facilities;
- (m) Packing or food processing plants;
- (n) Paper and paper product plants;
- (o) Radioactive materials plants or handling facilities;
- (p) Power plants;
- (q) Restrictive access or classified facilities;
- (r) Rubber processing plants
- (s) Sane, gravel and asphalt plants;
- (t) Schools and colleges;
- (u) Sewage and storm drainage facilities and reclaimed water systems;
- (v) Solar heating systems;

- (w) Temporary service connections such as fire hydrants, air valves, water blow-offs and other outlets.

16-304 INSTALLATION.

- (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 accessible location. Installation in pits or other locations not properly drained shall be prohibited, except that dual check valves may be installed in the meter box.
- (b) Water connections not subject to backpressure shall contain a vacuum breaker on the discharge side of the last valve on the line serving the fixture or equipment. A list of some conditions requiring protection are as follows:

<u>Fixture or Equipment</u>	<u>Method of Installation</u>
Aspirators & ejectors.	Critical level at least 6 inches above flood level of receptacle served.
Dental units.	On models without built in vacuum breaker critical level at least 6 inches above flood level of the bowl.
Commercial dish washing equipment.	Critical level at least 6 inches above flood level of the equipment. Installed on both hot and cold water supply lines.
Garbage can cleaning equipment.	Critical level at least 6 inches above flood level of equipment. Installed on both hot and cold water supply lines.
Hose outlets.	Critical level at least 6 inches above highest point on hose line.
Commercial laundry equipment.	Critical level at least 6 inches above flood level of machine. Installed on both hot and cold water supply lines.
Lawn sprinkler system.	Critical level at least 6 inches above highest sprinkler head or discharge outlet.

Steam tables.	Critical level at least 6 inches above flood level rim of line.
Tanks and vats.	Critical level at least 6 inches above flood level rim or line.
Through urinals.	Critical level at least 30 inches above perforated flush pipe.
Flush tanks.	Equipment with approved ball cock, installed according to manufacturer's instructions.
Hose bibs.	Critical level at least 6 inches above flood level of receptacle served.

(c) 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 back pressure, and an air gap cannot be installed, the city superintendent may require the use of an approved reduced pressure principle backflow preventer. The following partial list shows cross-connections subject to back pressure situations which may use approved reduced pressure principle backflow preventer devices:

1. Chemical lines;
2. Individual water supplies;
3. Industrial process water lines;
4. Tanks and vats- bottom inlets;

5. Pumps;
6. Steam lines;
7. Swimming pools;
8. Pressure tanks;
9. Certain hose bibs;

- (d) 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 proceed the point of connection.
- (e) Dual check valves may be installed at the meter. These valves shall be inspected and repaired not less frequently than every third year. Dual check valves shall be installed only in situations where the city superintendent is assured that only non-contaminating substances are subject to backflow into the potable system.
- (f) Atmospheric vacuum breakers shall be installed with the critical level at least 6 inches above the flow 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 12 inches above the flow rim but may have control valves downstream 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.

16-305 MAINTENANCE AND REPAIR. It shall be the responsibility of the remise owner(s) 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 who have completed a KDHE approved training course and have passed qualified written examinations. The city shall certify said device testers who have met the required qualifications.

The city will inspect all backflow preventer installations to assure proper installation and will assist in the development of appropriate testing and overhaul schedules for such devices. Testing intervals shall not exceed one (1) year except as noted for meter installed backflow preventer devices and overhaul shall not exceed every five (5) years.

16-306 PENALTIES AND FINES. The city superintendent shall notify the owner, or authorized agent of the owner of a building or premises in which a violation of this ordinance is discovered of such violation and what corrective measures are necessary to correct the violation. The city superintendent shall set reasonable time for the owner or owner's agent to correct the violation. If the owner fails to correct the violation within the specified time the City of Washington shall cease delivery of water to the building or premises until such time as the violation is satisfactorily corrected.