#### **Chapter 53: Potable Water General Provisions** Definitions §53.01 **Operation and funding** §53.02 Installation procedure §53.03 §53.04 Time §53.05 Restricted use §53.06 Inspection **Regulations** §53.25 Connections §53.26 Pollution Extension of mains §53.27 Sprinkler systems §53.28 **Rates; Charges** §53.45 Installation expense §53.46 Repairs §53.47 Lien **Cross Connections/Back Flow Backflow policy** §53.65 §53.66 Definitions §53.67 Cross connections prohibited Surveys and investigations §53.68 Type of protection required §53.69 §53.70 Where protection is required Backflow prevention devices §53.71 §53.72 Installation **Testing Repair** §53.73

§53.74 Resolution #01-2003

#### **General Provisions**

#### §53.01 Definitions

- For the purpose of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.
- **Main** Any pipe other than a supply or service pipe that is owned by the city and used for the purpose of carrying potable water to and dispersing the same in the city.
- **Supply Pipe -** Any pipe tapped into a main and extending from there to a point at or near the lot line of the consumer's premise where the shut-off, stop box, or curb cock is located.
- Service Pipe Any pipe extending from the shut-off, stop box, or curb cock at or near the lot line to and beyond the property line of the consumer to the location on the premise where the water is to be dispersed.
- Separate Premises More than one consumer may procure water from the same service or supply pipe. The second premises may be a separate dwelling, apartment, building, or structure used for a separate business, but must have common ownership and be located on one contiguous lot.

**Water** - Shall mean potable water of drinking quality. ('72 Code, § 3-702)

#### §53.02 Operation and Funding

- The city owns and operates the Water Department through the Board of Public Works. The Board of Public Works or its designated agent shall have the direct management and control of the Water Department and shall faithfully carry out the duties of his or her office. The Board of Public Works shall have the authority to adopt rules and regulations for the sanitary and efficient management of the Water Department.
- ('72 Code, § 3-703) (Am. Ord. 1493, passed 4-13-95; Am. Ord. 1815, passed 10-24-02) Statutory reference: Authority, see Neb. RS 17-531, 17-534, 19-1305

## §53.03 Installation Procedure

In making excavations in streets, alleys, or sidewalks for the purpose of installing pipe or making repairs, the paving, stones, and earth must be removed and deposited in a manner that will occasion the least inconvenience to the public and provide for adequate drainage. No person shall leave an excavation made in the street, alley, or sidewalk open at any time without a barricade, and during the night, warning lights. After service pipes are laid, the streets, alleys, and sidewalks shall be restored to good condition. If the excavation in any street, alley, or sidewalk is left open or unfinished for a period of 24 hours or more, the Board of Public Works or its designated agent shall have the duty to finish or correct the work, and all expenses so incurred shall be charged to the consumer. All installations or repairs of pipes require two inspections by the Board of Public Works or its designated agent. The first inspection shall be made when connections or repairs are completed and before the pipes are covered. The second inspection shall be made after the dirt work is completed and the service is restored. It is the customer's responsibility to notify the Board of Public Works or its designated agent at the time the work is ready for each inspection. All installation shall be done under the supervision and strictly in accordance with the rules, regulations, and specifications prescribed for such installation by the Board of Public Works.

The cost of concrete removal and replacement is <u>not</u> included in the Tap or Impact Fees. Any concrete expense is the customer's expense.

('72 Code, § 3-705) (Am. Ord. 1493, passed 4-13-95; Am. Ord. 1815, passed 10-24-02) **Statutory reference:** Authority to regulate, see Neb. RS 17-537

## §53.04 Time

All taps or plumbing work done on or to the city water system shall be done between the hours of 8:00 a.m. and 4:00 p.m. ('72 Code, § 3-707)

## §53.05 Restricted Use

The Board of Public Works may order a reduction in the use of water or shut off the water on any premises in the event of a water shortage due to fire or other good and sufficient cause. The city shall not be liable for any damages caused by shutting off the supply of water of any consumer while the system or any part thereof is undergoing repairs or when there is a shortage of water due to circumstances over which the city has no control.

('72 Code, § 3-7 16) (Am. Ord. 1493, passed 4-13-95) Penalty, see § 10.99 Statutory reference: Authority to regulate, see Neb. RS 17-537

## §53.06 Inspection

The Board of Public Works or its designated agent shall have free access, at any reasonable time, to all parts of each premises and building to or in which water is delivered, for the purpose of examining the pipes, fixtures, and other portions of the system to ascertain whether there is any disrepair or unnecessary waste of water.

('72 Code, § 3-719) (Am. Ord. 1493, passed 4-13-95; Am. Ord. 1815, passed 10-24-02)

Statutory reference: Authority to regulate, see Neb. RS 1 7-537

#### Regulations

#### §53.25 Connections

It shall be unlawful for any plumber or pipe fitter to do any work upon any of the pipes or appurtenances of the system of waterworks, or to make any connection with or extension of the supply pipes of any consumer taking water from the said system until such plumber or pipe fitter shall have first procured a license or permit from the city. All plumbing shall be done in the manner required by the Board of Public Works or its designated agent. The said licensed plumber shall be at all times subject to the inspection and approval of the Board of Public Works and it shall be further unlawful to cover or conceal willfully any defective or unsatisfactory plumbing work.

('72 Code, § 3-706) (Am. Ord. 1493, passed 4-13-95; Am. Ord. 1815, passed 10-24-02) Penalty, see § 10.99

Pits are expensive for the customer and difficult to maintain. Remote readers are the only acceptable meter configuration.

#### 53.26 Pollution

It shall be unlawful for any person to pollute or attempt to pollute any stream or source of water for the supply of the City Water Department.

(Neb. RS 17-536) ('72 Code, § 3-717) Penalty, see § 10.99 Cross reference: Water pollution, see § 94.40

## §53.27 Extension of Mains

(A) The extension of mains, as defined in Section 53.01 hereof, into unsupplied territory may be made by means of water extension districts or by the Board of Public Works, at its expense, without the creation of one or more water extension districts. If one or more mains have been constructed into unsupplied territory by the Board of Public Works without the creation of one or more water extension districts, there shall be no connection of a supply pipe, as defined in Section 53.01 hereof, to said main or mains by one or more adjacent property owners except with the permission by the Board of Public Works, which, among other items, may require a fee, in addition to the normal connection fee, which additional fee is meant to recoup for the Board of Public Works a portion of its costs in the extension of said main or mains into unsupplied territory, said additional fee to be in an amount as established by the Board of Public Works and paid to the Board of Public Works before any connection to a main.

(B) If there is an application to the Board of Public Works for the applicant to be supplied with water service via a main in unsupplied territory, and if the creation of a water extension district is not feasible or practical and if the main to which the applicant wishes to connect has not been constructed by the Board of Public Works, at its expense, such applicant may be supplied with water service on such basis as the Board of Public Works shall determine. An applicant may, upon permission by the Board of Public Works, be permitted and allowed to connect with the nearest adequate main. Such applicant may, under the supervision of the Board of Public Works or its designated agent, install a water main in the unsupplied territory, using the streets and alleys of the city. The main shall be built and constructed under such terms, specifications, and conditions as may be agreed upon by contract, executed by and between such owners and the Board of Public Works. Upon acceptance by the Board of Public Works, the main so extended shall become the property of the Board of Public Works.

('72 Code, § 3-721) (Am. Ord. 1493, passed 4-13-95; Am. Ord. 1815, passed 10-24-02) Penalty, see § 10.99) (Ord. 1815 Amendment No. 2009-1 approved 5-20-2009)

## §53.28 Sprinkler Systems

A separate water meter may be installed for each common customer desiring an underground sprinkler system. The customer shall pay for the meter and expenses of install as determined by the utility.

## Rates; Charges

## §53.45 Installation Expense

- The utility is responsible for tapping of the main, installing the meter, and providing fixtures and labor up to and including the stop box at the lot line of the customer. No one other than the Board of Public Works or its designated agent shall tap the water main. The customer shall pay an impact fee and if applicable a developer fee. The customer shall at his or her own expense bring water service from the stop box to his or her own premises and shall employ a licensed plumber who shall install water service to the place of disbursement. Nonresidents shall pay such tap fees and installation charges in such sums as the Board of Public Works, shall in each case fix.
- ('72 Code, § 3-708) (Am. Ord. 1493, passed 4-13-95; Am. Ord. 1815, passed 10-24-02) Penalty, see § 10.99

## §53.46 Repairs

- The city shall repair or replace, as the case may be, all supply pipe between the commercial main and the stop box. The customer at his or her own expense shall replace and keep in repair all service pipe from the stop box to the place of disbursement. When leaks occur in service pipes, the Board of Public Works or its designated agent shall shut off water service until the leak is repaired at the expense of the customer to the satisfaction of the Board of Public Works or its designated agent.
- All water meters shall be kept in repair by the city at the expense of the city. When meters are worn out, they shall be replaced and reset by the city at the expense of the city; provided, that if the customer permits or allows a water meter to be damaged, injured, or destroyed through his or her own recklessness, carelessness, or neglect so that the meter must be repaired or replaced, the Board of Public Works shall bill and collect from the customer the cost of such meter repair or replacement. Permitting a water meter to be damaged or destroyed by freezing shall always be considered negligence on the part of the customer. All meters shall be tested at the customer's request at the expense of the customer any reasonable number of times; provided, that if the test shows the water meter to be running 2% or more fast, the expense of such test shall be borne by the city. The city reserves the right to test any water service meter at any time, and if said meter is found to be beyond repair, the city shall always have the right to place a new meter on the customer's water service fixtures at city expense. Should a consumer's meter fail to register properly, the customer shall be charged for water during the time the meter is out of repair on the basis of the monthly consumption during the same month of the preceding year, or the customer shall be charged such amount as may be reasonably fixed by the Board of Public Works or its designated agent.
- ('72 Code, § 3-709) (Am. Ord. 1493, passed 4-13-95; Am. Ord. 1815, passed 10-24-02) Penalty, see § 10.99

Statutory reference: Authority to regulate, see Neb. RS 17-537

# §53.47 Lien

In addition to all other remedies, if a customer shall for any reason remains indebted to the city for water service furnished, such amount due, together with any rents and charges in arrears, shall be considered a delinquent water rent which is hereby declared to be a lien upon the real estate for which the same was used. The Board of Public Works shall notify in writing, or cause to be notified in writing, all owners of premises or their agents whenever their tenants or lessees are 60 days or more delinquent in the payment of water rent. It shall be the duty of the Utilities General Manager on the first day of June of each year to report to the Board or Public Works a list of all unpaid accounts due for water together with a description of the premises upon which the same was used. The report shall be examined, and if approved by the Board of Public Works, shall be forwarded to the City Council for approval and certified by the City Clerk to be collected as a special tax in the manner provided by law.

(Neb. RS 17-538) ('72 Code, § 3-713)

#### **Cross Connections**

# §53.65 Backflow Policy

(A) Purpose - The purpose of this subchapter is:

(1) To protect the public potable water supply of the city water system from contamination or pollution by containing within the consumer's internal distribution system or private water system contaminants or pollutants which could backflow through the service connection into the public potable water supply system.

(2) To promote the elimination, containment, isolation, or control of existing cross connections, actual or potential, between the public or consumer's potable water systems and nonpotable water systems, plumbing fixtures, and industrial process systems.

(3) To provide for the maintenance of a continuing program of cross connection control which will systematically and effectively prevent the contamination or pollution of all potable water systems.

(B) Application - This subchapter shall apply to all premises served by the public potable water system of the city.

(C) Policy

(1) This subchapter will be reasonably interpreted. It is the city's intent to recognize the varying degrees of hazard and to apply the principle that the degree of protection shall be commensurate with the degree of hazard.

(2) The City Water Department shall be primarily responsible for protection of the public potable water distribution system from contamination or pollution due to backflow or contaminants or pollutants through the water service connection. The cooperation of all consumers is required to implement and maintain the program to control cross connections. The consumer is responsible for preventing contamination of the water system within consumer's own premises.

('72 Code, § 3-723(part)) (Ord. 1302, passed 1-12-89)

#### §53.66 Definitions

- For the purpose of this subchapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.
- **Air Gap Separation** The unobstructed vertical distance 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 overflow level rim of the receptacle.
- Auxiliary Water Supply Any water source or system, other than the public water supply, that may be available in the building or premises.
- **Backflow** The flow other than the intended direction of flow, or any foreign liquids, gases, or substances into the distribution system of a public water supply.
- **Backflow Prevention Device** Any device, method, or type of construction intended to prevent backflow into a potable water system provided backflow preventers have been tested and approved by a reputable testing laboratory.
- **Consumer -** The owner or person in control of any premises supplied by or in any manner connected to a public water system.
- **Containment** Protection of the public water supply by installing a cross connection control device or air gap separation on the main service line to a facility, or as an installation within equipment handling potentially hazardous materials.
- **Contamination** An impairment of the quality of the water by sewage, process fluids, or other wastes to a degree which could create the actual hazard to the public health through poisoning or through spread of disease by exposure.
- **Cross Connection** Any physical link between a potable water supply and any other substance, fluid, or source, which makes possible contamination of the potable water supply due to the reversal of flow of the water in the piping or distribution system.
- **Hazard, Degree of -** An evaluation of the potential risk to public health and the adverse effect of the hazard upon the potable water system.

(1) **Hazard-Health** - Any condition, device, or practice in the water supply system and its operation which could create or may create a danger to the health and well-being of the water consumer.

(2) **Hazard-Plumbing** - A plumbing type cross connection in a consumer's potable water system that has not been properly protected by a vacuum breaker, air gap separation, or backflow prevention device.

(3) **Hazard-Pollutional** - An actual or potential threat to the physical properties of the water system or to the potability of the public or the consumer's potable water system but which would constitute a nuisance or be aesthetically objectionable or could cause damage to the system or its appurtenances, but would not be dangerous to health.

(4) **Hazard-System** - 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 which would have a protracted effect on the quality of the potable water in the system.

- **Industrial Process System** Any system containing a fluid or solution which may be chemically, biologically, or otherwise contaminated or polluted in a form or concentration such as would constitute a health, system, pollutional, or plumbing hazard if introduced into a potable water supply.
- **Isolation -** Protection of a facility service line by installing a cross connection control device or air gap separation on an individual fixture, appurtenance, or system.
- **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 of the water to a degree which does not create an actual hazard to the public health but which does adversely and unreasonably affect such waters for domestic use.
- **Public Potable Water System** Any publicly or privately owned water system supplying water to the general public which is satisfactory for drinking, culinary, and domestic purposes and meets the requirements of the State Department of Health.
- Service Connection The terminal end of a service line from the public water system. If a meter is installed at the end of the service, then the service connection means the downstream end of the meter.
- Water Department The Department of Wahoo Public Utility responsible for operation of maintenance and supervision of potable water system.
- ('72 Code, § 3-723(part)) (Ord. 1302, passed 1-12-89)

## §53.67 Cross Connections Prohibited

(A) No water service connection shall be installed or maintained to any premises where actual or potential cross connections to the public potable or consumer's water system may exist unless such actual or potential cross connections are abated or controlled to the satisfaction of the City Water Department, and as required by the laws and regulations of the Nebraska Department of Health.

(B) No connection shall be installed or maintained whereby an auxiliary water supply may enter a public potable or consumer's water system unless such auxiliary water supply and the method of connection and use of such supply shall have been approved by the City Water Department and the State Department of Health.

(C) No water service connection shall be installed or maintained to any premises in which the plumbing system, facilities, and fixtures have not been constructed and installed using acceptable plumbing practices considered by the City Water Department as necessary for the protection of health and safety.
('72 Code, § 3-723(part)) (Ord. 1302, passed 1-12-89) Penalty, see § 10.99 (Resolution)

01-2003)

# §53.68 Surveys and Investigations

(A) The consumer shall provide access to the premises at reasonable times to the City Water Department or its authorized representative for the conduction of surveys and investigations of water use practices within the consumer's premises to determine whether there are actual or potential cross connections to the consumer's water system through which contaminants or pollutants could backflow into the public potable water system.

(B) On request by the Water Department or its authorized representative, the consumer shall furnish information on water use practices within his or her premises.

('72 Code, § 3-723(part)) (Ord. 1302, passed 1-12-89) (Resolution 01-2003)

# §53.69 Type of Protection Required

The type of protection required by this subchapter shall depend on the degree of hazard which exists, as follows.

(A) An approved air gap separation shall be installed where the public potable water system may be contaminated with substances that could cause a severe health hazard.

(B) An approved air gap separation or an approved reduced pressure principle backflow prevention device shall be installed where the public potable water system may be contaminated with a substance that could cause a health hazard. (C) An approved air gap separation or an approved reduced pressure principle backflow prevention device or an approved double check valve assembly shall be installed where the public potable water system may be polluted with substances that could cause a pollutional hazard not dangerous to health. ('72 Code, § 3-723(part)) (Ord. 1302, passed 1-12-89) (Resolution 01-2003)

## §53.70 Where Protection Is Required

(A) An approved backflow prevention device shall be installed in the service connection line to a consumer's water system or within any premises where in the judgment of the Cross Connection Officer, actual or potential hazards to the public potable water system exists. The type and degree of protection required shall be commensurate with the degree of hazard.

(B) An approved air gap separation or reduced pressure principle backflow prevention device shall be installed at the service connection or within any premises where, in the judgment of the Cross Connection Officer, the nature and extent of activities on the premises, or the materials used in connection with the activities, or materials stored on the premises, would present an immediate and dangerous hazard to health should a cross connection occur, even though such cross connection may not exist at the time the backflow prevention device is required to be installed. This includes but is not limited to the following situations:

(1) Premises having auxiliary water supply, unless the quality of the auxiliary supply is acceptable to the City Water Department.

(2) Premises having internal cross connections that are not correctable, or intricate plumbing arrangements which make it impractical to ascertain whether or not cross connections exist.

(3) Premises where entry is restricted so that inspections for cross connections cannot be made with sufficient frequency or at sufficiently short notice to assure the cross connections do not exist.

(4) Premises that although not covered by code are subject to frequent modification which would change their status; or premises that have had backflow code violations.

(5) Premises on which any substance is handled under pressure so as to permit entry into the public water supply, or where a cross connection could reasonably be expected to occur. This shall include the handling of process waters and cooling waters. (6) Premises where materials of a toxic or hazardous nature are handled such that if back siphonage or backpressure should occur, a serious health hazard may result.

('72 Code, § 3-723(part)) (Ord. 1302, passed 1-12-89) (Resolution 01-2003)

## §53.71 Backflow Prevention Devices

(A) Any backflow prevention device required by this subchapter shall be of a model or construction approved by the Cross Connection Officer.

(1) Air gap separation to be approved shall be at least double the diameter of the supply pipe measured vertically above the flood level rim of the vessel but in no case less than one inch.

(2) A double check valve assembly or a reduced pressure principle backflow prevention device shall be approved by the Cross Connection Officer and shall appear on the current list of "approved backflow prevention devices" established by the City Water Department.

('72 Code, § 3-723(part)) (Ord. 1302, passed 1-12-89) Penalty, see § 10.99 (Resolution 01-2003)

#### §53.72 Installation

(A) Backflow prevention devices required by this subchapter to be installed in an existing facility shall be installed at a location and in a manner approved by the Cross Connection Officer and shall be installed at the expense of the Water Department.

(B) Backflow prevention devices required by this subchapter to be installed in a facility not in existence at the time of this subchapter shall be installed at a location and in a manner of the type approved by the Cross Connection Officer and shall be installed at the expense of the water consumer.

(C) Backflow prevention shall be located so as to be readily accessible for maintenance and testing, protected from freezing, and where no part of the device will be submerged or subject to flooding by any fluid.

('72 Code, § 3-723(part)) (Ord. 1302, passed 1-12-89) Penalty, see § 10.99

# §53.73 Testing, Repair

Testing, repair or replacement of backflow devices shall be the responsibility of the owner, renter, or customer. Wahoo Utilities Cross Connection Officer shall be responsible for maintaining required records and ordering the testing of installed devices.

Failure to test and report the test results to Wahoo Utilities shall result in immediate termination of water services.

#### §53.74 Resolution 01-2003

Municipal Water Department; Backflow Prevention Devices Required: Customer Installation, Maintenance and Testing.

(A) A cross connection control officer shall be appointed by the Utility General Manager of Wahoo Utilities to oversee the enforcement of this ordinance. This person shall be responsible for reviewing the surveys submitted by the customers of the municipal water department and determining if a backflow prevention device is required to comply with Title 179, NAC 2, *"Regulations Governing Public Water Supply Systems "*.

(B) All customers of the municipal water department shall be required to report to the cross connection control officer any potential cross connections which may be on their premises. This report shall be made at least every 5 years.

(C) A customer of the municipal water department may be required by the cross connection control officer to install and maintain a properly located backflow prevention device at the customer's expense appropriate to the potential hazard as set forth in Title 179 NAC 2, *"Regulations Governing Public Water Supply Systems"* and approved by the cross connection control officer.

- The customer shall make application to the cross connection control officer to install a required backflow prevention device on a form provided by the municipality. The application shall contain at a minimum the name and address of the applicant, the type of backflow prevention device to be installed, including make and model number, and the location of the proposed installation.
- The cross connection control officer shall approve or disapprove the application based on whether such installation will protect the municipal water distribution system from potential backflow and back-siphonage hazards.
- When a testable backflow prevention device shall be required, the customer shall also certify to the municipality at least one (1) time annually that the backflow prevention device has been tested by a Nebraska Health and Human Services System Grade VI certified water operator. Such certification shall be made on a form available at the General office of the utility.
- Any decision of the cross connection control officer may be appealed to the Board of Public Works of Wahoo, whose decision shall be final.

(D) That any other ordinance or section passed and approved prior to the passage, approval and publication or posting of this ordinance, and in conflict with its provisions, is hereby repealed.

(E) Any customer refusing to report on possible cross connections on their premises, refusing to install the necessary backflow prevention device, or failing to have a testable backflow prevention device tested at least annually shall be in violation of this ordinance and may have their water service discontinued. Any customer who has had their service discontinued for violation of this ordinance shall be subject to a twenty five dollar (\$25) reconnect fee to have the service reinstated after supplying proof that the potential cross connection has been eliminated or properly protected.

(F) This resolution shall take effect and be in full force from and after its passage, approval and publication or posting as required by law.

(Title 179, NAC 2) (Resolution approved 8-20-2003)

Wahoo Utilities Municipal Water Department Backflow Prevention Device Installation Application Form			
Date of Application:			
Name of Applicant:			-
Mailing Address:			
City:	State:		Zip:
Location of Device: (if different from above)			
Potential Hazard: (reason device is required)			1
Type of Backflow Prevente (atmospheric vacuum brea principal backflow prevente	ker, pressure vacuum breaker, double check va	alve or reduc	ced pressure
Make of Backflow Prevent	er:		
Model Number:			
Do not write below this line (official use only)			
Application			
Approved by: Denied by:	Cross Connection Control Officer	Date: _	
Installation Inspected by:	Cross Connection Control Officer	Date: _	
Appeal requested by:		Date: _	
Date of Appeal hearing:			
Appeal Approved by: Denied by:	Chairman, Board of Public Works	Date: _	