

## CHAPTER 18

### WATER

#### **Section 18-1. Wells Inside City Prohibited.**

It shall be unlawful for anyone to drill a water well within the incorporated limits of the of the City of Nixa, Missouri, when a City water line is located within one thousand (1,000) feet of the property line of the property to be served.

If the water source is available to the property owner, then such property owner must discontinue use of his private well and connect to the City water supply--the source being "available" when within one hundred (100) feet of said property line.

In any particular case where the property owner can show by reason of exceptional topographical or other physical conditions that the literal compliance with the requirements of the above provisions would cause practical difficulty or exceptional and undue hardship, the Board of Aldermen may modify such requirements to the extent deemed just and proper, so as to relieve such difficulty or hardship, provided such relief may be granted without detriment to the public interest and without impairing the intent and purpose of the above regulations or the desirable general development of the neighborhood and community in accordance with the ordinances herein above set forth.. Any modification thus granted shall be spread upon the minutes of the Board of Aldermen setting forth the reasons which, in the opinion of the Board of Aldermen, justified the modification.

#### **Section 18-2. Maximum Distance City to Run Water Mains.**

Where new water service is required, the maximum distance the City will furnish material and labor to install water mains shall be 100 feet beyond the existing water main.

Installation of any water main beyond above mentioned 100 feet shall be at the expense of the party desiring water service.

#### **Section 18-3. Service Charge for Meter Installation.**

See Section 23-11 Fees. (#1508 12/07)

**Section 18-4. Water Charges.**

a. Inside City

The following rates for residential water users within the City shall be as follows:

First 2,000 gallons or less used per month	\$6.40
Next 3,000 gallons used per month, per 1,000 gallons	2.18
Next 10,000 gallons used per month, per 1,000 gallons	1.98
Next 10,000 gallons used per month, per 1,000 gallons	1.72
All over 25,000 gallons used per month, per 1,000 gallons	1.32

b. Outside City

The following rates for residential water users outside the City shall be as follows:

First 2,000 gallons or less used per month	\$9.60
Next 3,000 gallons used per month, per 1,000 gallons	3.26
Next 10,000 gallons used per month, per 1,000 gallons	2.97
Next 10,000 gallons used per month, per 1,000 gallons	2.57
All over 25,000 gallons used per month, per 1,000 gallons	1.98 (#1289 2/04)

c. Bulk Water Sales per 1000 gallons	\$4.50 (#1495 9/07)
--------------------------------------	---------------------

d. Meter Size

All applicants requesting service from the City of Nixa and desiring a water meter larger than the standard 5/8 x 3/4 inch water meter, shall be required to pay an amount equal to the difference between the cost of said standard meter and the meter sought to be installed. Thereafter, the following minimum charges shall apply to users utilizing meters larger than the standard 5/8 x 3/4 inch meters:

1 inch meter, provided no more than 2,000 gallons of water per month is used	\$15.52
2 inch meter, provided no more than 12,000 gallons of water per month is used	55.39
4 inch meter, provided no more than 35,000 gallons of water per month is used	99.71

The above minimum charges shall be imposed upon each user regardless of whether any water is registered through the meter or not. All water used in excess of the above minimum but less than 50,000 gallons will be paid for at the following rates:

Minimum to 50,000 gallons – rate per 1,000 gallons	\$2.22
50,001 – 75,000 gallons – rate per 1,000 gallons	1.78
75,001 – 125,000 gallons – rate per 1,000 gallons	1.40
All over 125,000 gallons – rate per 1,000 gallons	1.18

(#1289 2/04)

e. Standby Service

An annual service and maintenance charge made on standby water lines used for fire protection or other purpose shall be paid by the land owner of the premises so serviced according to the following rates:

4 inch	\$ 75.00
6 inch	100.00
8 inch	150.00
10 inch	200.00

f. Extension by City

Whenever an extension of the City water department distribution system is necessary in order to serve an applicant whose premises are located within an area served by the City, the City shall extend its water mains along any public highways which are laid out in which grades have been established and which are dedicated to public use within its service area, provided:

1. Such applicant requesting extension of the City water distribution system shall execute and deliver, without cost, to the City, such easement indentures as in the opinion of the City are, or may be, required at the time such extension is made or may be required in the future to extend the water distribution system to an applicant located adjacent to the premises to be served by such extension.
2. Upon there being deposited with the City a non-refundable cash deposit which equals in the amount the estimated cost of extending the water distribution system to the applicant, said amount shall include the cost of a performance bond as well as a one-year maintenance bond on said extension.

g. Extension by Applicant

Where the provisions of subsection (e) above are otherwise satisfied and the applicant concerned has promptly and faithfully performed in the past all contractual obligations with the City and he is desirous of directly constructing at his own expense a water distribution extension rather than depositing estimated costs with the City and having the City construct such extension, the Board of Aldermen may approve such extension; provided, that the authorized agent of the applicant, as shown by an executed power of attorney on file with the City, executes a form of contract acceptable to the City, which, among other provisions, provides that:

1. In its entirety the extension is constructed in strict accord with the

construction specifications, drawings and plans prepared by or on behalf of the City; and approval of such extension is given by the State Inspection Bureau of Division of Health.

2. All work of construction and extension shall be at the applicant sole cost and subject to inspection by and approval of the City, that such construction is in strict accord with the extensions, constructions, specifications, drawings, and plans; and all expenses incurred by the City, as a result of the extension, including but not limited to preliminary engineering, preparation of specifications, drawings, performance bonds, one-year maintenance bond, plans, and inspection of construction shall be paid by the applicant.
3. That upon construction being completed to the satisfaction of the City prior to connection of the extension to the existing water distribution system, all right, title and interest therein of the applicant shall be conveyed to the City, free of lien or of any other encumbrance prior to such conveyance, and the City shall be furnished evidence satisfactory to it that the contractor and subcontractors, if any, of the extension have paid and discharged all indebtedness incurred by the, or any of them, for materials furnished or for work and labor done in connection with and performance and completion of the extension project.
4. In any particular case where the applicant for water service can show be reason of exceptional topographical or other physical conditions that the literal compliance with the requirements of the above provisions would cause practical difficulty or exceptional and undue hardship, the Board of Aldermen may modify such requirements to the extent deemed just and proper, so as to relieve such difficulty or hardship; provided such relief may be granted without detriment to the public interest and without impairing the intent and purpose of the above regulations or the desirable general development of the neighborhood and community modification thus granted shall be spread upon the minutes of the Board of Aldermen setting forth the reasons which, in the opinion of the Board of Aldermen, justified the modifications.

#### **Section 18-5. Water Deposits.**

All domestic users of water shall make a cash deposit of twenty dollars (\$20.00) in cash with the City Finance Department to secure the payment of water rents due the City of Nixa, Missouri. Said deposits shall be refunded in case users discontinue use of said water service, less deduction for water rents due the City of Nixa, Missouri. All out-of-City users of water service shall make a cash deposit of thirty dollars (\$30.00). All commercial users of water shall post an amount equal to 2½ times their estimated monthly bills. When said user shall cease to do business, or discontinue use of said water

service, said deposit shall be refunded less the amount due the City of Nixa, Missouri, for water used.

In the event water services are discontinued for failure to pay a bill when due, the deposit required shall double for the first re-connect.

Anyone wanting to purchase bulk water from the City of Nixa must use a backflow meter supplied by the City of Nixa. There will be a deposit of one hundred dollars (\$100.00) required and paid to the City of Nixa to secure the payment of bulk water extracted from the City of Nixa water system. Said deposit will be refunded, less the amount of the bulk water charges due the City of Nixa, Missouri. (#1612 10/09)

**Section 18-6. Delinquent Bills.**

All bills shall be due and payable when mailed and shall become delinquent ten (10) days after such date. A five percent (5%) surcharge shall be added to all bills not paid by the aforesaid due date. If any bills rendered pursuant to this ordinance are not paid by the 15th day following the billing date, water and/or electric service will be subject to being disconnected in accordance with the City of Nixa Utility Billing Department Utility Billing Collection Policy Statement and Procedures. If services are disconnected because of nonpayment, services shall not be reconnected except on full payment of all accounts due and a \$25.00 turn-on charge. (#1567 1/09)

**Section 18-7. Fraudulent Turn On of Water.**

Any person or persons who shall by any means or device turn on the water in the City of Nixa at the City cutoff after same has been cut off by the Water Superintendent or discontinued as provided in this ordinance, shall be guilty of a misdemeanor and shall be punished by a fine of not less than \$1.00 and not more than \$25.00.

**Section 18-8. Installation of Water Service Outside City.**

Section 18-8. Repealed (#1498 9/07)

Section 18-9. Repealed (#937 11/95) (See Technical Specifications)

Section 18-10. Repealed (#937 11/95) (See Technical Specifications)

**Section 18-11. Lead-Ban-General Policy.**

a. Purpose.

1. To ban the use of lead materials in the public drinking water system and private plumbing connected to the public drinking water system; and
2. To protect city residents from lead contamination in the city's public drinking water system and their own private plumbing systems.

b. Application.

This ordinance shall apply to all premises served by the public drinking water system of the City of Nixa.

c. Policy.

This ordinance will be reasonably interpreted by the Water Purveyor. It is the purveyors intent to ban the use of lead based material in the construction or modification of the city's drinking water system or private plumbing connected to the city system. The cooperation of all consumers is required to implement the lead ban.

If in the judgment of the Water Purveyor or his authorized representative, lead base materials have been used in new construction or modifications after January 1, 1989, due notice shall be given to the consumer. The consumer shall immediately comply by having the lead base materials removed from the plumbing system and replaced with lead free materials. If the lead base materials are not removed from the plumbing system, the water purveyor shall have the right to discontinue water service to the premises

d. Definitions.

The following definitions shall apply in the interpretation and enforcement of this ordinance.

1. "Consumer" means the owner or person in control of any premises supplied by or in any manner connected to a public water system;
2. "Lead base materials" means any material containing lead in excess of the quantities specified in Section 18-11. d. 3.;
3. "Lead free" means:

- (a) When used with respect to solder and flux, refers to solders and flux containing not more than 0.2 percent (0.2%) lead; and
    - (b) When used with respect to pipes and pipe fittings, refers to pipes and pipe fittings containing not more than eight percent (8.0%) lead.
  - 4. "Public drinking water system: means 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 Missouri Department of Natural Resources; and
  - 5. "Water Purveyor" means the owner, operator, or individual in responsible charge of a public water system.
- e. Lead banned from drinking water plumbing.
- 1. No water service connection shall be installed or maintained to any premises where lead base materials were used in new construction or modifications of the drinking water plumbing after January 1, 1989.
  - 2. If a premises is found to be in violation of Section 18-11. e. 1., water service shall be discontinued until such time that the drinking water plumbing is lead free.

**Section 18-12-1 Cross Connection Control Policy.**

This section will be reasonably interpreted by the water purveyor. It is the water purveyor'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.

The water purveyor 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 customers is required to implement and maintain the program to control cross connections. The water purveyor and customer are jointly responsible for preventing contamination of the water system.

If, in the judgment of the water purveyor or his authorized representative, cross connection protection is required through either piping modification or installation of an approved backflow prevention device, due notice shall be given to the customer. The customer shall immediately comply by providing the required protection at his own expense; and failure, refusal, or inability on the part of the customer to provide such protection shall constitute grounds for discontinuing water service to the premises until such protection has been provided.

## **Section 18-12-2 Definitions.**

The following definitions shall apply in the interpretation of this section:

*Air gap separation* means 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 and 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 (1) inch.

*Auxiliary water supply* means any water source or system, other than the public water supply, that may be available in the building or premises.

*Backflow* means the flow other than the intended direction of flow, of any foreign liquids, gases or substances into the distribution system of a public water supply.

*Backflow prevention device* means any device, method, or type of construction intended to prevent backflow into a potable water system.

*Customer* means the owner or person in control of any premises supplied by or in any manner connected to a public water system.

*Containment* means 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.

*Contamination* means an impairment of the quality of the water by sewage, process fluids or other wastes to a degree which could create an actual hazard to the public health through poisoning or through spread of disease by exposure.

*Cross connection* means 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.

*DNR* means the Missouri Department of Natural Resources.

*Hazard, degree of* means an evaluation of the potential risk to public health and the adverse effect of the hazard upon the potable water system.

(1) *Hazard, health* means 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 customer.

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

(3) *Hazard, pollution* means an actual or potential threat to the physical properties of the water system or to the potability of the public or the customer'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* means an actual or potential threat of severe damage to the physical properties of the public potable water system or the customer'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* means 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, pollution or plumbing hazard if introduced into a potable water supply.

*Isolation* means 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* means the presence of any foreign substances (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* means 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 Missouri Department of Natural Resources.

*Service connection* means 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 purveyor* means the owner, operator or individual in responsible charge of a public water system.

### **Section 18-12-3 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 customer's water system may exist unless such actual or potential cross connections are abated or controlled to the satisfaction of the water purveyor, and as required by the laws and regulations of DNR.

(b) No connection shall be installed or maintained whereby an auxiliary water supply may enter a public potable or customer's water system unless such auxiliary water supply and the method of connection and use of such supply shall have been approved by the water purveyor and DNR.

(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 water purveyor as necessary for the protection of health and safety.

#### **Section 18-12-4 Survey and Investigations.**

- (a) The customer's premises shall be open at all reasonable times to the water purveyor, or his authorized representative to conduct surveys and/or investigations of water use practices within the customer's premises to determine whether there are actual or potential cross connections to the customer's water system through which contaminants or pollutants could backflow into the public potable water system.
- (b) On request of the water purveyor or his authorized representative, the customer shall furnish information on water use practices within his premises.
- (c) It shall be the responsibility of the water customer to conduct periodic surveys of water use practices on his premises to determine whether there are actual or potential cross connections to his water system through which contaminants or pollutants could backflow into his or the public potable water system.

#### **Section 18-12-5 Type of Protection Required.**

- (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 system or 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 pollution hazard not dangerous to health.

#### **Section 18-12-6 Where Protection is Required.**

- (a) An approved backflow prevention device shall be installed on each service line to a customer's water system service premises where, in the judgment of the water purveyor or DNR, actual or potential hazards to the public potable water system exist. 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 water purveyor or DNR, 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 water purveyor and DNR.

- (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 inspection for cross connections cannot be made with sufficient frequency or at sufficiently short notice to assure the cross connections do not exist.
  - (4) Premises having a repeated history of cross connections being established or reestablished.
  - (5) Premises, which due to the nature of the enterprise therein, are subject to recurring modification or expansion.
  - (6) 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; a serious health hazard may result.
- (c) The following types of facilities fall into one (1) or more of the categories of premises where an approved air gap separation or reduced pressure principle backflow prevention device is required by the water purveyor and DNR to protect the public water supply and must be installed at these facilities unless all hazardous or potentially hazardous conditions have been eliminated or corrected by other methods to the satisfaction of the water purveyor and DNR.

- (1) Aircraft and missile plants.
- (2) Automotive plants.
- (3) Auxiliary water systems.
- (4) Beverage bottling plants.
- (5) Canneries, packing houses and reduction plants.
- (6) Car washing facilities.
- (7) Chemical manufacturing, processing, compounding or treatment plants.
- (8) Film laboratories.
- (9) Fire protection systems.
- (10) Hazardous waste storage and disposal sites.
- (11) Hospitals, mortuaries, clinics.
- (12) Irrigation and sprinkler systems.
- (13) Laundries and dye works.
- (14) Metal manufacturing, cleaning, processing and fabricating plants.
- (15) Oil and gas production, storage or transmission properties.
- (16) Paper and paper products plants.
- (17) Plating plants.
- (18) Power plants.
- (19) Printing and publishing facilities.
- (20) Radioactive material processing plants or nuclear reactors.
- (21) Research and analytical laboratories.
- (22) Rubber plants, natural and synthetic.
- (23) Sewage and storm drainage facilities-pumping stations.
- (24) Waterfront facilities and industries.

### **Section 18-12-7 Backflow Prevention Devices.**

(a) Any backflow prevention device required by this section shall be of a model or construction approved by the water purveyor and DNR.

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

(2) A double check valve assembly or a reduced pressure principle backflow prevention device shall be approved by the water purveyor and shall appear on the current "list of approved backflow prevention devices" established by DNR.

(b) Existing backflow prevention devices approved by the water purveyor at the time of installation and properly maintained shall, except for inspection and maintenance requirements, be excluded from the requirements of this section so long as the water purveyor is assured that they will satisfactorily protect the water system. Whenever the existing device is moved from its present location, or required more than minimum maintenance, or when the water purveyor finds that the maintenance constitutes a hazard to health, the unit shall be replaced by a backflow prevention device meeting the requirements of this section.

### **Section 18-12-8 Installation.**

(a) Backflow prevention devices required by this section shall be installed at a location and in a manner approved by the water purveyor and shall be installed at the expense of the water customer.

(b) Backflow prevention devices installed on the service line to the customer's water system shall be located on the customer's side of the water meter, as close to the meter as is reasonably practical, and prior to any other connection.

(c) Backflow prevention devices 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.

### **Section 18-12-9 Inspection and Maintenance.**

(a) It shall be the duty of the customer at any premises on which backflow prevention devices required by this section are installed to have inspections, tests and overhauls made in accordance with the following schedule or more often where inspections indicate a need.

(1) Air gap separations shall be inspected at the time of installation and at least every twelve (12) months thereafter.

(2) Double check valve assemblies shall be inspected and tested for tightness at the time of installation and at least every twelve (12) months thereafter. They shall be dismantled, inspected internally, cleaned and repaired whenever needed and at least every thirty (30) months.

- (3) Reduced pressure principle backflow prevention devices shall be inspected and tested for tightness at the time of installation and at least every twelve (12) months thereafter. They shall be dismantled, inspected internally, cleaned and repaired whenever needed and at least every five (5) years.
- (b) Inspections, tests and overhauls of backflow prevention devices shall be made at the expense of the water customer and shall be performed by a state certified backflow prevention device tester.
- (c) Whenever backflow prevention devices required by this section are found to be defective, they shall be repaired or replaced at the expense of the customer without delay.
- (d) The water customer must maintain a complete record of each backflow prevention device from purchase to retirement. This shall include a comprehensive listing that includes a record of all tests, repairs and overhauls and shall be made available to the water purveyor upon request.
- (e) The water customer shall provide a copy of records, listed in (d) above, to the water purveyor when testing, maintenance or repair activities are completed.
- (f) Backflow prevention devices shall not be bypassed, made inoperative, removed or otherwise made ineffective without separation authorization by the water purveyor.

**Section 18-12-10 Violations.**

- (a) The water purveyor shall deny or discontinue, after reasonable notice to the occupants thereof, the water service to any premises wherein any backflow prevention device required by this section is not installed, tested and maintained in a manner acceptable to the water purveyor, or if it is found that the backflow prevention device has been removed or bypassed, or if an unprotected cross connection exists on the premises.
- (b) Water service to such premises shall not be restored until the customer has corrected or eliminated such conditions or defects in conformance with this section to the satisfaction of the water purveyor.
- (c) Provided that the water purveyor becomes cited by the DNR as a result of a customer's actions or negligence of this policy, the water purveyor may in addition to subsections (a) and (b) above require reimbursements of any fees, fines or other administrative cost be reimbursed to the water purveyor prior to reconnection of service.

**Sections 18-13 through 18-20 reserved.**