#### **ORDINANCE NO. 2412**

AN ORDINANCE TO AMEND BACKFLOW PREVENTION REGULATIONS, SECTIONS 28-268 TO 28-306 OF CHAPTER 28 OF THE LEXINGTON CITY CODE; TO REPEAL ALL ORDINANCES OR SECTIONS OF ORDINANCES IN CONFLICT HEREWITH; AND TO PROVIDE FOR AN EFFECTIVE DATE AND FOR PUBLICATION IN PAMPHLET FORM.

## BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF LEXINGTON, NEBRASKA AS FOLLOWS:

**Section 1**. SECTION 28-268, of the LEXINGTON CITY CODE IS HEREBY REPEALED AND REPLACED WITH THE FOLLOWING:

#### Sec. 28-268. – Definitions.

(a) The following words, terms and phrases, when used in this division, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

*Air-gap separation* means the unobstructed vertical distance through the free atmosphere between the lowest opening of any pipe or faucet supplying water to a tank, plumbing fixture or other device and the flood level rim of the said receptacle. An approved air gap shall be at least double the diameter of the supply pipe, measured vertically, above the top of the rim of the receptacle and, in no case less than one inch.

Antisiphon vacuum breaker means a device which restricts the backflow of water into a potable water system by a simple check valve. The vacuum is broken by allowing air to enter upstream of the check valve.

*Approved* means that a backflow prevention device or method has been accepted by the manager as being suitable for the intended use.

*Auxiliary water system* means any water supply system available to the premises other than the public water supply system and includes the water supplied by such system.

*Backflow or backsiphonage* means the flow of water or other liquids, mixtures, or substances into the water distribution system from any other source than the intended source of the potable water supply.

*Backflow prevention device* means any device, method or type of construction intended to prevent backflow into a potable water system. Devices such as an approved air-gap, double-check valve assembly, antisiphon vacuum breaker or a reduced-pressure principle device can be used which have been approved by the manager.

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

Consumer's water supply system means any water supply system, located on the consumer's premises, supplied by or in any manner connected to a public water supply system. The term

"consumers' water supply system" includes a household plumbing system and a fire suppression system.

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

*Cross connection* means any arrangement whereby contamination due to backflow or backsiphonage can occur.

*Degree of hazard* means an evaluation of the potential risk to health and the adverse effects upon the potable water system.

*Double-check valve assembly* means an assembly composed of two single, independently acting, check valves including 100 percent closing shutoff ball valves located at each end of the assembly and suitable connections for testing the watertightness of each check valve.

*Health hazard* means any condition, device or practice in a water system or its operation that creates a real or potential danger to the health and well-being of the consumer.

*Interchangeable connection* means an arrangement or device that will allow alternate but not simultaneous uses of two sources of water.

*Manager* means the city manager or his authorized representative.

*Nonpotable water* means water not safe for drinking, personal or culinary use, or which does not meet the requirements of the state department of health.

*Owner* means the person delivering water through a public water supply system. The term "owner" means the city.

*Plumbing hazard* means a plumbing-type cross connection in a consumer's potable water system that has not been properly protected by air-gap separation or backflow prevention devices.

*Pollution* means the presence in water of any foreign substance (organic, inorganic or biological) that degrades the quality of water to a degree which does not necessarily cause an actual hazard to the public health but which does adversely and unreasonably affect such waters for any desired use.

*Pollution hazard* means a condition through which an aesthetically objectionable or degrading material not dangerous to health may enter the public water supply system or the consumer's water supply system.

*Potable water* means water which is satisfactory for drinking, culinary and domestic purposes and meets the requirements of the state department of health.

*Public water supply system* means a water supply system designed and intended to provide potable water to a designated consumer. The term "public water supply system" includes the water supply source and distribution piping network. The term "water supply source" means any artificial or natural accumulation of water used to supply the potable water system. The term "distribution piping network" includes all piping, pumping and treatment devices used to convey an adequate quality and quantity of potable water to the consumer.

*Reduced-pressure zone backflow prevention device* means a device containing a minimum of two independently acting check valves together with an automatically operated pressure

differential relief valve located between two check valves. During normal flow and at the cessation of normal flow, the pressure between these two checks shall be less than the supply pressure. In case of leakage, of either the check valve or the differential relief valve, by discharging to the atmosphere, shall operate to maintain the pressure between the check valves at less than the supply pressure. The unit must include 100 percent closing shutoff ball valves located at each end of the device, and each device shall be fitted with properly located test cocks.

*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.

*System hazard* means a condition posing an actual or potential threat of damage to the physical properties of the public's or the consumer's water supply system.

*Used water* means any water supplied by the public water supply system to a consumer's water supply system after it has passed through the service connection and is no longer under the sanitary control of the water supplier.

(b) The consumer as defined in subsection (a) of this section, if requested by the manager, shall designate an individual, who shall be responsible for contact and communications with the manager in matters relating to system alteration and construction, monitoring and sampling, maintenance, operation, recordkeeping, and reporting, as required by law and these regulations. Any change in assigned responsibilities or designated individuals shall be promptly reported to the manager.

# **Section 2**. SECTION 28-270, of the LEXINGTON CITY CODE IS HEREBY REPEALED AND REPLACED WITH THE FOLLOWING:

### Sec. 28-270. - Surveys and investigations.

- (a) It shall be the responsibility of the water consumer to conduct or cause to be conducted, periodic surveys of water use practices on his premises as necessary to determine whether there are actual or potential cross connections in the consumer's water supply system. The manager shall have the authority to conduct or cause to be conducted periodic surveys and investigations or a frequency, as determined by the manager, of water use practices within a consumer's premises to determine whether there are actual or potential cross connections to the consumer's water supply system through which contaminants or pollutants could backflow into the public water supply system. The manager may conduct these surveys to provide information in determining what level of protection will be necessary to protect the public health and safety.
- (b) On request by the manager, the consumer shall furnish the manager information on water use practices within the consumer's premises. If the consumer refuses to submit the proper information or to cooperate in obtaining the proper information, the manager shall treat the premises as if no appropriate cross connection survey has been completed, and in such event the consumer shall be required to install an approved backflow prevention device as required to section 28-271.

(c) The manager shall have the right to enter premises served by the public water supply system at all reasonable times for the purpose of making surveys and investigations of water use practices within the premises. In order to inspect the premises, the manager shall give notice setting forth a proposed date and time to the consumer at least ten days in advance. If the consumer cannot make the premises available for inspection at the proposed date and time, the consumer shall contact the manager and arrange for another date and time for the inspection. If the manager and the consumer cannot agree on a date and time, then the manager shall treat the premises as if no appropriate cross connection survey has been completed, and in such event the consumer shall be required to install an approved backflow prevention device as required to section 28-271.

## **Section 3**. SECTION 28-271, of the LEXINGTON CITY CODE IS HEREBY REPEALED AND REPLACED WITH THE FOLLOWING:

### Sec. 28-271. - Where protection is required.

- (a) An approved backflow prevention device shall be installed between the service connection and the point of potential backflow into a consumer's water supply system when in the judgment of the manager a health, plumbing, pollution or system hazard exists.
- (b) An approved backflow prevention device shall be installed when the following conditions are found by the manager to exist:
  - (1) Premises on which any substance is handled in such a fashion as to create an actual or potential hazard to a public water supply system. This shall include premises having sources or systems containing process fluids or waters originating from a public water supply system which are no longer under the sanitary control of the owner;
  - (2) Premises having internal cross connections that, in the judgment of the manager, are not correctable, or there exists intricate plumbing arrangements which make it impracticable to determine whether or not cross connections exist;
  - (3) Premises where, because of security requirements or other prohibitions or restrictions, it is impossible or impractical to make a complete cross connection survey;
  - (4) Premises having a repeated history of cross connections being established or reestablished;
  - (5) Premises having more than one customer service connection which could constitute a potential cross connection.
- (c) An approved backflow prevention device shall be installed on each service line to a customer's water supply system serving the following types of facilities unless the manager determines that no health, pollution or system hazard to the public water supply system exists:
  - (1) Hospitals, mortuaries, dental clinics, nursing and convalescent homes, medical buildings;
  - (2) Testing laboratories, film laboratories, film development facilities;
  - (3) Sewage treatment plants, sewage pumping stations or stormwater pumping stations;

- (4) Food or beverage processing plants;
- (5) Chemical plants;
- (6) Metal degreasing, plating industries, machine tool plants, dye and metal processing or productions;
- (7) Chemical and petroleum processing or storage plants;
- (8) Carwashes, automobile servicing facilities;
- (9) Swimming pools;
- (10) Laundries and dry cleaners;
- (11) Packinghouses;
- (12) Power plants;
- (13) Premises having radioactive materials such as laboratories, industries, hospitals;
- (14) Rendering plants;
- (15) Premises having booster pumps (Sec. 28-274);
- (16) Premises having water recirculating systems, as used for boilers or cooling systems;
- (17) Veterinary establishments, kennels, feedyards, stables, rodeo grounds, stockyards, pet grooming salons;
- (18) Beauty salons, barbershops, massage parlors, health clubs;
- (19) Fire suppression systems (Sec. 28-276);
- (20) Multistoried buildings greater than three stories in height;
- (21) Schools, universities, colleges;
- (22) Auxiliary water system;
- (23) Yard hydrants, hose bibs, and lawn irrigation systems (Sec. 28-275);
- (24) Other commercial or industrial facilities which may constitute potential cross connection.

## **Section 4**. SECTION 28-275, of the LEXINGTON CITY CODE IS HEREBY REPEALED AND REPLACED WITH THE FOLLOWING:

#### Sec. 28-275. - Yard hydrants, Hose bibs, and Lawn Irrigation Systems.

- (a) The installation of yard hydrants, where water is available or accessible for drinking or culinary purposes and which have drip openings at belowground surfaces, is prohibited unless such hydrants are equipped with an approved device to prevent the entrance of groundwater into chambers connected with the water supply.
- (b) Yard hydrants, hose bibs, and underground lawn and garden irrigation systems which would be used by the consumer to provide water to mix pesticides, fertilizer, lawn

chemicals, or other toxic substances, for direct use or aerial application to surface areas shall be equipped with an approved backflow prevention device.

Section 5. SECTION 28-277, of the LEXINGTON CITY CODE IS HEREBY REPEALED AND REPLACED WITH THE FOLLOWING:

### Sec. 28-277. - Discontinuance at premises not in compliance with division.

- (a) The manager may deny or discontinue, after notice to the consumer thereof, the water service to any premises where:
  - (1) Any backflow prevention device required by these regulations is not installed or maintained in a manner acceptable to the manager;
  - (2) It is found that the backflow prevention device has been removed or bypassed;
  - (3) An unprotected cross connection exists on the premises;
  - (4) A low pressure cutoff required by section 28-274 is not installed and maintained in working order; or
  - (5) The manager is denied entry to determine compliance with these regulations.
- (b) The manager may immediately deny or discontinue, without notice to the consumer thereof, the water service to any premises wherein a severe cross connection exists which constitutes an immediate threat to the safety of the public water system. The manager shall notify the consumer within 24 hours of said denial or discontinuation of service.
- (c) Water service to such premises may not be restored until the consumer has corrected or eliminated such conditions or defects in conformance with this division, and to the satisfaction of the manager.

**Section 6**. SECTION 28-278, of the LEXINGTON CITY CODE IS HEREBY REPEALED AND REPLACED WITH THE FOLLOWING:

### Sec. 28-278. - Approval standards.

(a) Any backflow prevention device required herein shall be of a model and size approved by the manager. The term "approved backflow prevention device" means a device that has been manufactured in full conformance with the standards established by 179 NAC 22-004(7g).

Section 7. REPEAL

(a) That all ordinances or sections of ordinances in conflict herewith are hereby repealed.

### Section 8. PAMPHLET FORM

(a) That this Ordinance shall be published in pamphlet form and take effect as provided by law.

Passed and approved this 13<sup>th</sup> day of November, 2018.

Mayor

City Clerk

Attest: