

13.16.010 CITY OF PRAIRIE CITY, PWS#4100673

Chapter 13.16

CROSS-CONNECTIONS

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13.16.010 Purpose.

The purpose of this chapter is:

A. To protect the public potable water supply of the city from the possibility of contamination or pollution by isolating within the customer's internal distribution system(s) or the consumer's private water system(s) such contaminants or pollutants which could backflow into the public water systems;

B. To promote the elimination or control of existing cross-connections, actual or potential, between the consumer's in-plant potable water system(s) and nonpotable water system(s), plumbing fixtures and industrial piping systems; and

C. 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. (Ord. 374 § 1.1, 1988)

13.16.020 Public works director—Responsibility.

The public works director shall be responsible for the protection of the public potable water distribution system from contamination or pollution due to the backflow of contaminants or pollutants through the water service connection. If, in the judgement of the

public works director an approved backflow prevention assembly is required at the customer's water service connection; or, within the customer's private water system for the safety of the water system, the public works director or his or her designated agent shall give notice in writing to the customer to install such an approved backflow prevention assembly(s) at specific location(s) on his or her premises. The consumer shall immediately install such approved assembly(s) at the consumer's own expense; and, failure, refusal or inability on the part of the customer to install, have tested and maintain the assembly(s) shall constitute a ground for discontinuing water service to the premises until such requirements have been satisfactorily met. (Ord. 374 § 1.2, 1988)

13.16.030 Definitions.

As used in this chapter:

"Air-gap" 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 flood level rim of the vessel. An approved air-gap shall be at least double the diameter of the supply pipe, measured vertically, above the overflow rim of the vessel; and in no case less than one inch.

"Approved" means accepted by the public works director as meeting an applicable specification stated or cited in this chapter, or as suitable for the proposed use.

"Auxiliary water supply" means any water supply on or available to the premises other than the purveyor's approved public water supply. These auxiliary waters may include water from another purveyor's public potable water supply or any natural source(s) such as a well, spring, river, stream, harbor, etc., or used

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Hazard, Health. "Health hazard" means any condition, device or practice in the water supply system and its operation which could create, or in the judgement of the public works director, may create a danger to the health and well-being of the water consumer.

Hazard, Plumbing. "Plumbing hazard" means a plumbing type cross-connection in a consumer's potable water system that has not been properly protected by an approved air-gap or approved backflow prevention assembly.

Hazard, Pollutional. "Pollutional hazard" means 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.

Hazard, System. "System hazard" means 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 affect on the quality of the potable water in the system.

"Industrial fluids 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, pollutional or plumbing hazard if introduced into an approved water supply. This may include, but not be limited to: polluted or contaminated waters; all types of process waters and used waters originating from the public potable water system which may have deteriorated in sanitary quality; chemicals in fluid form; plating acids and alkalines, circulating cooling waters connected to an open

cooling tower and/or cooling towers that are chemically or biologically treated or stabilized with toxic substances; contaminated natural waters such as from well, springs, streams, rivers, bays, harbors, seas, irrigation canals or systems, etc.; oils, gases, glycerine, parffins, caustic and acid solutions and other liquid and gaseous fluids used in industrial or other purposes or for firefighting purposes.

"Pollution" means the presence of any foreign substance (organic, inorganic or biological) in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness or quality of the water to a degree which does not create an actual hazard to the public health but which does adversely and unreasonably affect such waters for domestic use.

"Public works director" means the individual in charge of the water department of the city who is invested with the authority and responsibility for the implementation of an effective cross-connection control program and for the enforcement of the provisions of this chapter.

"Reduced pressure principle assembly" means an assembly of two independently acting approved check valves together with a hydraulically operating, mechanically independent differential pressure relief valve located between the check valves and at the same time below the first check valve. The unit shall include properly located test cocks and tightly closing shut-off valves at each end of the assembly. The entire assembly shall meet the design and performance specifications as determined by a laboratory and a field evaluation program resulting in an approval by a recognized and agency-approved testing agency for backflow prevention assemblies. The assembly shall operate to maintain the pressure in the zone between the two check

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prevention assembly has been removed, bypassed, or if an unprotected cross-connection exists on the premises. Service will not be restored until such conditions or defects are corrected.

2. The customer's system should be open for inspection at all reasonable times to authorized representatives of the city to determine whether cross-connections or other structural or sanitary hazards, including violations of these regulations, exist. When such a condition becomes known, the city public works director shall deny or immediately discontinue service to the premises by providing for a physical break in the service line until the customer has corrected the condition(s) in conformance with the state and city statutes relating to plumbing and water supplies and the regulations adopted pursuant thereto.

3. An approved backflow prevention assembly shall also be installed on each service line to a customer's water system at or near the property line or immediately inside the building being served; but, in all cases, before the first branch line leading off the service line wherever the following conditions exist:

a. In the case of premises having an auxiliary water supply which is not or may not be of safe bacteriological or chemical quality and which is not acceptable as an additional source by the public works director, the public water system shall be protected against backflow from the premises by installing an approved backflow prevention assembly in the service line appropriate to the degree of hazard.

b. In the case of premises on which any industrial fluids or any other objectionable substance is handled in such a fashion as to create an actual or potential hazard to the public water system, the public system shall be protected against backflow from the premises

by installing an approved backflow prevention assembly in the service line appropriate to the degree of hazard. This shall include the handling of process waters and waters originating from the utility system which have been subject to deterioration in quality.

c. In the case of premises having: (1) internal cross-connection that cannot be permanently corrected or controlled; or (2) intricate plumbing and piping arrangements or where entry to all portions of the premises is not readily accessible for inspection purposes, making it impracticable or impossible to ascertain whether or not dangerous cross-connections exist, the public water system shall be protected against backflow from the premises by installing an approved backflow prevention assembly in the service line.

4. The type of protective assembly required under subsection (B)(3)(a) through (c) of this section shall depend upon the degree of hazard which exists as follows:

a. In the case of any premises where there is an auxiliary water supply as stated in subsection (B)(3)(a) of this section and it is not subject to any of the following rules, the public water system shall be protected by an approved air-gap separation or an approved reduced pressure principle backflow prevention assembly.

b. In the case of any premises where there is water or substance that would be objectionable but not hazardous to health, if introduced into the public water system, the public water system shall be protected by an approved double check valve assembly.

c. In the case of any premises where there is any material dangerous to health which is handled in such a fashion as to create an actual or potential hazard to the public water system, the public water system shall be protected by

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inspections and tests shall be at the expense of the water user and shall be performed by the assembly manufacturer's representative, city personnel or by a certified tester approved by the public works director. It shall be the duty of the public works director to see that these tests are made in a timely manner. The customer-user shall notify the public works director in advance when the tests are to be undertaken so that an official representative may witness the tests if so desired. These assemblies shall be repaired, overhauled or replaced at the expense of the customer-user whenever the assemblies are found to be defective. Records of such tests, repairs and overhaul shall be kept and made available to the public works director.

7. All presently installed backflow prevention assemblies which do not meet the requirements of this section but were approved devices for the purposes described herein at the time of installation and which have been properly maintained, shall, except for the inspection and maintenance requirements under subsection (B)(6) of this section be excluded from the requirements of these rules so long as the public works director is assured that they will satisfactorily protect the utility system. Whenever the existing device is moved from the present location or requires more than minimum maintenance or when the public works director finds that the maintenance constitutes a hazard to health, the unit shall be replaced by an approved backflow prevention assembly meeting the requirements of this section. (Ord. 374 § 3, 1988)