

Chapter 13.06
CROSS-CONNECTIONS

RECEIVED
JUN 17 2003

TECHNICAL SERVICES
DRINKING WATER PROGRAM

Sections:

- 13.06.010 Purpose and scope.**
13.06.020 Definitions.
13.06.030 Cross-connections.
13.06.040 Use of backflow prevention devices.
13.06.050 Cross-connection inspection.
13.06.060 Liability.
13.06.070 Penalties.

[back to the top](#)

[back to the Sandy Municipal Code main page](#)

13.06.010 Purpose and scope.

The purpose of this chapter is to protect the public health of water consumers by the control of actual and/or potential cross-connections to customers. (Ord. 9-82 § 1 (part), 1982.)

13.06.020 Definitions.

- A. "Backflow"** shall mean the undesirable reversal of water or mixtures of water and other liquids, gases or other substances into the distribution pipes of the potable supply of water from any source or sources.
- B. "Backflow prevention device (approved)"** shall mean a device that has been investigated and approved by the regulatory agency having jurisdiction. The approval of back- flow prevention devices by the regulatory agency should be on the basis of a favorable laboratory and field evaluation report by an "approved testing laboratory," recommending such approval.
- C. "Backflow prevention device (type)"** shall mean any approved device used to prevent backflow into a potable water system. The type of device used should be based on the degree of hazard either existing or potential.
- D. "Contamination"** shall mean the entry into or presence in a public water supply of any substance which may be deleterious to health and/or quality of the water.
- E. "Cross-connection"** shall mean any unprotected actual or potential connection or structural arrangement between a public or a consumer's potable water system and any other source or system through which it is possible to introduce into any part of the potable system any used water, industrial fluid, gas, or substance other than the intended potable water with which the water, industrial fluid, gas, or substance other than the intended potable water with which the system is supplied. By-pass arrangements, jumper connections, removable sections, swivel or changeover devices and other temporary or permanent devices through which or because of which "backflow" can or may occur are considered to be cross-connections.
- F. "Director"** shall mean the director of public works of the city of Sandy, or authorized agent.
- G. "Hazard, degree of"** shall be derived from the evaluation of a health, system, plumbing or pollutional hazard.
- H. "Hazard, health"** shall mean an actual or potential threat of contamination of a physical or toxic nature to the public potable water system or the consumer's potable water system that would be a danger to health.

I. "Hazard, plumbing" shall mean an internal or plumbing type cross-connection in a consumer's potable water system that may be either a pollutional or a contamination type hazard. This includes, but is not limited to, cross-connections to toilets, sinks, lavatories, wash trays, domestic washing machines and lawn sprinkling systems. Plumbing type cross-connections can be located in many types of structures including homes, apartment houses, hotels and commercial or industrial establishments.

~~J. "Hazard, pollutional" shall mean an actual or potential threat to the physical properties of the water system or the potability of the public or the consumer's potable water system but which would not constitute a health or system hazard, as defined. The maximum degree or intensity of pollution to which the potable water system could be degraded under this definition would cause a nuisance or be aesthetically objectionable or could cause minor damage to the system or its appurtenances.~~

K. "Hazard, system" shall mean an actual or potential threat of severe danger to the physical properties of the public or 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.

L. "Health Division Officer" shall mean the Oregon State Health Division Officer, or authorized agent.

M. "Potable water supply" shall mean any system of water supply intended or used for human consumption or other domestic use.

(Ord. 9-82 § 1 (part), 1982.)

13.06.030 Cross-connections.

The installation or maintenance of a cross-connection which will endanger the water quality of the potable water supply system of the city shall be unlawful and is prohibited. Any such cross-connection now existing or hereafter installed is declared to be a public hazard and the same shall be abated. The control or elimination of cross-connections shall be in accordance with this chapter and in compliance with the Oregon Administrative Rules chapter 333 Public Water Systems Section 42-230. The director shall have the authority to establish requirements more stringent than state regulations if he deems that the conditions so dictate. The city shall adopt rules and regulations as necessary to carry out the provisions of this chapter. The building official is authorized to enforce the provisions of this chapter in the inspection of existing, new, and remodeled buildings. (Ord. 9-82 § 1 (part), 1982.)

13.06.040 Use of backflow prevention devices.

A. No water service connection to any premises shall be installed or maintained by the city unless the water supply is protected as required by state law and regulation and this chapter. Service of water to any premises shall be discontinued by the city if a back-flow prevention device required by this chapter is not installed, tested and maintained, or if it is found that a backflow prevention device has been removed, by-passed, or if an unprotected cross-connection exists on the premises. Service will not be restored until such conditions or defects are corrected.

B. The customer's system should be open for inspection and tests 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 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.

C. An approved backflow prevention device 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.

D. Backflow prevention devices shall be installed under circumstances including but not limited to the following:

1. Premises having an auxiliary water supply;
- ~~2. Premises having cross connections that are not correctable, or intricate planning 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 that cross-connections do not exist;~~
4. Premises having a history of cross- connections being established or reestablished;
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 in such a way that if back siphonage should occur, a serious health hazard might result;
7. The following types of facilities will fall into one of the above categories where a backflow prevention device is required to protect the public water supply. A backflow prevention device shall be installed at these facilities unless the city determines that no hazard exists:
 - a. Hospitals, mortuaries, clinics,
 - b. Laboratories,
 - c. Metal plating industries,
 - d. Piers and docks,
 - e. Sewage treatment plants,
 - f. Food or beverage processing plants,
 - g. Chemical plants using a water process,
 - h. Petroleum processing or storage plants,
 - i. Radioactive material processing plants or nuclear reactors,
 - j. Facilities with fire service lines as specified by Oregon State Health Division,
 - k. Others specified by the city.

E. The type of protective device required shall depend on the degree of hazard which exists:

1. An air-gap separation or a reduced- pressure-principle backflow prevention device shall be installed where the public water supply may be contaminated with sewage, industrial waste of a toxic nature, or other contaminant which could cause a health or system hazard.

2. In the case of a substance which may be objectionable but not hazardous to health, a double check valve assembly, air-gap separation, or a reduced-pressure-principle backflow prevention device shall be installed.

~~F. Backflow prevention devices required by this chapter shall be installed under the supervision, and with the approval, of the city.~~

~~G. Any protective device required by this chapter shall be approved by the director.~~

~~H. These devices shall be furnished and installed by and at the expense of the customer.~~

I. It shall be the duty of the customer-user at any premises where backflow prevention devices are installed to have certified inspections and operational tests made at least once per year. In those instances where the director deems the hazard to be great enough, he may require certified inspections at more frequent intervals. These inspections and tests shall be at the expense of the water user and shall be performed by a certified tester approved by the director. It shall be the duty of the director to see that these timely tests are made. The customer-user shall notify the director in advance when the tests are to be undertaken so that the director or a representative may witness the tests if so desired. These devices shall be repaired, overhauled or replaced at the expense of the customer-user whenever said devices are found to be defective. Records of such tests, repairs and overhaul shall be kept and copies sent to the director.

J. No underground sprinkling device will be installed without adequate backflow prevention devices.

K. Failure of the customer to cooperate in the installation, maintenance, testing or inspection of backflow prevention devices required by this chapter or by state law shall be grounds for the termination of water service to the premises. (Ord. 9-82 § 1 (part), 1982.)

13.06.050 Cross-connection inspection.

A. No water shall be delivered to any structure hereafter built within the city of Sandy or within areas served by city water until the same shall have been inspected by the city for possible cross-connections and been approved as being free of same.

B. Any construction for industrial or other purposes which is classified as hazardous facilities where it is reasonable to anticipate intermittent cross-connections, or as determined by the director, shall be protected by the installation of one or more backflow prevention devices at the point of service from the public water supply or any other location designated by the city.

C. Inspections shall be made at the discretion of the director of all buildings, structures, or improvements for the purpose of ascertaining whether cross-connections exist. Such inspections shall be made by the city. (Ord. 9-82 § 1 (part), 1982.)

13.06.060 Liability.

This chapter shall not be construed to hold the city responsible for any damage to persons or property by reason of the inspection or testing herein, or the failure to inspect or test or by reason of approval of any cross-connections. (Ord. 9-82 § 1 (part), 1982.)

13.06.070 Penalties.

Any person who violates, disobeys, omits, neglects, refuses to comply with, or resists the enforcement of any of the provisions of this chapter or the rules and regulations as adopted by the city, shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall for each offense be punished by a fine in a sum not exceeding five hundred dollars

or imprisonment for a term not exceeding ten days, or by both fine and imprisonment. (Ord. 982 § 1 (part), 1982.)

Sandy, City of
41 00789

PW# 4100789 SANDY, CITY OF