

3.103 CROSS-CONNECTION AND BACKFLOW PREVENTION.

3.103.01 Purpose.

To protect the public health of water customers by the control of actual and/or potential cross-connections to customers.

3.103.02 Special Definitions.

As used in this section,

"BACKFLOW" means 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.

"BACKFLOW PREVENTION DEVICE" shall mean a device that has been investigated and approved by the State of Oregon Health Department or the Water Superintendent. The approval of backflow prevention devices should be on the basis of a favorable laboratory and field evaluation by an approved testing laboratory, recommending such approval.

"CONTAMINATION" means the entry into or presence in public water supply of any substance which may be deleterious to health and/or the quality of water.

"CROSS CONNECTION" means 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 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.

3.103.03 Certain cross connections prohibited.

- A. The installation or maintenance of a cross connection which will endanger, in the opinion of the Water Superintendent, the water quality of the potable water supply system of the City or any customer is prohibited.
- B. Any such cross connection now existing or hereafter installed is hereby declared to be a public hazard and shall be abated.

3.103.04 Authority of Water Superintendent to establish requirements.

- A. The control or elimination of cross connections shall be in accordance with this Ordinance and in compliance with the Oregon Administrative Rules, Chapter 333, Public Water Systems.
- B. The Water Superintendent shall have the authority to establish requirements more stringent than State regulations if he deems that conditions so indicate. The City shall adopt rules and regulations as necessary to carry out the provisions of this Ordinance. The Water Superintendent is authorized to enforce the provisions of this section in the inspection of existing, new and remodeled buildings.

3.103.05 Use of backflow prevention devices.

- A. No water service connection to any premises shall be installed or maintained by the City or any customer unless the water supply is protected as required by State law and regulation and this Ordinance.
- B. Service of water to any premises shall be discontinued by the City if a backflow prevention device required by this Ordinance 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 shall not be restored until such conditions or defects are corrected.
- C. The customer shall be responsible for the costs of installation, maintenance, repair or replacement of any backflow prevention device on the customer's service line.
- D. No water shall be delivered to any structure built within the City or within areas served by City water until the same shall have been inspected by the Water Superintendent or his designee for possible cross connections and have been found free of the same and approved.

3.103.06 Inspection and testing of backflow prevention devices.

- A. The customer's system shall be open for inspection and testing at all reasonable times to the Water Superintendent or his designee for the purpose of determining whether cross connections or backflow preventions devices are in place and in conformance with this Ordinance.
- B. The Water Superintendent may require annual tests of any nonresidential customer's backflow prevention device, or more frequently, if the Water Superintendent deems the hazard to be great enough to require inspections and test at more frequent intervals.
- C. The Water Superintendent may require annual tests of residential customers' backflow prevention devices on an annual basis if:
 - 1. There is an existing well on the property;
 - 2. A booster pump is needed to provide pressure to the residence; or
 - 3. The Water Superintendent determines conditions warrant an annual test.
- D. Failure of the customer to cooperate in the installation , maintenance, testing, or inspection of backflow prevention devices shall be grounds for termination of water service to the premises.

3.103.07 Placement of backflow prevention devices.

Approved backflow prevention devices shall 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.

3.103.08 Additional circumstances requiring backflow prevention devices to be installed.

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

- A. Premises having an auxiliary water supply;
- B. Premises having cross connections that are not correctable, or intricate planning arrangements which make it impractical to ascertain whether or not cross connections exist;
- C. 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;
- D. Premises having a history of cross connections being established or re-established;
- E. Premises on which any substance is handled under pressure so as to permit entry into the City water supply, or where a cross connection could reasonably be expected to occur. This shall include the handling of process waters and cooling waters;
- F. 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;

3.103.09 Special facilities requiring backflow prevention devices.

The following types of special facilities shall have backflow prevention devices installed.

- A. Hospitals, mortuaries, clinics;
- B. Laboratories;
- C. Metal plating industries;
- D. Sewage treatment plants;
- E. Food or beverage processing plants;
- F. Chemical plants;
- G. Petroleum processing or storage plants;
- H. Facilities using any radioactive materials;
- I. Facilities with fire service lines as specified by the Oregon State Health Division;
- J. Other facilities which require cross connection control through the use of backflow prevention devices required by this Ordinance and/or OAR Chapter 333;
- K. Water Districts; and
- L. Water customers outside the City limits.

3.103.10 Filling of water trucks and machinery.

No water trucks or other machinery designed to draw water from a hydrant or other pressurized source of water shall obtain water from the City water supply unless they are equipped with a backflow prevention device approved for such use by the Water Superintendent.

3.103.11 Types of backflow prevention devices.

The type of backflow prevention device required shall depend on the degree of hazard which exists. The Water Superintendent shall be the final authority in deciding what type of device is appropriate for the installation. The following two type of devices are permitted:

- A. 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 hazard or damage to the water distribution system.
- B. 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.