

**FAIRVIEW WATER DISTRICT  
ORDINANCE NO. 2014-1**

AN ORDINANCE FOR THE CONTROL OF BACKFLOW AND CROSS-CONNECTIONS, REPEALING  
ORDINANCE NO. 93-3

THE FAIRVIEW WATER DISTRICT BOARD OF DIRECTORS ORDAINS AS FOLLOWS:

Section 1.     The purposes of this ordinance is:

1.1     To protect the health and welfare of the customers of the Fairview Water District by the control of actual or potential contamination or pollution from cross contamination.

1.2     To eliminate or control existing cross-connections, actual or potential, between the consumer's drinking water systems, lawn and fire sprinkler systems, and plumbing fixtures and industrial water distribution systems; and,

1.3     To provide for annual testing and maintenance of cross-connection and backflow prevention assemblies and to provide a continuous, systematic and effective program of cross connection control.

Section 2.     Responsibility

2.1     The property owner shall be responsible for all cross-connection control within the premises and protecting the District's water distribution system from contamination or pollution due to the backflow of contaminants or pollutants through water service connections.

2.2     When an approved backflow prevention assembly is required, the District shall give written notice to the property owner and occupant stating that an approved backflow prevention assembly shall be installed at a specified location designated by the District and a timeline for compliance.

2.3     The property owner and/or occupant shall be responsible for the cost of installation, testing and repairs to the approved backflow prevention assembly.

2.4     The property owner and/or occupant shall be responsible for maintaining the backflow prevention device and protect from damage or freezing.

2.5     Water service shall be disconnected by the District in the event said cross-connection and/or backflow prevention assemblies are not installed, maintained and/or tested as required by this Ordinance.

Section 3. Definitions

3.1 **Air Gap** (AG) means a physical separation between two piping systems.

3.2 **Approved Backflow Prevention Device**

(a) Approved backflow prevention assemblies and devices required under this ordinance shall be approved by the University of Southern California, Foundation for Cross-Connection Control and Hydraulic Research, or other equivalent testing laboratories approved by the Oregon Health Authority Drinking Water Program.

(b) Backflow Prevention Assemblies installed before the effective date of these rules that were approved at the time of installation, but are not currently approved, shall be permitted to remain in service provided the assemblies are not moved, the piping systems are not significantly remodeled or modified, the assemblies are properly maintained, and they are commensurate with the degree of hazard they were installed to protect. The assemblies must be tested at least annually and perform satisfactorily to the testing procedures set forth in these rules.

3.3 **Auxiliary Water Supply** means any water source or system other than the public drinking water system that may be available in the building or on the premises.

3.4 **Backflow** shall mean a hydraulic condition, caused by a difference in pressures, in which non-potable water or other fluids flow into a potable water system.

3.5 **Backflow preventer** shall mean a testable assembly to prevent backflow.

3.6 **Contamination** means the entry into or the presence of any substance in the drinking water system which could be a public health hazard and/or deleterious to the quality of the water.

3.7 **Cross-Connection** means any physical arrangement where the District's drinking water system is connected directly or indirectly, with any other water system or auxiliary system, sewer, drain pipes, swimming pool, storage reservoir, hot water heater, plumbing fixture, cooler, fire sprinklers, lawn sprinklers, or any other container or system which contains or may contain contaminated water, sewage, other liquids or an unknown or unsafe quality which may be capable of contaminating the District's drinking water system as a result of backflow. Bypass arrangements, jumper connections, removable sections, swivel or changeover devices, or other temporary or permanent devices through which, or because of which, backflow may occur, are considered to be cross-connections.

3.8 **Cross-Connection Specialist.** A person designated by the District and who has been certified as a Cross-Connection Specialist by the Oregon Health Authority under OAR 333-061-0073.

3.9 **Degree of hazard** shall be derived from the evaluation of a health, water system, plumbing or pollution hazard.

3.10 **District** means Fairview Water District.

3.11 **Double Check Valve Backflow Prevention Assembly** means an assembly composed of two independently acting approved check valves including tightly closed resilient seated shutoff valves attached at each end of the assembly and fitted with properly located resilient seated test cocks.

3.12 **Health Hazard** means an actual physical or toxic contamination threat to the district's drinking water system that would be a danger to health.

3.13 **High Public Health Hazard** means the classification assigned to an actual or potential cross-connection that potentially could allow substances or liquids that may cause illness or death to backflow into the District's drinking water system.

3.14 **OHA** means Oregon Health Authority Drinking Water Program

3.15 **Plumbing Hazard** means an internal or plumbing-type cross-connection in the consumer's drinking water system that may be either a pollution or a contamination type hazard. This includes, but is not limited to cross connections to livestock watering troughs, toilets, sinks, lavatories, wash trays, domestic washing machines, dishwashers, water hoses, or fire and lawn sprinkling systems.

3.16 **Pollution hazard** means an actual or potential threat to the physical properties of the water system or the potability of the District's or the consumer's potable water system but which would not constitute a health or water system hazard, as defined. The maximum degree of intensity of pollution to which the potable water system could be degraded under this definition would cause a nuisance or aesthetically objectionable or could cause minor damage to the water system or its appurtenances.

3.17 **Potable water supply** means any system of water supply intended or used for human consumption or other domestic use.

3.18 **Premises** means any piece of land to which water is provided including all improvements, mobile home(s) and structures located on it.

3.19 **Reduced Pressure Principle Backflow Prevention Assembly**

An assembly containing two independently operating approved check valves together with a hydraulically operating, mechanically independent pressure differential relief valve located between the check valves. The unit shall include properly located resilient seated test cocks and tightly closing resilient seated shut-off valves at each end of the assembly.

Section 4. Premises required to install Backflow Prevention Assembly

4.1 All service connections listed shall be required to install a premises isolation backflow prevention assembly consisting of either a reduced pressure principle backflow prevention assembly or an approved air gap.

1. Agricultural (e.g. farms, dairies)
2. Beverage bottling plants\*\*
3. Car washes
4. Chemical plants
5. Commercial laundries and dry cleaners
6. Premises where both reclaimed and potable water are used
7. Film processing plants
8. Food processing plants
9. Medical centers (e.g., hospitals, medical clinics, nursing homes, veterinary clinics, dental clinics, blood plasma centers)
10. Premises with irrigation systems that use water supplier's water with chemical additions (e.g., parks, playgrounds, golf courses, cemeteries, housing estates)
12. Metal plating industries
13. Mortuaries
14. Petroleum processing or storage plants
15. Piers and docks
16. Radioactive material processing plants and nuclear reactors
17. Wastewater lift stations and pumping stations
18. Wastewater treatment plants
19. Premises with piping under pressure for conveying liquids other than potable water and the piping is installed in proximity to potable water piping
20. Premises with an auxiliary water supply that is connected to a potable water supply
21. Premises where the water supplier is denied access or restricted access for survey
22. Premises where the water is being treated by an addition of chemical or other additives

4.2 Premises not listed or defined in section 4.1 shall be individually evaluated. If an existing or potential cross connection is identified the District shall require the installation of one of the following approved backflow prevention assemblies or an approved air gap commensurate with the degree of hazard identified on the premises;

- (a) Approved Air Gap
- (b) Reduced Pressure Principle Backflow Prevention Assembly (RP), or;
- (c) Reduced Pressure Principle-Detector Backflow Prevention Assembly (RPDA), or;
- (d) Double Check Valve Backflow Prevention Assembly (DC), or;
- (e) Double Check-Detector Backflow Prevention Assembly (DCDA).

4.3 Where unique conditions exist, but not limited to, extreme terrain or pipe elevation changes, or structures greater than three stories in height, even with no actual or potential health hazard, an approved backflow prevention assembly shall be required at the point of delivery.

4.4 In the case of any premise where there is an auxiliary water supply, connected to the plumbing system, the District's water system shall be protected from the possibility of backflow by a reduced-pressure principle backflow prevention assembly (RP) at the service connection.

4.5 In the case of any premise where there is any material, hazardous to human health, which is handled in such a fashion as to create an actual or potential threat to the District's water system by virtue of a backflow occurrence a Premises Isolation Backflow Prevention Assembly consisting of either a reduced pressure principle backflow prevention assembly or an approved air gap shall be required.

4.6 In the case of any premise where substances are handled that are objectionable, but not hazardous to human health, and the likelihood exists of it being introduced into the District's water system by virtue of a backflow occurrence a premises isolation backflow prevention assembly consisting of either a reduced pressure principle backflow prevention assembly or an approved air gap shall be required.

#### Section 5. Premises Isolation

5.1 Where premise isolation is used to protect against a cross connection, the following requirements apply;

- (a) Ensure the approved backflow prevention assembly is installed at a location adjacent to the service connection or point of delivery;
- (b) Ensure any alternate location used is with the approval of the District and meet the District's cross connection control requirements.
- (c) Ensure no cross connections exist between the point of delivery from the public water system and the approved backflow prevention assemblies, when these are installed in an alternate location.

#### Section 6. Premises Inspection

6.1 District employees shall have access to premises, with reasonable notice during reasonable hours to buildings and structures to which water is supplied for the purpose of inspecting for existing or potential cross connections.

6.2 Any premises refusing access or failing to complete a cross connection survey when requested for the purpose of determining if existing or potential cross connections exist shall be

required to install a premises isolation backflow prevention device at the service connection or approved alternate location.

Section 7. Installation, Maintenance & Testing

7.1 The device assembly shall be readily accessible with adequate room for maintenance and testing. Device assemblies 2" and smaller shall have at least 6" clearance on all sides of the device assembly. All device assemblies larger than 2" shall have a minimum clearance of 12" on the backside, 24" on the test cock side, 12" below the device assembly, and 36" above the device assembly.

7.2 If permission is granted to install the backflow device inside of the building, the device assembly shall be readily accessible during regular business hours of 8:00 a.m. to 4:30 p.m., Monday through Friday.

7.3 Maximum height of installation shall not exceed five (5) feet for device assemblies 2" and larger unless there is a permanently installed platform meeting Oregon occupational safety and health (OR-OSHA) standards to facilitate servicing and testing the device assembly.

7.4 Reduced pressure principle device assemblies may be installed in a vault only if the relief valve discharge can be drained to daylight through a "boresight" type drain. The drain shall be of adequate capacity to carry the full rated flow of the device assembly and shall be screened on both ends.

7.5 Backflow prevention assemblies shall be tested by OHA-certified Backflow Assembly Testers, except as otherwise provided for journeyman plumbers or apprentice plumbers in OAR 333-061-0072 of these rules (Backflow Assembly Tester Certification).

- (a) At the time of installation, any repair or relocation;
- (b) At least annually;
- (c) More frequently than annually for approved backflow prevention assemblies that repeatedly fail, or are protecting health hazard cross connections, as determined by the water supplier;
- (d) After an approved air gap is re-plumbed.

Section 8. Severability

The Sections of this ordinance are severable. The invalidity of a section shall not affect the validity of the remaining Sections.

Section 9. Repeal

That certain ordinance dated October 13, 1993 known as AN ORDINANCE ADOPTING RULES AND REGULATIONS FOR FAIRVIEW WATER DISTRICT RELATING TO CROSS CONNECTIONS is repealed.

Adopted by the Board of Commissioners of Fairview Water District this 14<sup>th</sup> day of April, 2014.

\_\_\_\_\_  
Chairman

ATTEST:

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Secretary