

ENABLING AUTHORITY

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WAUNA WATER DISTRICT

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Cross Connection

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ORDINANCE

AN POLICY TO PROTECT THE WATER SUPPLY OF WAUNA WATER DISTRICT FROM CONTAMINATION OR POLLUTION DUE TO ANY EXISTING OR POTENTIAL CROSS CONNECTIONS; DEFINING AND DESCRIBING ASSEMBLY AND INSTALLATION REQUIREMENTS; PROVIDING FOR PREMISES ACCESS, TESTING AND REPAIR OF ASSEMBLIES, AND COMPLIANCE COSTS WITH PENALTIES FOR FAILURE TO COMPLY.

Wauna Water District ordains as follows:

Section 1. Definitions:

- (1) "Approved backflow prevention assembly" means an assembly to counteract back-pressure or prevent backsiphonage. This assembly must appear on the list of approved assemblies issued by the Oregon Health Division.
- (2) "Auxiliary supply" means any water source or system other than the public water system that may be available in the building or on the premises.
- (3) "Backflow" means the flow in the direction opposite to the normal flow or the introduction of any foreign liquids, gases, or substances into the water system of Wauna Water District's water.
- (4) "Board" or "the Board " or "Wauna" means Wauna Water District.
- (5) "Contamination" means the entry into or presence in a public water supply system of any substance which may be deleterious to health and/or quality of the water.
- (6) "Cross Connection" means any physical arrangement where a public water system is connected, directly or indirectly, with any other non-drinkable water system or auxiliary system, sewer, drain conduit, swimming pool, storage reservoir, plumbing fixture, swamp coolers, or any other device which contains, or may contain, contaminated water, sewage, or other liquid of unknown or unsafe quality which may be capable of imparting contamination to the public 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.
- (7) "Degree of hazard" shall be derived from the evaluation of a health, system, plumbing or pollutional hazard.
- (8) "Health hazard" means 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.
- (9) "Plumbing hazard" means 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.
- (10) "Pollutional hazard" means 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 of 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.
- (11) "President" means the President of Wauna Water District.
- (12) "System hazard" means 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 detrimental effect on the quality of the potable water in the system.

(13) "Potable water supply" means any system of water supply intended or used for human consumption or other domestic use.

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

(15) "Reduced pressure principle assembly" shall mean an assembly containing two, independently acting, approved check valves together with a hydraulically operated, mechanically independent, pressure differential relief valve located between the check valves and at the same time below the first check valve. The assembly shall include properly located test cocks and tightly closing shut-off valves at the end of the assembly. A check valve is approved if it appears on the list of approved assemblies issued by the Oregon Health Division.

Section 2. No cross connections shall be created, installed, used or maintained within the boundaries of Wauna Water District jurisdiction, except in accordance with this ordinance.

Section 3. Approved backflow prevention assemblies shall be installed at the expense of the user, either at the service connection or within the premises, as determined by a certified cross connection inspector approved by Wauna Water District, whenever:

(1) The nature and extent of any activity of the premises, or the materials used in connection with any activity of the premises, or materials stored on the premises, could contaminate or pollute the drinking water supply.

(2) Premises having any one or more cross connections as that term is defined in Section 1, (5) are identified or are present.

(3) Internal cross connections that are not correctable, or intricate plumbing arrangements which make it impractical to ascertain whether or not cross connections exist are present.

(4) There is a repeated history of cross connections being established or reestablished.

(5) There is unduly restricted entry so that inspections for cross connections cannot be made with sufficient frequency or with sufficient notice to assure that cross connections do not exist.

(6) Materials of a toxic or hazardous nature are being used such that, if backflow should occur, a health hazard could result.

(7) Any mobile apparatus which uses Wauna supplied water or water from any premises within boundaries of Wauna Water District jurisdiction.

(8) Installation of an approved backflow prevention assembly is deemed to be necessary to accomplish the purpose of these regulations in the judgement of a certified cross connection specialist contracted by Wauna Water District.

(9) An appropriate cross connection report form has not been filed with Wauna Water District.

(10) A fire sprinkler system using non-potable piping material is connected to Wauna Water District's system.

(11) All residential properties occupied by persons other than the property owner shall install an approved backflow prevention assembly, or the property owner shall assume all responsibility for any backflow that should occur.

(12) All service connections 2 inches and larger will be required to have a minimum of a double check valve assembly or as directed by Wauna Water District.

Section 4. To ensure proper operation and accessibility of all backflow prevention assemblies, the following requirements shall apply to the installation of these assemblies;

(1) No part of the backflow prevention assembly shall be submerged in water or installed in a location subject to flooding. If installed in a vault or basement, adequate drainage shall be provided.

(2) Assemblies must be installed at the point of delivery of the water supply, before any branch in the line, on private property located just inside of the property line. Alternate locations must be approved in writing by Wauna Water District prior to installations.

- (3) The assembly must be protected from freezing and other severe weather conditions.
- (4) All backflow prevention assemblies shall be of a type and model approved by the Oregon Health Division and Wauna Water District.
- (5) Only assemblies specifically approved by the Oregon Health Division for vertical installation may be installed vertically. No assembly over 4" shall be installed vertically.
- (6) The assembly shall be readily accessible with adequate room for maintenance and testing. Assemblies 2 inches and smaller shall have at least 6-inch clearance on all sides of the assembly. All assemblies larger than 2 inches shall have a minimum clearance of 12 inches on the back side, 24" inches on the test cock side, 12 inches below the assembly and 36 inches above the assembly. Y" pattern double check valve assemblies shall be installed so that the checks are horizontal and the test cocks face upward (see example following).
- (7) The property owner assumes all responsibility for all maintenance and testing of the assembly, as determined and required by Wauna Water District.
- (8) If written permission is granted to install the backflow assembly inside of the building, the assembly shall be readily accessible during regular working hours of 8:00 a.m. to 5:00 p.m., Monday through Friday.
- (9) If an assembly, with written permission, is installed inside of the premises and is 4 inches or larger and is installed 4 feet above the floor, it must be equipped with a rigidly and permanently installed scaffolding acceptable to Wauna Water District. This installation must also meet the requirements set out by the U.S. Occupational Safety and Health Administration and the State of Oregon Plumbing Specialty Code.
- (10) Reduced pressure principle assemblies may be installed in a vault only if relief valve discharge can be drained to daylight through a "boresight" type drain located above the 100 year (1 percent) flood level. The drain shall be of adequate capacity to carry the full rated flow of the assembly and shall be screened on both ends.
- (11) An approved air gap shall be located at the relief valve orifice. This air gap shall be at least twice the inside diameter of the incoming supply line as measured vertically above the top rim of the drain and in no case less than 1 inch.
- (12) A backflow permit shall be obtained by the property owner prior to any new backflow assembly installation. With the permit, the owner and/or contractor will be provided with a Wauna cross connection ordinance and will be advised as to the minimum type of backflow assembly required and as to the locations that will be acceptable to the District.
- (13) Upon completion of installation, the District shall be notified and all assemblies must be inspected and tested. All backflow prevention assemblies must be registered with the District. Registration shall consist of date of installation, make model, serial number of the backflow assembly, and initial test report.
- (14) Any water pressure drop caused by the installation of a backflow assembly is not the responsibility of the District.
- (15) It is the responsibility of the property owner to eliminate the possibility of thermal expansion if a closed system has been created by the installation of a backflow assembly.
- (16) All new plumbing construction shall be evaluated as to the need for a backflow assembly before the issuance of plumbing approval within the boundaries of the District jurisdiction.

Section 5. Authorized personnel of the District, with proper identification, shall have access during reasonable hours to all parts of the premises and within the building to which water is supplied. However, if any water user refuses access to the premises or to the interior of a structure at reasonable times and on reasonable notice for inspection by a cross connection specialist appointed by the District, a reduced pressure principle assembly will be required to be installed at the service connection to the premises.

Section 6. All backflow assemblies installed within the jurisdiction of the District shall be tested immediately after installation and then annually on or before the anniversary date by a state-

certified tester. The District will send out notices of reminder that a test is due. If the test is not completed within 15 days after the anniversary date, a second notice in the form of a registered letter, return receipt requested will be sent. If the backflow assembly is not tested within 15 days of the second and final notice, the water service will be disconnected from the District water system. The District retains the right to have the assembly tested in special circumstances rather than terminating the water service. Special circumstances may consist of, but are not limited to, retirement homes, rental homes, hospitals, group homes, homes in which water dependent devices are in use (such as kidney dialysis machines), or any other circumstance where the District deems it a health risk to terminate water service. Should the District opt to have a backflow assembly tested, three current state-certified cross connection testers will be contacted and a price quoted. The District will pick the low quote and have the assembly tested and the test fee plus District personnel time required to set up the test, added to the assembly owner's bill.

Section 7. All costs associated with purchase, installation, inspections, testing, replacement, maintenance, parts, and repairs of the backflow assembly are the financial responsibility of the property owner.

Section 8. Failure on the part of any customer to discontinue the use of all cross connections and to physically separate cross connections is sufficient cause for the immediate discontinuance of public water service to the premises (OAR Chapter 333-061-0070, Section 1).

Approved by Wauna Water District Board members January 2017.