

4100372

CITY OF

# HERMISTON, OREGON

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235 E. Gladys Avenue  
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**FIRE & EMERGENCY SERVICES**

330 S. First Street  
Hermiston, OR 97838  
(541) 567-8822  
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**POLICE**

330 S. First Street  
Hermiston, OR 97838  
(541) 567-5519  
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**MUNICIPAL COURT**

330 S. First Street  
Hermiston, OR 97838  
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**WASTEWATER TREATMENT**

2205 N. First Place  
Hermiston, OR 97838  
(541) 567-5272  
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December 18, 1997

Bonnie Waybright, P.E.  
Regional Engineer  
Cross Connection Program Coordinator  
Drinking Water Program  
Oregon Department of Human Resources  
800 N.E. Oregon Street #21  
Portland, OR 97232-2162

RE: Backflow Program

Dear Bonnie:

Please find enclosed a "Backflow Resolution" which the city council passed on November 24, 1997. John Evans will be administering this program. John is a very good operator and will do an excellent job with the program.

If you have any questions, please contact John or me at (541) 567-5521.

Sincerely,

P.D. Napolitano, P.E.  
City Engineer/Water Superintendent

C: Roy Bicknell, Water Chief Operator  
John Evans, Cross-Connection Program Manager

PDN:pal

RECEIVED  
DEC 23 1997  
FIELD SERVICES  
DRINKING WATER PROGRAM



4100372

**RESOLUTION NO. 1491**

A RESOLUTION REGULATING CONNECTION TO THE MUNICIPAL WATER SYSTEM TO PROTECT AGAINST BACKFLOW TO THE SYSTEM OR CROSS CONNECTION; ESTABLISHING STANDARDS; AND IMPOSING PENALTIES FOR VIOLATION.

WHEREAS, the purpose of this resolution is to find and declare that all existing and future connections to the municipal water system which have the potential to allow contaminated waters to be siphoned, pumped or injected into the potable water supply shall be required to install approved regulating devices; declare that such devices must be tested and maintained; provide for termination of water supply and the financial responsibility for customers or owners who fail to install, test or maintain such devices to the detriment of the health, comfort, convenience, safety and welfare of the residents of the City of Hermiston and its inhabitants.

NOW, THEREFORE, the City of Hermiston, Oregon, acting by and through its Common Council, does resolve as follows:

**SECTION 1. Definitions.** The following terms and definitions shall have the following meanings as provided in this resolution:

- (1) "Air Gap Separation" means a physical separation between the free flowing discharge end of a potable water supply pipeline and the overflow rim of an open or non-pressure receiving vessel. The air gap shall be at least twice the diameter of the inlet pipe, measured vertically above the top overflow rim of the receiving vessel, but in no case less than one inch.
- (2) "Approved" as herein used in reference to air-gap separation, a double check valve assembly, a reduced pressure principle backflow prevention assembly or other backflow prevention assemblies or methods shall mean an approval by the Oregon State Health Division.
- (3) "Atmospheric Vacuum Breaker" means an assembly containing a float-check, a check seat and an air inlet port. The flow of water into the body causes the float to close the air inlet port. When the flow of water stops the float falls and forms a check valve against backsiphonage and at the same time opens the air inlet port to allow air to enter and satisfy the vacuum. A shutoff valve immediately upstream may be an integral part of the assembly. An atmospheric vacuum breaker is designed to protect against a health hazard (i.e. contaminant) under a backsiphonage condition only. It shall not be installed where it will be under continuous operating pressure for more than 12 hours in any 24 hour period.
- (4) "Auxiliary Water Supply" means any supply of water used to augment the supply obtained from the City water system which serves the premises in question.

- (5) "Backflow" means the flow of water or other liquids, and also compressed gases from any source, back into the potable water supply within a facility and/or public water supply. Backflow occurs due to a differential pressure existing between two different points within a continuous fluid system and may occur due to either backsiphonage or backpressure.
- (6) "Backflow Prevention Device" or "Backflow Prevention Device Assembly" means a backflow prevention device such as a pressure vacuum breaker, a double check valve or a reduced pressure principle device and the attached shut-off valves on the inlet and outlet ends of the device assembled as a complete unit.
- (a) "Backflow Prevention Device" may also mean an air gap separation and a atmospheric vacuum breaker.
- (7) "Certified Tester" means someone that is certified by the Oregon State Health Division to perform backflow device testing.
- (8) "City" means the City of Hermiston, Umatilla, County, Oregon. "City" representatives authorized to speak for the City of Hermiston in accord with this resolution shall mean the City Manager or his specifically authorized representative.
- (9) "Cross Connection" means any actual or potential connection, whereby a public water supply is connected, directly or indirectly, with any non-potable or unapproved water supply system, sewer, drain, conduit, pool, storage reservoir, plumbing fixture or other device which contains, or may contain, contaminated water, liquid, gases, sewage or other waste of unknown or unsafe quality which may be capable of imparting contamination to the public water supply as a result of backflow.
- (a) Bypass arrangements, jumper connections, removable sections, swivel or change-over devices and other temporary, permanent or potential connections through which, or because of which, backflow could occur are considered to be cross connections.
- (10) "Customer" means any person, firm, partnership, association, corporation or any combination of these identities who accepts water supply from the municipal water system for any use. Customer is determined to be the most current record of the City of Hermiston water utility.
- (11) "Customer Premises" or "Premises" means the area of water system delivery as contained in the records of the City of Hermiston, including all grounds, buildings and areas upon which municipal water supply is available or used.
- (12) "Check Valve" means a valve which allows flow in only one direction.

- (13) "Double Check Valve Assembly" means a device for preventing backflow which has two check valves, two shut-off valves, one on the upstream side and the other on the downstream side of the check valves and four test cocks for checking the watertightness of the check valves.
- (14) "Double Detector Check Valve Assembly" means a device which is a hybrid version of a mainline double check valve assembly with a smaller factory installed double check valve assembly and meter in a bypass configuration to detect leakage or use.
- (15) "Pressure Vacuum Breaker" means a device consisting of one or more spring loaded check valves and an independently operating air inlet valve installed as a unit between two tightly closing shut off valves. The air inlet valve is internally loaded to the open position.
- (16) "Potable Water" means safe drinking water.
- (17) "Reduced Pressure Principle Backflow Prevention Device (RP Device)" means a device for preventing backflow which has two check valves, a differential relief valve located between the two check valves, two shut-off valves, one on the upstream side and the other on the downstream side of the check valves and four test cocks for checking the watertightness of the check valves and the operation of the relief valve.
- (18) "Service Connection" means the piping connection by means of which water is conveyed from a distribution main of a public water system to a customer's premises. The portion of the service connection which conveys water from the distribution main to the customer's property line, or to the service meter where provided, is owned by and under the jurisdiction of the water supplier.
- (19) "Water System" shall be considered as made up of two parts: The Utility System and the Customer System.
- (a) The "Utility System" shall consist of the source of facilities and the distribution system and shall include all those facilities of the water system under the complete control of the utility up to the point where the customer system begins, generally at the water meter, or in a case of unmetered fire services, at the utility control valve or detector check or double check valve assembly.
- (b) The "Customer System" shall include those parts of the facilities which convey domestic water to points of use beyond the termination of the utility system. The term "customer system" is that of any user whether or not a charge is made.

**SECTION 2. Cross Connection Prohibited.** The installation or maintenance of a cross connection which will endanger the water quality of the potable water supply system of the City of Hermiston shall be unlawful and is prohibited. Any such cross connection now existing or hereafter installed is hereby declared to be a public hazard, and the same shall be abated as provided in this resolution.

**SECTION 3. Cross Connection Control Devices Required.** All customers connected to the water system shall cause to be installed approved backflow prevention devices when required by the Oregon State Plumbing laws, Oregon Administrative Rules or regulations of the Oregon State Health Division, the Environmental Protection Agency, the Department of Environmental Quality, the Occupational Safety and Health Administration, the American Water Works Association or on any premises where:

- (1) There is an auxiliary water supply which is or can be connected to the potable water piping; or
- (2) There is piping for conveying liquids other than potable water and where that piping is under pressure and is installed and operated in a manner which could cause a cross connection; or
- (3) There is intricate plumbing which makes it impractical to ascertain whether or not cross connections exist; or
- (4) There is backflow potential such as with any fire system.
- (5) Backflow prevention devices shall be required on domestic services 2" or smaller if the building is more than two (2) stories or higher than 32' above the water main; one (1) or two (2) story buildings which exceed 32' in height may be exempted upon written request for exemption citing the specific rationale for such exemption. Exemptions may be granted only in writing signed by the City.

**SECTION 4. Inspection of Premises.** Any duly authorized employee or contractor of the City of Hermiston shall have the right to enter upon and inspect any water plumbing system receiving water from the City. The purpose of such inspections shall be to identify any cross connection or other existing or potential contamination hazards.

**SECTION 5. Existing Cross Connection.** If the City has reasonable cause to believe an existing cross connection exists on the consumer premises, water service may be denied and physically discontinued. The consumer and the property owner identified in the records of the City of Hermiston water system will be notified in writing of the cross connection and source. Water service will continue to be discontinued until:

- (1) An approved cross connection control device is installed, or
- (2) The cause of the cross connection is eliminated.

**SECTION 6. Potential Cross Connections.** If the City has reasonable cause to believe a potential cross connection is located on the consumer premises, written notice shall be provided to the consumer and the property owner identified in the records of the City of Hermiston providing for thirty (30) days to correct the potential cross connection by:

- (1) Installing an approved cross connection control device, or
- (2) Elimination of the potential cross connection hazard

**SECTION 7. Circulating Flow Prohibition, Exceptions.** The City may refuse service to any premise with more than one service connection except that multiple service connections may be used for service to a premise under one ownership or management wherein each service connection serves separate buildings or groups of buildings, and there is no physical connection between the separate plumbing systems which would permit circulating flow at the time of application for service and there is reasonable assurance that no future interconnection will be established.

In large industrial and commercial customer piping systems requiring multiple service connections for adequacy of supply and for fire protection, the Commission may permit such multiple connections with interconnection on the customer's premises provided that there shall be an approved backflow prevention device assembly installed immediately downstream from each meter to prevent circulating flow.

**SECTION 8. Permit Required For Installation of Cross Connection Control Device.** No customer shall install or cause to be installed a backflow device without first obtaining a permit to do so from the City. Said permit shall be issued upon payment of a permit fee at the rate established by resolution, and upon approval of the plans. All installations shall comply with the provisions of this Resolution, and with the current Oregon State Plumbing laws and rules and regulations.

**SECTION 9. Type of Cross Connection Control Device Required.**

- (1) All cross connection control devices required under this section shall be of a type and model approved by the Oregon State Health Division and shall be installed in accordance with Oregon Administrative Rules. The device shall be readily accessible with adequate room for testing and maintenance. Double check valves may be installed below grade in a vault, providing all test cocks are fitted with brass pipe plugs. All vaults shall be constructed of concrete, plastic or other suitable materials, sized to make the valve readily accessible for testing and maintenance.
- (2) The type of cross connection control device required shall be commensurate with the degree of hazard that exists and meet the standards of the Oregon State Health Division on file in the Water Works Division.

**SECTION 10. Notice of Completion of Installation.** Upon completion of installation, the City of Hermiston shall be notified so that all system protection devices can be visually inspected. Each backflow device must be registered with the Water Department. Registration shall consist of the date of installation and the make, model and serial number of the backflow device.

**SECTION 11. Failure to Acquire Permit, Failure to Notify of Completion.** Any customer failing to notify of completion of installation, or failing to obtain a permit for installation, shall be notified of such failure when discovered by the City. The customer will be given a compliance time not to exceed thirty (30) days to obtain permits, register devices, or make necessary changes to meet the standards identified in this resolution. Failure to comply shall result in the termination of water service to the customer premises. Service will not be restored until compliance with this resolution is complete.

**SECTION 12. Cost of Installation.** Any installation, corrective measure, disconnection or other change to a cross connection control device shall be at the sole expense of the customer or owner. The cost of any change required in the City's system outside the property or between the meter and the supply line or distribution system and any charges for cutoff or disconnection shall be added to the charges for water against the premises which necessitated the expenditures.

**SECTION 13. Device Testing Required.** The water user or the owner of the premises where one or more reduced pressure device assembly, double check valve assembly or pressure vacuum breaker have been installed shall have the device tested at least once per year. Devices installed at facilities which pose an extreme health risk and devices which repeatedly fail shall be tested on a more frequent basis as determined by the City. Backflow prevention devices found not to be functioning properly shall be promptly repaired by the water user or owner of the device or the water supplier may deny or discontinue service.

**SECTION 14. Cost of Testing.** The cost of testing required by this resolution shall be at the sole expense of the customer or owner. Testing must be completed by an individual certified by the Oregon State Department of Health to conduct such tests.

**SECTION 15. Annual Testing, Repair.**

- (1) Any cross connection control device which may be required to be installed under this section for the protection of the water supply or anytime the device is moved shall be tested before its use in the City and annually thereafter, unless otherwise specified or required. All tests required to be performed under this section must be performed by a tester certified by the State. A list of individuals who are certified to conduct the testing can be found by contacting the Oregon State Health Division.
- (2) Approved device testers shall notify the Hermiston Water Department at least forty eight (48) hours in advance when the test is to be undertaken. Records



of such tests, repairs and overhauls will be maintained by the City Water Department, and it is the responsibility of any backflow prevention device testers performing tests and maintenance on backflow prevention devices to submit records of such tests, repairs and overhauls to the Hermiston Water Department.

- (3) If the City has not received the results of the test within thirty (30) days of the anniversary date for annual testing or within ten (10) days of the date of installation of the device, or the date of the City's discovery that the device was installed without testing as applicable, the City may order the test and add the cost of the test onto the property owner's water bill.
- (4) If the results of the test ordered by the City or the property owner indicate that repairs are necessary, the repairs must be made and a new test made and results of the test forwarded to the City within ten (10) days of the date of the first test.
- (5) If the City has not received evidence of the repairs and the results of the second test within ten (10) days of the first test, the City may have the repairs made and add the cost to the property owner's water bill.
- (6) The City may disconnect the water service of any person who refuses or fails to pay such testing or repair charges added to the customer's water bill.

**SECTION 16. Mobile Apparatus and Temporary Connections.** Temporary connections to the water system may be made when specifically authorized by the City without the use of cross connection control devices if no health threat is presented from the temporary use. The connection of any mobile apparatus, whether directly connected to the water system or through the customers premises, must provide approved backflow prevention devices in accord with this resolution.

**SECTION 17. Devices Installed Prior to this Resolution.** Any cross connection control device installed before the effective date of this resolution, which were approved at the time they were installed but not on the current list of approved device assemblies, shall be permitted to remain in service provided:

- (1) The device is registered with the City including the date of installation, make, model and serial number of the device.
- (2) The device is annually tested and maintained in accord with this resolution.
- (3) The type of device is commensurate with the degree of hazard on the customer premises.

**SECTION 18. Protection of Devices.** Consumer or owner shall be solely responsible for the protection of devices installed in accord with this resolution. Protection of devices from freezing and severe weather conditions is required. Such protection may include provisions for draining such devices when the device is in use on a seasonal basis.

**SECTION 19. Notice Requirements.** Notices required by this resolution shall be deemed to have been given by the City to the consumer and owner when such notice is placed in the United States mail, postage prepaid, and addressed to the consumer and property owner as shown in the records of the water utility.

**SECTION 20. Reinstating Discontinued Service.** Service discontinued as provided in this resolution may not be reinstated until all conditions of this resolution are met, and all outstanding fees for water use, discontinuation and other charges for utility services due and payable from the consumer's premises shall have been paid or arrangements made for payment therefore.


PASSED by the Common Council this 24th day of November, 1997.

APPROVED by the Mayor this 24th day of November, 1997.



MAYOR

ATTEST:

  
CITY RECORDER