

PWS # 41-00385

**ORDINANCE NO. 1875**

(An ordinance amending Chapter 12.08 of the Hood River Municipal Code)

WHEREAS, the City has contracted with Backflow Management, Inc., ("BMI") to implement and administer the City's backflow cross connection program;

WHEREAS, BMI has recommended some changes to the City's cross connection control ordinance, Chapter 12.08 to improve the City's cross connection program;

WHEREAS, the Department of Public Works and Engineering and the City Attorney have reviewed and approved the changes to Chapter 12.08 below.

NOW, THEREFORE, THE CITY OF HOOD RIVER ORDAINS AS FOLLOWS:

Chapter 12.08 of the Hood River Municipal Code is amended to read as follows:

**CHAPTER 12.08 – CROSS-CONNECTION CONTROL**

*Legislative History: Ord. 1814 (2001)*

Sections:

- 12.08.010 Definitions
- 12.08.020 Purpose
- 12.08.030 Application and Responsibilities
- 12.08.040 Cross Connections Regulated
- 12.08.050 Backflow Prevention Assembly Requirements
- 12.08.060 New Construction
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- 12.08.090 Thermal Expansion
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- 12.08.130 Effects of Backflow Assembly Installation
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- 12.08.150 Plumbing Code
- 12.08.160 Access to Premises
- 12.08.170 Annual Testing and Repairs
- 12.08.180 Responsibilities of Backflow Prevention Assembly Testers
- 12.08.190 Costs of Compliance
- 12.08.200 Termination of Service
- 12.08.210 Notification of Water Treatment

12.08.010 Definitions. For the purposes of this Chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning. If a word or term used in this Chapter is not contained in the following list, its definition, or other technical terms used, shall

have the meanings or definitions listed in the most recent edition of the *Manual of Cross Connection Control* published by the Foundation for Cross Connection Control and Hydraulic Research, University of Southern California ("USC").

"APPROVED BACKFLOW PREVENTION ASSEMBLY" or "BACKFLOW ASSEMBLY" or "ASSEMBLY" means an assembly to counteract backpressure and/or prevent back-siphonage. This assembly must appear on the list of approved assemblies issued by the Oregon State Health Division.

"AUXILIARY SUPPLY" means any water source or system other than the City's water.

"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 the City of Hood River.

"CERTIFIED CROSS CONNECTION SPECIALIST" or "SPECIALIST" means a person who has successfully completed and maintains all requirements as established by the DHS to be a Specialist in the state of Oregon.

"CERTIFIED BACKFLOW ASSEMBLY TESTER" means a person who has successfully completed and maintains all requirements as established by the DHS to be a tester in the state of Oregon.

"CITY" means the City of Hood River.

"CITY WATER SYSTEM" shall refer to and mean the City of Hood River's Water System, which shall include, it's wells, pumping stations, reservoirs, supply, trunk or feeder lines, service lines, meters and all other appurtenances, device lines and things necessary to the operation of the system and to supply water service to individual property or premise and shall include the City's potable water with which the system is supplied.

"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.

"CROSS CONNECTION" means any physical arrangement where a potable water supply 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.

"DEGREE OF HAZARD" means the LOW or HIGH HAZARD classification that shall be attached to all actual or potential cross connections.

"DHS" means the State of Oregon Department of Human Services.

"DIRECTOR" means the Public Works Director or his/her designee.

"DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY" or "DOUBLE CHECK ASSEMBLY" or "DOUBLE CHECK" means an assembly which consists of two (2) independently operating check valves which are spring-loaded or weighted. The assembly comes complete with a shut-off valve on each side of the checks, as well as test cocks to test the checks for tightness.

"HEALTH HAZARD" means an actual or potential threat of contamination of a physical, chemical, or biological nature to the public potable water system or the consumer's potable water system that would be a danger to health.

"NON-HEALTH HAZARD (POLLUTION)" means an impairment of the quality of the water to a degree that does not create a hazard to the public health, but does adversely affect the aesthetic qualities of such water for potable use.

"OAR" means Oregon Administrative Rules.

"POINT OF USE ISOLATION" means the appropriate backflow prevention within the consumer's water system at the point at which the actual or potential cross connection exists.

"POLLUTION 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 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.

"POTABLE WATER SUPPLY" means any system of water supply intended or used for human consumption or other domestic use.

"PREMISES" or "PREMISE" means any piece of property to which water is provided, including, but not limited to, all improvements, mobile structures and structures located on it.

"PREMISE ISOLATION" means the appropriate backflow prevention at the service connection between the public water system and the premises.

"REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY" or "REDUCED PRESSURE PRINCIPLE ASSEMBLY" or "RP ASSEMBLY" means 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 two tightly closing shut-off valves.

"RESIDENT" means a person or persons living within the territory served by the City of Hood River.

“RETROFITTING” means to furnish a service connection with parts or equipment made available after the time of construction or assembly installation.

“THERMAL EXPANSION” means the pressure created by the expansion of heated water.

12.08.020 Purpose. The purpose of this Chapter is to protect the water supply of the City of Hood River from contamination or pollution due to any existing or potential cross connections and to comply with OAR 333-061-0070, 0071, 0072, 0072 and 0074 as presently in effect or as hereafter amended.

12.08.030 Application and Responsibilities. This Chapter applies throughout the City of Hood River and to every premise and property served by the City of Hood River Water System. It applies to any premise, public or private, regardless of date of connection to the City water. Every owner, occupant and person in control of any concerned premise is responsible for compliance with the terms and provisions contained herein.

12.08.040 Cross Connections Regulated.

(1) No cross connections shall be created, installed, used or maintained within the territory served by the City, except in accordance with this Chapter.

(2) The Director shall carry out or cause inspections to be carried out to determine if any actual or potential cross connection exists. If found necessary, an assembly commensurate with the degree of hazard will be required to be installed at the service connection.

(3) The owner, occupant and person in control is responsible for all cross connection control within the premises.

(4) The use of any type of chemical spray attachment connected to the premise plumbing, including garden hose fertilizers and pesticide applicators, is prohibited within the City’s water system without proper protection from the potential of backflow occurring.

(5) The use of any type of radiator flush kits attached to the premise plumbing is prohibited within the City’s water system without proper protection from backflow occurring.

(6) All premises which appear on Table 1 of Chapter 333-061 of the OAR will be required to have a RP assembly at the service connection.

12.08.050 Backflow Prevention Assembly Requirements. A Specialist employed by or under contract with the City shall determine the type of backflow assemblies to be installed within the City’s water service area. All assemblies shall be installed at the service connection unless it is determined by the Specialist and approved by the Director that it should be installed at the point of use. An assembly shall be required in each of the following circumstances, but the Director is not limited to just these circumstances:

(1) When the nature and extent of any activity at a premises, or the materials used in connection with any activity at a premises, or materials stored at a premises, could contaminate or pollute the potable water supply.

(2) When a premises has one (1) or more cross connections as that term is defined in this Chapter.

- (3) When internal cross connections are present that are not correctable.
- (4) When intricate plumbing arrangements are present that make it impractical to ascertain whether cross connections exist.
- (5) When the premises has a repeated history of cross connections being established or re-established.
- (6) When entry to the premises is restricted so that inspections for cross connections cannot be made with sufficient frequency to assure that cross connections do not exist.
- (7) When materials are being used such that, if backflow should occur, a health hazard could result.
- (8) When an appropriate cross connection survey report form has not been filed with the Director.
- (9) Any and all used water return systems.
- (10) If a point-of-use assembly that is protecting the City's distribution system has not been tested or repaired as required by this Chapter, the installation of a reduced pressure principle assembly will be required at the service connection.
- (11) When there is upon the premises an auxiliary water supply that is or can be connected to the City's service or supply system.
- (12) All multi-story buildings and any building with a booster pump or elevated storage tank.
- (13) There is piping or equipment for conveying liquids other than potable City water and that piping or other equipment is under pressure and installed and operated in a manner that could cause a cross connection.
- (14) All services 2" or larger.
- (15) When installation of an approved backflow prevention assembly is deemed by a Specialist to be necessary to accomplish the purpose of these regulations.

#### 12.08.060 New Construction.

- (1) In all new nonresidential construction, an approved backflow assembly shall be installed at the service connection. The type of the assembly will be commensurate with the degree of hazard as determined by a Specialist.
- (2) When a building is constructed on commercial premises, and the end use of the building is not determined or could change, a reduced pressure principle backflow prevention assembly shall be installed at the service connection to provide protection of the public water supply in the event of the most hazardous use of the building.

12.08.070 Retrofitting. Retrofitting shall be required on all service connections where an actual or potential cross connection exists, and wherever else the City deems retrofitting necessary.

12.08.080 Lawn Irrigation. All lawn irrigation systems shall be protected with a minimum of a double check valve assembly. In the event any system is equipped with an injector system or has submerged heads, a reduced pressure principle assembly will be required.

12.08.090 Thermal Expansion. It is the responsibility of the property owner, the lessee, and person in control of the property to eliminate the possibility of damage from thermal expansion, if a closed system has been created by the installation of a backflow prevention assembly.

12.08.100 Wholesale Customers. Any customer that has a contract for water services with the City must have an active, ongoing cross connection program. The cross connection program must be approved by the Director. The Director reserves the right to require a reduced pressure principle assembly at the interconnect.

12.08.110 Mobile Units. Any mobile unit or apparatus which uses the City's water, or water from any premises within the City's system, shall first obtain written permission and pay all required fees. Water can only be obtained from the hydrant specified by the City. Fees will be set by Council Resolution.

12.08.120 Installation Requirements. All backflow prevention assembly installations shall follow the requirements set forth in the Oregon Administrative Rules (OAR) 333-061-0070 and OAR 333-061-0071, or as amended. The type of backflow prevention assembly required shall be commensurate with the degree of hazard that exists and must, at all times, meet the standards of the DHS; all backflow prevention assemblies required under this section shall be of a type and model approved by the DHS.

In the event a premises isolation assembly is allowed to be installed inside the building, there will be no connections made between the assembly and the meter.

12.08.130 Effects of Backflow Assembly Installation. The City shall in no way be responsible or held liable for any decrease in water pressure or other negative effect caused by the installation of a backflow assembly.

12.08.140 Fire System. An approved double check detector assembly shall be the minimum protection on fire sprinkler systems using piping material that is not approved for potable water use and does not provide for periodic flow through during each 24 hour period. A reduced pressure principle detector assembly ("RPDA") must be installed if any solution other than the potable water can be introduced into the fire sprinkler system.

12.08.150 Plumbing Code. As a condition of water service, customers shall install, maintain, and operate their piping and plumbing systems in accordance with the Oregon Specialty Plumbing Code, or as amended. If there is a conflict between this Chapter and the Plumbing Code, the more restrictive provision shall apply.

12.08.160 Access To Premises. Authorized City personnel shall have access during reasonable hours to all parts of a premise and within the structure to which water is supplied. However, if any owner, occupant or person in control refuses authorized personnel access to a premise, or to the interior of a structure, during these hours for inspection, a reduced pressure principle assembly must be installed at the service connection to that premise.

12.08.170 Annual Testing and Repairs. The owner of the property served by the City shall have any assemblies tested immediately upon installation, and at least annually thereafter by a Certified Backflow Prevention Assembly Tester. All such assemblies found not functioning properly shall be promptly repaired or replaced at the expense of the owner, occupant or person in control. In the event an assembly is moved, repaired or replaced it must be retested

immediately. If any such assembly is not promptly repaired or replaced, the Director may deny or discontinue water service to the premise.

12.08.180 Responsibilities of Backflow Prevention Assembly Testers.

(1) All backflow assembly testers operating within Hood River shall be certified in accordance with all applicable regulations of the DHS.

(2) Persons certified as backflow prevention assembly testers shall agree to abide by all requirements of the United States Occupational Safety and Health Administration ("OSHA"); and have completed confined space entry training to enter any confined space within the City.

(3) No person shall operate as a backflow prevention assembly tester within Hood River without first being annually registered with the Director.

(4) At the time of registration, recertification, and/or upon the Director's request, each person certified as a backflow prevention assembly tester shall furnish evidence to show that he/she is insured and bonded to perform services, has a current valid DHS backflow assembly tester certification, and have proof of gauge accuracy verification within the past year.

(5) All test reports must be turned into the City within 10 days following the completion of the test.

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

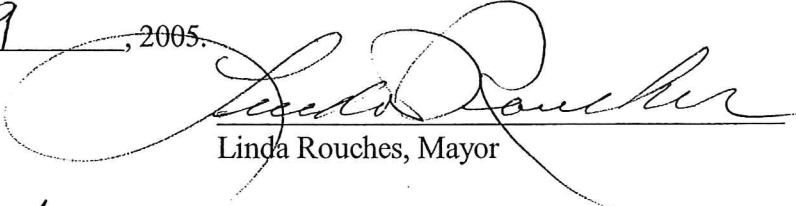
12.08.200 Termination of Service. Failure on the part of any owner, occupant or person in control to install an approved backflow device, conduct an annual test on a backflow device, or to discontinue the use of all cross connections and to physically separate cross connections in accordance with this Chapter is sufficient cause for the immediate discontinuance of public water service to the premises.

12.08.210 Notification of Water Treatment. Whenever any water user or the owner of the premises obtaining water from the City water system treats the water in any way or adds any chemical to the water before the water exits the premises' plumbing, they shall notify the City in advance of doing so.

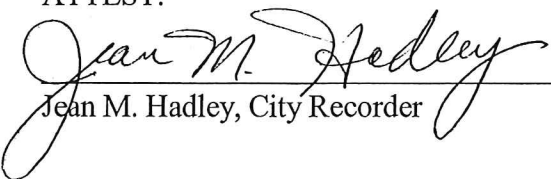
Read for the first time: July 25, 2005.

Read for the second time and passed: August 8, 2005, to become effective thirty (30) days hence.

Signed August 9, 2005.

  
Linda Rouches, Mayor

ATTEST:

  
Jean M. Hadley, City Recorder