

## ORDINANCE NO. 12-02

### AN ORDINANCE OF THE CITY OF MANZANITA ESTABLISHING A CROSS CONNECTION CONTROL PROGRAM FOR THE CITY OF MANZANITA WATER SYSTEM AND REPEALING SECTION 14 OF ORDINANCE 90-8.

**WHEREAS**, OAR 333-061-0070(1) states “(w)ater suppliers shall undertake cross connection control programs to protect the public water system from pollution and contamination”; and,

**WHEREAS**, OAR 333-061-0070(2) states “(t)he water supplier’s responsibility for cross connection control shall begin at the water supply source, include all public treatment, storage and distribution facilities under the supplier’s control, and end at the point of delivery to the water user’s premise”; now, therefore,

#### **THE CITY OF MANZANITA DOES ORDAIN AS FOLLOWS:**

##### **Section 1. Definitions**

The following definitions apply unless the context clearly indicates or requires a different meaning. Any word or term not defined in this section will be defined as provided in the Oregon Administrative Rules, Chapter 333, or 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”).

- (1) "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 Health Authority.
- (2) “AUXILIARY SUPPLY” means any water source or system other than the City of Manzanita Water System.
- (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 the City of Manzanita.
- (4) “CERTIFIED BACKFLOW ASSEMBLY TESTER” means a person who has successfully completed and maintains all requirements as established by Oregon Health Authority to be a tester in the state of Oregon.
- (5) “CERTIFIED CROSS CONNECTION CONTROL SPECIALIST” means a person who has successfully completed and maintains all requirements as established by the Oregon Health Authority to be a Specialist in the state of Oregon.
- (6) “CITY” means the City of Manzanita.

- (7) "CITY WATER SYSTEM" ("System") refers to and means the City of Manzanita Water System, which includes wells, treatment mechanisms or processes, pumping stations, reservoirs, supply trunk or feeder lines, service lines, meters and all other appurtenances, device lines and items necessary to the operation of the System and to supply water service to individual property or premises and shall include the City of Manzanita's potable water with which the System is supplied.
- (8) "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.
- (9) "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.
- (10) "DEGREE OF HAZARD" means the NON-HEALTH HAZARD or HEALTH HAZARD or HIGH HAZARD classification that shall be assigned to all actual or potential cross connections.
- (11) "OHA" means Oregon Health Authority.
- (12) "DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY", "DOUBLE CHECK ASSEMBLY", "DOUBLE CHECK" or "DCVA" means an assembly which consists of two (2) independently-operating check valves which are spring-loaded or weighted. The assembly comes complete with a resilient seated shut-off valve on each side of the checks, as well as test cocks to test the checks for tightness.
- (13) "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.
- (14) "MANAGER" means the City of Manzanita Water System Manager or his/her designee.
- (15) "MOBILE UNITS" means units that are temporary in nature, connecting to the water system through a legally-permitted hydrant, hose bibb, or other appurtenance of a permanent nature that is part of the City of Manzanita's water system or a permanent water service to a premises. Examples can include but are not limited to the following: water trucks, pesticide applicator vehicles, chemical mixing units or tanks, waste hauler's trucks or units, sewer cleaning equipment, carpet or steam cleaning equipment other than

homeowner use, rock quarry or asphalt/concrete batch plants or any other mobile equipment or vessel that poses a threat of backflow in the City of Manzanita Water System. Uses that are excluded from this definition are recreational vehicles at assigned sites or parked in accordance with other City of Manzanita policies pertaining to recreational vehicles and homeowner devices that are used by the property owner in accordance with other provisions of this, or other, City of Manzanita policies pertaining to provision of water service to a premises.

- (16) "NON-HEALTH HAZARD" shall mean the classification assigned to an actual or potential cross connection that could allow a substance that may be objectionable, but not hazardous to one's health, to backflow into the potable water supply.
- (17) "OAR" means Oregon Administrative Rule(s) effective April 19, 2010 or as amended after the date of this ordinance, adopted by the OHA, Public Health Division, related to Public Water Systems including but not limited to Chapter 333-Division 61, -0005 Purpose, -0020 Definitions and -0070 through -0072 Cross Connection program.
- (18) "PERSON(S)" means a natural person (individual), corporation, company, city, partnership, firm, limited liability company, joint venture company or city, and other such entity.
- (19) "POINT OF USE ISOLATION" means the appropriate backflow prevention within the consumer's water system at or near the point at which the actual or potential cross connection exists.
- (20) "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 minor damage to the system or its appurtenances.
- (21) "PREMISES" means any property to which water service is provided, including, but not limited to, all improvements, mobile structures and other structures located on the property.
- (22) "PREMISES ISOLATION" means the appropriate backflow prevention at the service connection between the public water system and the premises. This location will be at or near the property line and downstream from the service connection meter.
- (23) "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.

- (24) “RESIDENT” means a person or persons living within the area(s) served by the City of Manzanita Water System.
- (25) “RETROFITTING” means to furnish a service connection with parts or equipment made available after the time of construction or assembly installation.
- (26) “SPECIALIST” means an Oregon Health Authority certified cross connection Specialist, either employed with or contracted by the City of Manzanita.
- (27) “SUBMERGED HEADS” means irrigation sprinkling or delivery devices that are located below the surface of the landscaped area in which they are installed.
- (28) “THERMAL EXPANSION” means the pressure created by the expansion of heated water.

**Section 2. Application and Responsibilities**

This ordinance applies throughout the City of Manzanita Water System and to every premises and property served with water by the City. It applies to all premises, regardless of date of connection to the City Water System. Every owner, occupant or person in control of any concerned premises is responsible complying with the provisions of this ordinance.

**Section 3. Cross Connections Regulated**

- (1) No cross connections shall be created, installed, used or maintained within the area(s) served by the City, except in accordance with this ordinance and the City’s Guidance Manual.
- (2) The Specialist shall carry out or cause surveys 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 installed at the service connection.
- (3) The owner, occupant or person in control of any given premises is responsible for all cross connection control within the premises.
- (4) The owner of any premises found on Table 48 “Premises Requiring Isolation” of OAR 333-061-0070 shall install a Reduced Pressure Backflow Assembly at the service connection in accordance with this administrative rule.
- (5) It is the responsibility of the property owner/occupant of the premises to purchase, install, test, repair and maintain all backflow assemblies.
- (6) If there is a change in ownership of any property within the City’s service area, it is the responsibility of the new owner to determine that all assemblies are in compliance with this ordinance.

- (7) If a point-of-use assembly has not been tested or repaired as required, the installation of a reduced pressure principle assembly will be required at the service connection.
- (8) The use of any type of chemical spray attachment connected to the premises plumbing, including garden hose fertilizers and pesticide applicators, is not allowed within the City without proper protection from the potential of backflow occurring.
- (9) The use of any type of radiator flush kits attached to the premises plumbing is not allowed within the City without proper protection from backflow occurring.

#### **Section 4. 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. All assemblies shall be installed at the service connection unless it is determined by the Specialist and approved by the Manager that a specific assembly should be installed at the point of use. An approved assembly shall be required in each of the following circumstances, but the Specialist is in no way limited to the following circumstances:

- (1) In the case of any premises where there is any material dangerous to health which is handled in such a fashion as to permit entry into the City Water System, the System shall be protected by an approved air gap separation or an approved reduced pressure principle backflow prevention assembly.
- (2) When the nature and extent of any activity at premises, or the materials used in connection with any activity at premises, or materials stored at a premises, could contaminate or pollute the City Water System.
- (3) When a premises has one (1) or more cross connections, as that term is defined in Section 1.
- (4) When internal cross connections are present that are not correctable.
- (5) When intricate plumbing arrangements are present making it impractical to ascertain whether cross connections exist.
- (6) When the premises has a repeated history of cross connections being established or re-established.
- (7) When entry to the premises is restricted so that surveys for cross connections cannot be made with sufficient frequency to assure cross connections do not exist.
- (8) When materials are being used such that, if backflow should occur, a health hazard could result.
- (9) When an appropriate cross connection survey report form has not been filed with the Manager.

- (10) Any and all used water return systems.
- (11) 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.
- (12) When installation of an approved backflow prevention assembly is deemed by a Specialist to be necessary to accomplish the purpose of this ordinance.
- (13) Wherever reclaimed water or ditch water is used on the premises.
- (14) When premises with an auxiliary water supply is interconnected to the City Water System.

### **Section 5. New Construction and/or Change in Ownership**

- (1) On all new non-residential construction and/or if there is a change in ownership on premises supplied with non-residential water service, 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 premises.

### **Section 6. Retrofitting**

Retrofitting shall be required at all service connections where an actual or potential cross connection exists, and wherever else the City deems retrofitting is necessary to comply with the OAR and this ordinance.

### **Section 7. Irrigation Systems**

All irrigation systems shall be protected according to plumbing code regulations. In the event any system is equipped with an injector system, a reduced pressure principle assembly will be required.

### **Section 8. Thermal Expansion**

If a closed system has been created by the installation of a backflow prevention assembly or other appurtenances, it is the responsibility of the property owner, the occupant, or person in control of the property to eliminate the possibility of damage from thermal expansion in accordance with the Oregon Plumbing Specialty Code.

## **Section 9. Wholesale Customers**

Any customer, including other water suppliers, who 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 Manager. The Manager reserves the right to require a reduced pressure principle assembly at the interconnect.

## **Section 10. Mobile Units**

Any person responsible for any mobile unit or apparatus, as defined in Section 1 of this ordinance, which uses the water from any premises within the City, shall first obtain a permit from the City and have the unit or apparatus inspected to assure an approved air gap or reduced pressure principle assembly is correctly installed.

## **Section 11. Installation Requirements**

All backflow prevention assembly installations shall follow the requirements as stipulated by the City and OAR Chapter 333, Division 61.

If the premises isolation assembly is allowed to be installed at an alternate location, the City must have access to the assembly. No connections can be made between the meter and the backflow assembly.

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 OHA. All backflow prevention assemblies required under this section shall be of a type and model approved by the OHA.

## **Section 12. Pressure Loss**

Any decrease in water pressure caused by the installation of a backflow assembly shall not be the responsibility of the City.

## **Section 13. Fire Systems**

An approved double check assembly shall be the minimum protection on all new fire sprinkler systems using piping material that is not approved for potable water use, and/or that does not provide for periodic flow-through. A reduced pressure principle assembly must be installed, if any solution other than potable water can be introduced into the sprinkler system. Retrofitting on fire sprinkler systems will be required in each of the following circumstances:

- (1) Where improper maintenance has occurred;
- (2) On all high hazard systems;
- (3) Wherever a Specialist deems necessary; and

- (4) Wherever required by the OAR or state law.

In the event an assembly is installed on a designated lateral, a detector assembly commensurate with the degree of hazard will be required.

#### **Section 14. Temporary Meters and Hydrant Valves**

Backflow protection will be required on all temporary meters and hydrant valves before any use. The type of assembly will be commensurate with the degree of hazard and will be determined on a case-by-case basis by a Specialist.

#### **Section 15. Oregon Plumbing Specialty Code**

As a condition of water service, a customer shall install, maintain, and operate the customer's piping and plumbing systems in accordance with the current Oregon Plumbing Specialty Code, or as amended. If there is a conflict between this ordinance and the Oregon Plumbing Specialty Code, the provision that is stricter will prevail.

#### **Section 16. Right-Of-Way Encroachment**

All backflow assemblies must be installed in accordance with the Right-of-Way Encroachment stipulated by the City's "Right of Way" Encroachment Document.

#### **Section 17. Access to Premises**

Authorized City personnel with proper identification and sufficient notice to the owner or occupant shall have access during reasonable hours to all parts of a premises and within the structure to which water is supplied. However, if any owner, occupant or person in control refuses authorized personnel to access the property or to the interior of a structure during reasonable hours for inspection, a reduced pressure principle assembly will be required to be installed at the service connection to that premises.

#### **Section 18. Annual Testing and Repairs**

All backflow prevention assemblies installed within the area(s) served by the City shall be tested immediately upon installation, and at least annually thereafter by an OHA-certified backflow assembly tester and in accordance with all applicable regulations. All such assemblies found not functioning properly shall be promptly repaired or replaced at the expense of the owner, occupant or person in control of the premises. In the event an assembly is moved or replaced it must be retested within 24 hours.

All repairs on backflow assemblies within the City's service area must be performed according to all State and County regulations. Assemblies protecting health hazard connections must be



repaired or replaced within 24 hours. Assemblies protecting non-health hazard connections must be repaired or replaced within 10 business days.

**Section 19. Maintenance of Assemblies**

Backflow prevention assemblies shall be maintained, tested and repaired in accordance with the requirements set out in this ordinance and Oregon statutes and, regulations. The assembly owner is responsible for protecting the assembly from freezing and vandalism.

**Section 20. Responsibilities of Backflow Prevention Assembly Testers**

- (1) All backflow assembly testers operating within the City’s service area shall be certified in accordance with all applicable regulations of the OHA.
- (2) Persons certified as backflow assembly testers are required to comply withal requirements of the United States Occupational Safety and Health Administration (“OSHA”) and Oregon Occupational Safety and Health Administration (“OR-OSHA”).
- (3) It is the responsibility of backflow assembly testers to submit records of all backflow assembly test repairs to the City within 10 days of completing the test.

**Section 21. Costs of Compliance**

All costs associated with purchase, installation, surveys, testing, replacement, maintenance, parts and repairs of the backflow prevention assembly are the financial responsibility of the property owner, occupant, or other person in control of the premises.

**Section 22. Violation; Penalties**

(1) Violations Established.

A. Allowing a cross connection to occur, or failing to comply with any required provision of this ordinance, constitutes a violation of this ordinance.

B Causing damage to or impairing the City Water System, including, but not limited to, allowing contamination, pollution, any other solution or used water to enter the City Water System, constitutes a violation of this ordinance.

C. This ordinance does not prohibit the city from seeking other alternative remedies set forth in this code or the laws of the state, including but not limited to abatement of nuisances under city ordinance and enforcement authorized under ORS Chapter 448. The city may also file suit to enjoin any violation, or seek any remedy provided under state or federal law.

(2) Penalty for Violation. Any person, property owner, firm, corporation or business entity convicted of violating this ordinance or any regulation, rule or permit of the City issued pursuant to this ordinance is liable to the City for a forfeiture in an amount not less than \$250.00 or more than \$1,000.00 per violation. Each day of violation constitutes a separate offense.

(3) Additional Penalty. As an additional penalty, a person convicted of violating this ordinance is liable to the City for a forfeiture in an amount equal to the expense, loss or damage to the City Water System, as determined by the Manager and approved by the City Council, occurring as a result of the violation.

### **Section 23. Discontinuing Water Service**

Failure on the part of any owner, occupant or person in control of the premises to install a required assembly, have it tested annually and/or to discontinue the use of all cross connections and to physically separate cross connections in accordance with this ordinance is sufficient cause for the discontinuance of public water service to the premises pursuant to OAR 333-061-0070. In the case of an extreme emergency or where an immediate threat to life or public health is found to exist, discontinuance of public water service to the premises shall be immediate.

In lieu of discontinuing water service the City may, install a reduced pressure assembly at the meter at the property owner's expense. Testing, maintenance and repair of the assembly will be the responsibility of the property owner.

### **Section 24. Imminent Threat (Emergency Suspension of Service)**

The Manager or his or her designee may suspend water service without prior notice to any premises when suspension is necessary to stop the imminent threat of an actual or potential cross connection as defined in this ordinance and refined in the City's Guidance Manual.

### **Section 25. Non-Imminent Threat (Non-emergency Suspension of Service)**

With 24 hours notice, the Manager or his or her designee may suspend the water supply to any premises where a violation of this ordinance (including the City's Guidance Manual) has occurred.

### **Section 26. Falsifying Information**

Any person who knowingly makes any false statement, representation, record, report or other document filed or required to be maintained pursuant to this ordinance, or who falsifies, tampers with, or knowingly renders inaccurate any backflow assembly, device or method required under this ordinance, shall be subject to civil and/or criminal penalties on conviction of such crimes or offenses as provided by state law.

**Section 27. Enforcement; Costs**

All costs and fees associated with any disconnect or reconnect of service resulting from enforcement of this ordinance are the sole responsibility of the property owner.

**Section 28. Guidance Manual**

The City Council may by resolution adopt a Guidance Manual providing specific refinements to implement this ordinance.

**Section 29. Savings Clause**

If any provision of this ordinance, held by a court of competent jurisdiction to be invalid the invalid provision shall be severed and if the ordinance as altered effects the purposes for which it was adopted, then the remaining provisions not held invalid or unenforceable shall continue to be valid and enforceable to the extent allowed by law.

**Section 30. Previous Rules Repealed**

Section 14 of Ordinance No. 90-8 (Contamination of Water Supply) is hereby repealed.

**PASSED FIRST READING by the Council this 8<sup>th</sup> day of February, 2012.**

**PASSED SECOND READING by the Council this 7<sup>th</sup> day of March, 2012.**

**APPROVED by the Mayor this 7<sup>th</sup> day of March, 2012.**

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Garry R. Bullard, Mayor

**ATTEST:**

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Jerald P. Taylor, City Manager/Recorder