

41-00922

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Vernonia Ordinances

ORDINANCE NO. 874

FIELD SERVICES  
DRINKING WATER PROGRAM

**An ordinance repealing Ordinance No. 658 and relating to cross connection control and backflow prevention of the Vernonia Ordinances**

WHEREAS, pursuant to Chapter 333, Division 61 of the Oregon Administrative Rules, it is the responsibility of the City of Vernonia to protect its drinking water by instituting and enforcing a cross connection control and backflow prevention program; and

WHEREAS, it necessary for the peace, health, and safety of the City water supply system and its citizens that this ordinance take effect immediately upon its passage and approval by the Mayor and an emergency is therefore declared to exist.

**NOW, THEREFORE, THE CITY OF VERNONIA ORDAINS AS FOLLOWS:**

**Section 1. Definitions.** For the purposes of this ordinance, the following definitions apply unless the context clearly indicates or requires a different meaning. If a word or term used in this ordinance is not contained in the following list, its definition, or other technical terms used, shall have the meanings or definitions listed in the Oregon Administrative Rules (OAR) 333-061-0070 to OAR 333-061-0074, or the 9th Edition of the Manual of Cross Connection Control published by the Foundation for Cross Connection Control and Hydraulic Research, University of Southern California.

**“Approved Backflow Prevention Assembly”** (or any abbreviated version thereof) means an assembly designed to counteract back-pressure and/or prevent back-siphonage as approved by the Oregon Department of Human Services - Health Services.

**“Auxiliary Supply”** means any water source or system other than the city water system.

**“Backflow”** means the flow in the direction opposite to the normal flow or the introduction of any foreign liquids, gases or substances into the city’s water system.

**“Certified Backflow Assembly Tester”** means a person who has successfully completed all requirements as established by the Department of Human Services-Health Services to test backflow assemblies in the state of Oregon.

**“Certified Cross Connection Specialist”** means a person who has successfully completed all requirements as established by the Department of Human Services-Health Services to survey and inspect cross connection devices in the state of Oregon.

**“City”** means the City of Vernonia

**“City Water System”** means the City of Vernonia Water System, which shall include 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 an individual property or up to the meter 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-potable 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 non-health hazard, health hazard or high hazard classification that shall be assigned to all actual or potential cross connections.

**“DOHS”** means Oregon Department of Human Services - Health Services.

**“Double Check Valve Backflow Prevention Assembly”** (or any abbreviated version thereof) 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 covered 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.

**“Mobile Unit”** means a temporary unit connected to the water system through a hydrant, hose bib or other permanent appurtenance that is part of the city water system or a permanent water service to a premises. Examples can include, but not be limited to the following: water trucks, pesticide applicator vehicles, chemical mixing units or tanks, waste or septage hauler’s trucks or units, sewer cleaning equipment, carpet or steam cleaning equipment for 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 water system. Uses that are excluded from this definition are recreational vehicles at a recreational vehicle park or parked in accordance with City regulations pertaining to recreational vehicles, and homeowner devices that are used by the property owner in accordance with this ordinance, or other City regulation pertaining to provision of water service to a premises.

**“Non-Health Hazard”** means 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.

**“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.

**“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.

**“Premises”** means any piece of property to which water service is provided, including but not limited to, all improvements, mobile structures and other structures located upon it.



**“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.

**“Reduced Pressure Principle Backflow Prevention Assembly”** (or any abbreviated version thereof) 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 area(s) served by the city water system.

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

**“Service Connection”** means the point at which the premises water system connects to the city water system at the meter, or at the property line if no meter is present.

**“Submerged Heads”** means irrigation sprinkling or delivery devices that are located below the surface of the landscaped area in which they are installed.

**“Thermal Expansion”** means the pressure created by the expansion of heated water.

**Section 2. Purpose.** The purpose of this ordinance is to protect the City’s water supply and distribution system from contamination or pollution due to any existing or potential cross connections and to comply with the Oregon Administrative Rules 333-061-0070 to 333-061-0074.

**Section 3. Application and responsibilities.** The regulations set forth in this ordinance apply to every owner, occupant or person in control of any premises or property served by the city water system, regardless of date of connection to the city water system.

**Section 4. Cross Connections Regulated.**

1. No cross connection shall be created, installed, used or maintained within the area(s) served by the city water system, except in accordance with this ordinance.
2. The cross connection specialist 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 installed at the service connection by property owner.
3. The owner, occupant or person in control of any given premises shall be responsible for all cross connection control within the premises.
4. All premises found on Table 48 of OAR 333-061-0070 shall install a reduced pressure assembly at the service connection.

**Section 5. Backflow Prevention Assembly Requirements.** A certified cross connection inspector employed by or under contract with the City shall determine the type of backflow assembly to be installed within the city water system. Every assembly shall be installed at the service connection unless it is determined by the inspector and approved by the cross connection specialist, or designee, that it should be installed at the point of use. An approved assembly shall be required in each of the following circumstances, but the inspector may require an assembly under other 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 internal cross connections are present that are not correctable.

3. When intricate plumbing arrangements are present making it impractical to ascertain whether cross connections exists.

4. When the premises has a repeated history of cross connections being established or re-established.

5. 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.

6. When an appropriate cross connection inspection report form has not been filed with the City, or designee.

7. If a point-of-use assembly has not been tested or repaired as required by this ordinance, the installation of a reduced pressure principle assembly will be required at the service connection.

8. When there is a premises with an auxiliary water supply which is or can be connected to the city water service or supply system, a reduced pressure backflow assembly will be required. The City will immediately discontinue water service to any premises or customer where such a condition occurs until such time as the cross connection is eliminated or the required backflow prevention assembly is installed. Customers using the city water supply and any other water supply at the same premises shall install and maintain a separate plumbing system for the city water supply, which shall be separated by an air gap of not less than one (1) foot from any other supply, unless such reduced pressure principle backflow assembly is installed and maintained at the meter for the premises.

9. The cross connection specialist, or designee, shall make the final determination on the type of device needed when there is a disagreement between a cross connection specialist and the owner, occupant or person in control of the premises.

**Section 6. New Construction.** Where possible, a plan check shall be made prior to construction to determine the degree of hazard and the class of backflow prevention device, if any, required at the point of delivery from the public water system to the premises. Where adequate plans and specifications are not available and no realistic evaluation of the proposed water uses can be determined, the applicant, customer, architect, engineer or other authorized person shall be advised that eventually circumstances may require the installation of maximum backflow protection at the water service connection.

**Section 7. Retrofitting.** Retrofitting shall be required at all service connections where an actual or potential cross connection exists, and wherever else the City deems retrofitting necessary to comply with state law and this ordinance.

**Section 8. Landscape Irrigation Systems.** All landscape 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 9. Thermal Expansion.** 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 if a closed system has been created by the installation of a backflow prevention assembly, or other appurtenances.



**Section 10. Mobile Units.** Any mobile unit or apparatus as defined in Section 1 of this ordinance, which uses the water from any premises served by the city water system shall first obtain a permit from the City and be inspected to assure an approved air gap or reduced pressure principle assembly is installed on the unit.

**Section 11. Installation Requirements and Pressure Loss.** All backflow prevention assembly installations shall follow the requirements as stipulated by OAR 333-061-0070. 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 Department of Human Services - Health Services. All backflow prevention assemblies required under this ordinance shall be of a type and model approved by the DOHS. Any decrease in water pressure caused by the installation of a backflow assembly shall not be the responsibility of the City.

**Section 12. Fire Systems.** 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/or does not provide for periodic flow through during each 24 hour period. A reduced pressure principle detector assembly must be installed if any solution other than the potable water can be introduced into the fire sprinkler system.

**Section 13. Plumbing Code.** As a condition of water service, customers shall install, maintain and operate their piping and plumbing systems in accordance with the Oregon Plumbing Specialty Code ("Plumbing Code"). If there is a conflict between this ordinance and the Plumbing Code, the City, or designee, and the City engineer will determine which shall provide the most appropriate protection of the city water system.

**Section 14. Access Allowed.** Authorized personnel of the City, with proper identification and sufficient notice, shall have access during reasonable hours to all parts of a premises and within the structure to which water is supplied as allowed by property owner. A letter will be sent with date and approximate time of inspections. However, if any owner, occupant or person in control refuses authorized personnel access to a premises, 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 premises.

**Section 15. Assembly Permits.** When it is found that a customer needs a backflow prevention assembly, the City will issue a permit for such an assembly. This permit will identify the type, size, model, etc., of the backflow prevention assembly and also assign each an assembly number. This number and permit will enable the City to ensure that testing and other requirements of this ordinance are met. The permit number should be used in all correspondence in reference to each installation to eliminate confusion of devices.

**Section 16. Annual Testing and Repairs.** All backflow assemblies installed on premises served by the city water system shall be tested immediately upon installation, and at least annually thereafter by a certified backflow assembly tester. All 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, repaired or replaced it must be retested immediately. If any such assembly is not promptly repaired or replaced, the City shall deny or discontinue water service to the premises. It is the responsibility of the persons who own the assembly to have the assembly tested by a certified backflow assembly tester.

**Section 17. Responsibilities of Backflow Prevention Assembly Testers.**

1. All backflow assembly testers operating within the city water system service area shall be certified in accordance with all applicable regulations of the DOHS.

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

3. It is the responsibility of the backflow assembly tester to submit records of all backflow assembly test repairs to the City within ten (10) days of completing the test.

**Section 18. Costs of Compliance.** All costs associated with the purchase, installation, inspection, testing, replacement, maintenance, parts and repairs of backflow prevention assemblies, and all costs associated with enforcements of this ordinance, are the financial responsibility of the owner, occupant or other person in control of the premises.

**Section 19. Termination of 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 or to discontinue the use of all cross connections and to physically separate cross connections in accordance with this ordinance shall serve as sufficient cause for the discontinuance of city water service to the premises. In the case of an extreme emergency or where an immediate threat to life or public health is found to exist, discontinuance or termination of city water service to the premises shall cease immediately.

1. **Emergency Suspension.** Except as provided in subsection (2), the cross connection specialist, or designee, may, without prior notice, suspend, discontinue, or terminate water service to any premises when doing so is necessary to protect the city water supply system or to stop the imminent threat of any actual or potential cross connections as defined in this ordinance.

2. **Non-Emergency Suspension.** The cross connection specialist, or designee, may suspend, discontinue, or terminate water service to any premise with sixty (60) days notice, due to noncompliance with cross-connection requirements of this ordinance.

**Section 20. Appeal Process.**

1. Any property owner or service customer who receives a notice of possible suspension, discontinuance, or termination of water service due to noncompliance with cross-connection requirements may appeal the notice to the City Administrator. The appeal must be filed in writing, fully explaining the basis for the appeal within thirty (30) days after the date of the notice and be accompanied by an appeal filing and processing fee as set by Council resolution. Some or all of the appeal fee shall be refunded if the City Administrator revokes the notice.

2. The City Administrator shall fix the time and place of the hearing on a date no more than thirty (30) days after the City Administrator's receipt of the written appeal. The City Administrator shall give the appellant and any other persons requesting the same, at least five day's notice of the time and place of such hearing.

3. After reviewing the appeal, at the time and place set for the hearing, the City Administrator shall give the appellant and any other interested party, a reasonable opportunity to be heard. In all such cases, the burden of proof shall be upon the appellant. During the hearing, new evidence may be presented to and considered by the City Administrator. The City Administrator may also receive such evidence from City Staff as the City Administrator deems appropriate. The hearing shall be informal.



and follow such procedures as the City Administrator deems appropriate to resolve the questions presented by the appeal.

4. Within fifteen (15) days of the date of the hearing, the City Administrator shall issue a written decision which contains findings of fact and a determination of the issues presented. The City Administrator shall uphold, or modify and uphold the notice as issued, or revoke the notice and render a new decision on the matter consistent with the requirements of this ordinance. If the notice is upheld, the City shall not terminate the appellant's water service any sooner than fifteen (15) calendar days following the City Administrator's decision. The City Administrator's decision shall be final.

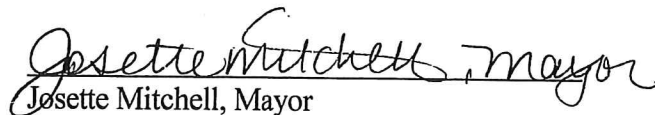
**Section 21.** [Repeal] Ordinance No. 658 and all other ordinances and parts thereof in conflict herewith are hereby repealed.

**Section 22.** [Effective Date.] Under the provisions of the City of Vernonia charter of 1998, Chapter VIII, Section 32, the Council find it necessary for the peace, health, and safety of the City and its citizens that this ordinance take effect immediately upon its passage and approval by the Mayor and an emergency is therefore declared to exist.

Read for the first time: April 4, 2011.

Read for the second time and passed: April 4, 2011, to become effective immediately.

Signed April 6<sup>th</sup>, 2011.

  
Josette Mitchell, Mayor

ATTEST:

  
Joann Glass, City Recorder

### **333-061-0070 Cross Connection Control Requirements**

- (1) Water suppliers shall undertake cross connection control programs to protect the public water systems from pollution and contamination.
- (2) The 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 water supplier's control, and end at the point of delivery to the water user's premise.
- (3) Water suppliers shall develop and implement cross connection control programs that meet the minimum requirements set forth in these rules.
- (4) Water suppliers shall develop a procedure to coordinate cross connection control requirements with the appropriate local administrative authority having jurisdiction.
- (5) The water supplier shall ensure that inspections of approved air gaps, approved devices, and inspections and tests of approved backflow prevention assemblies protecting the public water system are conducted:
  - (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 a backflow incident; or
  - (e) After an approved air gap is re-plumbed.
- (6) Approved air gaps, approved devices, or approved backflow prevention assemblies, found not to be functioning properly shall be repaired, replaced or re-plumbed by the water user or premise owner, as defined in the water supplier's local ordinance or enabling authority, or the water supplier may take action in accordance with subsection (9)(a) of these rules.
- (7) A water user or premise owner who obtains water from a water supplier must notify the water supplier if they add any chemical or substance to the water.
- (8) Premise isolation requirements:
  - (a) For service connections to premises listed or defined in Table 48 (Premises Requiring Isolation), the water supplier shall ensure an approved backflow prevention assembly or an approved air gap is installed;
    - (A) Premises with cross connections not listed or defined in Table 48 (Premises Requiring Isolation), shall be individually evaluated. The water supplier shall require the installation of an approved backflow prevention assembly or an approved air gap commensurate with the degree of hazard on the premise, as defined in Table 49 (Backflow Prevention Methods);
    - (B) In lieu of premise isolation, the water supplier may accept an in-premise approved backflow prevention assembly as protection for the public water system when the approved backflow prevention



assembly is installed, maintained and tested in accordance with the Oregon Plumbing Specialty Code and these rules.

- (b) Where premise isolation is used to protect against a cross connection, the following requirements apply;
  - (A) The water supplier shall:
    - (i) Ensure the approved backflow prevention assembly is installed at a location adjacent to the service connection or point of delivery;
    - (ii) Ensure any alternate location used must be with the approval of the water supplier and must meet the water supplier's cross connection control requirements; and
    - (iii) Notify the premise owner and water user, in writing, of thermal expansion concerns.
  - (B) The premise owner shall:
    - (i) 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; and
    - (ii) Assume responsibility for testing, maintenance, and repair of the installed approved backflow prevention assembly to protect against the hazard.
- (c) 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 may be installed at the point of delivery; and
- (d) Where the water supplier chooses to use premise isolation by the installation of an approved backflow prevention assembly on a one- or two-family dwelling under the jurisdiction of the Oregon Plumbing Specialty Code and there is no actual or potential cross connection, the water supplier shall:
  - (A) Install the approved backflow prevention assembly at the point of delivery;
  - (B) Notify the premise owner and water user in writing of thermal expansion concerns; and
  - (C) Take responsibility for testing, maintenance and repair of the installed approved backflow prevention assembly.
- (9) In community water systems, water suppliers shall implement a cross connection control program directly, or by written agreement with another agency experienced in cross connection control. The local cross connection program shall consist of the following elements:
  - (a) Local ordinance or enabling authority that authorizes discontinuing water service to premises for:

- (A) Failure to remove or eliminate an existing unprotected or potential cross connection;
  - (B) Failure to install a required approved backflow prevention assembly;
  - (C) Failure to maintain an approved backflow prevention assembly; or
  - (D) Failure to conduct the required testing of an approved backflow prevention assembly.
- (b) A written program plan for community water systems with 300 or more service connections shall include the following:
- (A) A list of premises where health hazard cross connections exist, including, but not limited to, those listed in Table 48 (Premises Requiring Isolation);
  - (B) A current list of certified cross connection control staff members;
  - (C) Procedures for evaluating the degree of hazard posed by a water user's premise;
  - (D) A procedure for notifying the water user if a non-health hazard or health hazard is identified, and for informing the water user of any corrective action required;
  - (E) The type of protection required to prevent backflow into the public water supply, commensurate with the degree of hazard that exists on the water user's premise, as defined in Table 49 (Backflow Prevention Methods);
  - (F) A description of what corrective actions will be taken if a water user fails to comply with the water supplier's cross connection control requirements;
  - (G) Current records of approved backflow prevention assemblies installed, inspections completed, backflow prevention assembly test results on backflow prevention assemblies and verification of current Backflow Assembly Tester certification; and
  - (H) A public education program about cross connection control.
- (c) The water supplier shall prepare and submit a cross connection control Annual Summary Report to the Department, on forms provided by the Department, before the last working day of March each year.
- (d) In community water systems having 300 or more service connections, water suppliers shall ensure at least one person is certified as a Cross Connection Control Specialist, unless specifically exempted from this requirement by the Department.
- (10) Fees: Community water systems shall submit to the Department an annual cross connection program implementation fee, based on the number of service connections, as follows:

Service Connections:	Fee:
15-99	\$30.
100-999	\$75.



1,000-9,999	\$200.
10,000 or more	\$350.

- (a) Billing invoices will be mailed to water systems in the first week of November each year and are due by January first of the following year;
  - (b) Fees are payable to Department of Human Services by check or money order;
  - (c) A late fee of 50 percent of the original amount will be added to the total amount due and will be assessed after January 31 of each year.
- (11) In transient or non-transient non-community water systems, the water supplier that owns and/or operates the system shall:
- (a) Ensure no cross connections exist, or are isolated from the potable water system with an approved backflow prevention assembly, as required in section (12) of this rule;
  - (b) Ensure approved backflow prevention assemblies are installed at, or near, the cross connection; and
  - (c) Conduct a cross connection survey and inspection to ensure compliance with these rules. All building permits and related inspections are to be made by the Department of Consumer and Business Services, Building Codes Division, as required by ORS 447.020.
- (12) Approved backflow prevention assemblies required under these rules shall be assemblies approved by the University of Southern California, Foundation for Cross Connection Control and Hydraulic Research, or other equivalent testing laboratories approved by the Department.
- (13) 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.
- (14) Tests performed by Department-certified Backflow Assembly Testers shall be in conformance with procedures established by the University of Southern California, Foundation for Cross Connection Control and Hydraulic Research, Manual of Cross Connection Control, 9th Edition, December 1993, or other equivalent testing procedures approved by the Department.
- (15) Backflow prevention assemblies shall be tested by Department-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). The Backflow Assembly Tester shall provide a copy of each completed test report to the water user or premise owner, and the water supplier:
- (a) Within 10 working days; and

- (b) The test reports will be in a manner and form acceptable to the water supplier.
- (16) All approved backflow prevention assemblies subject to these rules shall be installed in accordance with OAR 333-061-0071 and the Oregon Plumbing Specialty Code.
- (17) The Department shall establish an advisory board for cross connection control issues consisting of not more than nine members, and including representation from the following:
  - (a) Oregon-licensed Plumbers;
  - (b) Department-certified Backflow Assembly Testers;
  - (c) Department-certified Cross Connection Specialists;
  - (d) Water Suppliers;
  - (e) The general public;
  - (f) Department-certified Instructors of Backflow Assembly Testers or Cross Connection Specialists;
  - (g) Backflow assembly manufacturers or authorized representatives;
  - (h) Engineers experienced in water systems, cross connection control and/or backflow prevention; and
  - (i) Oregon-certified Plumbing Inspectors.

TABLE 48  
 PREMISES REQUIRING ISOLATION\* BY  
 AN APPROVED AIR GAP  
 OR  
 REDUCED PRESSURE PRINCIPLE TYPE OF ASSEMBLY  
 HEALTH HAZARD

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 the water supplier's water with chemical additions (e.g., parks, playgrounds, golf courses, cemeteries, housing estates)
11.	Laboratories
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 the addition of chemical or other additives

\* Refer to OAR 333-061-0070(8) premise Isolation Requirements.

\*\* A Double Check Valve Backflow Prevention Assembly could be used if the water supplier determines there is only a non-health hazard at a beverage bottling plant.

TABLE 49 BACKFLOW PREVENTION METHODS USED FOR PREMISE ISOLATION	
DEGREE OF IDENTIFIED HAZARD	
Non-Health Hazard (Pollutant)	Health Hazard (Contaminant)
BACKSIPHONAGE OR BACKPRESSURE	BACKSIPHONAGE OR BACKPRESSURE
Air Gap (AG)	Air Gap (AG)
Reduced Pressure Principle Backflow Prevention Assembly (RP)	Reduced Pressure Principle Backflow Prevention Assembly (RP)
Reduced Pressure Principle-Detector Backflow Prevention Assembly (RPDA)	Reduced Pressure Principle-Detector Backflow Prevention Assembly (RPDA)
Double Check Valve Backflow Prevention Assembly (DC)	
Double Check-Detector Backflow Prevention Assembly (DCDA)	

Stat. Auth.: ORS 448.131

Stats. Implemented: ORS 431.110, 431.150, 448.131, 448.150, 448.268, 448.271, 448.273, 448.278, 448.279, 448.295 & 448.300