## ASHLAND WATER DEPT 00047

## SECTION 14.05.060 Backflow Prevention.

- A. Purpose. The purpose of cross connection and backflow control is to:
  - 1) Protect the public potable water supply of Ashland from contaminants and pollutants by isolating the customer's internal distribution system(s) or private water system(s) from the backflow of contaminants and pollution into the public water systems.
  - Promote the elimination or control of existing cross connections, actual or potential, between the customer's potable water system and non-potable water systm, plumbing fixtures and industrial piping systems, and
  - 3) Provide for the maintenance of a continuing program of cross connection control which will systematically and effectively prevent the contamination or pollution of all potable water systems.
- B. Cross Connections Regulated. All current or future cross connection assemblies shall be installed, used, or maintained in accordance with this Chapter.
- C. Backflow Prevention Assembly Requirements.
  - 1) Customers adding chemicals or other substances to City water shall notify the City immediately.
  - 2) Approved backflow prevention assemblies shall be installed at the location service connection, or as determined by the City certified cross connection control inspector. Customer shall be liable for all associated costs.
  - 3) Customer's water supply line and plumbing shall be open for City inspection. City authorized representative shall determine if structural or sanitary hazards exist due to cross connection devices. Upon the City's awareness of a hazard, the City shall discontinue service to premises. Water service shall resume following correction, inspection, and City approval of the customer's corrections.
  - 4) Backflow protection shall be installed when a cross connection exists. The degree of the hazard shall determine the correction needed.
    - (a) Premises with an auxiliary water supply connected, or intended to be connected, to the City water system shall be protected by an approved air gap separation or an approved reduced pressure principle backflow prevention assembly. The City discourages such cross connections because of the high potential for backflow into the City water system. The City reserves the right to refuse such connections.
    - (b) Premises that contain materials dangerous to health that could enter into the City's water system shall install a an approved air gap separation or an approved reduced pressure principle backflow prevention assembly.
    - (c) Premises using or storing objectionable substance not hazardous to health shall protect the City water system by installing an approved backflow prevention assembly.
    - (d) Irrigation systems may be protected by a DCVA, PVB, or RP assembly.
    - (e) When water, gases, chemicals, or foreign substances that may contaminate the public water system as a result of backflow or backsiphonage are placed in the system, a reduced pressure principle backflow prevention assembly or an air gap separation shall be installed.
  - 5) All City equipment using City water within the City water system shall protect the water with an approved assembly. Examples are street sweepers, fire trucks, and tanker or flusher trucks.
  - 6) Installation of backflow prevention assemblies shall comply with the installation guidelines defined in these rules.
  - 7) Customer shall keep backflow prevention assemblies in good working condition at all times. Customer shall have annual inspection and leakage tests by an individual certified by the State. Additional inspections shall be required when successive inspections indicate failure. Customer shall be financially liable for inspections and tests performed by City or private certified individuals. City shall be responsible for tests being completed in a timely manner. Defective backflow prevention assemblies shall be repaired, overhauled, or replaced at customer expense. All backflow prevention assembly testing records shall be submitted to the City Records of such tests, repairs, and overhauls shall be maintained by the City.

- 8) Existing backflow prevention assemblies, which do not meet requirements of these rules, but were approved devices at the time of installation, and have been properly maintained, shall be excluded from the requirements of these rules except for the requirement in subsection 14.05.060(C)(7). The City water system must be protected in a method as determined by City. Whenever an existing assembly is relocated, the assembly shall meet requirements of these regulations.
- 9) If internal cross connections are not correctable, or an intricate plumbing arrangement makes it impractical to determine if a cross connection exists, City shall determine what backflow prevention assemblies are required.
- 10) All installation shall be in accordance with the OPSC.
- 11) All new construction plans shall be submitted to the Director or designee for approval.
- 12) If a backflow prevention assembly is required to accomplish the purpose of these regulations, installation shall be made by the homeowner, licensed landscape contractor, or licensed plumbing contractor.
- 13) If an appropriate cross connection application has not be filed with and approved by the City, water service shall be discontinued.
- 14) Pursuant to the ODHS and OAR Chapter 333, Division 61, an approved Double Check Valve Backflow Prevention Assembly (DC) shall be the minimum backflow protection for fire line services.
  - (a) A Double Check Detector Backflow Prevention Assembly (DCDA) is required by City.
  - (b) Systems that incorporate an antifreeze loop containing any type of chemical shall have an approved Reduced Pressure Principle Backflow Prevention Assembly installed on the antifreeze loop.
- D. Installation Requirements. To ensure proper operation and accessibility of all backflow prevention assemblies, the following is required:
  - 1) No part of the backflow prevention assembly shall be submerged or installed in a location subject to flooding. If a backflow prevention assembly is installed in a vault or basement, adequate drainage shall be provided.
    - (a) DCDA's may be installed below grade in a vault, provided that plugs are installed in the test cocks.
  - 2) Assemblies must be installed at the connecting point of the City water service connection. Alternate locations must be approved by the Director or designee prior to installation.
  - 3) Assemblies must be protected from freezing and/or other severe weather conditions.
  - 4) Backflow prevention assemblies shall be approved by the ODHS and the City.
  - 5) Assemblies specifically approved by the Oregon Department of Human Services for vertical installation shall be installed plumb.
  - Assemblies shall be accessible for maintenance and testing. Assemblies 2" and smaller shall have a minimum 6" clearance on all sides of the assembly. All devices larger than 2" shall have a minimum clearance of 12" on the back side, 24" on the test cock side, 12" below the assembly, and 36" above the assembly.
  - 7) Any assembly installed inside premises shall be readily accessible during the City's regular working hours.
  - 8) If an assembly is installed inside of premises, 5' above the floor and 2.5" or larger, the assembly must be equipped with permanently installed scaffolding approved by the City. Installation must also meet the U.S. Occupational Safety and Health Administration requirements and the State of Oregon Occupational Safety and Health Codes.
  - 9) Reduced Pressure Principle Assemblies may be installed in a vault only if the relief valve discharge can be drained to daylight through a "boresight" type drain. The drain shall be of adequate capacity to carry the full rated flow of the assembly and shall be screened on both ends.

- 10) An approved air gap shall be located at the relief valve orifice. This air gap shall be at least twice the inside diameter of the incoming supply line as measured vertically above the top rim of the drain and in no case less than 1".
- 11) When a backflow assembly is deemed necessary by the City, the model of assembly and installation plans shall be submitted to the City Water Department for approval prior to installation.
- 12) Upon completion of installation, the City shall be notified and all assemblies must be inspected and tested by certified personnel. All backflow assemblies must be recorded with the City. Registration records shall provide the installation date, make, model, serial number of the backflow assembly, and the initial test report.

Any variances from these installation requirements shall be requested in writing by the customer and approved by the Director or designee in writing prior to assembly installation.

- E. Access to Premises. Authorized employees of the City, with proper identification, shall have access during reasonable hours to all parts of the premise. If a customer refuses to give the City access to the premise for the purpose of inspection after receiving reasonable notice of the inspection at a reasonable time, then either a reduced pressure principle assembly shall be installed at the service connection to customer's premise at customer's expense by the City, or the City may discontinue water service to the premises.
- F. Annual Testing and Repairs. All assemblies installed by a customer as required by the City shall be tested immediately upon installation and then annually by a state certified tester. All such assemblies found not functioning properly shall be promptly repaired or replaced. The City may deny or discontinue water service to the premise for noncompliance of testing and/or repairs. All testing and repairs are the financial responsibility of the customer.
- G. Variances. Any variances from these requirements shall be requested in writing by the customer and approved by the Director or designee prior to assembly installation.
- H. Cost of Compliance. All costs associated with purchase, installation, inspections, testing, replacement, maintenance, parts, and repairs of the backflow assembly are the responsibility of the customer.
- I. Termination of Service. Failure on the part of the customer to discontinue the use of all cross connections and to physically separate cross connections is sufficient cause for immediate discontinuance of water service to the premises. OAR Chapter 333, Division 61. The Director or designee shall make said determination.

(Ord 2964, added, 10/07/2008)

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