



41-00364

## ORDINANCE 2020-435

### AN ORDINANCE OF THE CITY OF HALSEY AMENDING THE HALSEY MUNICIPAL CODE CHAPTER 4.15 CROSS CONNECTION CONTROL

**WHEREAS** the purpose of cross connection control is to assure safe drinking water within the City of Halsey water utility system; and

**WHEREAS** the City Council deems it needful to update the Halsey Municipal Code to comply with current codes and to best regulate cross connections within the City of Halsey;

#### **NOW THEREFORE, THE CITY OF HALSEY ORDAINS AS FOLLOWS:**

##### **4.15.010 Purpose**

The purpose of this chapter is to provide a basis for implementing the Oregon Drinking Water Quality Act of 1981, enacted to assure safe drinking water within the water systems which serve the public.

##### **4.15.020 Definitions.**

As used in this document, unless the context indicates otherwise, the following definitions shall apply:

*Air gap separation*: the physical vertical separation between the free-flowing discharge end of a potable water supply pipeline and the open or non-pressure receiving vessel.

*Approved backflow prevention assembly*: means an assembly which has been approved by the City of Halsey and the Oregon Health Authority for preventing backflow.

*Atmospheric vacuum breaker*: also known as an *anti-siphon valve*, is a device consisting of a single check valve in the supply line that opens to the atmosphere when the pressure in the line drops atmospheric.

*Auxiliary water supply*: any supply of water used to augment the supply obtained through the city water system which serves the premises in question.

*Backflow*: the flow of water or other fluids in the direction opposite to the normal flow.

*Backflow prevention assembly*: an assembly which prevents backflow into the purveyor's potable water supply or customer's piping system.

*Backflow prevention assembly tester*: an individual who is certified by the State of Oregon Health Authority, to test backflow prevention assemblies.

*Check valve*: a valve that permits flow in only one direction.

*Contaminant:* any physical, chemical, biological, or radiological substance or matter in water which may render the water non-potable, according to Oregon law.

*Cross-connection:* any link or channel between the piping which carries potable drinking water and the piping or fixtures which carry non-potable water or other substances.

*Cross-connection inspector:* an individual certified by the State of Oregon Health Division, Human Resources Department, to inspect for cross-connections.

*Customer system:* all plumbing, piping, and appurtenances on the customer's side of the point of metering or connection.

*Double check valve assembly:* an assembly of two independently acting check valves with a shut-off valve on each side of the two check valves. The assembly also has test ports for checking the water tightness of each check valve. The assembly must be an approved backflow prevention assembly.

*Double detector check valve assembly:* a double check valve assembly with the addition of a water meter and an additional double check valve assembly bypassing the main line assembly for the purpose of measuring low or proportional flow. The entire assembly must be an approved backflow prevention assembly.

*Facility survey:* an on-site review of the water source, facilities, equipment, operation, and maintenance for the purpose of evaluating the hazards to the drinking water supply.

*Pressure vacuum breaker assembly:* a mechanical assembly consisting of one spring-loaded check valve in the supply line and a spring-loaded air inlet on the downstream side of the check valve which will open to atmosphere when the pressure in the assembly drops below one pound per square inch. The complete assembly consists of two shut-off valves and two test ports for checking water tightness of the check valve. The assembly must be an approved backflow prevention assembly.

*Reduced pressure principle backflow prevention assembly (RP):* an assembly for preventing backflow incorporating two check valves, a differential relief valve located between the two check valves, two shut-off valves, one on each end of the assembly, test ports for checking water tightness of the check valves and the operation of the relief valve. The assembly must be an approved backflow prevention assembly.

*Reduced pressure principle detector assembly (RPD):* means same as an RP assembly with the addition of a water meter and an additional RP assembly bypassing the main line assembly for the purpose of measuring low or proportional flow. The complete assembly must be an approved backflow prevention assembly.

*Safe drinking water or potable water:* water which has sufficiently low concentrations of microbiological, inorganic chemical, organic chemical, radiological or physical substances so that individuals drinking such water at normal levels of consumption will not be exposed to disease organisms or other substances which may produce harmful physical effects.

*Secondary contaminant:* a contaminant which at levels generally found in drinking water do not present an unreasonable risk to health, but do adversely affect taste, odor, or color.

*Service connection:* the point of delivery of water at or near the property line, generally at the water meter.

#### **4.15.030 Customer system open for inspection.**

The customer system shall be open for facility survey at all reasonable times to the City of Halsey to determine whether cross-connections or other structural or sanitary hazards including violation of these regulations exist. When such a condition becomes known, the City of Halsey cross-connection inspector shall cause the service to the premises to be immediately discontinued or denied by a physical break in the service until the customer has corrected the condition in conformance with these regulations.

#### **4.15.040 Customer's responsibility.**

- (1) No customer shall establish or maintain a cross-connection to the public water supply.
- (2) If a cross-connection is found in the customer's water system, the customer will be informed of this condition in writing and given 60 days to correct the problem or install an approved backflow prevention assembly.
- (3) The customer shall provide sufficient information for the utility to evaluate the degree of any potential, suspected, or actual cross-connection.
- (4) The customer shall install, own, maintain, and repair any required backflow prevention assemblies.

#### **4.15.050 Backflow prevention requirements.**

- (1) All backflow prevention assemblies required herein shall be of a type and model approved by the City of Halsey and the Oregon Health Authority (OHA), and shall be installed in accordance with OHA and City of Halsey requirements.
- (2) Installation. Backflow prevention assemblies shall be installed by a state-licensed installer, at the customer's expense, on each service line of the customer's system at or near the property line, or, if approved, immediately inside the building being served. In all cases, they must be installed before the first branch line leading off the service line wherever any of the following conditions exist:
  - (a) Where there is an auxiliary water supply which is or can be connected to the potable water piping.
  - (b) Where there is piping for conveying fluids (liquids or gases) other than potable water and where that piping is installed and operated in a manner which could cause a cross-connection.
  - (c) Where there are intricate plumbing arrangements which make it impracticable to ascertain whether or not cross-connections exist.

(d) Where there has been a history of repeating the same or similar cross-connections even though these have been removed or disconnected.

(e) Where there is a building over three stories in height or any plumbing system that is greater than or equal to 30 feet above the main from which it is served.

(f) Where there is backflow or back siphonage potential.

(g) Where the system is not open for inspection.

(h) Where the system is subject to being submerged.

(3) Locations. Examples of locations requiring backflow prevention assembly are listed below, but are not limited to:

(a) Irrigation Systems. In the case of irrigation systems, an approved atmospheric vacuum breaker or an approved pressure vacuum breaker may be authorized, provided no back pressure is possible and no chemical or material injection or mixing exists.

(b) Private Fire Protection Services. In the case of all private fire protection services, an approved backflow prevention assembly with a monitoring meter or detection system to detect unauthorized use or leakage within the system and a remote meter shall be required. The type of backflow prevention device shall be as follows:

(i) An approved double detector check valve assembly shall be required for low and medium hazards. Low and medium hazards are systems with or without pumper connection but no auxiliary water supplies available, chemical or additives, detectable cross-connection, and serving a building three stories or less.

(ii) An approved reduced pressure principle backflow prevention assembly and a single detector check shall be required for high hazards. High hazards are systems with auxiliary water supplies, chemical additives, detectable cross-connections, or a building exceeding three stories.

(c) New Construction. The City of Halsey requires an approved backflow prevention assembly on every water service connection.

#### **4.15.060 The type of backflow protection required.**

The type of protective assembly required shall be commensurate with the degree of hazard which exists as follows:

(a) Air Gap or Reduced Pressure Assembly. An approved air gap of at least twice the inside diameter, but not less than one inch, of the incoming supply line measured vertically above the top rim of the vessel or an approved reduced pressure principle backflow prevention (RP) assembly shall be installed where the substance which could backflow is a contaminant or hazardous to health. Examples of premises where these conditions may exist include, but are not limited to, sewage treatment plants, pump stations, sewage piping, chemical manufacturing plants, hospitals, mortuaries, plating plants, car washes, medical clinics, and auxiliary water systems.

(b) Double Check Valve or Double Detector Check Valve Assembly. An approved double check valve (DC) assembly or double detector check valve (DDC) assembly shall be installed where the substance which could backflow is a secondary contaminant or objectionable but does not pose an unreasonable risk to health.

(c) Pressure Vacuum Breaker or Atmospheric Vacuum Breaker. An approved pressure vacuum breaker or an atmospheric vacuum breaker shall be installed where the substance which could backflow is objectionable but does not pose an unreasonable risk to health and where there is no possibility of back pressure in the downstream piping. A shutoff or control valve may be installed on the line downstream of a pressure vacuum breaker but shall not be installed downstream of an atmospheric vacuum breaker.

#### **4.15.070 Approval of assemblies.**

All backflow prevention assemblies required under this chapter shall be of a type and model approved by the Oregon Health Authority and the City of Halsey.

#### **4.15.080 Owner's duty for inspection.**

Inspections and Leakage Tests. It shall be the duty of the assembly owner at any premises where backflow protective assemblies are installed to have thorough inspections and leakage tests made immediately upon installation of assemblies, when assemblies are moved, and at least once a year, or more often in those instances where successive inspections indicate repeated failure. The frequency of these tests or the replacement of the assembly because of failure shall conform to State of Oregon regulations. The inspections, tests, repairs, and/or replacement of assemblies shall be at the expense of the assembly owner and shall be performed by an assembly tester who is licensed by the Oregon Health Authority. Repair or replacement shall be performed within 30 days from receipt of notice to test. The assembly owner is required to contact a tester who can perform the work in the necessary period.

#### **4.15.090 City's duty for inspection.**

The City of Halsey will notify the owner each year when the assembly is due for testing. The assembly owner shall notify the utility a minimum of 48 hours in advance when the test is to be performed, so that the utility may witness the test if so desired. Records of such tests, repairs, and overhaul shall be kept by the owner and a copy submitted to the utility within 30 days of completed tests.

#### **4.15.10 City's option for testing**

In lieu of notification, the City may choose to conduct testing of all devices annually with a single contractor. If the City exercises this option, the customer or property owner may be billed an annual fee in accordance with the current fee resolution. Copies of the test will be provided to the property owner upon request. If a device fails a test, the City will notify the property owner within 30 days of receipt of the test results.

#### **4.15.110 Previously installed assemblies.**

Backflow prevention assemblies which were approved at the time they were installed but are not on the current list of approved assemblies shall be permitted to remain in service provided they

are properly maintained, are commensurate with the degree of hazard, are tested at least annually, and perform satisfactorily. When assemblies of this type are moved, or require more than minimum maintenance, they shall be replaced by assemblies which are approved by the City of Halsey and the Oregon Health Authority.

**4.15.120 Enforcement.**

The cross-connection inspector shall cause the water service to the premises to be immediately discontinued or denied by a physical break in the service until the customer has corrected the condition in conformance with this chapter in any of the following situations:

- (1) When it becomes known that a condition such as a cross-connection, plumbing, structural or sanitary hazard, or other violation of this chapter is present.
- (2) In those cases of extreme emergency, and where an immediate threat to life or public health is found to exist.
- (3) When, in other cases and after a reasonable length of time has been allowed as determined by the City of Halsey cross-connection inspector, the tests, repair, and/or replacement of assemblies or any other requirement within this chapter is not performed in accordance with this chapter.

PASSED AND ADOPTED by the City Council this \_\_\_\_ day of \_\_\_\_\_.

READ before the Council this 10<sup>th</sup> day of November 2020

READ before Council this 8<sup>th</sup> day of December 2020

Adopted this \_\_\_\_ day of \_\_\_\_\_ 2020

Effective this \_\_\_\_ day of \_\_\_\_\_ 2020

APPROVED:

\_\_\_\_\_  
Jerry Lachenbruch, Mayor

ATTEST:

\_\_\_\_\_  
Hilary Norton, City Administrator/Recorder