

CITY OF HAINES ORDINANCE
ORDINANCE # 0901-1 (Cross Connection)

Received
Aug 18 2025
Cross Connection

**AN ORDINANCE ESTABLISHING STANDARDS AND REQUIREMENTS FOR CONTROLLING
CROSS CONNECTION TO THE MUNICIPAL WATER SUPPLY SYSTEM.**

BE IT ORDAINED BY THE CITY OF HAINES, OREGON:

Section 1. Definitions and Explanations: as used in the Ordinance:

1. "Approved backflow prevention device," means a device to counteract backpressures or prevent back siphonage. This device must appear on the list of approved devices issued by the Oregon State Health Division.
2. "Auxiliary supply" means any water source or system other than the public water system that may be available in the building or on the premises.
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's water.
4. "Contamination" means the entry into or presence in a public water supply system of any substance, which may be deleterious to the public's health and/or to the quality of the water.
5. "Cross Connection" means any physical arrangement where a public water system is connected, directly or indirectly, with any other non-drinkable water system or auxiliary system, and/or any other device which contains, or may contain, contaminated water, sewage, or the 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 change over devices, or other temporary or permanent devices through which, or because of which backflow may occur are considered to be cross connections.
6. "Degree of Hazard" shall be derived from the evaluation of public health, system plumbing or pollution hazard.
7. "City" or "The City" means the City of Haines.
8. "Health Hazard" means an actual or potential threat of contamination of a physical or toxic nature to the public potable water system or the consumer's potable water system that would be a danger to health.
9. "Plumber Hazard" means an internal or plumbing-type cross-connection in a consumer's potable water system that may be either a pollution or a contamination-type hazard. Plumbing-type cross connections can be located in many types of structures including homes, apartment houses, hotels and commercial or industrial establishments.

10. "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 degree of 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.
11. "System Hazard" means an actual or potential threat of danger to the physical properties of the public or consumer's potable water system and/or of a pollution or contamination, which would have a detrimental effect on the quality of the potable water in the system.
12. "Potable Water Supply" means any system of water supply intended for or used for human consumption or other domestic use.
13. "Premises" means any piece of land including all improvements, mobile home(s) and structures located on it.
14. "Reduced Pressure Principle Device (RP Device) shall mean 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 device shall include properly located test cocks and tightly closing resilient wedge shut-off valves or fully ported ball valves at the end of the assembly. A check valve is approved if it appears on the list of approved devices issued by the Oregon State Health Division.
15. "Persons" means any individual, corporation, association, firm, partnership, municipal, state or federal agency, or joint stock company and includes any receiver, special master, trustee, assignee, or other similar representative thereof.
16. "Unduly restricted entry" is a physical barrier, which prevents access to an area to allow inspection by a certified cross connection specialist or is a refusal by the property owner for entry to premises.

Section 2 Purpose

The purpose of this ordinance is to protect the water supply of the City of Haines from contamination or pollution due to any existing or potential cross connection.

Section 3 Cross Connections Prohibited

The installation or maintenance of a cross connection which will endanger the water quality of the potable water supply system of the City shall be unlawful and shall be prohibited. Any such cross connection now existing or hereafter installed is hereby declared to be a public hazard and the same shall be abated.

Section 4 Backflow Prevention Device Requirements

Approved backflow prevention devices shall be installed at the expense of the property owner at the service connection or within the premises; whenever:

1. The nature and extent of any activity of the premises, or the materials used in connection with any activity of the premises, or materials stored on the premises, could contaminate or pollute the public drinking water supply.

2. Premises having any one or more cross connections as that term is defined in section 1, paragraph 5 is identified or is present.
3. Internal cross connection that are not correctable, or intricate plumbing arrangement which make it impractical to ascertain whether or not cross connections exist, are present.
4. There is a repeated history of cross connection being established or re-established.
5. There is unduly restricted entry so that inspections for cross connection cannot be made with sufficient notice to assure that cross connections do not exist.
6. Materials of a toxic or hazardous nature are being used such that, if backflow should occur, a health hazard could result.
7. Any mobile apparatus (i.e., tank truck) which uses the City's water or water from any premises facility within the City of Haines' system; excluding fire apparatus not charged by the City for water and the Haines Fire Protection District.
8. Installation of an approved backflow prevention device is deemed to be necessary to accomplish the purpose of these regulations in the judgment of a certified cross connection specialist contracted by or employed by the City of Haines. The type of backflow prevention device required under this provision, shall be commensurate with the degree of hazard which exists:
 - a. 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 backflow device (RPBD) assembly shall be installed where the substance which could backflow is hazardous to health, such as but not limited to: sewage treatment plants, sewage pumping station, chemical manufacturing plants, plating plants, hospitals, mortuaries, car washes, medical clinics,
 - b. An approved double check valve assembly (DCVA) shall be installed where the substance, which could backflow, is objectionable but does not pose an unreasonable risk to health. An approved DCVA shall be the minimum protection for fire sprinkler systems using piping materials that is not approved for potable water use and/or which does not provide periodic flow through each 24 hour period.
9. An appropriate cross connection report form has not been filed with the City
10. A fire sprinkler system is connected to the City's water system.
11. A boiler or hydronic heating system is connected to the City's water system.

Section 5 Installation Requirements

To ensure proper operation and accessibility of all backflow prevention devices, the following requirements shall apply to the installation of these devices:

1. No part of the backflow prevention device shall be submerged in water or installed in a location subject to flooding. If installed in a vault or basement, adequate drainage shall be provided.
2. Devices must be installed at the point of delivery of the water supply, before any branch in the line. Prior to installation, alternate locations must be approved by a certified cross connection specialist and filed in writing with the City.
3. The device must be protected from freezing and other severe weather conditions.
4. All backflow device prevention assemblies shall be of a type and model approved by the State of Oregon Health Division.
5. Only devices specifically approved by the State of Oregon Health Division for vertical installation may be installed vertically.
6. The device shall be readily accessible with adequate room for maintenance and testing. Devices 2" and smaller shall have at least 6" clearance on all side of the device. All devices larger than 2"

shall have a minimum clearance of 12" on back side, 24" on the test cock side, 12" below the device and 36" above the device. "Y" pattern DCVA shall be installed so the checks are horizontal and the test cocks face upward.

7. The property owner assumes all responsibility for all maintenance and testing of the device, as determined and required by the City of Haines.
8. If a device is installed inside the premises and is 4" or larger and is installed 4' above the floor, it must be equipped with a rigidly and permanently installed scaffolding acceptable to the City. This installation must also meet the requirements set out by the U.S. Occupation Safety and Health Administration and The State of Oregon Occupational Safety and Health Codes.
9. RP devices may be installed in a vault only if relief valve discharge can be drained to daylight through a "bore sight" type drain. The drain shall be of adequate capacity to carry the full rated flow of the device and shall be screened on both ends. An approved air gap shall be located at the relief valve orifice. The 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".
10. Upon completion of installation, the City must be notified and all devices must be inspected and tested. The testing and repairs of all devices are the financial responsibility of the property owner.
11. All backflow devices must be registered with the City. Registrations shall consist of date of installation, make model serial number of backflow device, and initial test report. Residential dual check devices do not require testing.
12. Any water pressure drop caused by the installation of a backflow device is not the responsibility of the City of Haines.
13. Residential dual check device, as a minimum, shall be required for new residential buildings. Installation of this residential dual check device on a retrofit basis on existing service lines will be instituted at a time and at a potential cost to the property owner as deemed necessary by the City.
14. The City of Haines strongly recommends that all new and retrofit installations of reduced pressure principle devices and double check valve backflow provender's include the installation of strainer located immediately upstream of the backflow device.

Section 6 Existing Devices

Any cross connection control device installed before the effective date of this ordinance which is not an approved device under Sections 4 & 5 shall be permitted to remain in service if:

1. The device is properly maintained; and
2. The type of device is commensurate with the degree of hazard; and
3. The device is tested annually as required under Section 8, and
4. The device performs satisfactorily.

Section 7 Replacement of Existing Devices

If a device does not meet the requirements of Sections 4 & 5, but may be used pursuant to Section 6, the device must be replaced if it is moved or requires more than minimum maintenance.

Section 8 Annual Testing and Repairs

All backflow devices installed within the territory served by the City shall be tested immediately upon installation and at least annually thereafter by a state certified tester. All such devices found to be not functioning properly shall be promptly repaired or replaced by the property owner. If any such device is not

promptly repaired or replaced, the City may deny or discontinue water service to the premise. With the exception of Residential Dual Check, which does not require testing, all testing and repairs are the financial responsibility of the property owner.

Section 9 Cost of Compliance

All costs associated with purchase, installation, inspections, testing, replacement, maintenance, parts, and repairs of the backflow device are the financial responsibility of the property owner.

Section 10 Termination of Service

Failure on the part of any property owner to discontinue the use of all cross connections except in accordance with this ordinance is sufficient cause for the discontinuance of public water service to the premises.

Section 11 Following State Codes

All sections of this ordinance must maintain compliance with Oregon State Plumbing codes and regulations and will be changed to reflect said changes to state codes.

Section 12 Effective Date

This ordinance shall take effect 30 days following its passage by the City Council and approval by the Mayor.

APPROVED AND ENACTED by the Common Council of the City of Haines, Oregon, on the
10th day of February, 2009, by the following vote:

First reading: Date Dec 9, 2008 Ayes 5 Nays Abstentions Absences 1
Second reading: Date Jan. 13, 2009 Ayes 4 Nays Abstentions 1 Absences 1 (vacant position)
Third reading: Date Feb. 10, 2009 Ayes 4 Nays Abstentions 1 Absences 1

--and the Mayor having declared the ordinance enacted by a Majority vote,
became effective upon its passage and approved by the Mayor.

SUBMITTED TO AND APPROVED BY THE MAYOR, this 10th day of February, 2009