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ORDINANCE NO. 538

**AN ORDINANCE ADOPTING A CROSS CONNECTION PROGRAM
AND REPEALING ORDINANCE NO. 482**

Pursuant to Chapter 333, Division 61 of the Oregon Administrative Rules, it is the responsibility of the City of Gold Beach to protect its drinking water by instituting and enforcing a cross connection program. Therefore, an ordinance for the purpose of establishing standards and requirements for controlling cross connections to the municipal water supply system of the CITY OF GOLD BEACH, OREGON.

THE CITY OF GOLD BEACH ORDAINS AS FOLLOWS:

4101059

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1:01 DEFINITIONS

[1] "Approved backflow prevention assembly" means an assembly to counteract back pressures or prevent back siphonage. This assembly must appear on the list of approved assemblies 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 health and/or 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, sewer, drain conduit, swimming pool, storage reservoir, plumbing fixture, swamp coolers, or any other assembly 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 change over assemblies, or other temporary or permanent assemblies 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 a health, system, plumbing or pollutional hazard.

[7] "City" or "The City" means the City of Gold Beach.

[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] "Plumbing hazard" means an internal or plumbing-type cross-connection in a consumer's potable water system than may be either a pollutional or a contamination-type hazard. This includes, but is not limited to, cross connections to toilets, sinks, lavatories, wash trays, domestic washing machines and lawn sprinkling systems. Plumbing-type cross connections can be located in many types of structures including homes, apartment houses, hotels and commercial or industrial establishments.

[10] "Pollutional 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 to the physical properties of the water system or the potability of the public or the consumer's potable water 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 or used for human consumption or other domestic use.

[13] "Premises" means any piece of land to which water is provided including all improvements, mobile home(s) and structures located on it.

[14] "Reduced pressure principle assembly" 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 assembly shall include properly located test cocks and tightly closing resilient seated shut-off valves at the end of the assembly. A check valve is approved if it appears on the list of approved assemblies issued by the Oregon State Health Division.

[15] "Thermal Expansion" means heated water without the space to expand.

1:02 PURPOSE

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

1:03 CROSS CONNECTIONS REGULATED

No cross connections shall be created, installed, used or maintained within the territory served by the City of Gold Beach, except in accordance with this ordinance.

1:04 BACKFLOW PREVENTION ASSEMBLY REQUIREMENTS

Approved backflow prevention assemblies shall be installed at the expense of the user, either at the service connection or within the premises, as determined by a certified cross connection inspector contracted by or employed by the City of Gold Beach, 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 drinking water supply.

[2] Premises having any one or more cross connections as that term is defined in section 1:01 paragraph 5 are identified or are present.

[3] Internal cross connections that are not correctable, or intricate plumbing arrangements which make it impractical to ascertain whether or not cross connections exist are present.

[4] There is a repeated history of cross connections being established or re-established.

[5] There is unduly restricted entry so that inspections for cross connections cannot be made with sufficient frequency or 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 which uses the City's water or water from any premises within the City of Gold Beach's system.

[8] Installation of an approved backflow prevention assembly is deemed to be necessary to accomplish the purpose of these regulations in the judgement of a certified cross connection specialist contracted by or employed by the City of Gold Beach.

[9] An appropriate cross connection report form has not been filed with the City.

[10] A fire sprinkler system using non-potable piping material is connected to the City's water system.

1:05 INSTALLATION REQUIREMENTS

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

1] No part of the backflow prevention assembly 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] Assemblies must be installed at the point of delivery of the water supply, before any branch in the line, on private property located just inside of the property line. Alternate locations must be approved in writing by the City prior to installations.

[3] The assembly must be protected from freezing and other severe weather conditions.

[4] All backflow assembly prevention assemblies shall be of a type and model approved by the State of Oregon Health Division and the City.

[5] Only assemblies specifically approved by The Oregon Health Division for vertical installation may be installed vertically.

[6] The assembly shall be readily accessible with adequate room for maintenance and testing. Assemblies 2" and smaller shall have at least 6" clearance on all sides of the assembly. All assemblies 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. "Y" pattern double check valve assemblies shall be installed so that the checks are horizontal and the test cocks face upward (see Appendix A).

[7] The property owner assumes all responsibility for all maintenance and testing of the assembly, as determined and required by the City.

[8] If written permission is granted to install the backflow assembly inside of the building, the assembly shall be readily accessible during regular working hours of 8:00 a.m. to 5:00 p.m., Monday through Friday.

[9] If an assembly, with permission, is installed inside of 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. Occupational Safety and Health Administration and the State of Oregon Occupational Safety and Health Codes.

[10] RP assemblies may be installed in a vault only if 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.

[11] 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".

[12] Upon completion of installation, the City shall be notified and all assemblies must be inspected and tested. The testing and repairs of all assemblies are the financial responsibility of the water user.

[13] All backflow assemblies must be registered with the City. Registration shall consist of date of installation make model, serial number of the backflow assembly, and initial test report.

[14] Any water pressure drop caused by the installation of a backflow assembly is not the responsibility of the City of Gold Beach.

[15] All installations must meet the requirements set out in the Oregon Administrative Rules (attached).

1:06 ACCESS TO PREMISES

Authorized employees of the City, or their designated representatives with proper identification, shall have access during reasonable hours to all parts of a premise and within the building to which water is supplied. However, if any water user refuses access to a premise or to the interior of a structure at reasonable times and on reasonable notice for inspection by a cross connection specialist appointed by the City, a reduced pressure principle assembly will be required to be installed at the service connection to that premise.

1:07 ANNUAL TESTING AND REPAIRS

All backflow assemblies installed within the territory served by

the City shall be tested immediately upon installation, if repaired, if moved, and at least annually thereafter by a state certified tester. All such assemblies found not functioning properly shall be promptly repaired or replaced by the water user. if any such assembly is not promptly repaired or replaced, the City may deny or discontinue water to the premise. All testing and repairs are the financial responsibility of the water user.

1:08 VARIANCES

Any variances from these requirements shall be requested in writing by the owner and approved by the City prior to assembly installation.

1:09 COSTS OF COMPLIANCE

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

1:10 TERMINATION OF SERVICE

Failure on the part of any customer to discontinue the use of all cross connections and to physically separate cross connections, or failure to follow any part of these Regulations, is sufficient cause for the immediate discontinuance of public water service to the premises (OAR chapter 333-061-0070, section 1).

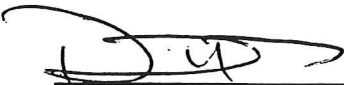
1:11 CONSTITUTIONALITY AND SAVING CLAUSE

That if any provision, section, sentence, clause or phrase of these regulations or the application of same to any person or set of circumstances are for any reason held to be unconstitutional, void, invalid, or for any reason unenforceable, the validity of the remaining portions of these Regulations or their application to other persons or circumstances shall not be affected thereby, it being the intent of the City of Gold Beach in approving these Regulations that no portion hereof or provision or regulation contained herein shall become inoperative or fail by reason of any unconstitutionality of invalidity of any other portion, provision, or regulation.

PASSED BY THE CITY COUNCIL OF GOLD BEACH, COUNTY OF CURRY, STATE OF OREGON, THIS 8th DAY OF SEPTEMBER, 1997.

ATTEST:

**APPROVED BY THE MAYOR THIS
8th DAY OF SEPTEMBER, 1997.**



David Hagood, City Administrator



Marilyn Schäfer, Mayor

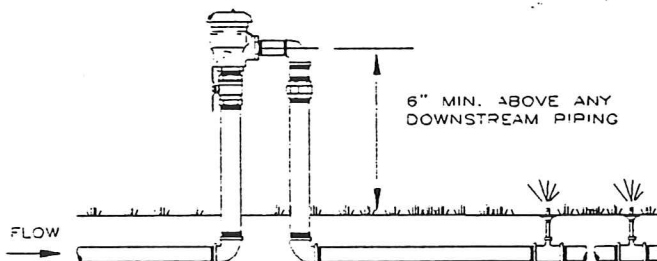
First Reading 8/25/97 Ayes 4 Nays 0 Absent 1
Second Reading 9/8/97 Ayes 5 Nays 0 Absent 0

OREGON ADMINISTRATIVE RULES
CROSS CONNECTION CONTROL

January 5, 1996

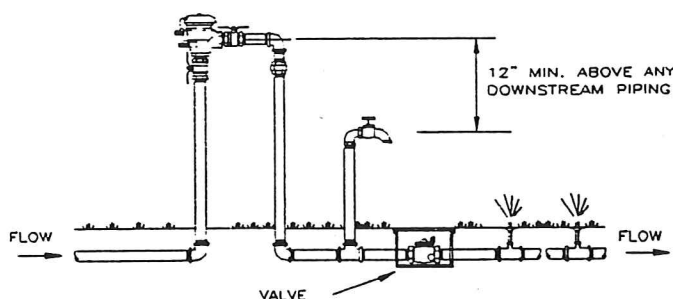
333-061-0071 BACKFLOW ASSEMBLY INSTALLATION STANDARDS

(1) TYPICAL INSTALLATION OF AN AVB



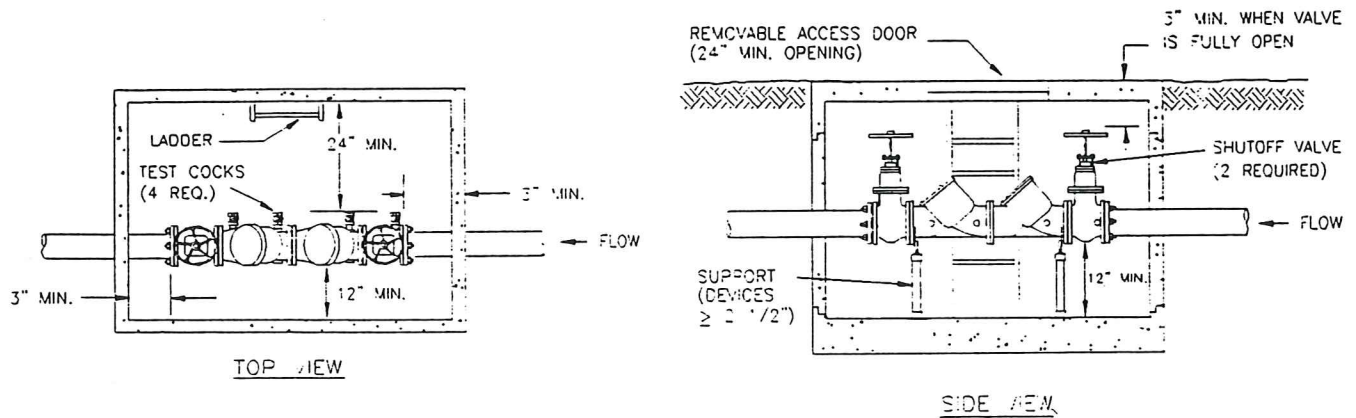
- (a) Absolutely no means of shut-off on the downstream or discharge side of the atmospheric vacuum breaker.
- (b) For intermittent use only. Must not be pressurized for more than 12 hours in any 24 hour period.
- (c) Shall not be subject to any backpressure.
- (d) Shall not be installed in dusty or corrosive atmospheres.
- (e) Shall not be installed where subject to flooding.
- (f) Shall be installed a minimum of six inches above the highest downstream piping and/or outlets.

(2) TYPICAL INSTALLATION OF A PVBA or SVBA



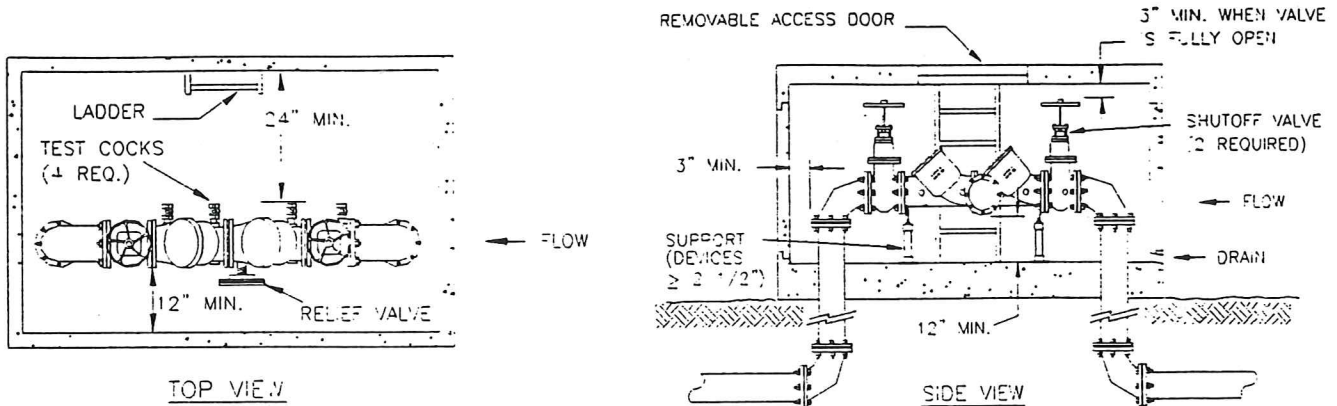
- (a) Downstream side of pressure vacuum breaker may be maintained under pressure by a valve. But, there may be absolutely no means of imposing backpressure by pump or other means.
- (b) PVBA's and SVBA's are designed to protect against back siphonage only, not backpressure.
- (c) It shall be installed where occasional water discharge from the assembly caused by pressure fluctuations will not be objectionable.
- (d) Adequate spacing shall be available for maintenance and testing.
- (e) Shall not be subject to flooding.
- (f) Shall be installed a minimum of twelve inches above the highest downstream piping and/or outlets.

(3) MINIMUM CLEARANCE FOR DCVA INSTALLATION



- (a) Bottom and side clearances apply when assemblies are installed inside building.
- (b) DCVAs may be installed vertically as well as horizontally provided that the device assembly:
 - (A) Is internally spring loaded -- not weighted checks.
 - (B) Is 4 inches or smaller.
 - (C) Is recommended by the manufacturer for vertical installation.
 - (D) Has the normal flow upward.
- (c) DCVAs may be installed below grade in a vault provided water tight, fitted plugs are installed in the test cocks, but the assembly shall not be subject to continuous immersion.
- (d) Maximum height of installation shall not exceed 5 feet for assemblies unless there is a permanently installed platform meeting Occupational Safety and Health (OSHA) standards to facilitate servicing the assembly.
- (e) Minimum clearances for assemblies 2 inches or smaller may be reduced provided that they are accessible for testing and repairing and approved by the water purveyor.
- (f) Adequate drainage must be provided except that the drain shall not be connected to a sanitary or storm water drain. Check with local utilities for requirements.
- (g) Freeze protection for DCVAs should be provided.

(4) MINIMUM CLEARANCE FOR RPBA INSTALLATION



- (a) Bottom and side clearances apply when assemblies are installed inside building. Access doors may be provided on side of above-ground vault.
- (b) RPBDs shall always be installed horizontally, never vertically.
- (c) RPBDs shall always be installed above the 100 year (1%) flood level unless approved by the local authority.
- (d) Relief valves shall never be extended or plugged.
- (e) Protection from freezing should be provided.
- (f) A provision for an air gapped drain shall be provided.
- (g) RPBDs shall not be installed in an enclosed vault or box unless a bore-sighted drain to daylight is provided.
- (h) Minimum clearances for assemblies 2 inches or smaller may be reduced provided that they are accessible for testing and repairing and approved by the water purveyor.
- (i) Maximum height of installation shall not exceed 5 feet for assemblies unless there is a permanently installed platform meeting Occupational Safety and Health (OSHA) standards to facilitate servicing the assembly.

3.325 Costs 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 water user and owner of the premises.

3.330 Termination of Service.

Failure on the part of any water user or owner of the premises to discontinue the use of all cross connections and to physically separate cross connections is sufficient cause for the immediate discontinuance of public water service to the premises.

PASSED BY THE CITY COUNCIL OF THE CITY OF GOLD BEACH, CURRY COUNTY, STATE OF OREGON, THIS 28th DAY OF NOVEMBER, 1994.

APPROVED BY THE MAYOR THIS 28th DAY OF NOVEMBER, 1994.

ATTEST:

Bill Curtis
Bill Curtis
City Administrator

Marlyn Schafer
Marlyn Schafer
Mayor

First Reading AYES: 4
 NAYS: 0
 ABSENT: 1

Second Reading AYES: 3
 NAYS: 0
 ABSENT: 2