

BURNS ORDINANCE NO 14-828

AN ORDINANCE AMENDING AND UPDATING BURNS MUNICIPAL CODE UNDER TITLE 13 UTILITIES, CHAPTER 13.30 RELATING TO CROSS CONNECTIONS

41-00153

WHEREAS, Title 13, chapter 13.30 provides that pursuant to chapter 333, division 61 of the Oregon Administrative Rules, it is the responsibility of the Burns Water Department to protect its drinking water by instituting and enforcing a cross connection program; and

WHEREAS, The City Council of the City of Burns (the "City Council") finds that certain revisions and/or additions to BMC chapter 13.30 are necessary or appropriate in order to, among other things, establish and clarify certain rules and procedures that will govern and clarify the needs of a safe water system.

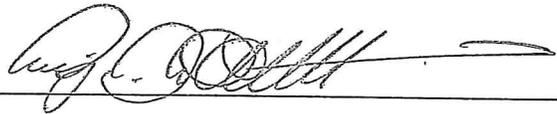
NOW, THEREFORE, THE CITY OF BURNS ORDAINS AS FOLLOWS:

Section 1: The City Council adopts the above findings.

Section 2: BMC Chapter 13.30 is hereby amended and restated to read in its entirety as follows per the attached by the reading of the above title summary.

Approved and adapted by the City of Burns this 12th day of February 2014.

City of Burns



Craig J. LaFollette, Mayor

Attested:



Dauna Wensenk, City Clerk

Chapter 13.30
CROSS CONNECTIONS

Sections:

- 13.30.005 Purpose of provisions.**
- 13.30.010 Definitions.**
- 13.30.020 Purpose.**
- 13.30.030 Cross connections regulated.**
- 13.30.040 Backflow prevention device requirement.**
- 13.30.050 Installation requirements.**
- 13.30.060 Access to premises.**
- 13.30.070 Annual testing and repairs.**
- 13.30.080 Variances.**
- 13.30.090 Costs of compliance.**
- 13.30.100 Termination of service.**

13.30.005 Purpose of provisions.

Pursuant to Chapter 333, Division 61 of the Oregon Administrative Rules, it is the responsibility of the Burns water department to protect its drinking water by instituting and enforcing a cross connection program. Therefore, the following regulations are hereby adopted. [Ord. 710, 1996]

13.30.010 Definitions.

(1) "Approved backflow prevention device" means a device to counteract back pressures or prevent back siphonage. This device must appear on the list of approved devices issued by the Oregon Health Authority.

(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 district'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 nondrinkable 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 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 a health, system, plumbing or pollutional hazard.

(7) "Director" means the director of public works of the Burns water department or authorized agent.

(8) "Department" or "the department" means the Burns water department.

(9) "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.

(10) "Plumbing hazard" means an internal or plumbing-type cross connection in a consumer's potable water system that may be either a pollutional or a contamination-type hazard.

This includes, but is not limited to, cross connections to toilets, sinks, lavatories, washtrays, 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.

(11) "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.

(12) "System hazard" means an actual or potential threat of severe danger to the physical properties of the public or consumer's potable water system or of a pollution or contamination which would have a detrimental effect on the quality of the potable water in the system.

(13) "Potable water supply" means any system of water supply intended or used for human consumption or other domestic use.

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

(15) "Reduced pressure principle 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 shut off 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 Health Authority. [Ord. 710 § 1:01, 1996]

13.30.020 Purpose.

The purpose of these regulations is to protect the water supply of the Burns water department from contamination or pollution due to any existing or potential cross connections. [Ord. 710 § 1:02, 1996]

13.30.030 Cross connections regulated.

No cross connections shall be created, installed, used or maintained within the territory served by the Burns water department, except in accordance with these regulations. [Ord. 710 § 1:03, 1996]

13.30.040 Backflow prevention device requirement.

Approved backflow prevention devices 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 specialist employed by the Burns water department, 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 BMC 13.30.010(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 department water or water from any premises within the Burns water department system.

(8) Installation of an approved backflow prevention device is deemed to be necessary to accomplish the purpose of these regulations in the judgement of a certified cross connection specialist employed by the Burns water department.

(9) An appropriate cross connection report form has not been filed with the department.

(10) A fire sprinkler system using nonpotable piping material is connected to the department's water system.

(11) All residential properties occupied by persons other than the property owner shall install an approved backflow prevention device, or the property owner shall assume all responsibility for any backflow that should occur. [Ord. 710 § 1:04, 1996]

13.30.050 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, on private property located just inside of the property line. Alternate locations must be approved in writing by the department prior to installations.

(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 Oregon Health Authority and the department.

(5) Only devices specifically approved by the 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 two inches and smaller shall have at least six inches clearance on all sides of the device. All devices larger than two inches shall have a minimum clearance of 12 inches on the back side, 24 inches on the test cock side, 12 inches below the device and 36 inches above the device. "Y" pattern double check valve assemblies shall be installed so that the checks are horizontal and the test cocks face upward sealed with a removable cap or plug to preserve threads. (see Appendix A).

(7) The property owner assumes all responsibility for all maintenance and testing of the device, as determined and required by the department.

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

(9) If a device, with written permission, is installed inside of the premises and is four inches or larger and is installed four feet above the floor, it must be equipped with a rigidly and permanently installed scaffolding acceptable to the department. 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 devices 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 device 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 one inch.

(12) Upon completion of installation, the department shall be notified and all devices must be inspected and tested. All backflow devices must be registered with the department. Registration shall consist of date of installation, make, model, serial number of the backflow device, and initial test report.

(13) Any water pressure drop caused by the installation of a backflow device is not the responsibility of the department.

(14) All new construction shall install an approved backflow device at the service connection. [Ord. 710 § 1:05, 1996]

13.30.060 Access to premises.

Authorized employees of the department, with proper identification, shall have access during reasonable hours to all parts of a premises and within the building to which water is supplied. However, if any water user refuses access to a premises or to the interior of a structure at reasonable times and on reasonable notice for inspection by a cross connection specialist appointed by the department, a reduced pressure principle device will be required to be installed at the service connection to that premises. [Ord. 710 § 1:06, 1996]

13.30.070 Annual testing and repairs.

All backflow devices installed within the territory served by the department shall be tested immediately upon installation and at least annually thereafter by a state certified tester. All such devices found not functioning properly shall be promptly repaired or replaced by the water user. If any such device is not promptly repaired or replaced, the department may deny or discontinue water to the premises. All testing and repairs are the financial responsibility of the water user. [Ord. 710 § 1:07, 1996]

13.30.080 Variances.

Any variances from these requirements shall be requested in writing by the owner and approved by the department prior to device installation. [Ord. 710 § 1:08, 1996]

13.30.090 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 property owner. [Ord. 710 § 1:09, 1996]

13.30.100 Termination of service.

Failure on the part of any customer 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 (OAR Chapter 333-061-070, Section 1). [Ord. 710 § 1:10, 1996]

Appendix A

APPENDIX A

333-061-0071 Backflow Prevention Assembly Installation and Operation Standards

- (1) Any approved backflow prevention assembly required by OAR 333-061-0070 shall be installed in a manner that:
 - (a) Facilitates its proper operation, maintenance, inspection, and in-line testing using standard installation procedures approved by the Authority, such as, but not limited to, University of Southern California, Manual of Cross-Connection Control, 10th Edition, the Pacific Northwest Section American Water Works Association, Cross Connection Control Manual, 7th Edition, or the local administrative authority having jurisdiction;
 - (b) Precludes the possibility of continuous submersion of an approved backflow prevention assembly, and precludes the possibility of any submersion of the relief valve on a reduced pressure principle backflow prevention assembly; and
 - (c) Maintains compliance with all applicable safety regulations and the Oregon Plumbing Specialty Code.

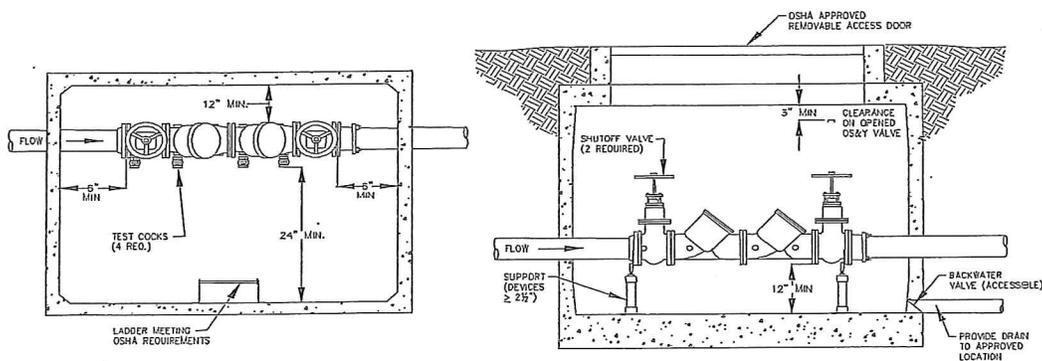
- (2) For premise isolation installation:
 - (a) The approved backflow prevention assembly shall be installed at a location adjacent to the service connection or point of delivery; or
 - (b) Any alternate location must be with the advance approval of the water supplier and must meet the water supplier's cross connection control requirements; and
 - (c) The premise owner shall ensure no cross connections exist between the point of delivery from the public water system and the approved backflow prevention assembly.

- (3) Bypass piping installed around any approved backflow prevention assembly must be equipped with an approved backflow prevention assembly to:
 - (a) Afford at least the same level of protection as the approved backflow prevention assembly being bypassed; and
 - (b) Comply with all requirements of these rules.

- (4) All Oregon Plumbing Specialty Code approved residential multi-purpose fire suppression systems constructed of potable water piping and materials do not require a backflow prevention assembly.

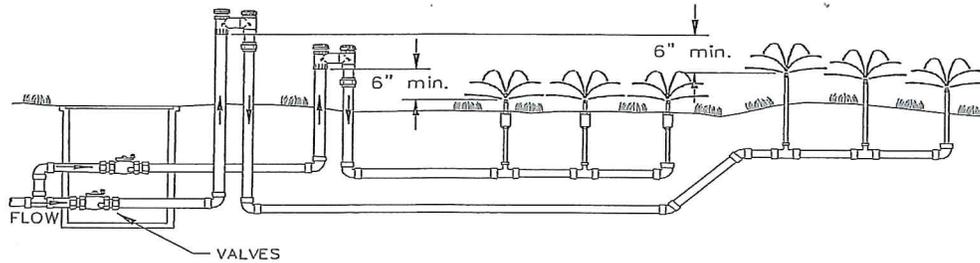
- (h) May be installed with reduced clearances if the pipes are 2 inches in diameter or smaller, are accessible for testing and repairing, and approved by the appropriate local administrative authority having jurisdiction;
 - (i) Shall not be installed at a height greater than 5 feet unless there is a permanently installed platform meeting Oregon Occupational Safety and Health Administration (OR-OSHA) standards to facilitate servicing the assembly; and
 - (j) Be used to protect against a non-health hazard or health hazard for backsiphonage or backpressure conditions.
- (8) A Double Check Valve Backflow Prevention Assembly (DC) or Double Check Detector Backflow Prevention Assembly (DCDA):

Figure 2



- (a) Shall conform to bottom and side clearances when the assembly is installed inside a building;
- (b) May be installed vertically as well as horizontally provided the assembly is specifically listed for that orientation in the Authority's Approved Backflow Prevention Assembly List.
- (c) May be installed below grade in a vault, provided that watertight fitted plugs or caps are installed in the test cocks, and the assembly shall not be subject to continuous immersion;
- (d) Shall not be installed at a height greater than 5 feet unless there is a permanently installed platform meeting Oregon Occupational Safety and Health Administration (OR-OSHA) standards to facilitate servicing the assembly;
- (e) May be installed with reduced clearances if the pipes are two inches in diameter or smaller, provided that they are accessible

- (10) An Atmospheric Vacuum Breaker (AVB) shall:
Figure 4



- (a) Have absolutely no means of shut-off on the downstream or discharge side of the atmospheric vacuum breaker;
- (b) Not be installed in dusty or corrosive atmospheres;
- (c) Not be installed where subject to flooding;
- (d) Be installed a minimum of six inches above the highest downstream piping and outlets;
- (e) Be used intermittently;
- (f) Have product and material approval under the Oregon Plumbing Specialty Code for non-testable devices.
- (g) Not be pressurized for more than 12 hours in any 24-hour period;
and
- (h) Be used to protect against backsiphonage only, not backpressure.

Stat. Auth.: ORS 448.131

Stats. Implemented: ORS 431.110, 431.150, 448.131, 448.150, 448.268, 448.273 & 448.279