#### ORDINANCE NO. 1776

AN ORDINANCE ADOPTING A CROSS-CONNECTION CONTROL PROGRAM AND REPLACING CHAPTER 13.20 "BACKFLOW PREVENTION DEVICES" OF THE MUNICIPAL CODE.

THE PEOPLE OF THE CITY OF CENTRAL POINT, OREGON DO ORDAIN, AS FOLLOWS:

<u>Section 1</u>. Central Point's Municipal Code Chapter 13.20 is hereby revised to read as follows:

## **CHAPTER 13.20**

## **CROSS-CONNECTION CONTROL**

#### Sections:

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13.20.020	Definitions
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13.20.070	Schedule for Inspection and Testing of BPA's
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13.20.010 Purpose The purpose of this ordinance is to protect the water supply of the City of Central Point from contamination or pollution due to any existing or potential cross-connections, and to implement and enforce the requirements of OAR Chapter 333, Division 61 for public water systems. No cross-connections shall be created, installed, used or maintained within the area served by the City, except in accordance with this ordinance. The standards set forth in this ordinance are considered to be minimum requirements for safe practice in the delivery of water for domestic use. They are to be interpreted as meeting only the minimum requirements for design, construction, maintenance, testing, and operation for cross-connection control. The cost of complying with this ordinance is the sole responsibility of the property owner and water service customer, as described herein. The City's adopted plumbing codes and the requirements of OAR Chapter 333, Division 61 are incorporated and made a part of this ordinance; if conflicts arise between the requirements of this ordinance, the codes, or OAR 333-61, the more restrictive shall apply.

<u>13.20.020 Definitions</u> For the purpose of this ordinance, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

A. Approved Backflow Prevention Assembly or Backflow Assembly or Assembly - An assembly to counteract backpressure or prevent backflow or backsiphonage. This assembly must appear on the list of approved assemblies issued by the Oregon Health Division and be as specified in the City's PWD standards. These assemblies include:

- 1. Air Gap A physical vertical separation between the free-flowing discharge end of a potable water supply piping and/or appurtenance and an open or nonpressure-receiving vessel, plumbing fixture or other device. An "approved air-gap separation" shall be at least double the diameter of the supply pipe measured vertically above the overflow rim of the vessel, plumbing fixture or other device -- in no case less than one inch.
- 2. Reduced Pressure Principle Backflow Prevention Assembly or Reduced Pressure Principle Assembly or RPBA Assembly or RP 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 shut-off valves at the inlet and outlet ends of the assembly.
- 3. Reduced Pressure Principle Detector Backflow Prevention Assembly or Reduced Pressure Detector or RPDA An assembly composed of a line-size approved, reduced pressure principle assembly with a bypass containing a specific water meter and an approved reduced pressure principle backflow prevention assembly. The meter shall register accurately in cubic feet or gallonage for very low rates of flow.
- 4. Double Check Valve Backflow Prevention Assembly DCVA or Double Check Valve Assembly or Double Check or DCA An assembly which consists of two, independently-operating check valves which are spring-loaded or weighted. The assembly comes complete with a shut-off valve on each side of the check valves, as well as test cocks to test the check valves for tightness.
- 5. Double Check Detector Backflow Prevention Assembly or Double Check Detector Assembly or DCDA An assembly composed of a line-size approved double check assembly with a bypass containing a specific water meter and an approved double check valve assembly. The meter shall register accurately in cubic feet or gallonage for very low rates of flow.
- 6. Pressure Vacuum Breaker Backflow Prevention Assembly PVBA or Pressure Vacuum Breaker or PVB An assembly which provides protection against backsiphonage, but does not provide adequate protection against backpressure backflow. The assembly is a combination of a single check valve with an air inlet valve, which can be used with downstream shut-off valves. In addition, the assembly has suction and discharge shut-off valves and test cocks which allows the full testing of the assembly.
- B. Auxiliary Water Supply Any water source other than the City's water system, including, but not limited to, domestic water wells and irrigation water sources.
- C. Backflow The flow in the direction opposite to the normal flow or the introduction of any foreign liquids, gases, or substances into the City's water system.
- D. Backpressure Any elevation of pressure in the downstream piping system above the supply pressure at the point of consideration which would cause, or tend to cause, a reversal of the normal direction of flow and the introduction of fluids, mixtures or substances from any source other than the intended source.
- E. Backsiphonage The flow of water or other liquids, mixtures or substances into the distribution pipes of a potable water supply system from any source other than its intended source caused by a sudden reduction of pressure in the potable water supply system.

- F. BPA Any backflow prevention assembly approved by the City.
- G. City The City of Central Point, Oregon or its designee.
- H. City Water System The system for providing piped water for human consumption to the public ("potable"), owned and operated by the City of Central Point.
- I. Contamination The entry or presence in a public water supply system of any substance which may be harmful to health or the quality of the water.
- J. Cross-Connection Shall mean any unprotected actual or potential (direct or indirect) connection or physical arrangement through which it is possible to introduce into any part of the drinking water system any liquid or substance other than the intended unused potable water, by backflow, backpressure, or back-siphonage.
- K. **Degree of Hazard** The low or high hazard classification that shall be attached to all actual or potential cross-connections.
- 1. High Hazard The classification assigned to an actual or potential cross-connection where a substance which, if allowed to backflow into the City Water System, could cause illness or death.
- 2. Low Hazard The classification assigned to an actual or potential cross-connection that could allow a substance which, if allowed to backflow into the City Water System, would be objectionable but not a hazard to human health.
- L. **Mobile Units** Any mobile equipment that uses water obtained through the City Water System. Mobile units include, but are not limited to, carpet-cleaning vehicles or machines; water-hauling vehicles; street-cleaning vehicles or machines that use water; pressure washers, portable toilet-hauling and water-service vehicles, and septic tank-cleaning and hauling vehicles that use water.
- M. Point-of-Use Isolation The appropriate backflow prevention within the consumer's water system at the point where the actual or potential cross-connection exists.
- N. Premises Any property to which water service is provided, including but not limited to, all residential, commercial, or industrial improvements; hospitals; clinics; parks; recreational sites; and any other land improvement that is served by the City water system.
- O. **Premises Isolation** The appropriate backflow prevention assembly installed at the point of service connection between the City water system and the customer's water system, or other approved installation point.
- P. Public Works Department (PWD)- The Department of the City responsible for operation and maintenance of the City water system.
- Q. **PWD Standards** The standard specifications and details of the City's Public Works Department.
- R. Representative of the City Any person designated by the City to perform cross-connection control duties that shall include, but are not limited to testing, cross-connection inspections and water-use surveys.

- S. Residential Use Shall include, but is not limited to, single- or multi-family dwellings, manufactured housing, and apartments where the individual units are each on a separate meter; or where two or more units are served by one meter.
- T. Service Connection The portion of the water system that conveys water from the distribution main to the outlet side of the City's meter.
- U. Tester A person certified as an OHD backflow prevention assembly tester who is registered with and approved by the City to perform the required testing, maintenance, repair, and replacement of the assembly.
- 13.20.030 Backflow Prevention Assembly (BPA) Requirements Chapter 13.20 shall apply to all properties within the City, and any properties located outside the City limits which are connected to the City water system. If an air-gap or BPA is required to be installed, the water service customer and the owner of the property are jointly responsible for installing and maintaining the approved air-gap or BPA. The type and location of the BPA and elimination method shall be subject to review and approval by the City. The property owner and water service customer jointly assume all responsibility for any damages resulting from installation, operation, testing, maintenance, repair, and/or replacement of any BPA.

Cross-connection control may be required or upgraded in each of the following minimum specific circumstances, as determined by the City Administrator or his designee:

- A. Cross-connections or potential cross-connections exist.
- B. There is a history of cross-connections being established or reestablished.
- C. Entry has been denied for cross-connection inspection when an existing or potential cross-connection is suspected to exist.
- D. Intricate plumbing arrangements are present that make it impractical to ascertain whether cross-connections exist.
- E. Manufacturing, processing, or maintenance materials or methods are being used such that if cross-connection (including back-pressure, back-siphonage, or backflow) should occur, a health hazard could result.
- F. An approved double check valve BPA shall be the minimum protection for any fire sprinkler systems using piping material that is not approved for potable water use; or a system that does not provide for periodic flow-through every 24 hours. A RP BPA must be installed if any solution other than the City's potable water can be introduced into the sprinkler system.
- G. There is piping for conveying liquids other than potable water, and where that piping is under pressure and is installed in proximity to the potable water piping.
- H. When a building is constructed on commercial or industrial property, and the end use of such building is not determined or could change (such as, but not limited to, shopping malls and buildings with undetermined occupance), a reduced pressure principle backflow prevention assembly shall be installed at the service connection.
- I. If it is determined the plumbing system has been changed without obtaining proper permits as required by the City.

- J. Any property with a non-pressurized water storage tank, or a pressurized water storage tank, excluding domestic hot water tanks with a capacity of 100 gallons or less.
  - K. A pressurized irrigation system is installed on the premises.
  - L. An auxiliary water source exists on the property or is conveyed to the property.

Cross connection control will not be required at the time of construction of new single-family residences, but may be subsequently required if any of the above noted conditions is determined to exist.

- <u>13.10.040 BPA Installations in the Rights-of-Way</u> A BPA may be installed upon or within any City rights-of-way based on the following minimum requirements:
- A. The BPA does not affect or interfere with the operation, use, or existing location of public infrastructure.
- B. All permits required by the City to perform work in the City's rights-of-way shall be obtained.
- C. A property owner shall, at the request of the City and at the property owner's expense, relocate a BPA which encroaches upon any City rights-of-way when such relocation is necessary for street, sidewalk, or utility construction or repairs as required by the City.
- <u>13.20.050 Installation Requirements</u> The following minimum requirements shall apply to the installation of BPA's:
- A. A BPA installer must obtain the required plumbing permits and any other permit required by the City; be licensed by the State of Oregon for the installation of BPAs; have a valid City business license; and have the installation inspected by the City.
- B. No part of a BPA shall be submerged in water or installed in a location subject to flooding, without the approval of the City Public Works Department..
- C. All BPA's are required to have brass or plastic threaded pipe plugs installed in all test cocks. Galvanized plugs in test cocks are not allowed.
- D. BPAs which are installed to isolate premises from the City water system shall be installed on the downstream side of the meter at or near the property line, or be installed immediately inside the building being served; but in any case must be installed before the first branch line. BPA's that are installed or located within City's rights-of-way are the responsibility of the property owner.
  - E. All vertical installations of BPA's must be as expressly approved by the City.
- F. The BPA shall be installed in accordance with City PWD Standards and the specifications, requirements, and recommendations of the BPA's manufacturer.
- G. All BPAs shall be available for inspection, as a minimum, during the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday, or as otherwise required and approved by the City.
- H. BPA's installed inside a building, 5 feet or more above the floor, shall be equipped with a rigid and permanently-installed platform with railing acceptable to the City. This

installation shall also meet the requirements established by the U.S. Occupational Safety and Health Administration and the State of Oregon Occupational Safety and Health Codes.

- I. All facilities that require continuous uninterrupted water service, and are required to have a BPA, shall make provisions for the parallel installation of BPA's so that testing, repair, maintenance, or replacement can be performed on one of the two BPAs, while still providing minimum flow requirements with only one of the two service lines in operation.
- J. In the event a point-of-use BPA has not had the testing or repair work as required by this ordinance, a premises isolation BPA or approved air gap may be required.
- K. Upon completion of any BPA installation, the City shall be notified by the property owner. The City will then conduct an inspection. If the installation is approved by the City, the property owner shall have the BPA tested by an authorized tester. Test results shall be provided by the property owner or tester to the City.
- L. All BPA's must be registered with the City. Registration shall consist of address and physical location of BPA; date of installation; manufacturer's name, model, type, size, and serial number; and a copy of the initial test report.
- M. Bypass lines (that are not an integral part of the BPA) are prohibited. Pipe fittings which could be used for connecting bypass lines shall not be installed.
- N. BPA information nameplate and serial number must be attached to the BPA; be readily visible; and be designed to be permanent and resilient to environmental conditions.
- O. Pressure vacuum breaker BPA's may be utilized only in single zone irrigation systems.
- P. BPA's shall be sized to provide an adequate supply of water and pressure for the premises being served. Consult manufacturer's specifications for specific performance data such as flow characteristics.

Variances from these specifications will be evaluated by the City Administrator or his designee on a case-by-case basis. Any variances must have prior written approval by the City.

- 13.20.060 Maintenance and Testing Requirements for BPA's A person who owns, operates, or manages premises where required BPA's are installed shall maintain such BPA's in proper working order at all times. It shall be the duty of the water service customer to keep BPAs in good working condition at all times. It shall also be the duty of the water service customer to have thorough inspections and assembly performance/leakage tests made at least once a year or more often in those instances where successive inspections or tests indicate failure. These inspection and tests, performed for and at the expense of the water service customer, must be performed by a person registered with and approved by the City as a tester. It is the responsibility of the water service customer to see that these tests and inspections are completed. Testers may be required to notify the City in advance when the test is to be undertaken so that City representative(s) may witness the test.
- A. BPAs shall be repaired, overhauled, or replaced at the expense of the water service customer and property owner, in an expedient manner, whenever they are found to be defective. Records of such tests, repairs, overhauls, and/or replacements shall be maintained by the property owner, and the City. It is the responsibility of any tester performing tests, maintenance, repair, overhauls, or replacements of any BPA, to submit records of such tests or

work to the City within 30 days of the performance of such work.

## 13.20.070 for Inspection and Testing of BPA's

- A. The City shall require inspection and testing of all BPA's in each of the following circumstances:
  - 1. Immediately after installation of the BPA;
  - 2. Whenever the BPA is moved;
  - 3. A minimum of once a year;
  - 4. Immediately after repairs.

BPA's may be required to be tested more frequently if, in the opinion of the City, it is determined that such factors as the repair history of the BPA, circumstances on the premises, and/or the degree of hazard present warrant additional testing.

- 13.20.110 Mobile Units Mobile units must obtain and maintain a current permit from the City before using any water. As a condition of issuing a permit, the City may require a fixed air gap or BPA to be mounted on the vehicle or its piping system, or on the City supplied hydrant meter which is rented by the mobile unit's owner for temporary connection into the City's water system.
- <u>13.20.120 Multiple Connections</u> Any premises to be served by multiple service connections shall be required to install a BPA or an approved air gap on each of the service lines to the premises. The assembly(s) will be commensurate with the degree of hazard that could occur in the event of a cross-connection.
- <u>13.20.130 Thermal Expansion</u> If a BPA is installed, the property owner and/or water service customer should make allowances for thermal expansion within their water system.
- 13.20.140 Pressure Loss Double check valves assemblies shall have a maximum loss of 10 psi and reduced pressure backflow assemblies shall have a maximum loss of 24 psi.
- <u>13.20.200 Tester Requirements and Responsibilities</u>. The following are minimum requirements and responsibilities for BPA testers:
- A. BPA testers shall have liability insurance in the minimum amount of \$500,000. If the employer holds the liability insurance, the tester may only test when working for the employer.
- B. All BPA testers shall be licensed with the appropriate State Contractor Board and have a valid City business license.
- C. The tester shall be responsible for accurate testing of BPA's and shall submit complete reports thereof to the City no later than 30 days after the test has been completed.
- D. Registration by BPA testers with the City must include registration of all test gauges to be used by said tester (i.e serial numbers and model, or other applicable identification). Registered OHD identification numbers of test gauges shall be listed on tests and maintenance reports prior to being submitted to the City.
- E. Certified testers shall not change the design or operation characteristics of any BPA, unless otherwise approved (in writing) by the BPA manufacturer and OHD.

F. City authorization to test BPA's may be revoked by the City if the tester has falsely, incompletely, delinquently, or inaccurately filed BPA testing/maintenance/repair reports; has used inaccurate, unregistered, uncalibrated, or improper gauges; has used improper testing methods or procedures; has expired insurance; is not in compliance with safety regulations; has a history of valid customer complaints; is not certified by the OHD to be a tester (at the time of testing); or is not licensed as noted in (B) above.

# 13.20.310 Water Service Termination

- A. If, in the opinion of the City Administrator or his designee, a customer is in noncompliance with any provision of this ordinance and an immediate health hazard is present, (i.e. a noted cross-connection or potential cross-connection exists which poses an immediate health threat), the City may terminate the water service immediately. The water service customer will be noticed (by phone, facsimile, or in writing) as soon as practicable after determination of the noncompliance item which presents the hazard, and again, immediately upon water service termination. The water service customer will be provided the opportunity to be heard upon request, as soon as practicable.
- B. If, in the opinion of the City Administrator or his designee, a customer is in noncompliance with any provision of this ordinance and an immediate health hazard is not present, a noncompliance notice will be mailed to the property owner and water service customer. The noncompliance notice will state the reasons for non-compliance (which will include the applicable provisions of this ordinance); the requirements needed to reestablish compliance; and a schedule for compliance which will include the date upon which water service termination would occur if the noted deficient items are not completed.

### 13.20.320 Notice of Appeal

- A. A property owner or water service customer receiving a noncompliance notice and/or water service termination may file a written appeal with the City Administrator within five days after the noncompliance notice is mailed. The property owner or water service customer shall include a written explanation of the basis of the appeal.
- B. The City Administrator or his designee will review the appeal and respond in writing to the customer within five days of receipt of the appeal with an explanation of the review of the appeal and specific actions to be taken by the customer or the City. If an immediate health hazard is not present, the termination of water service shall not occur prior to a period of 48 hours after the City Administrator or his designee's written response has been delivered to the premise, or in accordance with the schedule included in the notice of noncompliance, whichever is last.
- <u>13.20.400 Permits and Fees</u> The City Council may, from time to time, establish by resolution a permit and administration fee structure for BPA installation and testing.
- A. Prior to installing any BPA, the property owner shall apply for and obtain a BPA Installation Permit and other required permits. The City shall charge an Installation Permit Fee for each BPA in the amount of twenty-five dollars (\$25.00) for the purpose of covering City expenditures for initial registration, inspection, and administration.
- B. The City Council may establish by resolution a monthly administration fee (per installed BPA) for the purpose of administration, inspection, and enforcement of the requirements of this ordinance and the OHD as detailed in OAR 333-61-0070. This fee will be billed and collected as part of the monthly water service billing.

Passed by the Council and signed by me in authentication of its passage this 3 day of December 1997.

ATTEST:

Approved by me this 3 day of December 1997.

Mayor Rusty McGrath

An emergency is hereby declared to exist, and this ordinance shall take

Section 2.

5/8-3/4 inch meter		10.00
1 inch meter		15.00
1 1/2 inch meter		20.00
2 inch meter		30.00
3 inch meter		40.00
4 inch meter		55.00
Greater than four inch meter	1	L00.00
(Ord. 1613 §1(part), 1989).		