ORDINANCE NO. 262

AN ORDINANCE providing for the control of back flow and cross-connections.

THE TOWN OF CANYON CITY, OREGON ORDAINS AS FOLLOWS:

Section 1. **Cross Connection Control - General Policy Purpose:** The purpose of this ordinance is:

1.1 To protect the public potable water supply of the Town of Canyon City from the possibility of contamination or pollution by isolating, within the customer's internal distribution system(s) or the customer's private water system(s), such contaminants or pollutants which could backflow into the public potable water system(s) and;

1.2 To promote the elimination or control of existing and future cross-connections, actual or potential, between the customer's in plant potable water system(s) and nonpotable water system(s), plumbing fixtures and industrial piping system(s) and;

1.3 To provide for the maintenance of a continuing program of cross connection control which will effectively prevent the contamination or pollution of all potable water systems by cross connection.

Section 2. **Authority**

2.1 The Federal Safe Drinking Water Act of 1974, and the statutes of the State of Oregon, Administrative Rules Chapters #333-61-070, #333-61-072 state that the water supplier has the primary responsibility for the preventing of water from unapproved sources, or any other substances, from entering the public potable water system.

Section 3. **Responsibility**

3.1 The Town of Canyon City shall be responsible for the protection of the public potable water distribution system from contamination or pollution due to backflow or back siphonage of contaminates or pollutants through the water service connection. If, in the judgement of the City's designated representative, an approved backflow prevention device is required at the city's water connection to any customer's premise, the City's designated representative shall give notice in writing to said customer to install an approved backflow prevention device at each service connection to his premises. The customer shall, within ninety (90) days, install such approved device, or devices, at his own expense, and failure or refusal, or inability on

the part of the customer to install said device or devices within ninety (90) days, shall constitute a ground for discontinuing water service to the premises until such device or devices have been properly installed.

Section 4. **Definitions**

4.1 AWWA
American Water Works Association.

4.2 Air Gap
A physical separation sufficient to prevent between the free-flowing discharge end of the potable water system. Physically defined as a distance equal to twice the diameter of the supply side pipe diameter but never less than one (1) inch.

4.3 Approved
Accepted by the Oregon State Health Division and the City as meeting an applicable specification stated or cited in this Chapter.

4.4 Auxiliary Water Supply
Any supply of water used to augment the supply of water obtained from the public water supply which serves the premises in question. These auxiliary water may include but are not limited to, wells, springs, rivers or "used water" that have originated from the public supply and have deteriorated in quality . These waters may be contaminated or polluted and constitute an unacceptable water source over which the water purveyor does not have sanitary control.

4.5 Atmospheric Vacuum Breaker
A device which prevents back siphonage by creating an atmospheric vent when there is either a negative pressure or sub-atmospheric pressure on a water system.

4.6 Backflow
The flow of water or other liquids, mixtures or substances, under positive or reduced pressure in the distribution pipes of a potable water supply from any source other than its intended source.

4.7 Back Pressure
The flow of water or other liquids, mixtures or substances under pressure into the distribution pipes or a potable water supply system from any source other than the intended source. Booster pumps, elevated tanks, boilers or other means may result in a pressure greater than the supply pressure.

4.8 Back Siphonage
The flow of water or other liquids, mixtures or substances into the distribution pipes of a potable water supply from any source other than the intended source caused by the reduction of pressure in the public water supply system, Breaks in the water mains, low water main pressure due to high demand, and firefighting are causes of back siphonage.

4.9 Backflow Preventer
An assembly, device or means designed to prevent backflow of water, liquid, mixtures or substances. The term "approved backflow prevention assembly" shall mean an assembly that has been manufactured in full conformance with the standards established by the AWWA and approved for use in Oregon by the State Health Division.

4.10 City
The Town of Canyon City.

4.11 City Water System (also referred to as public water system)
All or any part of the facilities for transporting, storing, pumping, testing, distributing or providing water or water service connections and servicing fire hydrants.

4.12 Containment
A method of backflow prevention which requires a backflow preventer at the water service entrance.

4.13 Contamination
An impairment of the quality of the potable water by sewage, industrial fluids or waste liquids, compounds or other materials to a degree which create an actual or potential hazard to the public health through exposure to disease organisms or substances which may cause harmful physiological side effects.

4.14 Cross-Connections
Any physical connection or arrangement of piping or fixtures between two (two) otherwise separate piping systems one of which contains potable water and the other nonpotable water or industrial fluids through which or because of which backflow may occur into the potable water system, whether such can be separated by a value(s) or not. Bypass connections, jumper connections or any other plumbing arrangements in which it is possible to introduce into any part of the potable water system any polluted or contaminated water, fluid or substance are considered cross-connections.

4.15 Customer
Any person, firm or corporation granted water service by the City.

4.16 Customer Line
The extension of pipe, valves and fittings leading from the water meter into the premises served.

4.17 Customer System
All or any part of the network of pipes, fixtures and plumbing for distributing water on the premises being served past the utility systems meter.

4.18 Double Check Valve Assembly (DCVA)
An assembly of two (2) independently acting check valves with shutoff valves on each side of the check valves and test cocks for testing the water tightness of each check valve. This assembly is designed for low hazard applications.

4.19 Hazard
The term is derived from the elevation of the potential risk to public health and the adverse effect of the hazard upon the public water system. The degree of hazard is referred to as low hazard, moderate hazard and high hazard.

4.20 Permit
A document issued by the Utility which allows the use of a backflow preventer.

4.21 Pollution
The presence of any foreign substance (organic, inorganic, radiological, physical or biological) in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness or quality of the water to a degree which adversely and unreasonably affect such waters for domestic use.

4.22 Premises
Any building, structure, improvement or parcel of land which now or some future time receives water service from the City.

4.23 Reduced Pressure Zone Backflow Preventer (RPZ)
An assembly for preventing backflow which has two (2) independent check valves, a differential relief valve located between the two (2) check valves, two (2) shut-off valves, one on the upstream side and one on the downstream of the check valves, and four (4) test cocks for testing the water tightness of the check valves and the operation of the relief valve. This assembly is designed for high hazard applications.

4.24 Vacuum Breakers
Two (2) types of vacuum breakers are the atmospheric type (AVB) and the pressure type (PVB). The difference between the two (2) devices is that the pressure vacuum breaker is spring loaded to assist the device in opening. Both devices open the pipeline to atmosphere in the event of back siphonage conditions only. Neither device is approved for back pressure conditions. Their primary purpose is to protect the water system from cross-connections due to submerged inlets, such as irrigation systems and tank applications. Shut-off valves cannot be installed downstream of atmospheric devices but can be on pressure devices. The devices must be installed above the highest downstream piping.

4.25 Water, Notpotable
Water which is not safe for human consumption or which is of questionable potability.

4.26 Water, Potable
Any water which according to State Health and Federal Standards is safe for human consumption.

4.27 Water Purveyor
The owner or operator of the public potable water system supplying water for public use.

4.28 Water Service Connection
The terminal end of the City water system to which a water meter is attached (i.e., where the water purveyor loses jurisdiction and sanitary control over the water at its point of delivery to the customer's water system). There shall be no unprotected take offs from the service line ahead of any water meter. Service connections shall also include all other temporary or emergency water service connections from the City water system.

4.29 Water User
Any person using any part of the City water system.

Section 5. **Responsibility to Maintain Water System**

5.1 Water System: The water system shall be considered made up of two (2) parts: the utility system and the customer system.

5.2 City to Maintain Utility System: The City shall maintain the utility system facilities which include sources, storage, transmission and distribution mains and service lines and supply potable water to the service connection point of delivery of quality meeting the requirements of the Oregon State Health Division and the National Drinking Water Act PL 3-523 or its successor.

6.3.1 There is an auxiliary water supply which is or can be connected to the public water supply. Such auxiliary supply shall be considered connected to the public water supply unless there is a physical break in the piping between such separate water supply and the public water supply.

6.3.2 There is piping for conveying liquids other than potable water, and where that piping is under pressure and is installed and operated in a manner which could cause a cross-connection.

6.3.3 There is intricate plumbing and piping arrangements, or where entry to all portions of the premises is not readily accessible to ascertain whether or not dangerous cross-connections exist.

6.3.4 There are fire protection systems connected to the public water system that are not interconnected with an unapproved water supply, pipe material not approved for potable water use, where chemical additives and antifreeze compounds that may be toxic are used, or where stagnant waters that have deteriorated could backflow into the public water system.

6.3.5 There are underground sprinkler/irrigation systems that could let water contaminated by weed killers and fertilizers be back siphoned (backflow) into the public water system.

6.3.6 There are sprinkler/irrigations systems that provide for chemical injection.

6.3.7 There is back siphonage potential.

6.3.8 Cross-connections or potential cross-connections exist.

Section 7. **Requirements**

7.1 All backflow prevention assembly(s) required by the Oregon State Health Division and this Ordinance shall be of a type and model aproved by the Health Division and are commensurate with the degree of hazard which exists.

7.2 All re$ently installed assemblies which do not meet the requirements of this section, but were approved assemblies for the purposes described herein at the time of installation and which have been properly maintained, shall, except for the inspection and maintenance requirements under Section 9.1 be excluded from the requirements of these rules so long as they satisfactorily protect the public water system. Whenever the existing assembly is moved from the present location or requires more than minimum maintenance

or constitutes a hazard to public health, the unit shalla be replaced by a back flow prevention assembly meeting the requirements of this section.

Section 8. **Installation:**

8.1 Assembly not to be submerged: 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.

8.2 Protection from Freezing: The assembly must be protected from freezing and other severe weather conditions.

8.3 Manufacturer's installation Instructions: All assemblies shall be installed according to the manufacturer's installation instructions and the "Accepted Procedure and Practice in Cross-Connection Control Manual" published by the Cross-Connection Control Committee, Pacific Northwest Section, AWWA. Only assemblies specifically approved by the City's designated representative for vertical installation may be installed vertically.

8.4 Minimum Clearance Specifications: All assemblies shall be readily accessible with adequate room for maintenance and testing. The minimum clearance specified by the manufacturer's installation instructions shall be closely followed.

8.5 Installation Kept on File: Upon completion of installation, the City shall be notified and all backlow protection assemblies inspected by the City's designated representative. Each backflow prevention assembly shall be kept on file with the City. The file shall consist of date of installation, location, make, model, size and serial number of the assembly and initial report.

8.6 Pipe Joints: All pipe joints shall be retained.

8.7 Assembly Tested: The assembly shall be tested upon installation by a State of Oregon certified tester and at least annually thereafter.

Section 9. **Testing**

9.1 Water User to Have Inspections; User's Expense: It shall be the responsibility of the customer user at any premises where backflow prevention assemblies are installed to have certified inspections and operational tests made at least once per year. In those instances where the City's designated representative deems the hazard to be great enough he may require certified inspections at more frequent intervals. These inspections and tests shall be at the sole expense of the water customer user. The customer user shall

notify the City in advance when tests are to be undertaken so that an official representative of the City may witness the tests if desired. The repair, overhaul or replacement of any assemblies found defective shall be at the sole expense of the customer user. The results of such testing shall be forwarded to the Oregon State Health Division and the City within ten (10) days of the date of installation and thirty (30) days of the anniversary date for the annual testing.

9.2 Failure to Test Assemblies: If a water customer user fails to have such tests performed as required by subsection 9.1 the City may upon written notification within ten (10) days, order such required tests be performed by a certified tester and all costs added to the customer user's water bill.

Section 10. **Severability**

The sections of this ordinance are severable. The invalidity of a section shall not affect the validity of the remaining sections.

Section 11. **Penalties**

Unless otherwise provided, any violation of any of this ordinance shall be punished by a fine not to exceed five hundred dollars ($500.00) for any one offense, or by imprisonment in the County jail for a period of not more than six (6) months or by both such fine and imprisonment.

Section 12. **Effective Date**

Passed by the City Council of the Town of Canyon City, Oregon and Approved by the Mayor December 19, 1995.

Russell Bratcher

Russell Bratcher, Mayor

Attest:

Tammy Day

Tammy Day, Recorder/Manager