

4100419

## ARTICLE X

A-by law providing for the control of cross-connections with the SHADOW HILLS PARK CO-OP WATER ASSOCIATION and adopting rules and regulations for backflow prevention in compliance with Oregon Administrative Rules Chapter 333-061-0070 and 333-61-99, and declaring an emergency.

The Shadow Hills Park Co-op Water Association does ordain as follows:

### Section 1 General Statement

- A. These standards set forth minimum requirements for safe practice in the delivery of water for domestic use. They are to be interpreted as meeting only the minimum requirements of design, construction, maintenance, and operation of the water system.
- B. For the purpose of these minimum requirements, the word "shall" indicates a mandatory requirement. The use of the word "should" indicates a recommendation for good waterworks practice.

### Section 2 Definitions

- A. "Air Gap Separation" means the physical vertical separation between the free-flowing discharge end of a potable water supply pipeline and the open of non-pressure receiving vessel.
- B. "Approval" or "Approved" means approved in writing.
- C. "Atmospheric Vacuum Breaker" means a device which allows air to enter the water line when the line pressure is reduced to a gauge pressure of zero or below.
- D. "Auxiliary Water Supply" means any supply of water used to augment the supply obtained from the water system which serves the premises on question.
- E. "AWWA" means the American Water Works Association.
- F. "Backflow" means the flow in the direction opposite to the normal flow.
- G. "Backflow Prevention Device" or "Backflow Prevention Device Assembly" means a backflow prevention device such as a pressure vacuum breaker, a double check valve, or a reduced pressure principle device, and the attached shut-off valves on the inlet an outlet ends of the device assembled as a complete unit.
- H. "Check Valve" means a valve which allows flow in only one direction.
- I. "Water System" means the potable water system of the Shadow Hills Park Co-op Water Association.

J. "Cross Connection" means any physical arrangement where a water system is connected, directly or indirectly, with any water system or auxiliary system, drain conduit, swimming pool, swamp cooler, hot tubs, Jacuzzi, underground sprinkler system, drip irrigation system, green house, solar system, utility sink (threaded faucet), fire sprinkler system, ghost pipes, water beds, plumbing fixture, or any other device which contains, or maybe contains contaminated water, sewage or other liquid of unknown or unsafe quality which may be capable of imparting contamination to the community 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.

K. "Cross Connection Control Inspector" means a person contracted by the Water System who has been trained in Cross Connection Control and is certified by the State of Oregon.

L. "Division" means the Health Division of the Oregon Department of Human Resources.

M. "Double Check Valve Assembly" means an assembly of two independently acting check valves with shut-off valves on each side of the check valves and test cocks for checking the water-tightness of each check valve.

N. "Owner" means any person owning a beneficial interest with a right of possession in property served by the water system, and occupant of any premises served by the water system and any customer or water user of the water system.

O. "Person" includes 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.

P. "Potable Water" means safe drinking water.

Q. "Pressure Vacuum Breaker" means a device consisting of one or more spring loaded check valves and an independently operation air inlet valve installed as a unit between two tightly closing shut off valves. The air inlet valve is internally loaded to the open position.

R. "Reduced Pressure Principle Backflow Prevention Device (R.P. Device)" means a device for preventing backflow which has two check valves, a differential relief valve located between the two check valves, two shut-off valves, one on the upstream side and the other on the downstream side of the check valves, and four test cocks for checking the tightness of the check valves and the operation of the relief valve,

S. "Safe Drinking Water" means water which has sufficiently low concentration of microbiological inorganic chemical, organic chemical, radiological or physical substances for that individuals drinking such water at normal levels of consumption will not be exposed to disease organisms or other substances which may produce harmful physiological effects.

T. "Service Connection" means the piping connection by means of which water is conveyed from a distribution main of the water system to a members premises. The portion of the service connection which conveys water from the distribution main to the members property line, or to the service meter where provided, is owned by an under the jurisdiction of the water supplier.

U. "Water System" means the following:

1. The water system shall be considered as made up of two parts. The Water System and the Members System.
2. The Water System shall consist of the source of facilities and the distribution system, and shall include all those facilities of the water system under the complete control of the utility, up to the point where the customer system begins, generally at the water meter, or in case of fire service at the utility control valve of detector check.
3. The Members System will include those parts of the facilities which convey domestic water to points of use beyond the termination of the Water System. The term "Member System" is that of any user whether or not a charge is made.

### Section 3 Cross Connection Control Requirements

A. Before a water user or the owner of the premises obtaining water from the water system treats the water in any way or adds any chemical or substance to the water, such person shall obtain approval from the Cross Connection Control Inspector in writing prior to treatment.

B. Backflow prevention device assemblies for protecting the water system shall be installed on the owners side of the service connection to premises where an approved air gap does not exit and:

1. There is an auxiliary water supply which is connected to the potable water piping.
2. There is an auxiliary water supply which could be connected to the potable water piping, unless all the following requirements are met.
  - a. The auxiliary water supply is not, in fact, connected to the potable water piping.
  - b. The auxiliary water supply is conspicuously posted with a sign identifying it as a non potable water supply prohibiting it from being connected to the water supply or any potable supply system on the premises. The location and contents of the sign shall be determined by the Cross Connection Inspector.
  - c. The owner permits inspection, at such time a the Cross Connection Control Inspector may determine, to establish whether the auxiliary water has been connected to the potable water system or the water supply system.
  - d. If any inspection reveals that the auxiliary water system had been connected to the water system or any potable water system on the premises, the Cross Connection Control Inspector shall give written notice to the owner requiring the immediate disconnection of the auxiliary water supply until the installation of an approved backflow prevention device assembly has been installed at the service connection.

3. There is intricate plumbing which makes it impractical to ascertain whether or not cross-connection exists.
  4. There is back siphonage potential.
  5. Cross-Connection or potential cross-connection exists.
- C. The type of backflow prevention device required under paragraph(b) of this section, shall be commensurate with the degree of hazard which exists.
1. 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 (RP) device assembly shall be installed where a potential substance which could back flow is hazardous to health.
  2. An approved double check valve assembly shall be installed where the substance which could backflow is objectionable, but does not pose an unreasonable risk to health.
  3. An approved pressure vacuum breaker or an atmospheric breaker shall be installed where the substance which could backflow is objectionable but does not pose an unreasonable risk to health and where there is no possibility of back pressure in the downstream piping. A shut-off valve may be installed on the line downstream of a pressure vacuum breaker, but shall not be installed downstream of an atmospheric vacuum breaker.
- D. Except as set forth in paragraph (f) of this section all backflow prevention device assemblies required under this section shall be of a type or model approved by the Division.
- E. All backflow prevention device assemblies shall be installed in accordance with OAR chapter 333-61-99 and the Water Systems Standard Specifications.
- F. Backflow prevention device assemblies installed before the effective date of this by-law which were approved at the time they were installed, but are not on the current list of approved device assemblies maintained by the Division, shall be permitted to remain in service provided they are properly maintained, are commensurate with a degree of hazard, are tested at least annually, and perform satisfactorily. When devices of this type are moved, or required more than minimum maintenance, they shall be replaced by device assemblies which are on the Division list of approved device assemblies.

#### Section 4 Annual Testing and Repair

- A. The water user or the owner of the premises where one or more reduced pressure device assemblies, double check valve assemblies or pressure vacuum breakers have been installed shall have the device or devices tested, at owners or users expense, at least once per year. Devices shall be tested immediately after installation and after they are moved. Reports on the test shall be prepared by the tester and copies of the reports shall

be provided to the water user or the owner of the premises, and to the Cross Connection Control Inspector, within (15) days of the date the test is conducted. Tests shall be performed by State of Oregon certified testers in conformance with the procedures established by the Foundation for Cross-Connection Control and Hydraulic Research.

- B. If the results of any test indicate that repairs are necessary, the tester must notify the water user or of the premises immediately. All repairs must be made, a new test performed and the results of the test forwarded to the Cross Connection Control Inspector within ten days of the date of the first test.

Section 5 Notices Any notice required or permitted under this by-law shall be deemed given upon mailing to the address of the premises served or to the billing address of the water user listed with the water system.

Section 6 Inspections All water users and owners of premises served by the water system shall permit inspections by the Cross Connection Control Inspector, at such times as the Cross Connection Control Inspector may designate, for purposes of determining whether the water user or owner is in compliance with this by-law.

Section 7 Termination of Service The Cross Connection Control Inspector may terminate the water service to any premises when:

- A. A violation of this by-law continues after the expiration of any notice period provided under this by-law.
- B. Immediately, upon determination that an emergency exists or that a substantial hazard exists due to the potential for a backflow of hazardous substances.
- C. Immediately upon the refusal of any water user or owner of premises to permit inspection, or if the Cross Connection Control Inspector is unable to contact the water user or owner to arrange for an inspection.

Section 8 Cost of Compliance All costs associated with purchase, installation, inspection, testing, replacement, maintenance, parts, and repairs of the backflow device are the financial responsibility of the water user.

Section 9 Fees Fees for inspection by the Cross Connection Control Inspector shall be set by resolution.

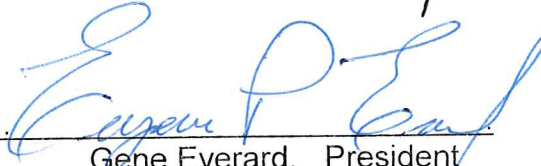
Section 10 Penalties Violations of this by-law shall be punishable by a fine not to exceed \$1,000.

Section 11 Separate Violations Each day that a violation of this by-law continues shall constitute a separate violation.

Section 13 Constitutionality Saving Clause Whereas, it is necessary to maintain the peace, health, and safety of the citizens of Shadow Hills Park Estate, an emergency is hereby declared to exist. This by-law therefore shall become in force with the effective date of this by-law upon its passage by the Board of Directors and approved by the President of the Shadow Hills Park Co-op Water Association.

Passed by the Board of Directors this 15 day of February, 1998

Approved by the President this 15 day of February 1998

  
Gene Everard, President