

#4100625

ORDINANCE NO. 708

AN ORDINANCE ADOPTING RULES AND REGULATIONS FOR BACKFLOW PREVENTION IN COMPLIANCE WITH OREGON ADMINISTRATIVE RULES CHAPTER 333-61-070, REPEALING ORDINANCE #658, AND DECLARING AN EMERGENCY.

THE CITY OF PHOENIX ORDAINS AS FOLLOWS:

GENERAL STATEMENT

- 1) 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 utility system.
- 2) For the purpose of these minimum requirements, the use of the word "shall" indicates a mandatory requirement. The use of the word "should" indicates a recommendation for good waterworks practice.

DEFINITIONS

- 1) City: This indicates the City of Phoenix when used in this ordinance.
- 2) Cross Connection Control Inspector: He/she shall be an employee of the City who has been trained in cross connection control and who has been certified by the Oregon State Health Department.
- 3) water system:
 - A. The water system shall be considered as made up of two parts: the utility system and the customer system.
 - B. The utility 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 or detector check.
 - C. The customer system shall include those parts of the facilities which convey domestic water to points of use beyond the termination of the utility system. The term "customer system" is that of any user whether or not a charge is made.
- 4) cross connection: Any physical arrangement where a public water system is connected, directly or indirectly, with any other water system or auxiliary system, sewer, drain conduit, swimming pool, storage reservoir, plumbing fixture, swamp coolers, 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 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.

- 5) backflow: The flow in the opposite to the normal flow or the introduction of any foreign liquids, gases, or substances into the water distribution system of the City.
- 6) auxiliary supply: Any water source or system other than the City's water system, that may be available in the building or on the premises.
- 7) approved assembly: A device to counteract back pressures or prevent back siphonage. This device shall appear on the list of approved devices issued by the Oregon State Health Division.
- 8) reduced pressure principle assembly: An approved 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 ends of the assembly.
- 9) pressure vacuum breaker assembly: An approved assembly consisting of a spring loaded check valve loaded to the closed position, an independently operating air inlet valve loaded to the open position and installed as a unit with and between two resilient seated shutoff valves and with suitable connections for testing. It is designed to protect against back siphonage only.
- 10) double check valve assembly: An approved assembly consisting of two independently operating check valves, loaded to the closed position by springs or weights, and installed as a unit with and between two resilient seated shutoff valves and having suitable connections for testing.
- 11) premises: Any piece of land to which water is provided including all structures, improvements, mobile home(s), and structures located on it.

PURPOSE

The purpose of these regulations is to protect the water supply of the City from contamination or pollution due to any existing or potential cross connections.

ROSS CONNECTIONS REGULATED

No cross connections shall be created, installed, used or maintained within the territory served by the City, except in accordance with these regulations.

BACKFLOW PREVENTION ASSEMBLY REQUIREMENT

Approved backflow prevention assemblies shall be installed at the expense of the property owner, either at the service connection or within the premises, as determined by a certified Cross Connection Control Inspector in each of the following circumstances:

- 1) If the nature and extent of any activity on the premises, or the materials used in connection with any activity on the premises, or materials stored on the premises, could contaminate or pollute the drinking supply in anyway.
- 2) On premises having any one or more cross connections as that term is defined in the definitions section of this ordinance.
- 3) Internal cross connections that are not correctable or intricate plumbing arrangements which make it impractical to ascertain whether or not cross connections exist.
- 4) A repeated history of cross connections being established or re-established.
- 5) Unduly restricted entry so that inspections for cross connections cannot be made with sufficient frequency or with sufficient notice to assure that cross connection do not exist.
- 6) Materials of a toxic or hazardous nature being used such that if back siphonage should occur, a health hazard could result.
- 7) Any mobile apparatus which uses the City's water system or water from any premises within the City's system.
- 8) All Unified Plumbing Codes must be maintained.
- 9) All new construction shall submit their plans to the water department for review and determination of the necessity of an assembly by the Cross Connection Control Inspector.
- 10) On any premises where 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 City.
- 11) On any premise where an appropriate cross connection report form has not been filed with the office of the Cross Connection Control Inspector.

INSTALLATION REQUIREMENTS

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

- 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 Cross Connection Control Inspector prior to installations.
- 3) The assembly must be protected from freezing and other severe weather conditions.
- 4) All backflow prevention assemblies to be installed shall be of a type and model pre-approved by the State of Oregon Health Division and the Cross Connection Control Inspector.
- 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. Devices 2" and smaller shall have at least 6" clearance on all sides of the device. All devices larger than 2" shall have a minimum clearance of 12" on the back side, 24" on the test cock side, 12" below the device and 36" above the device.
- 7) 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 4:30 p.m., Monday through Friday.
- 8) If an assembly with written permission is installed inside of the premises and is 4" or larger and is installed above the floor, it must be equipped with a rigidly and permanently installed scaffolding acceptable to the Cross Connection Control Inspector. 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.
- 9) Reduced Pressure Principal Assemblies may be installed in a vault only if the 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.

- 10) 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".
- 11) Where a backflow device is deemed necessary, the model of assembly and installation plans shall be submitted to the Cross Connection Control Inspector for approval prior to installation.
- 12) Upon completing of installation, the Cross Connection Control Inspector shall be notified and all devices must be inspected and tested. All backflow devices must be registered with the Cross Connection Control Inspector. Registration shall consist of date of installation, make, model, serial number of the backflow device, and initial test report.

Any variances from these installation requirements shall be requested in writing by the owner and approved by the Cross Connection Control Inspector prior to device installation.

ACCESS TO PREMISES

Authorized employees of the City, 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 City, a reduced pressure principle assembly will be required to be installed at the service connection to that premises at the user's expense.

ANNUAL TESTING AND REPAIRS

All backflow assemblies installed within the territory served by the City shall be tested immediately upon installation and at least annually thereafter by a state certified tester. Any tester operation within the territory served by the City must notify the Cross Connection Control Inspector, 48 hours prior to testing. 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 City may deny or discontinue water to the premise. All testing and repairs are the financial responsibility of the water user.

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. If these costs are not paid within thirty (30) days from the date of compliance, an assessment of the costs, as stated or as determined by the Council shall be entered in the docket of city liens, and upon such entry being made, shall constitute a lien upon the property.

TERMINATION OF SERVICE


Failure on the part of any customer to discontinue the use of all cross connections except in accordance with this ordinance is sufficient cause for the immediate discontinuance of public water service to the premises (OAR Chapter 333-61-070, Section 1).

CONSTITUTIONALITY AND SAVING CLAUSE

If any clause, sentence, paragraph, section, article, or portion of this ordinance shall, for any reason, be adjudged invalid or unenforceable by a court of competent jurisdiction, the remainder of the ordinance shall remain in full force and effect.

It is hereby adjudged and declared that the existing conditions are such that this ordinance is necessary for the immediate preservation of the public health and safety of the people of the City of Phoenix and an emergency is hereby declared to exist and this ordinance shall be in full force and effect from and after the date of its passage and approval by the Mayor.

ADOPTED AND ACCEPTED THIS 20th DAY OF January, 1992.


Otto Caster, Mayor

ATTEST:


Jeralyn Jones, City Recorder

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