

**AN ORDINANCE PROVIDING FOR A CROSS CONNECTION CONTROL PROGRAM.**

WHEREAS, Chapter 333, Division 61, of the Oregon Administrative Rules, mandate the responsibility of the City of Aurora to protect its drinking water by instituting and enforcing a cross connection control program.

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF AURORA ORDAINS THAT:****SECTION 1. DEFINITIONS.**

- (1) "Approved backflow prevention assembly" or "backflow assembly" or "assembly" means an assembly to counteract back pressures or prevent back siphonage. This assembly must appear on the list of approved assemblies issued by the Oregon State Health Division. ✓
- (2) "Auxiliary supply" means any water source or system other than the public water system, that may be available in the building or 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 City's water.
- (4) "Boresight" or "boresight to daylight" means providing adequate drainage for backflow prevention assemblies installed in vaults through the use of an unobstructed drain pipe.
- (5) "City or "the City" shall mean the City of Aurora.
- (6) "Contamination" means the entry to or presence in a public water supply system of any substance which may be deleterious to health and/or quality of the water.
- (7) "Cross connection" means any physical arrangement where a public water system is connected, directly or indirectly, with any other non-drinking 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 changeover devices or other temporary or permanent devices through which, or because of which, backflow may occur are considered to be cross connections.
- (8) "Degree of hazard" means the low or high hazard classification that shall be attached to all actual or potential cross connections.
- (9) "Superintendent" means the Superintendent of Public Works of the City of Aurora, or authorized agent.
- (10) "Double check valve backflow prevention assembly", "double check assembly" or "double check", means an assembly which consists of two independently operating check valves which are spring-loaded or weighted. The assembly comes complete with a gate valve on each side of the checks, as well as test cocks to test the checks for tightness.

(11) "Health hazard" means the classification assigned to an actual or potential cross connection that potentially could allow a substance that may cause illness or death to backflow into the potable water supply.

*should this be "high hazard"?*

(13) "Low hazard" means the classification assigned to an actual or potential cross connection that potentially could allow a substance that may be objectionable, but not hazardous to one's health, to backflow into the potable water supply.

(14) "Plumbing hazard" means an internal or plumbing-type cross connection in a consumer's potable water system that may be either a polluttional or a contamination-type hazard. This includes, but is not limited to, cross connections to toilets, sinks, lavatories, wash trays, 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.

(15) "Point of use isolation" means the appropriate backflow prevention within the consumer's water system at the point at which the actual or potential cross connection exists.

(16) "Polluttional hazard" means 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.

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

(18) "Premises" or "premise" means any piece of property to which water is provided including all improvements, mobile structures and structures located on it.

(19) "Premise isolation" means the appropriate backflow prevention at the service connection between the public water system and the water user.

(20) "Reduced pressure principle backflow prevention assembly", "reduced pressure principle assembly" or "RP assembly" 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 assembly shall include properly located test cocks and tightly closing shut off valves at the end of the assembly.

(21) "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.

(22) "Thermal expansion" means heated water that does not have the space to expand.

## SECTION 2. PURPOSE.

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

### SECTION 3. CROSS CONNECTIONS REGULATED

No cross connection shall be created, installed, used or maintained within the territory served by the City of Aurora except in accordance with this ordinance.

### SECTION 4. BACKFLOW PREVENTION ASSEMBLY REQUIREMENTS

- (1) A cross connection inspector employed by or contracted with the City shall carry out inspections and surveys of each property and will require an assembly commensurate with the degree of hazard to be installed at the service connection.
- (2) The property owner is responsible for all cross connection control within the premises.
- (3) The property owner is responsible for providing adequate protection against thermal expansion. ✓
- (4) The use of any type of chemical spray attachment connected to the premise plumbing, including garden hose fertilizers and pesticide applicators, is prohibited within the City of Aurora water system.
- (5) The use of any type of radiator flush kits attached to the premise plumbing is prohibited within the City of Aurora water system.

### SECTION 5. INSTALLATION REQUIREMENTS

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

- (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 immediately downstream of the water meter, before any branch in the line. Alternate locations must be approved in writing by the City prior to installation.
- (3) The assembly must be protected by the property owner from freezing and other severe weather conditions.
- (4) All backflow prevention assemblies shall be of a type and model approved by the State of Oregon Health Division and the City.
- (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. Assemblies 2" and smaller shall have at least 6" clearance on all sides of the assembly. All assemblies larger than 2" shall have a minimum clearance of 12" on the back side, 24" on the test cock side, 12" below the assembly and 36" above the assembly. "Y" pattern double check valve assemblies shall be installed so that the checks are horizontal and the test cocks face upward.

- (7) If written permission is granted to install the backflow assembly inside of the building, the assembly must be readily accessible during regular working hours of 6:00 AM to 6:00 PM, Monday through Friday.
- (8) An assembly installed inside of the premises and installed 5' above the floor, must be equipped with a rigidly and permanently installed scaffolding acceptable to the City. This installation must also meet the requirements set out by the US Occupational Safety and Health Administration and the State of Oregon Occupational Safety and Health Codes.
- (9) RP assemblies 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 assembly 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) Upon completion of installation of any additional assemblies within the premises, the City must be notified and all assemblies must be inspected and tested, as required in Section 7.
- (12) Any water pressure drop caused by the installation of a backflow assembly is not the responsibility of the City.
- (13) All new construction must install an approved assembly at the service connection. The type of assembly shall be commensurate with the degree of hazard as determined by a certified inspector. If the use of the property has not been determined, an RP assembly must be installed.

#### SECTION 6. ACCESS TO PREMISES

Authorized employees of the City, with proper identification, shall have access during the hours of 6:00 AM to 6:00 PM of all parts of a premise and within the building to which water is supplied. However, if any water user refuses access to a premise or to the interior of a structure during these hours for inspection by a cross connection specialist appointed by the City, a reduced pressure principle assembly must be installed at the service connection to that premise.

#### SECTION 7. 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 employed by or contracted with the City to perform required tests. All such assemblies found not functioning properly shall be promptly repaired or replaced at the expense of the property owner. If any such assembly is not promptly repaired or replaced, the City may deny or discontinue water to the premise. The City may set fees to cover the cost of this service.

*Who pays for the test?*

*May have a problem requiring property owner to hire the City's testers.*

#### SECTION 8. COSTS OF COMPLIANCE

All costs associated with purchase, installation, inspections, testing, replacement, maintenance, parts, and repairs of the backflow assembly are the financial responsibility of the property owner.

SECTION 9. TERMINATION OF SERVICE

Failure on the part of any customer to discontinue the use of all cross connections and to physically separate cross connection is sufficient cause for the immediate discontinuance of public water service to the premises (OAR Chapter 333-61-070, Section 1). ✓

SECTION 10. CONSTITUTIONALITY AND SAVINGS CLAUSE

If any provision, section, sentence, clause or phrase of this Ordinance, or the application of same to any person or set of circumstances, are for any reason held to be unconstitutional, void or invalid, or for any reason unenforceable, the validity of the remaining portions of this Ordinance, or its application to other persons or circumstances, shall not be affected. It is the intent of the City Council of the City of Aurora in adopting this Ordinance that no portion hereof or provisions or regulation contained herein shall become inoperative or fail by reason of any unconstitutionality or invalidity of any other portion. provision or regulation.

SUBMITTED to the Aurora City Council and read for the first time at a regularly scheduled meeting thereof on the 30 day of January 1996; ordered posted for not less than 5 days, as provided by the Aurora City Charter; scheduled for a second reading and enactment by the City Council at a regularly scheduled meeting thereof on Tuesday February 13, 1996, commencing at the hour of 7:30 PM at the Council's regular meeting place, Aurora City Hall.

Melody Thompson  
Melody Thompson - City Recorder

ADOPTED by the Aurora City Council at a regularly scheduled meeting thereof on Tuesday, February 6, 1996, by the following vote:

3 YEAS      0 NAYS      0 ABSTAIN      2 ABSENT

15 FEB 96  
Richard Harrison - Mayor

ATTEST:

Melody Thompson  
Melody Thompson - City Recorder

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REMITTED to the Aurora City Council and read for the first time at a regularly scheduled meeting thereof on the 10 day of January 1998, ordered placed for not less than 3 days as provided by the Aurora City Charter, scheduled for a second reading and enactment by the City Council at a regularly scheduled meeting thereof on Tuesday, February 13, 1998, commencing at the hour of 7:30 PM at the Council's regular meeting place, Aurora City Hall.

*Melody Thompson*  
Melody Thompson - City Recorder

ADOPTED by the Aurora City Council at a regular, scheduled meeting thereof on Tuesday, February 13, 1998 by the following vote:

3 YEAS      2 NAYS      2 ABSTAIN      3 ABSENT

*Ronald Harrison*  
Ronald Harrison - Mayor

ATTEST:

*Melody Thompson*  
Melody Thompson - City Recorder