

# 41-00257

## ORDINANCE NO. 110

### CROSS CONNECTION ORDINANCE.

Pursuant to Chapter 333, Division 61 of the Oregon Administrative Rules, it is the responsibility of the City of Detroit to protect its drinking water by systematically identifying and controlling cross connections. Now therefore, the City of Detroit, Oregon ordains as follows:

#### CITY OF DETROIT WATER DEPARTMENT CROSS CONNECTION REGULATIONS

##### Contents:

<u>Section</u>	<u>Title</u>
1	Definitions
2	Purpose
3	Cross Connections Regulated
4	Backflow Prevention Device Requirements
5	Installation Requirements & Instructions
6	Access to Premises
7	Annual Testing and Repairs
8	Variances
9	Cost of Compliance
10	Termination of Services
11	Severability
12	Emergency

**SECTION 1. Definitions.** As used in this ordinance, the following mean:

**Water Department.** An administrative unit of the City of Detroit.

**Cross Connection.** Any physical arrangement where a public water system is connected directly or indirectly, with any other non-drinkable 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 change over devices, or other temporary or permanent devices through which, or because of which, backflow may occur are considered to be cross connections.

**Backflow.** 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 City of Detroit.

**Auxiliary supply.** Any water source or system other than the public water system, that may be available in the building or on the premises.

(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 of Detroit Water System or water from any premises within the system.

(8) On any premise 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 of Detroit.

(9) On any premise where an appropriate cross connection report form has not filed with the Water Department.

**SECTION 5. Installation Requirements.** To ensure proper operation and accessibility of all backflow prevention devices, the following requirements shall apply to the installation of these devices.

(1) No part of the backflow prevention device 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) Devices 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 Water Department prior to installations.

(3) The device must be protected from freezing and other severe weather conditions.

(4) All backflow device prevention assemblies shall be of a type and model approved by the State of Oregon, Health Division and Water Department.

(5) Only devices specifically approved by the Oregon Health Division, for vertical installation may be installed vertically.

(6) The device 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) The property owner assumes all responsibility, for all maintenance and annual testing of the device.

(8) If written permission is granted to install the backflow device inside of the building, the device shall be readily accessible during regular working hours of 8:00 a.m. to 5:00 p.m., Monday through Friday.

(9) If a device, with written permission, is installed inside of the premises and is 4" or larger and is installed 4' above the floor, it must be equipped with a rigidly and permanently installed scaffolding acceptable to the Water

**SECTION 9. 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.

**SECTION 10. Termination of Service.** Failure on the part of any customer to discontinue the use of all cross connections, and to physically separate cross connections is sufficient cause, for the immediate discontinuance of public water service to the premises. (OAR chapter 333-061-070, section 1)

**SECTION 11. Severability.** Should any section, subsection, paragraph, sentence, clause or phrase of this ordinance be declared invalid, such declaration shall not affect the validity of any other section, subsection, paragraph, sentence, clause or phrase; and if this ordinance or any portion thereof should be held to be invalid on one ground, but valid on another it shall be construed that the valid ground is the one upon which the ordinance, or such portion thereof was enacted.

**SECTION 12. Emergency.** It being necessary for the peace, health, safety and sound development of the City of Detroit an emergency is hereby declared to exist; and this ordinance shall take effect immediately upon its passage by the council and signature by the mayor.

Read first in full and by title only at the council meeting on April 13, 1993, and read a second time by title only at the council meeting on the 13 day of APRIL, 1993. Passed by a vote of 5 ayes and 0 nays of the City Council this 13 day of APRIL 1993.

Signed and approved by the mayor, and signed by the recorder this 13 day of APRIL 1993.



Mayor

ATTEST: Maryann Hills  
City Recorder



RESOLUTION NO. 209

**A RESOLUTION ADOPTING A CROSS CONNECTION CONTROL PROGRAM.**

**WHEREAS,** the city of Detroit has adopted a Cross Connection Ordinance, a program is needed to administer cross connection regulations; and

**WHEREAS,** the city has employed a certified cross control inspector who shall carry out the cross control program; now, therefore,

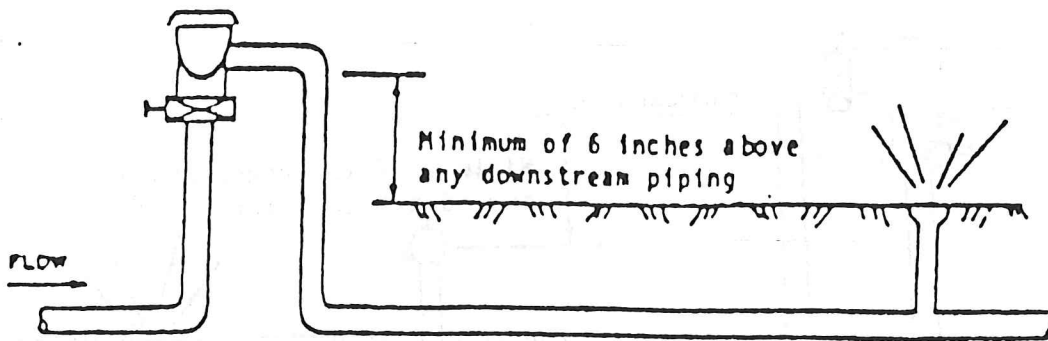
**BE IT RESOLVED,** that the city council adopts the program, for controlling and eliminating cross connections as follows:

**CITY OF DETROIT WATER DEPARTMENT  
CROSS CONNECTION CONTROL PROGRAM**

- (1) Identify potential cross connections.
- (2) Backflow prevention device assemblies, for protecting City of Detroit Water system shall be installed at the connection to premises where an approved airgap does not exist, and:
  - (a) There is an auxiliary water supply which is, or can be, connected to the potable water piping;
  - (b) 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;
  - (c) There is intricate plumbing which makes it impractical to ascertain whether or not cross connections exist;
  - (d) There is backsiphonage potential.
  - (e) Cross connections or potential cross connections are identified.
- (3) The type of backflow prevention required under section (2) of this program, shall be fit for the degree of hazard which exists:
  - (a) 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 backflow device (RPBD) device assembly shall be installed where the substance which could backflow is hazardous to health;

333-61-099 BACKFLOW DEVICE INSTALLATION  
STANDARDS

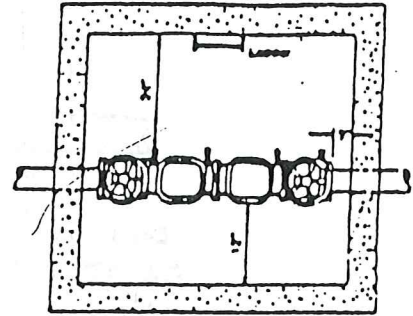
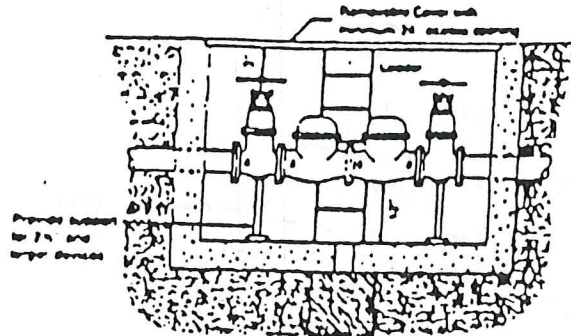
TYPICAL INSTALLATION OF AN AVB



333-61-099

- NOTE: 1. Absolutely no means of shut-off on the downstream or discharge side of the vacuum breaker.
2. For intermittent use only. Must not be pressurized for more than 12 hours in any 24 hour period.
3. Shall not be subject to any backpressure.
4. Shall not be installed in dusty or corrosive atmospheres.
5. Shall not be installed where subject to flooding.

## MINIMUM CLEARANCE FOR DCVA INSTALLATION



- NOTE: 1. Bottom and side clearances apply when devices are installed inside building.
2. DCVAs may be installed vertically as well as horizontally provided that the device assembly:
- a. Is internally spring loaded — not weighted checks.
  - b. Is 4 inches or smaller.
  - c. Is recommended by the manufacturer for vertical installation.
  - d. Has the normal flow upward.
3. DCVAs may be installed below grade in a vault, provided plugs are installed in the test cocks.
4. Maximum height of installation shall not exceed 5 feet for device assemblies larger than 2 inches unless there is a permanently installed platform meeting Occupational Safety and Health (OSHA) standards to facilitate servicing the device.
5. Minimum clearances for device assemblies 2 inches or smaller may be reduced provided that they are accessible for testing and repairing and the water purveyor agrees to the variance.
6. Adequate drainage must be provided except that the drain shall not be connected to a sanitary or storm water drain. Check with local utilities for requirements.

(5) As a condition of water service, customers shall install, maintain, and operate their piping and plumbing systems in accordance with the Oregon State Plumbing Laws and Administrative Rules.

PASSED AND ADOPTED this 13 day of April 1993.

Conner M. Erickson

Mayor

ATTEST:

Maryann Hills  
City Recorder