

41-00537

CITY OF MONMOUTH
CROSS CONNECTION CONTROL PROGRAM
September 5, 1995

SECTION 1. CROSS CONNECTION CONTROL - GENERAL POLICY

1.1 PURPOSE

- 1.1.1 To protect the public potable water supply served by the City of Monmouth Public Works Department from the possibility of contamination or pollution by isolating, within its customers internal distribution system, such contaminants or pollutants which could backflow or backsiphon into the public water system.
- 1.1.2 To promote the elimination of, or control of, existing cross connections, actual or potential, between the potable water system and source of non-potable water or other hazardous substances.
- 1.1.3 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 connections.

1.2 AUTHORITY

- 1.2.1 The Federal Safe Drinking Water Act of 1974, and the statutes of the State of Oregon, Administrative Rules chapters 333-61-070 (070-Program Requirements), 333-61-071 (071-Installation Standards), and 333-61-072 (072-Certification), state that the water supplier has the primary responsibility for preventing water from unapproved sources, or any other substances, from entering the public potable water system.
- 1.2.2 The City of Monmouth Water Department Rules and Regulations as described in Chapter 71 of the City of Monmouth City Code.

1.3 RESPONSIBILITY

The Public Works Director shall be responsible for the protection of the public potable water distribution system from contamination or pollution due to the backflow or backsiphonage of contaminants or pollutants through the water service connection. If, in the judgment of the Public Works Director, an approved backflow device is required at the city's water connection to any customer's premise, the Director, or delegated agent, shall give notice in writing to said customer to install an approved backflow prevention device at each service connection to the customer's premise.

The customer shall, within ninety (90) days of notification, install such approved device, or devices, at his own expense. Failure, refusal, or inability on the part of the customer to install, have tested, and maintain said device or devices within ninety (90) days, shall constitute grounds for discontinuing water service to the premises until such device or devices have been properly installed and tested.

SECTION 2. DEFINITIONS

2.1 Approved

Accepted by the City of Monmouth as meeting an applicable specification stated or cited in this regulation, or as suitable for the proposed use.

2.2 Auxiliary Water Supply

Any water supply, on or available, to the premises other than the purveyor's will be considered as an auxiliary water supply.

2.3 Backflow

The term "Backflow" shall mean the undesirable reversal of flow of water or mixtures of water and other liquids, gases or other substances into the distribution pipes of the potable supply of water from any source or sources.

2.4 Backflow Preventer

An assembly or means designed to prevent backflow or backsiphonage.

2.4.1 Air Gap

A physical separation between free flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel. An "approved air gap" shall be at least double the diameter of the supply pipe measured vertically above the overflow rim of the vessel - in no case be less than one inch.

2.4.2 Atmospheric Vacuum Breaker

A device which prevents backsiphonage by creating an atmospheric vent when there is either a negative pressure or sub-atmospheric pressure on a water system.

2.4.3 Double Check Valve Assembly

An assembly of two (2) independently operating spring loaded check valves with tightly closing shut off valves on each side of the check valves, plus properly located test clocks for the testing of the check valve.

2.4.4 Pressure Vacuum Breaker

Means a device consisting of one or more spring loaded check valves and an independently operating air inlet valve installed as a unit between two tightly closing shut off valves on each side of the check valves and properly located test cocks for testing. The air inlet valve is internally loaded to the open position.

2.4.5 Reduced Pressure Principle Backflow Preventer

Means a device consisting of two independently acting, spring loaded check valves separated by a spring loaded differential pressure relief valve. This device shall be installed as a unit between two tightly closing shut off valves and properly located test cocks for the testing of the check valves and relief valves.

2.5 Back pressure

Shall mean any elevation of pressure in the downstream piping system (by pumping, elevation of piping, steam or air pressure) above the supply pressure at the point of consideration which would cause, or tend to cause, a reversal of the normal direction of flow.

2.6 Backsiphonage

The flow of water or other liquids, mixtures or substances into the distribution pipes of a potable water supply system from any source other than its intended source caused by the sudden reduction of the pressure in the potable water supply system.

2.7 Contaminant

Means any physical, chemical, biological, or radiological substance or matter in water.

2.8 Cross Connection

Means any link or channel between the public water supply and piping or fixtures which carry other water or other substances.

2.9 Distribution System

Means the network of pipes and other facilities which are used to distribute water from the source, treatment, transmission, or storage facilities to the water user.

2.10 Division

Means the Health Division of the Oregon Department of Human Resources.

2.11 Owner

Any person who has legal title to, or license to operate or habitat in, a property upon which a cross connection inspection is to be made or upon which a cross connection is present.

2.12 Person

Any individual, partnership, company, public, or private corporation, political subdivision or agency of the State Division, agency or instrumentality of the United States or any other legal entity.

2.13 Permit

A document issued by the utility which allows the use of a backflow preventer.

2.14 Public Works Director

The Director, or his delegated representative in charge of the water section of the Public Works, is invested with the authority and responsibility for the implementation of a cross connection control program and for the enforcement of the provisions of the Ordinance.

2.15 Utility

City of Monmouth water section of the Public Works Department.

2.16 Water Service Entrance (connection)

That point in the owner's water system beyond the sanitary control of the utility; generally considered to be the outlet end of the water meter and always before any unprotected branch.

SECTION 3 - ADMINISTRATION

3.1 The utility will operate a cross connection control program, to include the keeping of necessary records, which fulfills the requirements of the Division's Cross Connection Regulations.

3.2 The owner shall allow his property to be inspected, when given reasonable notification and during reasonable times, for possible cross connections and shall follow the provisions of the utility's program, and the Division's regulations if a cross connection is identified.

SECTION 4 - REQUIREMENTS

4.1 Utility

- 4.1.1 On new installations, the utility will provide on-site evaluation and/or inspection of plans in order to determine the type of backflow preventer, if any, that will be required, will issue permit, and perform inspection.
- 4.1.2 For premises existing prior to the start of this program, the utility will perform evaluations and inspections of plans and/or premises and inform the owner by letter of any corrective action deemed necessary.
 - 4.1.2.1 The method of achieving the correction, and the time allowed for the correction to be made.
 - 4.1.2.1.1 Ordinarily ninety (90) days will be allowed for the correction.
 - 4.1.2.1.2 This 90 day period may be shortened depending on the degree of hazard or the history of the device.
- 4.1.3 The utility will not allow any cross connection to remain unless it is protected by an approved backflow preventer for which a permit has been issued and which will be regularly tested to insure satisfactory operation.
- 4.1.4 The utility will inform the owner by letter of any failure to comply, within ten (10) working days of the first re-inspection.
 - 4.1.4.1 The utility will allow an additional fifteen (15) days for the correction.
 - 4.1.4.2 At the end of the additional fifteen (15) days a second re-inspection will be made to determine if corrections have been made.
 - 4.1.4.3 If correction has not been made, the utility will inform the owner by letter that the water service to the owner's premises will be terminated five (5) days from date of this notice.
 - 4.1.4.4 In the event that the owner informs the utility of extenuating circumstances as to why the correction has not been made, a time extension may be granted by the utility but in no case will exceed an additional thirty (30) days.

- 4.1.5 If the utility determines at any time that a serious threat to the public health exists, the water service will be terminated immediately.
- 4.1.6 The utility shall have on file a list of private contractors who are certified backflow device testers. All charges for these tests will be paid by the owner of the building or property.
- 4.2 Owner
- 4.2.1 The owner shall be responsible for the elimination or isolation of all cross connections on his premises.
- 4.2.2 The owner, after having been informed by a letter from the utility, shall at his expense, install, maintain, and test or have tested, any and all backflow preventers on his premises.
- 4.2.3 The owner shall correct any malfunctions of the backflow preventer which is revealed by periodic testing.
- 4.2.4 The owner shall inform the utility of any proposed or modified cross connections and also any existing cross-connections of which the owner is aware but has not been found by the utility.
- 4.2.5 The owner shall not install a by-pass around any backflow preventer unless there is a backflow preventer of the same type on the by-pass. Owners shall not tamper with backflow devices.
- 4.2.6 The owner shall install backflow preventers in a manner approved by the utility.
- 4.2.7 The owner shall install only backflow preventers approved by the Health Division.
- 4.2.8 Any owner having a private well or other private water source, must have a permit if the well or source is cross-connected to the utility's system. Permission to cross connect may be denied by the utility. The Owner may be required to install a backflow preventer at the service entrance if a private water source is maintained, even if it is not cross connected to the utility's system.
- 4.2.9 In the event the owner installs plumbing to provide potable water for domestic purposes which is on the utility's side of the backflow preventer, such plumbing must have its own backflow preventer installed.

SECTION 5 - DEGREE OF HAZARD

- 5.1 The utility recognizes the threat to the public water system arising from cross connections. All threats will be classified by degree of hazard and will require the installation of an approved backflow prevention devices.
- 5.2 Degree of Hazard
The term "Degree of Hazard" shall mean either a pollutional (non-health-low) or contamination (Health-High) hazard and is derived from the evaluation of conditions within a system.

SECTION 6 - EXISTING BACKFLOW DEVICES

- 6.1 Any existing backflow preventer shall be allowed by the utility to continue in service unless the degree of hazard is such as to supersede the effectiveness of the preventer, or result in an unreasonable risk to public health.
- 6.2 Where the degree of hazard has increased, as in the case of a residential installation converting to a business establishment, any existing backflow device must be replaced with an approved device suitable for that degree of hazard.

SECTION 7 - PERIODIC TESTING

- 7.1 All testable backflow devices shall be tested and inspected at least annually.
- 7.2 Periodic testing shall be performed by a certified tester from a list provided by the utility this testing will be done at the owner's expense.
- 7.3 Any backflow preventer which fails during a periodic test will be repaired or replaced. When repairs are necessary, upon completion, of the repair the device will be re-tested at owner's expense to insure correct operation. High hazard situations will not be allowed to continue if the backflow preventer fails the test and cannot be repaired immediately. In other situations, a compliance date of not more than thirty (30) days after the test date will be established. The owner is responsible for spare parts, repair tools, or a replacement device. Parallel installation of two (2) devices is an effective means of the owner insuring uninterrupted water service during testing or repair of devices and is strongly recommended when the owner desires such continuity.

7.4 Backflow prevention devices will be tested more frequently than specified in 7.1 of this Section if the utility feels that there is a history of test failures. Cost of additional testing will be borne by the Owner. Any circumstance not covered by this Ordinance or any of the Authorities (1.2.1 - 1.2.2) shall be left to the judgment of the Public Works Director or his delegated representative.