

BEFORE THE CITY COUNCIL FOR THE
CITY OF ADAIR VILLAGE, OREGON

In the matter of)
amending section 20,)
Cross Connections,)
from Adair Village)
Ordinance No.)
78/79 #8)

RECEIVED
MAR 16 2009
FIELD SERVICES
DRINKING WATER PROGRAM

ORDINANCE NO. 95/96 2

THE CITY OF ADAIR VILLAGE CITY COUNCIL ORDAINS AS FOLLOWS:

Sec. 1. Adair Village Ordinance 78/79 #8, section 20 is amended to read as follows:

- See Attached Exhibit A

Sec. 2. This Ordinance being immediately necessary to protect public safety and property, an emergency is declared, and this Ordinance takes effect upon its adoption.

City of Adair Village, Oregon, May __, 1996.

CITY OF ADAIR VILLAGE

YRC
MAYOR

Manda Pierson
CITY RECORDER

Approved as to Form:

DA M
City Attorney

First Reading: May 6, 1996

Second Reading: May 6, 1996

Recording Secretary: Manda Pierson

Section 20 Cross Connection

I. DEFINITIONS

1. AIR GAP - A physical separation sufficient to prevent backflow between the free-flowing discharge end of the potable water system and any other system. Physically defined as a distance equal to twice the diameter of the supply side pipe diameter but never less than one (1) inch.
2. APPROVED - Accepted by the City as meeting an acceptable specification stated or cited in the regulation, or as suitable for the proposed use.
3. ATMOSPHERE VACUUM BREAKER - A device which prevents backsiphonage by creating an atmospheric vent when there is either a negative pressure or sub-atmospheric pressure on the water system.
4. AUXILIARY WATER SUPPLY - Any water supply, on or available, to the premises other than the suppliers approved public potable water supply.
5. BACKFLOW - The flow of water or other liquids, mixtures or substances, under positive or reduced pressure in the distribution pipes of a potable water supply from any source other than its intended source.
6. BACKPRESSURE - A condition in which the Owner's system pressure is greater than the supplier's system pressure.
7. BACKFLOW PREVENTER - A device or means designed to prevent backflow or backsiphonage. Most commonly categorized as air gap, reduced pressure principle device, double check valve assembly, pressure vacuum breaker, atmospheric vacuum breaker, hose bib vacuum breaker, and double check with intermediate atmospheric vent. Any device must be classified as an approved backflow device by the Oregon Health Division and the City.
8. BACKSIPHONAGE - The flow of water or other liquids, mixtures or substances into the distribution pipes of a potable water supply system from a source other than its intended source caused by the sudden reduction of the pressure in the potable water supply system.
9. CONTAINMENT - A method of backflow prevention which requires a backflow preventer at the water service entrance.
10. CONTAMINANT - Any substance that will impair the quality of the water to a degree that it creates a serious health hazard to the public leading to poisoning or the spread of disease.

11. CROSS CONNECTION - Any actual or potential connection between the public water supply and a source of contamination or pollution.
12. DIVISION - The State of Oregon Public Health Division.
13. 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. The check valve(s) must be able to be removed for testing.
14. DOUBLE CHECK VALVE with INTERMEDIATE ATMOSPHERIC VENT - A device having two (2) spring loaded check valves separated by an atmospheric vent chamber.
15. FIXTURE ISOLATION - A method of backflow prevention in which a backflow preventer is located to correct a cross connection at an in-plant location rather than a water service entrance.
16. HOSE BIB VACUUM BREAKER - A device which is permanently attached to a hose bib and which acts as an atmospheric vacuum breaker.
17. OWNER - Any person who has legal title to, or license to operate or live in a property upon which a cross connection inspection is to be made or upon which a cross connection is present.
18. PERMIT - A document issued by the City which allows the use of a backflow preventer.
19. PERSON - Any individual, partnership, company, public or private corporation, political subdivision or agency of the State Division, agency or instrumentality or the United States or any other legal entity.
20. POLLUTANT - A foreign substance that, if permitted to get into the public water system, will degrade its quality so as to constitute a moderate hazard, or impair the usefulness or quality of the water to a degree which does not create an actual hazard to the public health but which does adversely and unreasonably effect such water for domestic use.
21. PRESSURE VACUUM BREAKER - A device containing one (1) or two (2) independently operating approved check valves and an independently operated spring loaded air inlet valve located on the discharge side of the check of the checks. Device includes right closing shut-off valves on each side of the check valves and properly located test cocks for the testing of the check valve(s).

22. PUBLIC WORKS DIRECTOR - The Director, the Certified Water Operator, the designated representative of the Certified Water Operator, or the designated representative of the City Administrator in charge of the maintenance of the City Water System, is vested with the authority and responsibility for the implementation of a cross connection control program and for the enforcement of the provisions of this ordinance.

23. REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER - An assembly consisting of two (2) independently operating approved check valves with an automatic differential relief valve located between the two check valves, tightly closing shut-off valves plus properly located test cocks for the testing of the check valves and the relief valves.

24. UTILITY - The City of Adair Village.

25. WATER SERVICE ENTRANCE - That point in the Owner's water system beyond the sanitary control of the City generally considered to be the outlet end of the water meter and always before any unprotected branch.

II. PURPOSE

- A. To protect the public potable water supply served by the City of Adair Village from the possibility of contamination or pollution by isolating, within its customer's internal distribution system, such contaminants or pollutants which could backflow or backspin into the public water system.
- B. To promote the elimination of, or control of, existing cross connections, actual or potential, between the potable water system and sources of non-potable water or other hazardous substances.
- C. 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 connection.

III. AUTHORITY

The Federal Safe Drinking Water Act of 1974, the ordinances of the City of Adair Village, and the statutes of the State of Oregon, including OAR 333-61-070, and 333-61-071 provide that the water supplier has the authority to act to prevent water from any unapproved source or any other substance from entering the public potable water system.

IV. NOTIFICATION

If an approved backflow device is required at the point of the City's water connection to any property, the City shall give notice in writing to said customer to install an approved backflow prevention device at each service connection site. The customer shall within thirty (30) days, install such approved device(s), at his/her own expense, and failure or refusal or inability to install said device(s) within thirty (30) days shall constitute grounds for discontinuing water service to the property until such time as the device(s) have been properly installed.

V. REQUIREMENTS

A. The City will provide as follows:

1. Operate a cross connection control program to include the keeping of necessary records pursuant to the Division's Cross Connection Regulations.

2. On new installations, the City, consistent with its Master Fee Schedule, will provide on-site evaluation and/or inspection of plans in order to determine the type of backflow preventer that will be required. Only the City may permit and authorize an installation. The City may elect to install the device at the request and expense of the owner. The installation must be inspected by an approved backflow inspector/tester.

3. For premises or systems existing prior to May 6, 1996, the City will perform, consistent with its Master Fee Schedule, evaluations and inspections of plans and/or premises or systems, and notify the Owner by letter of any corrective action deemed necessary. In addition, the method of achieving the correction, and the time allowed for same will be stated in writing.

4. The City will not allow any cross connection to remain unless it is protected by an approved backflow preventer for which a permit has been issued to insure satisfactory operation.

5. The City 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.

6. The City will begin initial premise inspections

to determine the nature of existing or potential hazards during the calendar year 1996. Initial focus will be on high hazard premises.

7. The City will inform the Owner by letter of any failure to comply with this cross connection ordinance within five (5) working days of the first inspection. The City will allow an additional ten (10) days for the correction. In the event the Owner fails to comply with the necessary correction by the time of the second inspection, the City will shall inform the Owner by certified letter that water service to the premises will be terminated within 72 hours. If extenuating circumstances are present, the Owner may make a written request to the City for a time extension. The City may grant an extension of up to ten (10) days on terms set by the City.

8. If the City determines at any time that a serious threat to the public health exists, the water service to those premises shall be immediately terminated.

B. The Owner will provide as follows:

1. Shall allow his property to be inspected for possible cross connections and shall follow the provisions of the City's program and the Division's regulations if a cross connection is identified.

2. Upon notification by the City that the public supply be protected by containment, the Owner shall be responsible for water quality beyond the outlet end of the containment device and must utilize a backflow device for that purpose.

3. Shall eliminate or isolate all cross connections on the premises.

4. Upon notification by the City, shall at Owner's expense, install, maintain, test or have tested any and all backflow preventers on the premises.

5. Shall, within the time frame set by the City, correct any malfunction of any backflow preventer which is revealed by periodic testing.

6. Shall inform the City in writing of any proposed or modified cross connections and also any existing cross connections of which the Owner is aware but has which has not been revealed to the City.

7. 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.

8. Install backflow preventers in a manner approved by the City.

9. Shall install only backflow preventers which are approved by the City.

10. Any Owner having a private well or other private water source, must have a permit from the City if the well or source is cross connected to the City's system. Approval to cross connect may be denied by the City, in which case such denial must be in writing and must state the reason(s) for denial.

11. The Owner may be required by the City 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 City's system.

12. If the Owner installs plumbing to provide potable water for domestic purposes which is on the City's side of the backflow preventer, such plumbing must have its own backflow preventer installed.

VI. DEGREE OF HAZARD

The City recognizes the threat to the public water system arising from cross connections. All threats will be classified by hazard and will require the installation of approved backflow prevention devices.

VII. EXISTING IN-USE BACKFLOW PREVENTION DEVICES

Any existing backflow preventer shall be allowed by the City to continue in service unless, in the opinion of the City, the degree of hazard is such as to supersede the effectiveness of the preventer, or result in an unreasonable risk to the public health. Where the degree of hazard increases, as in the case of use conversions, the existing backflow device must be replaced with an approved device suitable for the new use and degree of hazard.

VIII. PERIODIC TESTING

- A. All backflow devices, as appropriate, shall be tested and inspected annually.
- B. Periodic testing shall be performed by a certified tester from a list provided upon request from the City. This testing is performed at the expense of the Owner.
- C. Any backflow preventer which fails during a periodic test must be repaired or replaced. All re-tests are at the expense of the Owner. High hazard situations are not permitted to continue once detected, and allow the City to immediately discontinue water service. In all other situations, a compliance date of no more than fifteen (15) days will be established. Failure to timely comply will result in immediate discontinuation of water service. 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 service continuity.
- D. Backflow prevention devices will be tested more frequently than specified in Paragraph A of this section, if the City identifies a history of test failures. The cost of all testing is to be borne by the Owner.

IX. RECORDS AND REPORTS

- A. The City will initiate and maintain the following records:
 - 1. Master files on customer's cross connection tests and/or inspections;
 - 2. Master files on cross connection permits;
 - 3. Copies of permits and permit applications;
 - 4. Copies of lists and summaries supplied to the Division;
 - 5. Initial listing of low hazard cross connections;
 - 6. Initial listing of high hazard cross connections.

B. The City will submit an annual report of cross connection inspections to the Division.

X. JURISDICTION

This ordinance is binding and applicable to any site, premise, building, property, unit or other location which is, or which becomes connected to the City water system, regardless of physical location inside or outside of the city limits or the UGB.

**CROSS CONNECTION
CONTROL PROGRAM
FOR
CITY OF ADAIR VILLAGE**

EFFECTIVE DATE: JANUARY ____, 1996

OSHD APPROVED BY: _____

DATE: _____

**Submitted by:
KPF Consulting Engineers
707 SW Washington Street, Suite 600
Portland, OR 97205**

I. PURPOSE

To protect the public potable water supply served by City of Adair Village 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.

To promote the elimination of, or control of, existing cross connections, actual or potential, between the potable water system and sources of non-potable water or other hazardous substances.

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 system by cross connection.

II. AUTHORITY

The Federal Safe Drinking Water Act of 1974, and the statutes of the State of Oregon, Administrative Rules Chapters #333-61-070, #333-61-071 state that the water supplier has the primary responsibility for the preventing of water from unapproved sources, or any other substances, from entering the public potable water system.

City of Adair Village Rules and Regulations, which are adopted and approved by the City Council.

III. RESPONSIBILITY

City of Adair Village shall be responsible for the protection of the public potable distribution system from contamination or pollution due to the backflow of backsiphonage of contaminants or pollutants through the water service connection. If in the judgment of the City, an approved backflow device is required at the City's water connection to any customer's premise, the City, or its Public Works staff, shall give notice in writing to said customer to install an approved backflow prevention device at each service connection to the customer's premises. The customer SHALL, within ninety (90) days, install such approved device, or devices, at his own expense, and failure or refusal, or inability on the part of the customer to install said device or devices within ninety (90) days, shall constitute a ground for discontinuing water service to the premises until such device or devices have been properly installed.

IV. INSTALLATION

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

The Owner shall allow his property to be inspected for possible cross connections and shall follow the provisions of the City's program and the Division's regulations if a cross connection is identified.

If the City requires that the public supply be protected by containment, the Owner shall be responsible for water quality beyond the outlet end of the containment device and should utilize a backflow device for that purpose. He may utilize public health officials, or personnel from the City, or their delegated representative, to assist in the survey for the facilities and to assist in the selection of proper fixture outlet devices, and the proper installation of these devices.

V. REQUIREMENTS

City

On new installations, the City or County will provide on-site evaluation and/or inspection of plans in order to determine the type of backflow preventer that will be required, they will issue a permit, and install the device at the customer's request and expense. The installation will be inspected by a approved backflow inspector and tester.

For premises existing prior to the start of this program, the City or County will perform evaluations and inspections of plans and/or premises, and inform the Owner by letter of any corrective action deemed necessary. In addition, the method of achieving the correction, and the time allowed shall also be stated.

The City will not allow any cross connection to remain unless it is protected by an approved backflow preventer for which a permit has been issued to insure satisfactory operation.

The City shall inform the Owner by letter of any failure to comply, within ten (10) working days of the first inspection. The City will allow an additional fifteen (15) days for the correction. In the event the Owner fails to comply with necessary correction by the time of the second inspection, the City will inform the Owner by letter that the water service of the Owner/s premises will be terminated with a period not to exceed five (5) days. In the event that the Owner informs the City of extenuating circumstances as to why the correction has not been made, a time extension may be granted by the City, but in no case will the extension time exceed and an additional thirty (30) days.

If the City determines at any time that a serious threat to the public health exists, the water service shall be terminated immediately.

The City 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.

The City will begin initial premise inspections to determine the nature of existing or potential hazards during the calendar year 1996. Initial focus will be on high hazard premises.

Owner

The Owner shall be responsible for the elimination or isolation of all cross connections on his premises.

The Owner, after having been informed by a letter from the City, shall at his expense, install, maintain, test or have tested, any and all backflow preventers on his premises.

The Owner shall correct any malfunctions of the backflow preventer which is revealed by periodic testing.

The Owner shall inform the City of any proposed or modified cross connections and also any existing cross connections of which the Owner is aware but not been found by the City.

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.

The Owner shall install backflow preventers in a manner approved by the Company.

The Owner shall install only backflow preventers approved by the City.

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 City's system. Permission to cross connect may be denied by the City. 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 City's system.

In the event the Owner installs plumbing to provide potable water for domestic purposes which is on the City's side of the backflow preventer, such plumbing must have its own backflow preventer installed.

VI. DEGREE OF HAZARD

The City recognizes the threat to the public water system arising from cross connections. All threats will be classified by hazard and will require the installation of approved backflow prevention devices.

VII. EXISTING IN-USE BACKFLOW PREVENTION DEVICES

Any existing backflow preventer shall be allowed by the City to continue in service unless the degree to hazard is such as to supersede the effectiveness of the preventer, or result in an unreasonable risk to the public health. Where the degree of hazard has increase, 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.

VIII. PERIODIC TESTING

All testable backflow devices shall be tested and inspected yearly.

Periodic testing shall be performed by the City's certified tester or from a list provided by the City. This testing will be done at the Owner's expense.

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 retested 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.

Backflow prevention devices will be tested more frequently than specified in the first paragraph of this section, if the City feels that there is a history of test failures. Cost of additional testing will be borne by the Owner.

IX. RECORDS AND REPORTS

Records

The City will initiate and maintain the following:

- Master files on customer's cross connection tests and/or inspections.
- Master files on cross connection permits.
- Copies of permits and permit applications.
- Copies of lists and summaries supplied to the Division.
- Initial listing of low hazard cross connections.
- Initial listing of high hazard cross connections.

Reports

The City will submit the following to the Division:

- Annual summary of cross connection inspections to the Division.

X. FEES AND CHARGES

The City will publish a list of fees or charges and make them available to the public.

DEFINITIONS

Air Gap: A physical separation sufficient to prevent backflow between the free-flowing discharge end of the potable water system and any other system. Physically defined as a distance equal to twice the diameter of the supply side pipe diameter but never less than one (1) inch.

Approved: Accepted by the City as meeting an acceptable specification stated or cited in the regulation, or as suitable for the proposed use.

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

Auxiliary Water Supply: Any water supply, on or available, to the premises other than the suppliers approved public potable water supply.

Backflow: The flow of water or other liquids, mixtures or substances, under positive or reduced pressure in the distribution pipes of a potable water supply from any source other than its intended source.

Backpressure: A condition in which the Owner's system pressure is greater than the supplier's system pressure.

Backflow Preventer: A device or means designed to prevent backflow or backsiphonage. Most commonly categorized as air gap, reduced pressure principle device, double check valve assembly, pressure vacuum breaker, atmospheric vacuum breaker, hose bib vacuum breaker, and double check with intermediate atmospheric vent. Any device must be classified as an approved backflow device by the Oregon Health Division and the City.

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

Containment: A method of backflow prevention which requires a backflow preventer at the water service entrance.

Contaminant: Any substance that will impair the quality of the water to a degree that it creates a serious health hazard the public leading to poisoning or the spread of disease.

Cross Connection: Any actual or potential connection between the public water supply and a source of contamination or pollution.

Division: The State of Oregon Public Health Division.

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. The check valve(s) must be able to be removed for testing.

Double Check Valve with Intermediate Atmospheric Vent: A device having two (2) spring loaded check valves separated by an atmospheric vent chamber.

Fixture Isolation: A method of backflow prevention in which a backflow preventer is located to correct a cross connection at an in-plant location rather than a water service entrance.

Hose Bib Vacuum Breaker: A device which is permanently attached to a hose bib and which acts as an atmospheric vacuum breaker.

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

Permit: A document issued by the City which allows the use of a backflow preventer.

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

Pollutant: A foreign substance that, if permitted to get into the public water system, will degrade its quality so as to constitute a moderate hazard, or impair the usefulness or quality of the water to a degree which does not create an actual hazard to the public health but which does adversely and unreasonably affect such water for domestic use.

Pressure Vacuum Breaker: A device containing one (1) or two (2) independently operating approved check valves and an independently operated spring loaded air inlet valve located on the discharge side of the check of checks. Device included tightly closing shut-off valves on each side of the check valves and properly located test cocks for the testing of the check valve(s).

Reduced Pressure Principle Backflow Preventer: An assembly consisting of two (2) independently operating approved check valves with an automatically operating differential relief valve located between the two check valves, tightly closing shut-off valves plus properly located test cocks for the testing of the check valves and the relief valves.

Utility: City of Adair Village.

Water Service Entrance: That point in the Owner's water system beyond the sanitary control of the City generally considered to be the outlet end of the water meter and always before any unprotected branch.

Public Works Director: The Director, the Certified Water Operator, or his delegated representative, in charge of the City Water System, is vested with the authority and responsibility for the implementation of a cross connection control program and for the enforce of the provision of the Ordinance.

ADAIR VILLAGE ORDINANCES

ORDINANCE NO. 78/79-8

ADAIR
4874
VILLAGE, CITY OF

SECTION 20. CROSS CONNECTIONS

- A. Health regulations - Unprotected cross connections between the public water supply and any unapproved source of water are prohibited.
- B. Definition: A cross connection is defined as an interconnection between the utility water supply and any unapproved water supply, or a connection between a water distribution pipe and any fixture installed in such a manner that unsafe water, waste or sewage may be drawn into the utility water system. Cross connections may be divided into two classifications, as follows:
 - 1. Connections in which pure and impure water are separated by gate valves, check valves, or both.
 - 2. Connections which permit pollution to enter when the pressure in the utility water system falls below atmospheric pressure, thus, creating a vacuum. This process of water pollution is known as back siphonage.