

RECORD OF PROCEEDINGS

Town of Fleming
Ordinance 1-1990

AN ORDINANCE ADOPTING CROSS CONTROL REGULATIONS

1.0 The authority to implement and maintain this program on cross connection control is contained in the following legislative actions:

1.1 Colorado Department of Health Law C.R.S. 1973, Title 25-1-114, 25-1-114.1.

1.2 Colorado Primary Drinking Water Regulations Section 11.1.2 (Hazardous Cross Connections).

1.3 Cross Connection Control, Colorado Department of Health, 198, or latest edition.

1.4 Occupational Safety and Health Administration Federal Register #202 part 2, page 22234, subparts J.

1.5 Local ordinance or resolution.

1.6 Local building code.

1.7 Uniform plumbing code of the International Plumbing and Mechanical Officials, Chapter 10, Section 1001, 1002, 1003.2.0.

1.8 Uniform pool and spa code.

1.9 Uniform solar code.

2.0 Reference manuals adopted for guidelines on cross connection control:

2.1 "Manual of Cross Connection Control", Foundation for Cross Connection Control and Hydraulic Research, University of Southern California.

2.2 Cross Connection Control, Colorado Department of Health.

2.3 Cross Connection Control Committee, Pacific Northwest Section AWWA Manual of Accepted Procedures and Practices.

2.4 Recommended Practice for Backflow Prevention and Cross Connection Control AWWA Manual M14.

2.5 Definitions of terms used in this regulation are those contained in "Colorado Department of Health Cross Connection Manual". Available for review at the Fleming Town Hall, 114 N. Logan Avenue, Fleming, Colorado.

3.0 General Requirements:

3.1 Building plans submitted to the Fleming Zoning Administrator will be reviewed by the Cross Connection Control Section, and approved prior to the issuance of a building permit.

BUILDING PLANS MUST SHOW:

3.1.1 Water service size and location.

3.1.2 Meter size and location, if water meter is required.

3.1.3 Backflow prevention device, size, type, and location.

3.1.4 Fire sprinkling system(s) service line, size, and type of backflow prevention device.

RECORD OF PROCEEDINGS

3.2 Backflow prevention devices are to be installed in an accessible location to facilitate maintenance, testing, and repair. Drawings 1 through 10 show various installations.

3.3 All cross connections shall be isolated by the appropriate approved back flow prevention device as close to the source as practical. Otherwise the Town shall require a back flow prevention device to be installed immediately downstream of the water meter.

3.4 Before installing a backflow prevention device, pipelines should be thoroughly flushed to remove foreign material.

3.5 In no case will it be permissible to have connections or tees between the meter and service line backflow prevention device.

3.6 In no case is it permissible to connect the relief valve discharge on the reduced pressure device into a sump, drainage ditch, etc.

3.7 Backflow prevention valves are not to be used as the inlet or outlet valve of the water meter. Test cocks are not to be used as supply connections.

3.8 In order to insure the backflow prevention devices continue to operate satisfactorily, it will be necessary that they be tested at the time of installation, and on an annual schedule thereafter. Such test will be conducted in accordance with F.C.C.C. and H.R. performance standards and field test procedures as directed by the Colorado Department of Health.

3.8.1 Final inspections on new or retrofit installations will be performed only after the backflow device has been tested. The test results, plumbing permit, and test permit number will be supplied at the time an inspection is scheduled or to be scheduled by phone, 24 hours prior to the time requested. Access arrangements shall be made by the technician.

3.9 The authority having jurisdiction will inspect all installation.

3.10 All costs for design, installation, maintenance, repair, and testing are to be borne by the customer.

3.11 No grandfather clause exists. All laws and regulations apply regardless of the age of the facility.

3.12 All fire sprinkling lines shall have a minimum protection of an approved double check valve for containment of the system.

3.12.1 All glycol (ethylene or propylene), or antifreeze systems shall have an approved Reduced Pressure Zone device for containment.

3.12.2 Dry fire systems shall have an approved double check valve installed upstream of the air pressure valve.

3.12.3 Single family residents with a fire sprinkler system and domestic water combined shall have a double check valve when no chemicals are used.

3.13 All underground fire sprinkler systems shall conform to the following sections of the National Fire Protection Association pamphlets number thirteen and twenty-four:

Pamphlet number thirteen, sections 1-1.2.2 allowable leakage. Pamphlet number twenty-four, "Private Fire Service Mains and Their Appurtenances," Sections 8.4, 8.5, 8.6, 8.7, and 8.8. These regulations are available for review at the Fleming Town Hall, 114 N. Logan Avenue, Fleming, Colorado.

4.0 Standards for Backflow Prevention Devices:

4.1 Any backflow prevention device required herein shall be of a model and size approved by the Town of Fleming Water Department. The term "Approved Backflow Prevention Device" shall mean a device that has been manufactured in full conformance with the standards established by the Colorado Department of Health Cross Connection Manual and by the Town of Fleming Water Department. Final approval shall be evidenced by a "Certificate of Approval" issued by an approved testing laboratory certifying full compliance with Colorado Department of Health standards and F.C.C.C. and H.R. specifications. The following testing laboratory is qualified to test and certify backflow prevention devices:

Foundation for Cross Connection Control and Hydraulic Research
University of Southern California
OHE 430-D University Park - MC 1453
Los Angeles, California 90089-1453

4.2 Only approved backflow prevention devices shall be used. See latest Colorado Department of Health Cross Connection Manual at Fleming Town Hall, 114 N. Logan Avenue, Fleming, Colorado. See Section (42) for selection criteria.

4.2.1 Exception: Residential containment may be accomplished with a device not approved by the Foundation for Cross Connection Control and Hydraulic Research, but approved by the American Society of Sanitary and Mechanical Engineers and designated by the Water Division Manager.

4.3 Backflow preventers currently installed which are not approved shall be replaced with an approved device at the time it fails an operational test.

4.4 Backflow devices used on fire lanes shall have O.S.&Y. valves and be listed by the National Fire Prevention Association.

5.0 Installations:

5.1 Backflow prevention devices shall be installed in accordance with drawings 1 through 10.

5.2 Backflow prevention devices installations shall be inspected and approved for use by the Town of Fleming Water Department by calling 265-2692 at least 24 hours in advance of the desired inspection time. See Section 3.8.

5.3 All backflow devices shall be installed in the horizontal position or as recommended by the manufacturer. Variance by review only on retrofit fire systems.

5.4 A pressure vacuum breaker shall be used where the device is never subjected to backpressure and installed a minimum of twelve inches above the highest piping or outlet downstream of the device in a manner to preclude backpressure.

5.5 An atmospheric vacuum breaker shall be used only where the device is:

5.5.1 Never subject to continuous pressure (more than 12 hours continuous).

RECORD OF PROCEEDINGS

5.5.2 Installed with the air inlet in a level position and a minimum of six inches above the highest piping or outlet it is protecting.

5.5.3 No valves shall be permitted downstream of the device.

5.6 The single check valve is not considered to be a backflow prevention device.

5.7 Double check valve assemblies may be installed in below grade vaults when these vaults are properly constructed in accordance with Drawings 1 through 9.

5.8 Reduced pressure backflow preventers will be installed above ground. The unit should be placed at least twelve inches above the finish grade to allow clearance for the repair work. A concrete slab at finish grade is recommended. Proper drainage should be provided for the relief valve and may be piped away from the location, provided it is readily visible from above grade and the relief valve is separated from the drainline by a minimum of double the diameter of the supply line. A modified vault installation may be used if constructed with ample side clearances. Freezing is a major problem in this area. Precautions should be taken to protect above ground installations.

5.9 Reduced pressure zone backflow preventer may be installed in a basement provided with an adequate drain with an effective opening of twice the diameter of the device. See flow chart drawing #10.

6.0 Testing and Maintenance:

6.1 At least once per year, it will be the duty of the customer/user at any premises where any backflow prevention devices are installed to have certified test made of these devices. In those specific instances where the Town of Fleming Water Department deems the hazard to be great enough, he will require certified inspections at more frequent intervals. These tests shall be performed by the water utility personnel or by a certified technician approved by the Colorado Department of Health and Water Division Manager or Water Distribution and Wastewater Collection Systems Certification Council. An inspection of the device may be performed at any time complying with 7.0 of this document.

6.2 As necessary, the device shall be repaired or replaced at the expense of the customer/user whenever the device(s) are found to be defective. Records or copies of same, of all such tests, repairs or replacement shall be kept with a copy sent to the Cross Connection Control Office, Town of Fleming Water Department, 114 N. Logan Avenue, Fleming, Colorado.

6.3 The technician who will perform the test shall call the Cross Connection Control Office for a test permit number which must appear on all forms.

6.4 Existing devices shall be sealed by the technician performing the test at the completion of the test.

6.5 All testing gauges shall be checked for accuracy yearly, or more often, in the event of questionable readings.

6.6 The Town of Fleming Water Department retains the right to test or otherwise check the installation and operation of any containment device.

RECORD OF PROCEEDINGS

7.0 Right of Entry:

The water utility department representative, assigned to inspect premises relative to possible hazards shall, carry proper credentials of his/her office, upon exhibit of which he or she shall have the right of entry during usual business hours to inspect any and all buildings and premises for cross connection in the performance of his or her duties.

This right of entry shall be a condition of water service in order to provide assurance that the health, safety and welfare of the people throughout the Town of Fleming potable water distribution system where building security is required, the backflow device(s) should be located in an area not subject to security. Questions regarding proper credentials should be directed to the Cross Connection Control Office.

8.0 Violations:

8.1 Failure of the customer to cooperate in the installation, maintenance, testing or inspection of backflow prevention devices required by this ordinance shall be grounds for the discontinuance of water service to the premises or the requirement for an air-gap separation from the public potable water system.

8.2 Service of water to any premises may be discontinued by the Town of Fleming Water Department after written notification if unprotected cross connections exist on the premises or if any defect is found in an installed backflow prevention device or if a backflow prevention device has been removed or bypassed. Service shall not be restored until such conditions or defects are corrected.

8.3 Discontinuance of service may be summary, immediate and without written notice whenever in the judgment of the Town of Fleming Water Department such action is necessary to protect the purity of the public potable water supply or the safety of the water system.

INTRODUCED, READ, AND ORDERED POSTED THIS 6TH DAY OF MARCH, 1990.

1. Fleming Town Hall

Fleming Post Office

First National Bank of Fleming

Posted this 7th Day of March, 1990

SECOND READING AND ADOPTED THIS 3rd DAY OF APRIL, 1990.

TOWN OF FLEMING

Rich [Signature]
Mayor

ATTEST:

Susan J. Einspahr
Town Clerk