**ORDINANCE NO. 002/2012**

AN ORDINANCE OF THE CITY OF MONROE, WASHINGTON, AMENDING CHAPTER 13.06 OF THE MONROE MUNICIPAL CODE REVISING CROSS CONNECTION CONTROL AND MINIMUM PLUMBING STANDARDS FOR CUSTOMERS CONNECTED TO THE CITY OF MONROE WATER SYSTEM, PROVIDING FOR SEVERABILITY, AND FIXING A TIME WHEN THE SAME SHALL BECOME EFFECTIVE

WHEREAS, the City of Monroe operates a group A public water system; and

WHEREAS, Washington State Administrative Code 246-290-490 requires group A public water systems to develop and implement a Cross-Connection Control Program; and

WHEREAS, the most current Monroe Municipal Code 13.06 code was adopted in 1985 and standards for protection of the public water supply have changed substantially since 1985; and

WHEREAS, the City Council has determined to adopt certain amendments to the Monroe Municipal Code to reflect the substantial changes in protection of the public water supply.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MONROE as follows:

Section 1. Chapter 13.06 of the Monroe Municipal Code is hereby replaced with the following:

**13.06.010 Interpretation and intent**

The regulations set out in this chapter detail the manner in which the public potable water supply shall be protected from contamination or pollution. Washington State Department of Health requires Group A water systems to meet the requirements as laid out in WAC 246-290-490 by developing and implementing a Cross-Connection Control Program. The Cross-Connection Control Program presents detailed requirements that must be met by City of Monroe water customers.

**13.06.015 References adopted into Monroe's Cross-Connection Control Program**

A. The Group 'A' Public Water Systems WAC 246-290 as it is applicable to the City of Monroe water system, is hereby adopted by reference.

B. The City of Monroe's Cross Connection Control Program Manual, most current edition, as required by WAC 246-290-490(3)(b), is adopted by reference.

C. The Cross-Connection Control Manual, Accepted Procedure and Practice, most current edition, published by the Pacific Northwest Section of the American Water Works Association is adopted by reference.
D. The Manual of Cross-Connection Control, most current edition, published by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research, is adopted by reference.
E. The Uniform Plumbing Code and Standards published by the International Association of Plumbing and Mechanical Officials, most current edition, is adopted by reference.

**13.06.020 Conformance to rules and regulations**

Any customer receiving water from the City, or who will in the future receive water from the City, shall comply with the rules and regulations contained in this section.

**13.06.030 Organization – Conformance**

Any water district, municipal organization or other organization, which is connected to the city water supply and/or which is furnished to people within said district or organization, shall cause all the people or members within said district or organization, as well as the district or organization itself, to comply with the rules and regulation contained in this chapter.

**13.06.040 Definitions**

As used in this chapter, unless the context states otherwise, the following definitions shall apply:

A. "Approved air gap" means a physical separation between the free-flowing end of a potable water supply pipeline and the overflow rim of an open or non-pressurized receiving vessel. To be an air gap approved by the department, the separation must meet the dimensions defined in the WAC 246-290-490.
B. "Auxiliary supply" means any water source other than the public water supply that may be available in the building or on the premises.
C. "Backflow" means the undesirable reversal of flow of water or other substances through a cross-connection into the public water system or consumer's potable water system.
D. "Approved backflow preventer" means an approved air gap, an approved backflow prevention assembly or an approved atmospheric vacuum breaker. The terms "approved backflow preventer," approved air gap" or "approved backflow prevention assembly" refer only to those approved backflow preventers relied upon by the City's cross-connection control specialist for the protection of the public water system.

E. "Backpressure" means a pressure (caused by a pump, elevated tank or piping, boiler or other means) on the consumer's side of the service connection that is greater than the pressure provided by the public water system and which may cause backflow.

F. "Backsiphonage" means backflow due to a reduction in system pressure in the City's distribution system and/or consumer's water system.

G. "The City of Monroe" is the authority having jurisdiction, in regards to this chapter, to administer and enforce the provisions up held in the City's Cross-Connection Control Program.

H. "Cross-connection" means any actual or potential physical connection between a public water system or the consumer's water system and any source of nonpotable liquid, solid or gas that could contaminate the potable water system.

I. "Cross-Connection Control Program" means the administrative and technical procedures the City of Monroe implements to protect the public water system from contamination via cross-connections as required in WAC 246-290-490 as defined in WAC 246-290-010. Cross-Connection Control Program requirements are found in the City's Cross-Connection Control Manual.

J. "Cross-connection control specialist" means a person holding a valid cross-connection control specialist certificate issued under WAC 246-290-292.

K. "Fire system" means a wet or dry piping system that can either be categorized as a closed, flow-through, or combination.

L. "Premises" a tract of land including its buildings or other appurtenances.

M. "Premises isolation" a method of protecting the public water system by installation of air gaps or approved backflow prevention assemblies at or near the service connection or alternative location acceptable to the City's cross-connection control specialist to isolate the consumer's water system from the City's distribution system.

N. "Double check valve assembly" (DCVA) means an assembly composed of two single, independently acting check valves, including tightly closing shutoff valves located at each end of the assembly, and suitable connections for testing the water-tightness or each check valve. This assembly shall only be used to protect against a non-health hazard.

O. "Double check detector assembly" (DCDA) means a specifically designed assembly composed of a line-size approved double check valve assembly with a bypass containing a specific water meter and an approved double check valve assembly. The meter shall register accurately for only very low rates of flow up to 3 gpm (gallons per minute) and shall show a registration for all rates of flow. This assembly shall only be used to protect against a non-health hazard. This assembly is primarily used on fire sprinkler systems.

P. "Reduced pressure backflow assembly" (RPBA) means an assembly incorporating two check valves and an automatically operating differential relief valve, located between the two shut off valves, and equipped with necessary appurtenances for testing. This assembly may be used for non-health and health-hazard applications.

Q. "Reduced pressure detector assembly" (RPDA) means specifically designed assembly composed of a line-size approved reduced pressure backflow assembly with a bypass containing a specific water meter and an approved reduced pressure backflow assembly. The meter shall register accurately for only very low rates of flow up to 3 gpm and shall show a registration for all rates of flow. This assembly shall be used to protect against a non-health hazard or a health-hazard. The assembly is primarily used on fire sprinkler systems with chemical injection.

**13.06.050 Cross-connection prohibited – Exceptions**

All cross-connections whether or not controlled by automatic flushing devices such as check valves or by hand-operated mechanisms such as a gate valve or stopcocks, are prohibited unless the City of Monroe's cross-connection control specialist determines there is no actual or potential hazard present. All cross-connections must be observed by the City's cross-connection control specialist and assigned the appropriate method of backflow protection.

**13.06.060 Failure to discontinue**

Failure on the part of persons, firms, businesses or corporations, receiving water services from the City of Monroe, and who fail to follow the City's Cross-Connection Control Program requirements will be sufficient cause for the discontinuance of the public water service to the premises on which the cross-connection exists.

**13.06.070 Cross-connection corrections**

The City of Monroe's cross-connection control specialist has the option to make periodic inspections of the premises served by the public water supply to check for the presence of cross-connections. Any cross-connection found in such inspection shall be ordered to be corrected, according to the City's cross-connection control specialist.

**13.06.080 Backflow prevention device – Installation required when**

Backflow prevention devices shall be installed at the service connection or within any premises even though a cross-connection may not exist at the time the backflow device is required to be installed. This shall include, but is not to be limited to, the following situations:

A. Industrial, commercial and warehouse buildings.

B. Premises having an auxiliary water supply.

C. Premises having internal cross-connections that are not correctable, or intricate plumbing arrangements which make it impractical ascertain whether or not a cross-connection exists;

D. Premises where entry is restricted so that inspections for cross-connections cannot be made with sufficient frequency, or at sufficiently short notice, to assure that cross-connections do not exist;
E. Premises having a repeated history of cross-connections being established, or reestablished;
F. Premises on which any substance is handled under pressure so as to permit entry into the public water supply or where a cross-connection could reasonably be expected to occur. This shall include the handling of process water and cooling waters;
G. Premises where material of toxic or hazardous nature are handled such that if backsiphonage should occur, a serious health hazard may result;
H. The following types of facilities will fall into one of the above categories where an approved backflow preventer shall be installed at these facilities as set forth in this section;
    1. Hospitals, mortuaries, and clinics
    2. Laboratories
    3. Sewage treatment plants
    4. Food and beverage processing plants
    5. Manufacturing plants
    6. Chemical plants using a water process
    7. Petroleum processing or storage plants
    8. Multi-unit buildings
    9. Strip-malls
    10. Fairgrounds
    11. Others specified by Washington State Department of Health

**13.06.085 Fire system requirements**

For service connections other than a flow-through or combination fire protection system the cross-connection control specialist shall ensure backflow protection is installed in an approved location.

A closed commercial fire systems is required to have one of the following types of backflow protection installed in-line to isolate the fire system from the public water system:

A. Double check detector assembly
B. Reduced pressure detector assembly if the use of chemical addition or the use of an auxiliary water supply is used.

A closed residential fire system is required to have one of the following types of backflow protection installed in-line to isolate the fire system from the public water system:

A. Double check valve assembly
B. Double check detector assembly

C. Reduced pressure backflow assembly if the use of chemical addition or the use of an auxiliary water supply is used.
D. Reduced pressure detector assembly if the use of chemical addition or the use of an auxiliary water supply is used.

Flow-through or combination fire protection systems must be constructed of potable water piping and materials in accordance with Uniform Plumbing Code.

**13.06.086 Hydrant-Meters**
Hydrant-meters may be rented out on a case-by-case basis as determined by public works staff. Any persons or party renting a hydrant-meter must comply with the provisions of the Monroe Municipal Code 13.04.380, .410, .420, and .500 (which addresses connecting to a hydrant, obstruction, permission, and penalties).

**13.06.090 Backflow prevention device – Degree of hazard determination**
The type of protection device required shall depend on the degree of hazard which exists as follows:

A. An approved air-gap separation shall be installed where the water supply may be contaminated with sewage, industrial waste of a toxic nature or other contaminant which would cause health or system hazard.
B. In the case of a substance which may be objectionable but not hazardous to health, a double check valve assembly, air-gap separation or a reduced pressure backflow assembly shall be installed.

**13.06.100 Backflow prevention device – Location**
Backflow prevention devices required in this chapter shall be installed in a location designated by the cross-connection control specialist.

**13.06.110 Backflow prevention device – Installation supervision**
Approved backflow preventers required in this chapter shall be installed under the supervision of, and with the approval of, the City of Monroe's cross-connection control specialist.

**13.06.120 Protective device – Approval Required**
Any protective device required in this chapter shall be a model approved by the Washington State Department of Health.

**13.06.130 Backflow prevention device – Annual inspection and tests**
Backflow prevention assemblies installed under this chapter shall be inspected and tested annually or more often if determined by the City of Monroe's cross-connection control specialist. The devices shall be repaired, or replaced whenever they are found to be defective. Inspections, tests, repairs and records thereof shall be done under the City of Monroe's cross-connection control specialist's supervision.

**13.06.140 Failure to comply – Termination of service**

Failure of any customer, any district or any organization to cooperate in the installation, maintenance, testing of approved backflow preventers or the requirements or an approved air-gap separation shall be grounds for termination of the water service at a point where such flow, which is to be determined by the City of Monroe's cross-connection control specialist, would best prevent possible contamination of the public supply. (Ord. 784, 1985, 2012)

Section 2. Severability. If any section, sentence, clause or phrase of this ordinance should be held to be invalid or unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any other section, sentence, clause or phrase of this ordinance.

Section 3. Effective Date. This ordinance shall be in full force and effect thirty (30) days from and after its passage and approval and publication as required by law.

PASSED by the City Council and APPROVED by the Mayor of the City of Monroe, at a regular meeting held this 14th day of February 2012.

1st Reading: 02/07/2012
2nd Reading: Waived
Published: 02/14/2012
Effective: 03/15/2012

CITY OF MONROE, WASHINGTON:

Robert G. Zimmerman, Mayor

ATTEST/AUTHENTICATED:

Eadye Martinson, Deputy City Clerk

APPROVED AS TO FORM:

J. Zachary Lell, City Attorney