

AN ORDINANCE ENACTING ARTICLE 930 OF THE MORGANTOWN CITY CODE, AS THE SAME APPLIES TO CROSS-CONNECTION CONTROL AND BACKFLOW PREVENTION RULES AND REGULATIONS TO PROTECT THE PUBLIC POTABLE WATER SUPPLY OF THE CITY OF MORGANTOWN

WHEREAS, West Virginia law deems it the responsibility of a water purveyor (hereinafter Morgantown Utility Board) to provide water to the customer that meets State and Federal water quality standards at the end of the service connection or meter; and,

WHEREAS, it is the responsibility of the Morgantown Utility Board to prevent the contamination of the public water system from a consumer's water system, which begins at the downstream end of the service connection or water meter; and,

WHEREAS, Cross-Connections within the customer's plumbing system pose a potential source for the contamination of the public water supply system; and,

WHEREAS, it is a requirement of the West Virginia State Board of Health for the Morgantown Utility Board to establish and/or maintain a Cross-Connection Control Program deemed to be satisfactory by the West Virginia State Board of Health; and,

WHEREAS, the City of Morgantown and the Morgantown Utility Board wish to adopt a Cross-Connection Control Program that meets the requirements of State and Federal law.

NOW THEREFORE, the City of Morgantown hereby ordains that Article 930, addressing Cross-Connection Control and Backflow Prevention, is added to its City Code and reads as follows:

ARTICLE 930

Cross-Connection Control and Backflow Prevention

930.01 Purpose:

- (a) To protect the public potable water supply served by the Morgantown Utility Board from the possibility of contamination or pollution by isolating, within its customers' internal distribution system, contaminants or pollutants which could backflow or back-siphon into the public water system.
- (b) To promote the elimination or control of existing Cross-Connections, actual or potential, between in-plant potable water systems and non-potable systems.
- (c) To provide for a continuing program of Cross-Connection control which will effectively prevent the contamination or pollution of potable water systems by Cross-Connection.

930.02 Authority:

- (a) By authority of the Federal Safe Drinking Water Act of 1974, and the Code of West Virginia Chapter 16, Article 1 and the Regulations of the State of West Virginia, Title 64, Series 15, the Morgantown Utility Board has the primary responsibility and authority to prevent water from unapproved sources, or any other substances, from entering the public potable water distribution system.

930.03 Responsibility:

- (a) Morgantown Utility Board shall be responsible for the protection of the public potable water distribution system from contamination or pollution due to the backflow or back-siphonage of contaminants or pollutants through the water service connection. (*Ref: 64 WV CSR 15-4,8*)

930.04 Definitions:

- (a) Approved - Accepted by the Morgantown Utility Board as meeting an applicable specification cited in this regulation, or as suitable for the proposed purpose.
- (b) Auxiliary Water Supply - Any water supply on or available to the premises other than the approved public potable water supply provided by the Morgantown Utility Board.
- (c) 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.
- (d) Backflow Preventer – A device or means designed to prevent backflow or back-siphonage. Such a device is most commonly categorized as air gap, atmospheric vacuum breaker, barometric loop, double check valve assembly, double check valve with intermediate atmospheric vent, hose bib vacuum breaker, pressure vacuum breaker, reduced pressure principle backflow preventer and residential dual check.
 - 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. Atmospheric Vacuum Breaker – A device that prevents back-siphonage by creating an atmospheric vent when there is either a negative pressure or sub-atmospheric pressure in a water system.
 - 3. Barometric Loop – A fabricated piping arrangement rising at least thirty-five (35) feet at its topmost point above the highest fixture it supplies, installed to protect against back-siphonage.
 - 4. Double Check Valve Assembly - An assembly of two (2) independently operating spring loaded check valves with tightly closing shutoff valves on each side of the check valves, and properly located test cocks for the testing of each check valve.
 - 5. Double Check Valve with Intermediate Atmospheric Vent - A device having two (2) spring loaded check valves separated by an atmospheric vent chamber.
 - 6. Hose Bibb Vacuum Breaker – A device that is permanently attached to a hose bibb and which acts as an atmospheric vacuum breaker.

7. Pressure Vacuum Breaker – A device containing one or two independently operated spring loaded check valves and an independently operated spring loaded air inlet valve located on the discharge side of the check or checks. The device includes 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).
 8. 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 (2) check valves, tightly closing shut-off valves on each side of the check valves plus properly located test cocks for the testing of the check valves and the relief valve.
 9. Residential Dual Check - An assembly of two (2) spring loaded, independently operating check valves without tightly closing shut-off valves and test cocks. Generally employed immediately downstream of the water meter to act as a containment device.
- (e) Backpressure – A condition in which the owner's system pressure is greater than the pressure in the serving public distribution system.
 - (f) Back-siphonage - 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 pressure in the potable water supply system.
 - (g) Containment – A method of back flow prevention that requires a backflow prevention device at the water service entrance.
 - (h) Contaminant – A 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.
 - (i) Cross-Connection - Any actual or potential connection between the public water supply and a source of contamination or pollution.
 - (j) 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 at a water service entrance.

- (k) Owner - Any person who has a legal title or license to operate or reside in a property upon which a Cross-Connection inspection is to be made or upon which a Cross-Connection is present.
- (l) Person - Any individual, partnership, company, public or private corporation, political subdivision or agency of the State, or agency/instrumentality of the United States or any other legal entity.
- (m) Pollutant - A foreign substance, which if permitted to get into the public water system, will degrade its quality so as to constitute a hazard, or to impair the usefulness or quality of the water to a degree which does not create an actual hazard to the public health, but which adversely and unreasonably affect such water for domestic use.
- (n) Water Purveyor or Purveyor – The Morgantown Utility Board, which 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.
- (o) Water Service Entrance - That point in the owner's water system beyond the control of the Water Purveyor, generally considered to be the outlet end of the water meter and always before any unprotected branch.
- (p) West Virginia Bureau for Public Health (WVBPH) - The State of West Virginia Bureau for Public Health.

930.05 Administration:

- (a) The Morgantown Utility Board shall operate a Cross-Connection Control Program, to include the keeping of necessary records that, at a minimum, protects the public water supply and meets the requirements of the Statutes and Regulations of the State of West Virginia. (*Ref: 64 WV CSR 15-4,8*)
- (b) The Owner of any property served by and connected to the public water supply shall allow that property to be inspected by the Morgantown Utility Board for possible Cross-Connections. If a Cross-Connection is permitted, the Owner shall, at all times, comply with the provisions of this Ordinance and ancillary regulations of the Morgantown Utility Board. (*Ref: 64 WV CSR 15-8*)

- (c) If the Morgantown Utility Board 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 fixture outlet protection for that purpose. The Owner may utilize local public health officials, or personnel from the Morgantown Utility Board or its designated representatives, to assist in the survey of facilities, the selection of proper fixture outlet devices, and the proper installation of these devices. *(Ref: 64 WV CSR 15-6)*

930.06 Requirements:

(a) MORGANTOWN UTILITY BOARD:

1. The Morgantown Utility Board shall, for all new Cross-Connection installations, provide on-site evaluation and/or inspection of plans in order to determine the type of backflow preventer, if any, that will be required. Following the installation, the Utility Board shall perform inspection and testing of the installed facilities. *(Ref: 64 WV CSR 15-4,8)*
2. For premises existing prior to the start of this program, the Morgantown Utility Board shall perform evaluations and inspections of plans and/or premises and inform the Owner by letter of any corrective action deemed necessary, the method of achieving the correction, and the time allowed for the correction to be made. Ordinarily, ninety (90) days will be allowed. However, this time period may be shortened depending upon the degree of hazard involved and the history of the device(s) in question. *(Ref: 64 WV CSR 15-4,8)*
3. No Cross-Connection will remain active unless it is protected by an approved backflow preventer which will be regularly tested to ensure satisfactory operation. *(Ref: 64 WV CSR 15-5)*
4. The Morgantown Utility Board shall inform the Owner, by letter, of any failure to comply by the time of the first re-inspection. The Utility Board shall allow an additional fifteen (15) days for the completion of the required correction. In the event the Owner fails to comply with the necessary correction by the time of the second re-inspection, the Utility Board shall inform the Owner, by letter, that the water service to the Owner's premises will be terminated within a period not to exceed five (5) days. In the event the Owner informs the Utility Board of

extenuating circumstances as to why the correction has not been made, a time extension may be granted by the Utility Board, but in no case may said extension exceed an additional thirty (30) days from the time of the second re-inspection. (Ref: 64 WV CSR 15-4)

5. If the Morgantown Utility Board determines at any time that a serious threat to the public health exists as a result of an actual or suspected Cross-Connection, the subject water service shall be terminated immediately. (Ref: 64 WV CSR 15-4)
6. The Morgantown Utility Board shall conduct an inspection program to determine the nature of existing or potential hazards. Initial focus will be on high hazard industries and commercial premises. (Ref: 64 WV CSR 15-5,8)

(b) OWNER:

1. The Owner shall be responsible for the elimination or protection of Cross-Connections located within the served premises. (Ref: 64 WV CSR 15-7,8)
2. The Owner, after having been informed by a letter from the Morgantown Utility Board, shall, at the sole expense of the Owner, install, maintain, and test, or have tested, any and all backflow preventers located within the served premises. (Ref: 64 WV CSR 15-7,8)
3. The Owner shall immediately correct any malfunction or deficiency of a backflow preventer that is revealed by periodic testing. (Ref: 64 WV CSR 15-4)
4. The Owner shall inform the Morgantown Utility Board of any proposed or modified Cross-Connections and also any existing Cross-Connections of which the Owner is aware, but have not been found by the Utility Board. (Ref: 64 WV CSR 15-8)
5. The Owner shall not install a bypass around any backflow preventer unless there is a backflow preventer of the same type on the bypass. Owners who cannot shut down operation for testing of a backflow preventer must supply additional devices necessary to allow testing to take place. (Ref: 64 WV CSR 15-6)
6. The Owner shall install only backflow preventers of a design and in a manner approved by the Morgantown Utility Board or the West Virginia Board of Public Health. (Ref: 64 WV CSR 15-7)

7. Any Owner having a private well or other private water source must have the approval of the Morgantown Utility Board and the West Virginia Board of Public Health if the well or source is Cross-Connected to the public water supply distribution system. Permission to form such a Cross-Connection may be denied. 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 public water supply distribution system. *(Ref: 64 WV CSR 15-6)*
8. In the event Owner installs plumbing to provide potable water for domestic purposes that is on utility side of the backflow preventer, such plumbing must include a backflow preventer. *(Ref: 64 WV CSR 15-6)*
9. The Owner shall be responsible for the payment of all fees for permits, annual or semi-annual device testing, retesting in the case that the device fails to operate correctly, and second re-inspections for non-compliance with this Ordinance or the Regulations of the Morgantown Utility Board and/or the West Virginia Board of Public Health. *(Ref: 64 WV CSR 15-8)*

930.07 Degree of Hazard:

The City of Morgantown 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 approved backflow prevention devices, in a manner and within a time period appropriate for said degree of hazard. *(Ref: 64 WV CSR 15-5,6)*

930.08 Existing In-Use Backflow Prevention Devices:

Any existing backflow preventer shall be allowed to continue in service unless the degree of hazard is such as to supersede the effectiveness of the present backflow preventer, or otherwise results in an unreasonable risk to the public health. Where the degree of hazard has increased, as in the case of a residential installation converting to a business establishment, any existing backflow preventer must be upgraded to a reduced pressure principle device, or a reduced pressure principle device must be installed in the event that no backflow device is present. *(Ref: 64 WV CSR 15-4,5,6)*

930.09 Periodic Testing:

- (a) Backflow prevention devices shall be tested and inspected at least annually.
- (b) Periodic testing shall be performed by an Inspector certified by the West Virginia Board of Public Health. This testing will be done at the Owner's expense.
- (c) Any backflow preventer which fails during a periodic test will be repaired or replaced. When repairs are necessary, the repaired device will be retested at Owner's expense to insure correct operation. High hazard situations will not be allowed to continue unprotected 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 ensuring the uninterrupted water service during the testing or repair of devices and is strongly recommended when the Owner desires such continuity.
- (d) Backflow prevention devices shall be tested more frequently than specified in Section (a) above, in cases where there is a history of test failure and the Morgantown Utility Board finds that the degree of hazard involved warrants additional testing. The cost of any additional test(s) will be borne by the Owner. (*Ref: 64 WV CSR 15-4,8*)

930.10 Records:

The Morgantown Utility Board shall maintain the following information:

1. Master files on customer Cross-Connections.
2. Master files on customer Cross-Connection tests and/or inspections.
3. Copies of lists and summaries supplied to the West Virginia Board of Public Health

Upon request, the Utility Board shall submit records of inspection, surveys, tests or corrective actions to the West Virginia Board of Public Health. (*Ref: 64 WV CSR 15-8*)

930.11 Severability and Effective Date:

If any provision of this ordinance, or the written Cross-Connection Control Program or application thereof, shall be held invalid or ineffective and/or less stringent than or inconsistent with the State or Federal statutes or rules, the State or Federal statute or rules shall apply.

This ordinance shall take effect upon date of adoption.

FIRST READING:

ADOPTED:

Mayor

FILED:

RECORDED:

City Clerk