

**ARTICLE 15**  
**PLUMBING CODE**

**SECTION 15.1**      **COMPLIANCE WITH STATE LAW**

No person shall hereafter engage in the business of plumbing in the City of Mt. Vernon, Illinois, either as a plumbing contractor, employing plumber, or journeyman plumber who shall not comply with the requirements and provisions, including the minimum code of plumbing standards, of the Plumber's License Law of the State of Illinois, 225 ILCS 320/0.01, et seq.

**SECTION 15.2**      **OFFICE OF INSPECTOR**

The Building inspector shall sign and issue all notices, permits, and certificates required by this Article. He shall keep a record of the performance of his duties which shall include a record of all notices issued, applications received, and permits granted. He shall keep a record of violations of this Article. He shall cause to be inspected in the manner required by law, and for the purpose thereof may enter, all buildings in the course of erection and all buildings undergoing alteration or repair as often as may be necessary to ensure conformance with the requirements of this Article. He shall compel all work in plumbing to be performed in accordance with the provisions of this Article.

**SECTION 15.3**      **PLUMBING PERMITS**

No plumbing (except replacement of existing fixtures only) shall be installed, altered, or changed in any building or structure; nor shall any plumbing be installed, altered, or changed upon any service or lateral between a structure and the City's water or sewer system within the corporate limits of the City of Mt. Vernon except by authorized employees of the City until a permit for such installation, alteration, or change shall have been obtained from the Building Inspector. Said permit shall be issued only to a plumber contractor, employing plumber, or self-employed journeyman plumber licensed under the Plumber's License Law of the State of Illinois and bonded as hereinafter provided or to the owner occupant or lessee occupant of a single-family residence as provided within 225 ILCS 320/2(2). After the permit shall have been issued by the Building Inspector, no change or modification in the plans or specifications shall be made unless such change shall first have been submitted to the Building Inspector and approved.

**SECTION 15.4**      **FEES FOR PERMITS**

The City Clerk shall collect the following fees for permits issued, which said fees shall be paid prior to the issuance of the permit. The fee shall be the same in the case of alteration or change of existing plumbing as in the case of the installation of new plumbing.

<u>ITEM</u>	<u>FEE</u>
Each plumbing fixture or other plumbing opening	\$ 1.50
Air-conditioning unit (which requires plumbing)	1.50

Each floor drain	1.50
Each water tap or connection	See Art. 16, §16.6(h)
Each sewer tap or connection	See Art. 16, §16.7(r)

The fees for the permits above described shall not be charged to or collected from an applicant if all of the following criteria are met:

1. The work is being done for the use of a governmental entity or a not-for-profit organization whose purposes are religious, educational, or charitable.
2. The applicant shall file a written declaration with the City that said fees have not been and will not be included in any payment to any contractor or other person.
3. Such organization shall apply for and obtain all necessary permits and otherwise fully comply with the Ordinances of the City, unless exempted therefrom by any law of the State of Illinois or of the United States.

**SECTION 15.5      NOTIFICATION TO BUILDING INSPECTOR**

The Building Inspector shall be notified by the firm or person doing the work when any plumbing work is begun and when it is ready for inspection. The Building Inspector shall cause all inspections to be made, except inspections of taps for sewer or water, which inspections will be caused to be made by the Superintendent of Public Utilities, all of said inspections to be made by a licensed plumber. All work shall be left uncovered and convenient for examination until inspected and approved. If such work shall not be left uncovered and convenient for inspection, the Building Inspector, the Superintendent of Public Utilities, or their respective designee is hereby authorized to require such excavation as shall be necessary to make the inspection. The inspection shall be made within one day after receipt of notice that the work is ready for inspection. All plumbing must be tested as provided by law in the presence of the inspector, and all defective materials and work replaced and corrected. Upon satisfactory completion of the work, the Building inspector or Superintendent of Public Utilities as applicable shall issue a Certificate of Approval.

**SECTION 15.6      PROHIBITION**

No person shall engage in the business of plumbing as a journeyman plumber, contracting plumber, or employing plumber in the City without having obtained a license from the State of Illinois. No person shall commence any plumbing work within the City without first having obtained a permit as required herein. No person shall refuse, neglect, or disobey any order of the Building Inspector to correct or remove a nuisance existing by reason of unsanitary plumbing or plumbing installed in violation of this Article.

**SECTION 15.7      CROSS-CONNECTION CONTROL**

A. Application.

All premises served by the public potable water supply system of the City of Mt. Vernon shall provide protection of the potable water system from contamination due to backflow or back-siphonage of contaminants through the water service connection in accordance with the Illinois Plumbing Code and in accordance with this Subsection which is enacted pursuant to said Illinois Plumbing Code.

B. Purpose.

The purpose of this Subsection is (a) to protect the public water supply system from contamination or pollution by isolating within the customer's water system contaminants or pollutants which could backflow through the service connection into the public water supply system; (b) to promote the elimination or control of existing cross-connections, actual or potential, between the public or consumer's potable water system and non-potable water systems, plumbing fixtures, and sources or systems containing substances of unknown or questionable safety; (c) to provide for the maintenance of a continuing program of cross-connection control which will prevent the contamination or pollution of the public and consumer's potable water systems.

C. Policy.

1. The owner, custodian, or occupant of each premises served by the public potable water supply system of the City of Mt. Vernon shall be responsible for protection of the public water supply from contamination due to backflow or back-siphonage of contaminants, through the customer's water service connection. If, in accordance with the Illinois Plumbing Code or if in the judgment of the Superintendent of Public Utilities or his authorized representative, an approved backflow prevention device is necessary for the safety of the public water supply system, the Superintendent of Public Utilities shall give notice to the consumer to install such approved backflow prevention device at each service connection to the premises. The consumer shall immediately install such approved device or devices at his own expense at a location and in a manner in accordance with the Illinois Plumbing Code, Illinois Environmental Protection Agency, and this Ordinance and shall have inspections and tests made of such approved devices upon installation; failure, refusal, or inability on the part of the consumer to install such device or devices immediately shall constitute grounds for discontinuing water service to the premises until such device or devices have been installed. The consumer shall retain records of installation, maintenance, testing, and repair as hereinafter required for a period of at least five years. The Superintendent of Public Utilities may require the consumer to submit a cross-connection inspection report to the City of Mt. Vernon to assist in determining whether or not service line protection will be required. All cross-connection inspections shall be conducted by a Cross-Connection Control Device Inspector certified by the Environmental Protection Agency.

2. No person, firm, or corporation, shall establish or permit to be established or maintain or permit to be maintained any connection whereby a private, auxiliary, or emergency water supply other than the regular public water supply of the City of Mt. Vernon, Illinois may enter the supply or distribution system of said City.

3. It shall be the duty of the Superintendent of Public Utilities to cause surveys and

investigations to be made of commercial, industrial, and other properties served by the public water supply that may pose an actual or potential hazard, including premises described within Section 15.7H2 and 3 herein.

D. Definitions.

The following definitions shall apply in the interpretation and enforcement of this Subsection:

1. “Fixed proper air gap” means the unobstructed vertical distance through the free atmosphere between the water discharge point and the flood level rim of the receptacle.
2. “Agency” means Illinois Environmental Protection Agency.
3. “Approved” means backflow prevention devices or methods approved by the Research Foundation for Cross-Connection Control of the University of Southern California, Association of State Sanitary Engineer, American Water Works Association, American National Standards Institute, or certified by the National Sanitation Foundation.
4. “Auxiliary water system” means any water source or system on or available to the premises other than the public water supply system and includes the water supplied by the system. These auxiliary waters may include water from another purveyor's public water supply system; or water from a source such as wells, lakes, or streams, or process fluids; or used water. These waters may be polluted or contaminated or objectionable or constitute a water source or system over which the water purveyor does not have control.
5. “Backflow” means the flow of water or other liquids, mixtures, or substances into the distribution pipes of a potable water supply.
6. “Backflow prevention device” means any device, method, or type of construction intended to prevent backflow into a potable water system. All devices used for backflow prevention in Illinois must meet the standards of the Illinois Plumbing Code and the Illinois Environmental Protection Agency.
7. “Consumer” or “Customer” means the owner, official custodian or person in control of any premises supplied by or in any manner connected to a public water system.
8. “Consumer's water system” means any water system located on the customer's premises. A building plumbing system is considered to be a customer's water system.
9. “Contamination” means any impairment of the quality of the water by entrance of any substance to a degree which could create a health hazard.
10. “Cross-connection” means any physical connection or arrangement between two otherwise

separate piping systems, one of which contains potable water and the other a substance of unknown or questionable safety or quality, whereby there may be a flow from one system into the other.

Direct cross-connection means a cross-connection formed when a water system is physically joined to a source of unknown or unsafe substance

Indirect cross-connection means a cross-connection through which an unknown substance can be forced, drawn by vacuum, or otherwise introduced into a safe potable water system.

11. “Double-check valve assembly” means an assembly composed of single, independently acting check valves approved under ASSE Standard 1015. A double-check valve assembly must include tight shutoff valves located at each end of the assembly and suitable connections for testing the water-tightness of each check valve.
12. “Health hazard” means any condition, device, or practice in a water system or its operation resulting from a real or potential danger to the health and well-being of consumers. The word “severe” as used to qualify “health hazard” means a hazard to the health of the user that could be expected to result in death or significant reduction in the quality of life.
13. “Inspection” means a plumbing inspection to examine carefully and critically all materials, fixtures, piping and appurtenances, appliances, and installations of a plumbing system for compliance with requirements of the Illinois Plumbing Code, 77 Ill. Adm. Code 890.
14. “Nonpotable water” means water not safe for drinking, personal, or culinary use was determined by the requirements of 77 Ill. Adm. Code 900.
15. “Plumbing” means the actual installation, repair, maintenance, alteration, or extension of a plumbing system by any person. Plumbing includes all piping, fixtures, appurtenances, and appliances for a supply of water for all purposes, including without limitation lawn sprinkler systems, from the source of a private water supply on the premises or from the main in the street, alley, or at the curb to, within, and about any building or buildings where a person or persons live, work, or assemble. Plumbing includes all piping, from discharge of pumping unit to and including pressure tanks in water supply systems. Plumbing includes all piping, fixtures, appurtenances, and appliances for a building drain and a sanitary drainage and related ventilation system of any buildings where a person or persons live, work, or assemble from the point of connection of such building drain to the building sewer or private sewage disposal system five feet Beyond the foundation walls.
16. “Pollution” means the presence of any foreign substance (organic, radiological, or biological) in water that tends to degrade its quality so as to constitute a hazard or impair the usefulness of the water.

17. “Potable water” means water which meets the requirements of 77 Ill. Code 90C for drinking, culinary, and domestic purposes.
18. “Potential cross-connection” means a fixture or appurtenance with threaded hose connection, tapered spout, or other connection which would facilitate extension of the water supply line beyond its legal termination point.
19. “Process fluid(s)” means any fluid or solution which may be chemically, biologically, or otherwise contaminated or polluted in a form or concentration such as would constitute a health, pollution, or system hazard if introduced into the public or a consumer's potable water system. This includes but is not limited to:
  - a. polluted or contaminated waters;
  - b. process waters;
  - c. used waters originating from the public water supply system which may have deteriorated in sanitary quality;
  - d. cooling waters;
  - e. questionable or contaminated natural waters taken from wells, lakes, streams, or irrigation systems;
  - f. chemicals in solution or suspension;
  - g. oils, gases, acids, alkalis, and other liquid and gaseous fluids used in industrial or other processes, or for fire fighting purposes.
20. “Public water supply” means all mains, pipes, and structures through which water is obtained and distributed to the public, including wells and well structures, intakes and cribs, pumping stations, treatment plants, reservoirs, storage tanks, and appurtenances, collectively or severally, actually used or intended for use for the purpose of furnishing water for drinking or general domestic use and which serve at least 15 service connections or which regularly serve at least 25 persons at least 60 days per year. A public water supply is either a “community water supply” or a “non-community water supply”
21. “Reduced pressure principle backflow prevention device” means a device containing a minimum of two independently acting check valves together with an automatically operated pressure differential relief valve located between the two check valves and approved under ASSE Standard 1013. During normal flow and at the cessation of normal the pressure between these two checks shall be less than the supply pressure. In case of leakage of either check valve, the differential relief valve, by discharging to the atmosphere, shall operate to maintain the pressure between the check valves at less than the supply pressure. The unit must include tightly closing shutoff valves located at each end of the device, and each device shall be fitted with properly located test cocks.
22. “Service connection” means the opening, including all fittings and appurtenances, at the water main through which water is supplied to the user.

23. “Survey” means the collection of information pertaining to a customer's piping system regarding the location of all connections to the public water supply system and must include location, type, and most recent inspection and testing date of all cross-connection control devices and methods located within that customer's piping system. The survey must be in written form and should not be an actual plumbing inspection.
24. “System hazard” means a condition through which an aesthetically objectionable or degrading material not dangerous to health may enter the public water supply system or a consumer's potable water system.
25. “Used water” means any water supplied by a public water supply system to a consumer's water system after it has passed through the service connection and is no longer under the control of the water supply official custodian.
26. “Water purveyor” means the owner or official custodian of a public water system.

E. Water System.

The water system shall be considered as made up of two parts: the public water supply system and the consumer's water system. The public water supply system shall consist of the source facilities and the distribution system, and shall include all those facilities of the potable water system under the control of the Superintendent of Public Utilities up to the point where the consumer's water system begins. The source shall include all components of the facilities utilized in the production, treatment, storage, and delivery of water to the public water supply distribution system. The public water supply distribution system shall include the network of conduits used to deliver water from the source to the consumer's water system. The consumer's water system shall include all parts of the facilities beyond the service connection which are used to convey water from the public water supply distribution system to points of use.

F. Cross-Connection Prohibited.

Connections between potable water systems and other systems or equipment containing water or other substances of unknown or questionable quality are prohibited. No physical connection shall be permitted between potable portion of a supply and any water supply not of equal or better bacteriological and chemical quality as determined by inspection and analysis by the Agency. There shall be no arrangement or connection by which an unsafe substance may enter a supply.

There shall be no direct connections between potable water lines and any lines; equipment, or any part of the sewage system, except only such connections as shall be made through a minimum fixed air gap as detailed within Section 890.1140 of 77 111. Adm. Code 890 or the Illinois Plumbing Code.

G. Survey and Investigation.

1. The approved Cross-Connection Control Device Inspector shall have the right to enter at

any reasonable time any property served by a connection to the public water supply or distribution system of the City of Mt. Vernon for the purpose of verifying the presence or absence of cross-connections within the consumer's premises and testing, repair, and maintenance of cross-connection control devices within the consumer's premises; and that the Water Superintendent or his authorized agent shall have the right to enter at any reasonable time any property served by a connection to the public water supply or distribution system of the City of Mt. Vernon for the purpose of verifying information submitted by the customer regarding the required cross-connection control inspection. On demand, the owner, lessees, or occupants of any property so served shall furnish to the Superintendent of Public Utilities any information which he may request regarding the piping system or systems or water use on such property. The refusal of such information, when demanded, shall, within the discretion of the Superintendent of Public Utilities, be deemed evidence of the presence of improper connections as provided in this Ordinance.

2. It shall be the responsibility of the water consumer to arrange periodic surveys of water use practices on his premises to determine whether there are actual or potential cross-connections to his water system through which contaminants or pollutants could backflow into his or the public potable water system. All cross-connection control or other plumbing inspections must be conducted in accordance with 225 ILCS 320/3.

3. It is the responsibility of the water consumer to prevent backflow into the public water system by ensuring that:

- a. All cross-connections are removed; or approved cross-connection control devices are installed for control of backflow and back-siphonage.
- b. Cross-connection control devices shall be installed in accordance with the manufacturer's instructions.
- c. Cross-connection control devices shall be inspected at the time of installation and at least annually by a person approved by the Agency as a Cross-Connection Control Device Inspector (CCCDI). The inspection of mechanical devices shall include physical testing in accordance with the manufacturer's instructions.
- d. Testing and Records

Each device shall be tested at the time of installation and at least annually or more frequently if recommended by the manufacturer.

Records submitted to the community public water supply shall be available for inspection by Agency personnel in accordance with 415 ILCS 5/4(e).

Each device shall have a tag attached listing the date of most recent test, name of CCCDI, and type and date of repairs.

A maintenance log shall be maintained and include:

- i. date of each test;
- ii. name and approval number of person performing the test;
- iii. test results;
- iv. repairs or servicing required;
- v. repairs and date completed; and
- vi. servicing performed and date completed.

H. Protection Required.

1. An approved backflow device shall be installed on all connections to the public water supply as described in the Plumbing Code, 77 Ill. Adm. Code 900 and the Agency's regulations 35 I11. Adm. Code 680. In addition, an approved backflow prevention device shall be installed on each service line to a consumer's water system serving premises, where in the judgment of the Superintendent of Public Utilities, actual or potential hazards to the public water supply water system exist.

2. An approved backflow prevention device shall be installed on each service line to a consumer's water system serving premises where the following conditions exist:

- a. Premises having an auxiliary water, unless such auxiliary supply is accepted as an additional source by the Superintendent of Public Utilities and the source is approved by the Illinois Environmental Protection Agency.
- b. Premises on which any substance is handled which can create an actual or potential hazard to the public water supply system. This shall include premises having sources or systems containing process fluids or waters originating from the public water supply system which are no longer under the sanitary control of the Superintendent of Public Utilities.
- c. Premises having internal cross-connections that, in the judgment of the Superintendent of Public Utilities and the Cross-Connection Control Device Inspector, are not correctable or intricate plumbing arrangements which make it impractical to determine whether or not cross-connections exist.
- d. Premises where, because of security requirements or other prohibitions or restrictions, it is impossible or impractical to make a complete cross-connection survey.
- e. Premises having a repeated history of cross-connections being established or reestablished.

3. An approved backflow device shall be installed on all connections to the public water supply as described in the Plumbing Code, 77 Illinois Administrative Code 890 and the Agency's regulations, 35 Ill. Adm. Code 653. In addition, an approved backflow prevention device shall be installed on each service line to a consumer's water system serving, but not necessarily limited to, the following types of facilities unless the Superintendent of Public Utilities determines that no actual or potential hazard to the

public water supply system exists:

- a. Hospitals, mortuaries, clinics, nursing homes.
- b. Laboratories.
- c. Piers, docks, waterfront facilities.
- d. Sewage treatment plants, sewage pumping stations or storm water pumping stations.
- e. Food or beverage processing plants.
- f. Chemical plants.
- g. Metal plating industries.
- h. Petroleum processing or storage plants.
- i. Radioactive material processing plants or nuclear reactors.
- j. Carwashes.
- k. Pesticide, or herbicide, or extermination plants and trucks.
- l. Farm service and fertilizer plants and trucks.

I. Type of Protection.

1. The type of protection required under paragraph H 2 (a), (b), and (c) shall depend on the degree of hazard which exists as follows:

- a. An approved fixed proper air gap separation shall be installed where the public water supply system may be contaminated substances that could cause a severe health hazard.
- b. An approved fixed proper air gap separation or an approved reduced pressure principle backflow prevention device shall be installed where the public water supply system may be contaminated with a substance that could cause a system or health hazard.
- c. An approved fixed proper air gap separation or an approved reduced pressure principle backflow prevention device shall be installed where the public water supply system may be polluted with substances that could cause a pollution hazard not dangerous to health.

2. The type of protection required under Paragraph H 2 (d) and (e) shall be an approved fixed proper air gap separation or an approved reduced-pressure principle backflow prevention device.

3. Where a public water supply or an auxiliary water supply is used for a fire protection system, reduced pressure principle backflow preventers shall be installed on fire safety systems connected to the public water supply when:

- a. the fire safety system contains antifreeze, fire retardant, or other chemicals;
- b. water is pumped into the system from another source; or
- c. water flows by gravity from a non-potable source; or water can be pumped into the fire

safety system from any other source;

d. there is a connection whereby another source can be connected to the fire safety system.

4. All other fire safety systems connected to the potable water supply shall be protected by a double-check valve assembly on metered service lines and a double-detector check valve assembly on unmetered service lines.

J. Backflow Prevention Devices.

All backflow prevention devices or methods required by these rules and regulations shall be approved by the Research Foundation for Cross-Connection Control of the University of Southern California, American Water Works Association, American Society of Sanitary Engineering, or American National Standards Institute, or certified by the National Sanitation Foundation to be in compliance with applicable industry specification. Installation of approved devices shall be made in accordance with 77 Illinois Administrative Code 890, and only as specified by the Research Foundation for Cross-Connection Control of the University of Southern California or applicable industry specifications. Maintenance as recommended by the manufacturer of the device shall be performed. Manufacturer's maintenance manual shall be available onsite.

K. Inspection and Maintenance.

1. It shall be the duty of the consumer at any premises on which backflow prevention devices required by these regulations are installed to have inspection, tests, maintenance, and repair made in accordance with the following schedule or more often where inspections indicate a need or are specified in manufacturer's instructions.

a. Fixed proper air gap separations shall be inspected to document that a proper vertical distance is maintained between the discharge point of the service line and the flood level rim of the receptacle at the time of installation and at least annually thereafter.

b. Double-check valve assemblies shall be inspected and tested at time of installation and at least annually thereafter, and required service performed within fifteen days.

c. Reduced pressure principle backflow prevention devices shall be tested at the time of installation and at least annually or more frequently if recommended by the manufacturer, and required service performed within five days.

2. Testing shall be performed by a licensed cross-connection control inspector.

3. Each device shall have a tag attached listing the date of most recent test or visual inspection, name of tester, and type and date of repairs.

4. A maintenance log shall be maintained and include:
  - a. date of each test or visual inspection;
  - b. name and approval number of person performing the test or visual inspection;
  - c. test results;
  - d. repairs or servicing required;
  - e. repairs and date completed; and
  - f. servicing performed and date completed.

5. Whenever backflow prevention devices required by these regulations are found to be defective, they shall be repaired or replaced at the expense of the consumer without delay.

6. Backflow prevention devices shall not be bypassed, made inoperative, removed, or otherwise made ineffective without specific authorization by the Superintendent of Public Utilities.

L. Booster Pumps.

Where a booster pump has been installed on the service line to or within any premises, such pump shall be equipped with a low pressure cutoff device designed to shut off the booster pump when the pressure in the service line on the suction side of the pump drops to 20 psi or less. It shall be the duty of the water consumer to maintain the low pressure cutoff device in proper working order and to certify to the Superintendent of Public Utilities, at least once a year, that the device is operable.

M. Violations.

1. The Superintendent of Public Utilities is hereby authorized and directed to disconnect, after reasonable notice to the occupant thereof, the water service to any property wherein any backflow prevention device required by this Ordinance is not installed, tested, maintained, and repaired in a manner acceptable to the Superintendent of Public Utilities; or if it is found that the backflow prevention device has been removed or bypassed; or if an unprotected cross-connection exists on the premises; or if a low pressure cutoff required by this Ordinance is not installed and maintained in working order; or if any connection in violation of the provisions of this Ordinance is known to exist; and said Superintendent of Public Utilities is authorized to take such other precautionary measures as he may deem necessary to eliminate any danger of contamination to the public water supply distribution mains.

2. Water service to such property shall not be restored until such conditions have been eliminated or corrected in compliance with the provisions of this Ordinance and to the satisfaction of the Superintendent of Public Utilities and until the required reconnection fee is paid to the City of Mt. Vernon.

3. Immediate disconnection with a verbal notice can be effective when the Superintendent of Public Utilities is assured or has determined that eminent danger of harmful contamination of the public water supply system exists. Such action shall be followed by written notification of the cause of disconnection. Immediate disconnection without notice to any party can be effected to prevent actual or anticipated contamination or pollution of the public water supply, provided that, in the reasonable opinion of the Superintendent of Public Utilities or the Illinois Environmental Protection Agency, such action is required to prevent actual or potential contamination or pollution of the public water supply.

4. Neither the City of Mt. Vernon, the Superintendent of Public Utilities, its agents, nor assigns shall be liable to any customer for any injury, damages, or lost revenues which may result from termination of said customer's water supply in accordance with the terms of this Ordinance, whether or not said termination was with or without notice.

5. Any person found to be violating any provision of this Ordinance or any customer responsible for back-siphoned material or contamination through backflow, if contamination of the potable water supply system occurs through an illegal cross-connection or an improperly installed, maintained, or repaired device, or a device which has been bypassed, must bear the cost of clean-up of the potable water supply system; and said customer shall be responsible for all reasonable attorney fees incurred by the City in enforcing the terms of this Ordinance.

#### **SECTION 15.8. PENALTY**

In addition to any other provision herein, any person violating any provision of this Ordinance shall be subject to a fine and penalty in accordance with Article 22.6 of the Revised Code of Ordinances.