

Chapter 47

PUBLIC WATER SYSTEM

BACKFLOW PREVENTION

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Section 47-1. Purpose

The purpose of this Local Law is to safeguard potable water supplies from potential contamination by preventing back flow from a water customer's system into the public water system. It is the intent of this Local Law to recognize that there are varying degrees of hazard and to apply the principal that the degrees of protection should commensurate with the degrees of hazard. Further, it is the intent of the Village of Arcade, Arcade, New York, to comply with the requirements of New York State Sanitary Code, Part 5, Section 5-1.31 which mandates that the supplier of water protect their water system in accordance with procedures acceptable to the Commissioner of Health. These mandated requirements are as set forth in the Cross Connection Control Manual published by New York State Department of Health (NYSDOH) and to that extent, the terms, conditions and provisions of the New York State Sanitary Code, Part 5, Section 5-1.31 and the Cross Connection Control Manual are incorporated in this Local Law by reference as if more fully stated.

Section 47-2. Definitions

Unless specifically defined below, words or phrases used in this local law shall be interpreted so as to give them the meaning they have in common usage and to give this local law its most reasonable application.

- A. Air Gap Separation – The term “air gap separation” means a physical break between a supply pipe and a receiving vessel. The air gap shall be at least double the diameter of the supply pipe, measured vertically above the top rim of the vessel, in no case less than one inch.

- B. Approved Check Valve – The term “approved check valve” means a check valve that seats readily and completely. It must be carefully machined to have free moving parts and assured water tightness. The face of the closure element and valve seat must be bronze, composition, or other non-corrodible material which will seal tightly under all prevailing conditions of field use. Pins and bushings shall be of bronze and other non-corrodible, non-sticking material, machined for easy dependable operation. The closure element shall be internally weighted or otherwise internally equipped to promote rapid and positive closure in all sized where this feature is obtainable.
- C. Approved Double Check Valve Assembly – The term “approved double check valve assembly” means two single independently acting check valves, including tightly closing shut off valves located at each end of the assembly and suitable test connections. This device must be approved as a complete assembly.
- D. Approved Reduced Pressure Zone Device – The term “approved reduced pressure zone device” means a minimum of two independently acting check valves together with automatically operated pressure differential relief valve located between the two check valves. 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 checks at less than the supply pressure. The unit must include tightly closing shut off valves located at each end of the device, and each device shall be fitted with properly located test cocks. This device must be approved as a complete assembly.
- E. Approved Water Supply – The term “approved water supply” means any water supply approved by the New York State Department of Health.
- F. Auxiliary Supply – The term “auxiliary supply” means any water supply on or available to the premises other than the approved public water supply.
- G. Certified Back Flow Prevention Device Tester – The term “certified back flow prevention device tester” is an individual who has successfully completed a New York State Department of Health approved course in the testing of back flow prevention devices and has been issued a certificate BY THE New York State Department of Health. Such certificate shall be kept current as may be required by the New York State Department of Health.
- H. Cross Connections – The term “cross connections” as used in the Local Law means any unprotected connection between any part of a water system used or intended to be used as a supply of water and any source or system containing water or substance(s) that is not or cannot be approved as equally safe, wholesome and potable for human consumption.

- I. Vacuum Breaker – Pressure Type and Non-Pressure Type – A vacuum breaker which can only be used for internal plumbing control and, therefore, not acceptable as a containment device.
- J. Water Customer – The term “water customer” means the consumer or person on the premises charged with the responsibility of complete knowledge and understanding of the water supply piping within the premises and for maintaining the consumer’s water system free from cross connections and other sanitary defects, as required by this Local Law and all other required regulations and laws.

Section 47-3. Where Backflow Protection is Required:

The consumer’s water system shall be required to maintain a degree of protection commensurate with the degree of hazard regardless of whether the hazard is immediate or potential. To that extent, the Cross Connection Control Manual published by NYSDOH shall be used, as a guide, to determine where protection is required. It shall be the responsibility of the water customer to provide and maintain such required protection devices and such devices shall be of a type acceptable to the New York State Department of Health. Plans for the installation of protective devices must be submitted to the Superintendent of Public Works of the Village of Arcade and the County Health Department for approval.

Section 47-4. Type of Protection:

The protective device required shall depend on the degree of hazard as tabulated below:

- A. Where any customer maintains an auxiliary water supply in addition to the public water supply, the two systems must not be interconnected. Where the two systems are now interconnected, the following will be deemed appropriate with existing New York State policies and recommendations and with this local law.
 - 1. Disconnection of the auxiliary water supply from the public water supply. An inspection to determine compliance will be made initially and at any time in the future but no less often than once every three years thereafter or whenever the property is sold. The inspection may be made by the Village of Arcade or by the local building codes inspector. When disconnection is made one of the following must also be completed to ensure the safety of the public water system:
 - 2. Installation of an acceptable Reduced Pressure Zone (RPZ) device on the public water supply connection;

3. Proper abandonment of the auxiliary water supply.
- B. At the service connection to any premises on which a substance that would be objectionable is handled (but not necessarily hazardous to health if introduced into the public water supply), the public water supply shall be protected by an approved double check valve assembly.
 - C. At the service connection to any premises on which a substance of unusual toxic concentration or danger to health is or may be handled (but not under pressure), the public water supply shall be protected by an air gap separation or an approved reduced pressure zone back flow prevention device. If an air gap is installed, it shall be located as close as practical to the water meter, and all piping between the water meter and receiving tanks shall be entirely visible. A reduced pressure zone device, when installed, shall be located as close as possible to the property line.
 - D. At the service connection to any premises on which any material dangerous to health, or toxic substance and toxic concentration, is or may be handled under pressure, the public water supply shall be protected by an air gap separation. The air gap shall be located as close as practical to the water meter, and any piping between the water meter and receiving tanks shall be entirely visible. If these conditions cannot reasonably be met, the public water supply shall be protected with an approved reduced pressure zone back flow prevention device and it shall be located as close as possible to the property line.
 - E. At the service connection to any sewage treatment plant or sewage pumping station, the public water supply shall be protected by an air gap separation. The air gap shall be located as close as practicable to the water meter and all piping between the water meter and receiving tanks shall be entirely visible. If these conditions cannot be reasonably met, the public water supply shall be protected by an approved reduced pressure zone back flow prevention device and it shall be located as close as possible to the property line.

Section 47-5. Frequency of Inspection of Protective Devices:

It shall be the duty of the water customer upon whose premises back flow protective devices are installed, to have TESTS and INSPECTIONS MADE AT LEAST ONCE A YEAR, or more often in instances where successive inspections indicate repeated failure. Devices shall be tested, repaired, overhauled or replaced at the expense of the water customer. These tests shall be performed by a CERTIFIED BACK FLOW PREVENTION DEVICE TESTER and all test results will be provided to the Village within 72 hours after the test is made.

Records of such tests, repairs and overhaul shall also be kept and made available to the Village and the local health department upon request.

Section 47-6. Penalties and Recourse for Non-Compliance

- A. No water service connection to any premises shall be installed or maintained by the water customer, unless the water supply is protected as required by this Local Law and such other applicable local, state and federal laws, rules and regulations.
- B. If any facility served by the Village of Arcade water system denies a Village of Arcade water department person access to their premises for the purposes of determining if protection to the public water system is necessary, then the maximum protection condition shall be imposed with the requirement that the number of devices shall equal the number of service lines.
- C. The following penalties shall be applicable for a violation of this Local Law:

- 1. Failure to install the appropriate back flow prevention device within a prescribed time frame after first notice:

\$250.00

- 2. Failure to install the appropriate back flow prevention device within prescribed time frames after second notice:

Termination of service

- 3. Failure to at least annually test the back flow prevention device:

\$300.00 and/or termination of water service

- 4. Failure to replace or repair a back flow prevention device as required:

\$1,000.00 and/or termination of water service

Section 47-7. Effective Date

This Local Law shall take effect upon filing with the New York State Department of State.

Local Law No. 1-1993
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Date Filed: January 19, 1993

