CHAPTER 45: WATER SERVICE

ARTICLE I - GENERAL PROVISIONS

§ 45.1 Title

This Chapter shall be known and may be cited as the "Town of Camillus Water Service Law."

§ 45.2 Applicability

This Chapter shall apply to the Camillus Consolidated Districts, the Belle Isle Water District and any other Water District that may be hereafter established in the Town of Camillus.

§ 45.3 Definitions

As used in this Chapter, unless the context or subject matter otherwise requires, the following terms shall have the following meanings:

- 1. District Camillus Consolidated and/or Belle Isle Water District or any other Water District established in the Town of Camillus.
- 2. System Source of supply, reservoirs, reservoir sites, chlorination apparatus, water mains, hydrants, pipes, and all appurtenances of district water supply and distribution facilities.
- 3. Water Superintendent The person designated and appointed by the Town Board to supervise the operation of the District system, inspect and supervise the installation of connections to the system, supervise the employees of the District, and enforce this Chapter and any other rules and regulations of the District and policies of the Town Board.
- 4. Consumer Owner or owners of premises supplied with water from the system. (Not a tenant.)
- 5. Goose neck That portion of the service line extending from the corporation stop in the District main to the curb stop at the edge of the public highway.

§ 45.4 Chapter, rules and regulations to be part of contract

Every person who shall be supplied with water by the District shall be deemed to have accepted and approved the provisions of this Chapter and all other rules and regulations of the District. The continuance to take water after any amendment or change of or addition to this Chapter and such rules and regulations shall be deemed an acceptance of such amendment, change or addition.

§ 45.5 Application for service

A. All applications for the use of water must be made in writing on forms provided by the

District at the Town Clerk's Office designated Application for Water Service, or Application for Fire Protection Service. On acceptance by the District, the application shall constitute a contract between the District and the applicant obligating the applicant to pay the District its established rates and to comply with its rules and regulations.

- B. Applications will be accepted subject to there being an existing main in a street or right of way abutting on the premises to be served, but acceptance shall in no way obligate the District to extend its mains to serve the premises.
- C. A separate application must be made for each "premises". The word "premises" as used herein shall be defined as follows:
 - 1. A building under one roof owned or leased by one Consumer, and occupied as one residence or one place of business.
 - 2. A combination of buildings owned or leased by one Consumer, in one common enclosure, occupied by one family, or one corporation or firm, as a residence or place of business.
 - 3. Each unit of a multiple house or building separated by a solid vertical partition wall, occupied by one family, or one firm, as a residence, or place of business.
 - 4. A building owned or leased by one Consumer having a number of apartments, offices, or lofts which are rented to tenants, and using in common one hall and one or more means of entrance.
 - 5. A building one or more stories high under one roof, owned or leased by one Consumer having an individual entrance for the ground floor occupants and one for the occupants of the upper floors.
 - 6. Garden apartments owned by one individual or firm and located in one common enclosure.

Sub-metering will not be permitted except by written permission from the Water Superintendent.

§ 45.6 Installation of services

- A. Upon written application for water service, as hereinbefore prescribed, by an owner or occupant of any property abutting on any public or private street, and upon payment of the applicable charge for the size service to be installed, the District will install, operate, maintain and, when necessary, replace at its own cost and expense, the service pipe and connection between the main and the curb box shut-off on both public and private streets.
 - Service pipe and service connections shall not be trespassed upon nor interfered with in any respect. The curb stop may not be used by the Consumer for turning on or shutting off the water supply but is for the exclusive use of the District.
- B. The applicant shall, at his or her own expense, install the service pipe from the curb box shut-off

to the premises and a valve to be located preferably just inside the building wall, permitting control of the water supply by the Consumer. This property shall be maintained, at the expense of the Consumer, and when necessary replaced. For this installation and maintenance thereof, the Consumer shall employ a competent plumber and all work shall be performed in a manner satisfactory to the District. The minimum size, materials, depth of cover and method of construction shall be the same as hereinafter specified for a service pipe installed by the District. If any defects in workmanship or materials are found, or if the Consumer's service pipe has not been installed in accordance with such specifications, or with the District's requirements, water service either will not be turned on, or will be discontinued if such defects are not remedied.

No service pipe will be installed by the District until the service pipe and service connection from the premises to the street have been installed in a manner satisfactory to the District.

- C. All service pipes shall have a minimum cover of four and one-half (4 ½) feet and shall comply with the specifications contained hereinafter in paragraphs 1 or 2.
 - 1. No service pipes shall be less in size than 3/4" inside diameter. U.S. Government Specification Type K soft tempered copper tubing shall be used on 3/4" and 1" services. Byers galvanized pipe or Type K copper tubing shall be used on 1½" and 2" services. All services larger than two (2) inches in diameter shall be cast iron pipe of quality equal to American Water Works Association standard specifications, and of weight suitable for service under a pressure of 150 pounds per square inch. All connections of service pipes to a main with a ground cover of less than five (5) feet shall be made on the side of the main so that such service pipes shall in no case have less covering than the main. The District reserves the right in all cases to stipulate the size and type of service connection to be used.
 - 2. Polyethylene tubing may be utilized for service pipes which tubing shall be an ethylene-hexane copolymer and shall comply with the applicable requirements as specified in ASTM D3350 providing for inner and outer layers of UV protection for five years in direct sunlight and shall be manufactured from PE3408 high density polyethylene resin. Polyethylene shall comply with the following: Tubing shall have a working pressure of 200PSI at 73.4 degrees F and be in conformance with ANSI/NSF Standard 61. All tubing furnished under these specifications shall conform to the following standards: AWWA C-901, ASTM D2239, ASTM D2737, ASTM D3350, ASTM D1248, ASTM F1248, ASTM D1693, ASTM D2837, and ASTM D3140. Tubing dimensions and tolerances shall conform to the following requirements: Polyethylene tubing surfaces shall be mirror smooth, and shall be free from bumps and irregularities. Materials must be completely homogenous and uniform in appearance. Tubing dimensions and tolerances shall correspond with the values listed in AWWA C901 with standard dimensions ration (SDR) of 9. Tubing shall be fully labeled at intervals of not more than 5 feet with brand name and manufacturer, the nominal size, PE 3408, the word TUBING and SDR9, PC 200, AWWA C901-88, and the seal or mark of the testing agency. For house services 1" minimum piping will be use. Corporation cocks shall be Mueller 110 compression or equal. The inlet shall have AWWA standard thread for tapping water mains and the outlet shall be provided with a compression fitting and stainless steel stiffeners and shall open left. Curb stops shall be Mueller Oriseal Mark 2 or equal. Curb boxes shall be heavy pattern, adjustable, type as manufactured by Buffalo Pipe and Foundry Co.,

type or equal. A single copper conductor tracer/locator wire (10 gage) will be installed and terminate at curb box, with a 18" wipe.

§ 45.7 Water line Specifications 1

All water line installation plans must be submitted to the Water Superintendent at the Water Department Office along with a cloth map of the area involved unless previously furnished.

- 1. All water lines shall be cast iron Class 150 and can be either bell and spigot or mechanical joint pipe.
- 2. All water lines shall be at least 6" in diameter unless arrangements are made with the Water Department for smaller pipe.
- 3. All water line trenches shall be excavated to a sufficient depth to provide fifty-four (54") inches of cover and proper bedding.
- 4. All valve installations shall be laid out by the Water Department and all valves shall open left.
- 5. Tie-in on all valve installations shall be furnished, measurements from hydrants or building foundations from two angles wherever possible or other permanent objects.
- 6. All valve boxes shall be of H. D. Wood make or equivalent with large flange and no pieces of bell and cast iron pipe shall be used as valve boxes.
- 7. All fire hydrants shall have a 6° open left valve directly in front of hydrant.
- 8. All fire hydrants shall be Matthews-Double bib or equivalent 4½" with 6" bell and Camillus Water Department standard thread.
- 9. All fire hydrants shall be set at finish grade with mark on hydrant called ground line.
- 10. A bond of \$1,000.00 covering each installation of water lines shall be furnished to the Camillus Water Department. Bond shall be for one (1) year from date of installation.

§ 45.8 Meter service - payment

- A. All water service bills are due and payable after rendition. If a service bill remains unpaid after ninety (90) days, the District or its agents may discontinue service at the shutoff and service will not be re-established until such unpaid charges, together with a charge for the restoration of service is paid as provided in § 45.38.
- B. Any Consumer, new or otherwise, taking water for more than one half of one month that month, will be charged the minimum charge for that monthly period, together with any excess gallonage

¹See also Appendix 2, infra.: Industrial Code Rule 53 and check with Onondaga County Central Registry of Operators of Underground Facilities before commencing excavations.

over the minimum allowance, if used.

- C. Any Consumer may discontinue water service by giving the District written notice not less than ten days prior to the discontinuance, and all liability for charges for service rendered after the discontinuance of service, as herein provided for, shall cease.
- D. The Consumer shall notify the District in writing of any change in occupancy. No adjustment of bills will be made by the District as between owners or tenants.
- E. In case of temporary discontinuance at request of a Consumer, service will be turned off. Upon re-establishment of service a turn-on fee shall be charged as provided in § 45.38.

§ 45.9 General rules

- A. No person, except the officials of the Water District and authorized assistants, and District Fire Departments for emergency purposes only, shall use water from any public fire hydrant for any use whatsoever unless authorized by the Water Superintendent. For good cause, upon application to the District, the Water Superintendent may authorize water use from public hydrants under such conditions as he or she may deem advisable.
- B. The District undertakes to use reasonable care and diligence to provide a constant supply of water at a reasonable pressure to Consumers, but reserves the right, at any time, without notice, to shut off the water in its mains for the purposes of making repairs or extensions, or for other purposes. It is expressly agreed that the District shall not be liable for a deficiency or failure in the supply of water or the pressure thereof for any cause whatsoever, nor for any damage caused thereby, or by the bursting or breaking of any main or service pipe or any attachment to the District property.

ARTICLE II - SPECIFIC REGULATIONS

§ 45.21 Service pipes and fixtures

- A. New taps
 - 1. All taps on the mains shall be made, put in and installed only by the Water Superintendent, or employees of the District or persons authorized by the Water Superintendent.
 - 2. No person shall make any tap on the main or make any connection with the service pipes extending from the main to curb stop or valve, except the Water Superintendent or employees of the District or as permitted by the Water Superintendent.
 - 3. Minimum size of taps shall be 3/4"
 - 4. Specific approval shall be required from the Water Superintendent for 1" or larger taps
 - 5. All new taps will service one premise or dwelling only except as specifically authorized by the Water Superintendent.

- 6. Any repairs to multiple dwelling services will be designed so as to make one tap serve one dwelling.²
- 7. Service lines, either new or replacement, shall be installed with a ten foot (10') horizontal or eighteen inch (18") vertical separation from a sanitary sewer line. Vertical separation shall be with the water line above the sewer line and still maintain necessary depth of burial for water line. Where these conditions cannot be met, the service line shall be encased in a sealed conduit acceptable to the Superintendent to provide the required protection.

B. New service lines

- 1. District responsibility Gooseneck. Upon written application from Consumer and approval by the Water Superintendent or the Town Board where necessary, the District shall make the tap and complete the necessary work to supply the water to the curb stop, with the following exceptions:
 - a. The Consumer will be responsible for the excavation necessary to uncover the water main where is adjacent to property owner or outside shoulder of public highway on opposite side from property to be served.
 - b. When the service is to cross a public highway, the District will be responsible for all excavation, equipment, labor, and materials necessary to make tap on the main and or reach the edge of the public highway. The District will provide the necessary materials, labor and equipment to cross any and all public highways. All goose necks will be installed only by the Water Superintendent or employees of the District according to specifications in Appendix 1 at cost to the Consumer, unless authorized by the Water Superintendent.

C. Leaks and/or replacement

All service pipes shall be maintained and kept in repair and free from leaks at the expense of the Consumer. Leaks in service pipes shall be repaired within forty-eight (48) hours after notice given to Consumer. If leaks are not repaired within said period, the District shall have the right to discontinue the supply of water and to collect the expense of shutting off the water plus an estimated charge for loss of water caused by such leak. Water shall not again be supplied to the premises until such expense and charges are paid in full.

D. Turning water on or shutting water off

1. No person, except the Water Superintendent or employees of the District, shall turn on or shut off the water in any service pipes. The curb stop shut off box shall be kept readily accessible, by and at the expense of the Consumer at all times, except where the shut off box is within the highway. No person shall use the curb stop without the consent of the Water Superintendent.

2. Points of shut off:

²Provides control in event of selling, renting, or leasing one dwelling.

- a. Single dwelling services. The shut off point shall be the curb stop in the line.
- b. Multiple dwelling services
 - 1) On old services supplying more than one dwelling or premise the point of shut off for any of the dwellings singularly shall be the control valve that controls the water service in that dwelling, unless a curb stop has been installed where the lines Tee or Y off to the separate dwellings.
 - 2) The point of shut off for all the dwellings or premises shall be the curb stop in the service line, adjacent to the district main.

§ 45.22 Metered service - installation

A. Individual meters

An individual meter will be required for each premises and for each separate water connection to a premises.

B. District to furnish meters

The meter will be furnished and connected by the District at the expense of the consumer. The District reserves the right in all cases to specify the size, type and make of the meter to be used on any connection. Payment for the meter shall be made at the time the application is made for the service in the amount established by the Town Board.

C. Consumer's responsibilities

The Consumer shall provide a place acceptable to the District for the location of the meter. The Consumer shall install the necessary piping, fittings, valves and pipe couplings to receive the meter.

D. Maintenance of meters

All meters and meter connections shall at all times remain the sole property of the District, and shall not be interfered with in any respect. All meters will be maintained by and at the expense of the District so far as ordinary wear and tear are concerned, but the Consumer will be held responsible for damages due to freezing, hot water or other external causes. In case of damage the District will repair the meter, if necessary replacing it with another meter, and the costs shall be paid by the Consumer. The District recommends the Consumer install, at his or her expense, suitable equipment properly located to prevent backflow of hot water which may cause damage to the meter, or other damage to the Consumer's plumbing.

E. Testing

The District reserves the right to remove and test any meter at any time and to substitute another meter in its place. In case of a disputed account involving the question as to the accuracy of the meter, such meter will be tested by the District upon the request of the Consumer. The fee for testing such meters will be Ten Dollars (\$10.00) for the first test and Twenty-five Dollars (\$25.00) for all subsequent tests for meters 1" and smaller, and the actual cost to the District for larger meters, payable in advance of the test. In the event that the meter so tested is found to have an error in registration to the prejudice of the Consumer in excess of four per cent (4%) at any rate of flow within the normal test flow limits, the fee advanced for testing will be refunded, and prior water bills will be adjusted for over-registration.

F. Large size meters

Meters larger than 2" in size shall be placed in specially designed settings so that they may be tested in place at frequent intervals. If the diameter of a meter be 2" or more, no reduction in the size of the meter will be permitted for a period of two years.

G. Non-registering meters

The reading of a duly installed meter showing the amount of water consumed shall be used for all metered billing purposes except where it appears that the meter has ceased to register or has registered inaccurately.

In cases where it is found that a meter has ceased to register or has registered inaccurately, and it cannot be determined by reasonable test the percentage of inaccuracy, an estimated bill for the billing period may be rendered to the Consumer. The estimated bill shall be based upon the amount of water consumed in the corresponding period in prior years, except where it appears that there has been a change in the occupancy of the premises, or in the use of water, in which case an equitable adjustment shall be made.

§ 45.23 Water Rents

A. In advance, minimum:

1.	Camillus Consolidated Water District	\$30.00
2.	District 16, Town of Geddes	\$31.50
3.	Town of VanBuren	\$31.50

- B. \$2.50 per 1,000 gallon consumption or major fraction thereof, in excess of 8,000 gallons per quarter.
- C. Users shall be billed quarterly commencing January 2000. Water rents shall be due and payable within thirty days after billing date. If not paid within thirty days after billing date, a five percent penalty shall be added. The failure of the District to mail a bill shall not be grounds for nonpayment. Each customer shall be responsible to inquire of the Water Rent Collector's office if a bill is not received when due.

§ 45.24 Change of occupancy

The Consumer shall notify the District in writing of any change in ownership. No adjustment of bills will be made between owners unless due notice has been given to the District.

§ 45.25 Electrical grounding

The Consumer shall be responsible for the establishment of suitable grounding in accordance with the Electrical Code in effect in the Town.

§ 45.26 Discontinuance of service

Water service may be discontinued for any one of the following reasons:

A. For use of water other than represented in application or through branch connections on the

street side of the meter or place reserved therefor.

- B. For willful waste or use of water through improper and imperfect pipes, or by any other means.
- C. For molesting any service pipe, seal, meter or any other appliance owned by the District.
- D. For non-payment of bills for water or services rendered.
- E. For cross-connecting pipes carrying potable water supplied by the District with any other source of supply or with any apparatus which may endanger the quality of the potable water supply.
- F. For refusal of reasonable access to the property for the purpose of inspecting fixtures or piping or for reading, repairing, testing or removing meters.
- G. For submetering or reselling water except as otherwise permitted.
- H. Violation or noncompliance of §45.25.

§ 45.27 Sprinkling or irrigation, washing automobiles or washing driveways, etc.

There may be times when, in the opinion of the Water Superintendent, it may be necessary to restrict the use of this service to certain definite periods or to prohibit it entirely. In this event all Consumers will be notified by public notice.

§ 45.28 Old or improperly installed service lines

All service lines not meeting specifications of Appendix 2, and which are subjected to freezing and have to run to prevent freezing; or which have a history of other problems necessitating frequent visits by the District personnel shall be given notice to install a new service line within a thirty (30) day period or such longer period as the Water Superintendent deems reasonable under the circumstances to meet all specifications of Appendix 2.

§ 45.29 Installation of District mains

District mains shall be installed in accordance with A.W.W.A. Standard C-600. Trenching shall be in accordance with Section 6, A.W.W.A. C-600. Every reasonable effort should be made to keep the width of the trench at a point level with the top of the pipe, no greater than 30". The trench width in rock or among boulders shall be sufficient to leave at least six inches (6") of clearance between the pipe and any rock or boulder. Excavation in plain earth shall not ordinarily be carried below the bottom of the pipe; but rock shall be excavated to a depth of at least six inches (6") below the pipe. If excavation is carried below the pipe bottom for any reason, a backfill of sand or soft dry earth, free of stone, shall be used to restore the trench to its proper depth. This material will be thoroughly compacted and then shaped to fit the pipe. For ductile cast iron and cast iron pipe, bedding shall be Class B, consisting of flat-bottomed trenches, with bellholes dug before laying pipe and with backfill tamped. Pipe and fittings shall be Class 52 ductile iron, cement lined or teflon lined, mechanical joint with retainer glands.

§ 45.30 Other sources of supply

- A. No connection to any other source of supply of water shall be made or maintained to any pipes or plumbing fixtures that may be connected with the system of the District, causing a cross-connection as defined in Article IV. If any connection to another source of supply is made or maintained, the water from the District system shall be shut off and service shall not be restored until such connection to other source has been discontinued and the charges of shutting off and turning on the water have been paid.
- B. All plumbing shall be of such configuration as to eliminate any possible cross connections with sewer line or other dangerous fixtures and all measures shall be employed to prevent any back flow or back siphonage of contaminated materials.

§ 45.31 Hydrants

No person, except the Water Superintendent or employees of the District or member of duly organized fire company, shall take water from any fire hydrant, or shall operate, use or disturb any hydrant. No person shall obstruct any fire hydrant in any manner, such as, but not limited to the placing of junk, cars, or snow anywhere near a hydrant. Hydrants shall be kept accessible from all directions. Fire company members shall open a hydrant only in an emergency without notification and consent of the Water Superintendent.

§ 45.32 Suspension of supply

In the event the necessity shall arise, resulting from break, emergency or other unavoidable cause, to cut off the water supply in order to make necessary repairs, the District shall have the right to temporarily shut off the water supply. The Superintendent shall use all reasonable and practicable measures to notify Consumers in advance of such discontinuance of service, if possible. The District and the Town shall not be liable for damages or inconveniences suffered by any Consumer by reason of interruption of service, lessening of supply, inadequate pressure or any cause beyond its control.

ARTICLE III - FEES AND CHARGES; TERMINATION OF SERVICE

§ 45.36 Tap fees

The fees for tapping shall be determined as follows:

- A. 3/4" and 1" \$515.00
- B. Larger than 1" Fee shall be whatever the cost is to the District for installation.

§ 45.37 Turning on and shutting off of service

A. Consumers wishing to temporarily discontinue water service or wishing to re-establish water service shall notify the Superintendent at least two (2) days in advance, except in event of an emergency.

1. Single dwelling services:

Water rent shall be terminated effective as of date water is actually shut off and shall be resumed effective as of date water is turned back on.

2. Multiple dwelling services:

Water rent shall be terminated effective as of date of actual inspection to insure control valve is turned off and premises are empty. Water rent shall be resumed as of date service is resumed. If water service is resumed and/or premises are occupied without prior notification to the Superintendent, water rent shall be resumed retroactive to date service was discontinued.

§ 45.38 Turning service on or off; charges

There shall be a charge of Fifteen Dollars (\$15.00) for each visit for the purpose of turning water on or off, except weekends or overtime for which there shall be a Twenty-Five Dollar (\$25.00) charge.

§ 45.39 Termination of service for violation and nonpayment

Notwithstanding any of the foregoing provisions, except in case of emergency, temporary interruption necessitated by repairs, extensions or maintenance operations, shortage of water or similar situations, no service shall be terminated by the District without complying with the following procedures:

A. Notice of violation and hearing

Upon the determination by the Water Superintendent that a violation has occurred pursuant to this Chapter or that a bill for services or other charges has become delinquent, the Superintendent shall notify in writing the occupant or occupants of the affected premises as well as the owner thereof either personally or by certified mail at the last known address of such persons, setting forth specifically the grounds for termination of service and the time and place of hearing within the District. Such notice shall be served at least ten (10) days prior to the date of the hearing and shall contain a warning that unless such person or persons shall appear and offer proof or other evidence at such hearing, the service may be terminated without further notice.

B. Conduct of hearing

At the time and place specified in the notice, the Water Superintendent or other town official designated by the Town Board hereafter referred to as the hearing officer, shall conduct the hearing and such proof or evidence that may be presented by the District and the other interested parties.

C. Determination

At the close of the hearing, the hearing officer may order the termination of the service or other appropriate action as he or she may determine.

D. Appeal

Any person aggrieved by the action of the hearing officer shall have the right to appeal to the Town Board. Such appeal shall be taken by filing within fourteen (14) days after notice of the action complained of has been mailed to such person's last known address, together with a

written statement setting forth fully the grounds for the appeal. The Town Board shall set a time and place for the hearing on such appeal and notice of such hearing shall be mailed to the applicant at his or her last known address at least five (5) days prior to the date set for the hearing. The decision and order of the Town Board shall be final and conclusive. (U.S. Supreme Court has determined that a hearing is required before service may be terminated.)

ARTICLE IV - CROSS-CONNECTION CONTROL

§ 45.41 Authority

A. Responsibility of the Water Superintendent

The Water Superintendent, or his or her designated agent, shall inspect the plumbing in every building or premises in this District as frequently as in his or her judgement may be necessary to ensure that such plumbing has been installed in such a manner as to prevent the possibility of pollution of the water supply of the District by the plumbing. The Water Superintendent shall notify or cause to be notified in writing the owner or authorized agent of the owner of such building or premises, to correct, within a reasonable time set by the Water Superintendent, any plumbing installed or existing contrary to or in violation of this Article, and which in his or her judgement, may, therefore, permit the pollution of the District water supply, or otherwise adversely affect the public health.

B. Inspections

The Water Superintendent, or his or her designated agent, shall have the right of entry into any building, during reasonable hours, for the purpose of making inspection of the plumbing systems installed in such building or premises provided that with respect to the inspection of any single family dwelling, consent to such inspection shall first be obtained from a person of suitable age and discretion therein or in control thereof.

§ 45.42 Definitions

As used in this Article, the following definitions shall apply:

- 1. "Airgap" means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture, or other device and the flood-level rim of the receptacle.
- 2. "Approved" means accepted by the agency as meeting an applicable specification stated or cited in this Article, or as suitable for the proposed use.
- 3. "Auxiliary supply" means any water source or system other than the potable water supply that may be available in the building or premises.
- 4. "Backflow" means the flow of water or other liquids, mixtures, or substances into the distributing pipes of a potable supply of water from any source or sources other than its intended source. Backsiphonage is one type of backflow.

- 5. "Backflow preventer" means a device or means to prevent backflow.
- 6. "Backsiphonage" means backflow resulting from negative pressures in the distributing pipes of a potable water source.
- 7. "Barometric loop" means a loop of pipe rising at least thirty-five (35) feet, at its topmost point, above the highest fixture it supplies.
- 8. "Check valve" means a self-closing device which is designed to permit the flow of fluids in one direction and to close if there is a reversal of flow.
- 9. "Contamination." See Pollution.
- 10. "Cross-connection" means any physical connection between a potable water supply and any waste pipe, soul pipe, sewer, drain, or any unapproved source or system. Furthermore, it is any potable water supply outlet which is submerged or can be submerged in waste water and/or any other source of contamination. (See Backflow and Backsiphonage.)
- 11. "Drain" means any pipe that carries waste water or waterborne wastes in a building drainage system.
- 12. "Fixture, plumbing" means installed receptacles, devices, or appliances supplied with water or that receive or discharge liquids or liquid-borne wastes.
- 13. "Flood-level rim" means the edge of the receptacle from which water overflows.
- 14. "Hazard, health" means any conditions, devices, or practices in the water supply system and its operation which create, or, in the judgement of the Director, may create, a danger to the health and well-being of the water consumer. An example of a health hazard is a structural defect in the water supply system, whether of location, design, or construction, that regularly or occasionally may prevent satisfactory purification of the water supply or cause it to be polluted from extraneous sources.
- 15. "Hazard, plumbing" means any arrangement of plumbing including piping and fixtures whereby a cross-connection is created.
- 16. "Hydropneumatic tank" means a pressure vessel in which air pressure acts upon the surface of the water contained within the vessel, pressurizing the water distribution piping connected to the vessel.
- 17. "Inlet" means the open end of the water supply pipe through which the water is discharged into the plumbing fixture.
- 18. "Plumbing System" includes the water supply and distribution pipes, plumbing fixtures, and traps; soil, waste and vent pipes; building drains and building sewers including their respective connections, devices, and appurtenances within the property lines of the premises; and water-treating or water-using equipment.
- 19. "Pollution" means the presence of any foreign substance (organic, inorganic, radiological, or

biological) in water that tends to degrade its quality so as to constitute a hazard or impair the usefulness of the water.

- 20. "Reduced pressure principle backflow preventer" means an assembly of differential valves and check valves including an automatically opened spillage port to the atmosphere designed to prevent backflow.
- 21. "Surge tank" means the receiving, nonpressure vessel forming part of the airgap separation between a potable and an auxiliary supply.
- 22. "Vacuum" means any pressure less than that exerted by the atmosphere.
- 23. "Vacuum breaker, nonpressure type" means a vacuum breaker designed so as not to be subjected to static line pressure.
- 24. "Vacuum breaker, pressure type" means a vacuum breaker designed to operate under conditions of static line pressure.
- 25. "Water, potable" means water free from impurities in amounts sufficient to cause disease or harmful physiological effects. Its bacteriological and chemical quality shall conform to the requirements of the Public Health Service Drinking Water Standards or to the regulations of the public health authority having jurisdiction.
- 26. "Water, nonpotable" means water that is not safe for human consumption or that is of questionable potability.

§ 45.43 General technical requirements

A. General

A potable water supply system shall be designed, installed, and maintained in such manner as to prevent contamination from nonpotable liquids, solids, or gases from being introduced into the potable water supply through cross-connections or any other piping connections to the system.

B. Cross-connections prohibited

Cross-connections between potable water systems and other systems or equipment containing water or other substances of unknown or questionable safety are prohibited except when and where, as approved by the authority having jurisdiction, suitable protective devices such as the reduced pressure zone backflow preventer or equal are installed, tested, and maintained to insure proper operation on a continuing basis.

C. Interconnections

Interconnection between two or more public water supplies shall be permitted only with the approval of the health authority having jurisdiction.

D. Individual water supplies

Cross-connections between an individual water supply and a potable public supply shall not be made unless specifically approved by the health authority having jurisdiction.

E. Connections to boilers

Potable water connections to boilers shall be made through an airgap or provided with an approved backflow preventer.

F. Prohibited connections to fixtures and equipment

Connection to the potable water supply system for the following is prohibited unless protected against backflow in accordance with Subdivision H or as set out herein.

1. Bidets

- 2. Operating, dissection, embalming, and mortuary tables or similar equipment; in such installation the hose used for water supply shall terminate at least twelve (12) inches away from every point of the table or attachments.
- 3. Pumps for nonpotable water, chemicals, or other substances; priming connections may be made only through an airgap.
- 4. Building drainage, sewer, or vent systems.
- 5. Any other fixture of similar hazard.

G. Refrigerating unit condenser and cooling jackets

Except where potable water is provided for a refrigerator condenser or cooling jacket is entirely outside the piping or tank containing a toxic refrigerant, the inlet connection shall be provided with an approved check valve. Also adjacent to and at the outlet side of the check valve, an approved pressure relief valve set to relieve at five (5) psi above the maximum water pressure at the point of installation shall be provided if the refrigeration units contain more than twenty (20) pounds of refrigerants.

H. Protection against backflow and backsiphonage.

- 1. Water outlets. A potable water system shall be protected against backflow and backsiphonage by providing and maintaining at each outlet:
 - a. Airgap. An airgap, as specified in Paragraph 2 herein, between the potable water outlet and the flood level rim of the fixture it supplies or between the outlet and any other source of contamination, or
 - b. Backflow preventer. A device or means to prevent backflow

2. Minimum required airgap

- a. How measured. The minimum required airgap shall be measured vertically from the lowest end of a potable water outlet to the flood rim or line of the fixture or receptacle into which it discharges.
- b. Size. The minimum required airgap shall be twice the effective opening of a potable water outlet unless the outlet is a distance less than three times the effective opening away from a wall or similar vertical surface, in which cases the minimum required airgap shall be three (3) times the effective opening of the outlet. In no case shall the minimum required airgap be less than shown in Table

3. Approval of devices. Before any device for the prevention of backflow or backsiphonage is installed, it shall have first been certified by a recognized testing laboratory acceptable to the Water Superintendent. Devices installed in a building potable water supply distribution system for protection against backflow shall be maintained in good working condition by the person or persons responsible for the maintenance of the system.

The Water Superintendent or his or her designee shall inspect routinely such devices and if found to be defective or inoperative shall require the replacement thereof.

4. Installation of devices

- a. Vacuum breakers. Vacuum breakers shall be installed with the critical level at least (6) inches above the flood level rim of the fixture they serve and on the discharge side of the last control valve to the fixture. No shutoff valve or faucet shall be installed beyond the vacuum breaker. For closed equipment or vessels such as pressure sterilizers the top of the vessel shall be treated as the flood level rim by a check valve shall be installed on the discharge side of the vacuum breaker.
- b. Reduced pressure principle backflow preventer. A reduced pressure principle type backflow preventer may be installed subject to full static pressure.
- c. Devices of all types. Backflow and backsiphonage preventing devices shall be accessibly located preferably in the same room with the fixture they serve. Installation in utility or service spaces, provided they are readily accessible, is also permitted.

5. Tanks, vats, below rim supply

- a. Where a potable water outlet terminates below the rim of a tank or vat and the tank or vat has an overflow of diameter not less than given in Table II, the overflow pipe shall be provided with an airgap as close to the tank as possible.
- b. The potable water outlet to the tank or vat shall terminate a distance not less than 1½ times the height to which water can rise in the tank above the top of the overflow. This level shall be established at the maximum flow rate of the supply to the tank or vat and with all outlets except the airgap overflow outlet closed.
- c. The distance from the outlet to the high water level shall be measured from the critical point of the potable water supply outlet.
- 6. Protective devices required. Approved devices to protect against backflow and backsiphonage shall be installed at all fixtures and equipment where backflow and/or backsiphonage may occur and where a minimum airgap cannot be provided between the water outlet to the fixture or equipment and its flood level rim.
 - a. Connections not subject to backpressure. Where a water connection is not subject to backpressure, a vacuum breaker shall be installed on the discharge side of the last valve on the line serving the fixture or equipment. A list of some conditions requiring protective devices of this kind is given in Table III, "Cross-connections where protective devices are required and critical level (C-L) settings for vacuum

breakers."

- b. Connections subject to backpressure. Where a potable water connection is made to a line, fixture, tank, vat, pump, or other equipment with a hazard of backflow or backsiphonage where the water connection is subject to backpressure, and an airgap cannot be installed, the Superintendent may require the use of an approved reduced pressure principle backflow preventer. A partial list of such connections is shown in Table IV.
- 7. Barometric loop. Water connections where an actual or potential backsiphonage hazard exists may in lieu of devices specified in Subdivision H, paragraph 6 be provided with a barometric loop. Barometric loops shall precede the point of connections.
- 8. Double check double gate valves. The Superintendent may authorize installation of approved, double check double gate valve assemblies with test cocks as protective devices against backflow in connections between a potable water system and other fluid systems which present no significant health hazard in the judgement of the Superintendent.
- 9. Low pressure cutoff required on booster pumps. When a booster pump is used on a water pressure booster system and the possibility exists that a positive pressure of ten (10) psi or less may occur on the suction side of the pump, there shall be installed a low pressure cutoff on the booster pump to prevent the creation of a vacuum or negative pressure on the suction side of the pump, thus cutting off water to other outlets.

§ 45.44 Maintenance requirements

A. General requirements

It shall be the responsibility of building and premise owners to maintain all backflow preventers and vacuum breakers within the building or on the premises in good working order and to make no piping or other arrangements for the purpose of bypassing backflow devices.

B. Backflow preventers

Periodic testing and inspection schedules shall be established by the Water Superintendent for all backflow preventers and the interval between such testing and inspections and overhauls of each device shall be established in accordance with the age and condition of the device. Inspection intervals should not exceed one (1) year and overhaul intervals should not exceed five (5) years. These devices should be inspected frequently after the initial installation to assure that they have been installed properly and that debris resulting from the installation has not interfered with the functioning of the device. The testing procedures shall be in accordance with the manufacturer's instructions when approved by the Water Superintendent.

§ 45.45 Violations and penalties

A. Notification of violation

The Water Superintendent shall notify the owner, or authorized agent of the owner, of the building or premises in which there is found a violation of this Article, of such violation. The Superintendent shall set a reasonable time for the owner to have the violation removed or corrected. Upon failure of the owner to have the defect corrected by the end of the specified time interval the Water Superintendent may, if in his or her judgment and imminent health hazard

exists, cause the water service to the building or premises to be terminated, and/or recommend such additional fines or penalties to be invoked as herein may be provided.

B. Penalties

The owner or authorized agent of the owner responsible for the maintenance of the plumbing systems in the building who knowingly permits a violation to remain uncorrected after the expiration of time set by the Water superintendent shall, upon conviction thereof be subject to the penalties as provided in § 45.100.

§ 45.100 Violations and penalties

A. Penalties

Except as otherwise provided in this Chapter, any person violating any provision of this Chapter shall be subject to a fine of not more than Two Hundred Fifty Dollars (\$250.00) or fifteen (15) days imprisonment or both such fine or imprisonment. Each day that the violation shall continue shall constitute a separate violation.

B. Service charge

In addition to the foregoing penalties, a reconnection charge of Twenty-five Dollars (\$25.00) shall be paid before a service can be restored whenever a service has been disconnected due to nonpayment or for any violation of this Chapter, or rules or regulations.

TABLE I - MINIMUM AIRGAPS FOR GENERALLY USED PLUMBING FIXTURES

FIXTURE	WHEN NOT AFFECTED BY NEAR WALL ³ (INCHES)	WHEN NOT AFFECTED BY NEAR WALL ⁴ (INCHES)
Lavatories and other fixtures with effective openings not greater than 1/4 inch diameter	1.0	1.50
Sink, laundry trays, goose-neck bath faucets and other fixtures with effective openings not greater than 3/4 inch diameter	1.5	2.25
Over rim bath fillers and other fixtures with effective openings not greater than 1 inch diameter	2.0	3.0
Drinking water fountains - single orifice 7/16 (0.437) inch diameter or multiple orifices having total area of 0.150 square inch (area of circle 7/16 inch diameter)	1.0	1.5
Effective openings greater than one inch	2 times the diameter of the effective openings	3 times the diameter of the effective openings

TABLE II - SIZES OF OVERFLOW PIPES FOR WATER SUPPLY TANKS

MINIMUM	DIAMETER OF OVERFLOW
CAPACITY OF	PIPE (INCHES ID)
WATER SUPPLY	
LINE TO TANK	

³Side walls, ribs, or similar obstructions do not affect airgaps when spaced from inside edge of spout opening a distance greater than three times the diameter of the effective opening for a single wall, or a distance greater than four times the diameter of the effective opening for two intersecting walls.

⁴Vertical walls, ribs or similar obstructions extending from the water surface to or above the horizontal plan of the spout opening require a greater airgap when spaced closer to the nearest inside edge of spout opening than specified in note 1 above. The effect of three or more such vertical walls or ribs has not been determined. In such cases, the airgap shall be measured from the top of the wall.

0 50 gpm	2
50 150 gpm	2 1/2
100 200 gpm	3
200 400 gpm	4
400 700 gpm	5
700 1,000 gpm	6
Over 1,000 gpm	8

TABLE III - CROSS-CONNECTIONS WHERE PROTECTIVE DEVICES ARE REQUIRED AND CRITICAL LEVEL (C-L) SETTINGS FOR VACUUM BREAKERS 5

FIXTURE OR EQUIPMENT	METHOD OF INSTALLATION
Aspirators and ejectors	C-L at least 6 inches above flood level of receptacle served.
Dental units	On models without built-in vacuum breakers C-L at least 6 inches above flood rim of bowl.
Dishwashing machines	C-L at least 6 inches above flood level of machine. Install on both hot and cold water supply line.
Flushometers (closet & urinal)	C-L at least 6 inches above top of fixture supplies.
Garbage can cleaning machine	C-L at least 6 inches above flood level of machine. Install on both hot and cole water supply lines.
Hose outlets	C-L at least 6 inches above highest point on hose line.
Laundry machines	C-L at least 6 inches above flood level of machine. Install on both hot and cold water supply line.
Lawn sprinklers	C-L at least 12 inches above highest sprinkler or discharage outlet.
Steam tables	C-L at least 6 inches above flood level.
Tank and vats	C-L at least 6 inches above flood level rim or line.
Trough urinals	C-L at least 30 inches above perforated flush pipe.

⁵Critical level (C-L) is defined as the level to which the vacuum breaker may be submerged before backflow ill occur. Where the C-L is not shown on the preventer, the bottom of the device shall be taken as the C-L.

Flush tanks	Equip with approved ball cock. Where ball cocks touch tack water, equip with vacuum breaker at least 1 inch above overflow outlets. Where ball cock does not touch tank water, install ball cock outlet at least 1 inch above overflow outlet or provide vacuum breaker as specified above.
Hose bibs (where aspirators could be connected	C-L at least 6 inches above flood level of receptacle served.

TABLE IV - PARTIAL LIST OF CROSS-CONNECTIONS WHICH MAY BE SUBJECT TO BACKPRESSURE

Chemical linesPumpsDock water outletsSteam linesIndividual water suppliesSwimming PoolsIndustrial process water linesTank and vats-bottom inlets

APPENDIX 1 - DISTRICT RESPONSIBILITY

A. Goose Necks - 3/4" - 1"

Pressure tanks

- 1. Generally
 - a. Minimum size 3/4"
 - b. Type "K" copper
 - c. Flared fitting only
- 2. Same side of road
 - a. No excavation required of District
 - b. Minimum bury depth under roads or traveled areas 5 ft.
 - c. Minimum bury depth out of roads or traveled areas 4 1/2 ft.
 - d. Curb cock to be located between edge of highway pavement and Consumer property edge. (i.e., edge of property line.)

Hose bibs

- 3. Opposite side of road
 - a. Two curb cocks will be used one on main end of casing and one on Consumer's end of casing.
 - b. All copper pipe not protected by casing will be laid in sand and covered with 6" of sand or comparable material free of stones.
 - c. Minimum bury depth 5' under highways or traveled areas. 4 1/2' out of roads or traveled areas.

B. Large services (over 1")

- 1. Services over 1" shall be justified by Consumer and approved by the Water Superintendent.
- 2. Tap fee for services over 1" shall be borne by Consumer at the cost to District for equipment, labor and materials.
- 3. Services over 2" shall be cast iron or ductile iron, mechanical joint with retainer glands, cement lined pipe, class 52.

APPENDIX 2 - CONSUMER RESPONSIBILITY

A.

- 1. Minimum size service line shall be 3/4"
- 2. Service lines must be type "K" copper tubing or galvanized iron
- 3. Only flare or galvanized fittings will be allowed under ground or a compression joint providing electrical continuity.
- 4. Curb boxes must be installed within the <u>bounds</u> of Town, County, or State Highway
- 5. Service line shall be laid at a minimum depth as follows:
 - a. 2' under stream beds or water ways in an appropriate casing.
 - b. 4½ out of highways or traveled areas
 - c. 5' within highways, roads or driveways, or traveled areas
- 6. Service lines shall be laid in sand with a minimum cover of 6' of sand or a comparable material free of stones. Care should be exercised in laying galvanized iron pipe to prevent unnecessary stress on joints when ditch is backfilled.
- 7. Service lines larger than 2" must be cast iron or ductile iron, mechanical joint with retainer glands, cement lined pipe, class 52.
- 8. If meter pit is required pit will be installed at expense of Consumer
- 9. Any tap to another service line shall be considered a violation and water service to initial service line shall be terminated.
- 10. Water and sewer lines may not be installed in the same ditch. A minimum separation of 10' horizontal and 18" vertical, with water line on top, must be maintained.

B. Interior requirements:

- 1. Immediately inside foundation or meter pit wall the following fittings will be required: (in that order)
 - a. Flared by iron pipe adapter (if service line is copper)
 - b. Ball, globe, or gate valve conforming to ASTM specifications B62
 - c. Brass tee with plug in end for cleaning line
 - d. Fittings for meter (if meter is required)

C. Meter pits:

- 1. Shall be a minimum of 4'8" x 6' inside measurement and depth of 5'. Top sections may be so designed as to provide for a 2' manhole frame which has a flange diameter of 33"
- 2. They may be constructed of cement or cement block.
- 3. Pit must have a drain or sump pump
- 4. Cover shall be regulation cast iron design

D. Meter installation:

- 1. Meter on 2" service or over must be installed with ball, globe or gate valve conforming to A.S.T.M. specifications B62.
- 2. Where pressure exceeds 60 lbs. pressure reducer must be installed ahead of water meter.

The Water Superintendent may waive any of the above specifications if equivalent standards or requirements are met.

Historical Notes:

- §45.36 Tap Fees LL #1-1988, LL#1-2003
- §45.23 Water Rents LL #16-1994, LL #31-1996, LL #5-1997, LL #7-1998, LL #14-1999, LL#6-2003
- §45.23 Water Rents increase in advance minimum, LL#18-2003
- §45.38 Turning Service on/off LL#4-2004
- §45.23 Water Rents increase in advance minimum, LL#6-2005
- §45.23 Water Rents increase in advance minimum, LL#6-2006
- §45.23-Water Rents (A)-increase the in advance minimums, LL#2-2008
- \$45.6-Water Service (C) amend & restate, LL#3-2008
- §45.23-Water Rents (A) & (B) increase in advance minimums & consumption cost over 8K gallons/quarter, LL#1-2009
- §45.23 Water Rents increase in advance minimum, LL#3-2012