

# North Chelmsford Water District

64 Washington Street  
North Chelmsford, MA 01863  
(978) 251-3931

## Rules, Regulations & Rates- 2022

The following Rules and Regulations shall be considered a part of the Contract with every person using water:

1. All applications for the use of water are available at the North Chelmsford Water District, 64 Washington Street, N. Chelmsford, MA 01863. Demand charge schedule is set forth November 7, 1988, revised September 1, 2006, **revised April 4, 2016:**

DATE	SYSTEM DEVELOPMENT CHARGE	DOMESTIC DEMAND CHARGE (Per dwelling/unit)
<b>4/04/2016</b>	Residential: single dwelling	\$3,000
<b>4/04/2016</b>	Residential: multi dwellings/units	\$5,000 each
<b>2/04/2019</b>	Non-Residential: dwellings/units	\$7,500 each

### EFFECTIVE 1/1/86 FIRE SPRINKLER DEMAND CHARGES- REVISED 4/6/16 SYSTEM DEVELOPMENT CHARGE

Buildings up to	19,999 Sq. Ft.	Minimum Size 6" Main	\$5,000
Buildings between	20,000 Sq. Ft.	and 39,999 Sq. Ft.	6,000
Buildings between	40,000 Sq. Ft.	and 59,999 Sq. Ft.	7,000
Buildings between	60,000 Sq. Ft.	and 79,999 Sq. Ft.	8,000
Buildings between	80,000 Sq. Ft.	and 99,999 Sq. Ft.	9,000
Buildings over	100,000 Sq. Ft.		10,000

# North Chelmsford Water District

## Notice of Water Rate Increase

This rate will take Effect after the January 1, 2022, water bills and all bills thereafter.

Residential	0-15,000 gals.	15,001-30,000 gals.	30,001-45,000 gals.	>45,001 gals.
	Semi-annual Minimum per unit	Rate per Thousand	Rate per Thousand	Rate per Thousand
Old Rate	\$80.00	\$5.50	\$6.00	\$6.50
Usage	0-10,000 gals.	10,001-25,000 gals.	25,001-40,000 gals.	>40,001 gals.
New Rate	\$80.00	\$6.00	\$6.50	\$7.00
Commercial	Quarterly Minimum per unit	Rate per Thousand	Rate per Thousand	Rate per Thousand
	0-10,000 gals.	10,001-25,000 gals.	25,001-40,000 gals.	>40,001 gals.
New Rate	\$80.00	\$6.00	\$6.50	\$7.00

## Yearly Fire Sprinkler Fees- Effective January 1, 1986

Steps	Area of Building	By Square ft <sup>2</sup>	Per Year
0	Multi-Family/Churches	9,999 ft <sup>2</sup>	\$100.00
1	Buildings up to	9,999 ft <sup>2</sup>	\$200.00
2	Buildings between	10,000 ft <sup>2</sup> and 19,999 ft <sup>2</sup>	220.00
3	Buildings between	20,000 ft <sup>2</sup> and 29,999 ft <sup>2</sup>	240.00
4	Buildings between	30,000 ft <sup>2</sup> and 39,999 ft <sup>2</sup>	300.00
5	Buildings between	40,000 ft <sup>2</sup> and 49,999 ft <sup>2</sup>	360.00
6	Buildings between	50,000 ft <sup>2</sup> and 59,999 ft <sup>2</sup>	420.00

7	Buildings between	60,000 ft <sup>2</sup> and 69,999 ft <sup>2</sup>	480.00
8	Buildings between	70,000 ft <sup>2</sup> and 79,999 ft <sup>2</sup>	540.00
9	Buildings between	80,000 ft <sup>2</sup> and 89,999 ft <sup>2</sup>	600.00
10	Buildings between	90,000 ft <sup>2</sup> and 99,999 ft <sup>2</sup>	660.00
11	Buildings between	100,000 ft <sup>2</sup> and 149,999 ft <sup>2</sup>	960.00
12	Buildings between	150,000 ft <sup>2</sup> and 199,999 ft <sup>2</sup>	1230.00
13	Buildings over	200,000 ft <sup>2</sup>	1500.00

***Note: Building areas are determined by Chelmsford Assessors' Records***

**The North Chelmsford Water District will be increasing the Bond Dept Bills effective October 1, 2019, for further information please go to [www.northchelmsfordwater.com](http://www.northchelmsfordwater.com)**

<b>Residential:</b>	<b>Semi- Annual</b>	<b>Semi- Annual</b>
<b>Service Size</b>	<b>1/1/2008 Fees</b>	<b>10/1/2019 Fees</b>
5/8" or 3/4"	60.00	70.00
1"	75.00	85.00
1 1/2"	100.00	110.00
2"	125.00	135.00
3"	150.00	160.00
4"	175.00	185.00
Additional Units	20.00	25.00

<b>Commercial:</b>	<b>Quarterly</b>	<b>Quarterly</b>
<b>Service Size</b>	<b>1/1/2008 Fees</b>	<b>10/1/2019 Fees</b>
5/8" or 3/4"	50.00	55.00
1"	75.00	80.00
1 1/2"	100.00	105.00
2"	175.00	180.00
3"	175.00	185.00

4"	175.00	190.00
Additional Units	25.00	30.00

**Fire Sprinkler:**

**Commercial Quarterly/Residential Semi-Annual**

**Note: Bond Fees are in addition to water charges.**

Steps		Total Area of Building	1/1/2008	10/1/2019
1	Buildings up to	9,999 ft <sup>2</sup>	\$50.00	\$55.00
2	Buildings between	10,000 ft <sup>2</sup> and 19,999 ft <sup>2</sup>	100.00	105.00
3	Buildings between	20,000 ft <sup>2</sup> and 29,999 ft <sup>2</sup>	150.00	155.00
4	Buildings between	30,000 ft <sup>2</sup> and 39,999 ft <sup>2</sup>	200.00	205.00
5	Buildings between	40,000 ft <sup>2</sup> and 49,999 ft <sup>2</sup>	250.00	255.00
6	Buildings between	50,000 ft <sup>2</sup> and 59,999 ft <sup>2</sup>	300.00	305.00
7	Buildings between	60,000 ft <sup>2</sup> and 69,999 ft <sup>2</sup>	350.00	355.00
8	Buildings between	70,000 ft <sup>2</sup> and 79,999 ft <sup>2</sup>	400.00	405.00
9	Buildings between	80,000 ft <sup>2</sup> and 89,999 ft <sup>2</sup>	450.00	455.00
10	Buildings between	90,000 ft <sup>2</sup> and 99,999 ft <sup>2</sup>	500.00	505.00
11	Buildings between	100,000 ft <sup>2</sup> and 149,999 ft <sup>2</sup>	750.00	755.00
12	Buildings between	150,000 ft <sup>2</sup> and 199,999 ft <sup>2</sup>	1000.00	1005.00
13	Buildings between	200,000 ft <sup>2</sup> and 249,000 ft <sup>2</sup>	1125.00	1130.00
14	Buildings over	250,000 ft <sup>2</sup>	1250.00	1255.00

**Miscellaneous Fees**

Backflow Testing Charge	\$80.00 per device
Backflow Re-Testing Charge	80.00 per device
Hydrant Flow Testing Charge	200.00 per test
Transfer of Account/Final Meter Reading Charge	100.00 per transaction
Pressure Testing/Chlorinating/Sampling Charge	360.00 minimum
Shutting Off or Turning On Water Charge	\$50.00-\$250.00

**Note:** Special Services will not be provided unless Water and Bond Debt Fee accounts are paid in full. All bills are due and payable within 30 days. Overdue bills are subject to an interest charge of 14% per annum effective July 1, 1994, + \$5.00 Demand Charge.

Non-Payment Shut Off/Turn on Charge- \$50.00-\$250.00 each.

2. Pipe size and type for any installation will be determined by the Water Commissioners or their Agents. Cost of installation, service, materials and demand charges are payable prior to service connection.

All materials used within the North Chelmsford Water District will be purchased according to the "Uniform Procurement Act" Chapter 30B of the Massachusetts General Laws signed into Law, January 10, 1990.

All materials are to be purchased through the North Chelmsford Water District with an additional 25% overhead added in. All costs are to be paid for before ordering materials per order of the Water Commissioners.

3. No person will connect, or cause to be connected, any service pipe with the main or any distribution pipes, except by order of the Water Commissioners made on such application for new service.
4. Periodic inspections of pipes to the meter may be made by the Water District Superintendent or Employees. When the equipment is found to be defective, all payment for necessary repairs between the property line and the meter shall be assessed by the owner. Persons allowing their meter to be damaged by frost or otherwise will be held responsible, therefore. The Water District will keep Residential meters 5/8" and 3/4" in repair from ordinary derangements. The cost of testing, maintenance and/or replacement of Commercial and Industrial meters are the responsibility of the owner under the direction of the Water District.
5. All apparatus and all places supplied with water must be accessible at all reasonable times to the inspection of the Commissioners or their Agents. "No person other than an employee in the service of the Commonwealth or any political subdivision thereof, or in the service of an independent contractor acting for the Commonwealth or any such subdivision, shall pile, push, or plow snow or ice on or against any fire hydrant or other similar device used for fire protection, which is located in any public or private way, so as to conceal such hydrant or device to cover any outlet thereof. Whoever violates this section shall be punished by fine of not more than \$100.00 (One Hundred Dollars)." Pursuant to Massachusetts General Law, Chapter 148, Section 27B.
6. No alterations shall be made to the service installed by the Water District except by authorized Agents of the Water District.
7. The Water District shall not in any way, nor under any circumstances, be held liable or responsible to any person or persons for any loss or damage from any excess or deficiency in the pressure, volume or supply of water, due to any cause whatsoever. The Water District will undertake to use all reasonable care and diligence to avoid interruptions and fluctuations in the service but cannot and does not guarantee that such will not occur.
8. The Water District will not be responsible for damage caused by dirty water resulting from opening or closing any gate valves, fire hydrants, or the breaking of any supply lines for repairs or any other reasons.

9. The Water District will endeavor to give due notice to as many of the customers affected as time and character of the work permit, whenever it may be necessary to shut off the water supply from any section of the Water District to make repairs or changes or because of broken water mains, will as far as practicable, use every effort to prevent damage or inconvenience; but failure to give such notice will not involve the Water District in any responsibility or liability for damage arising from the shutting off of any supply or any subsequent conditions arising there from.
10. The Water District reserves the right at any time without notice to shut off the water supply for purpose of making repairs, extensions, or other reasons, and all consumers having boilers or other appliances on their properties are hereby warned against danger of collapse from these sources and are urged to provide safety devices for their own protection. In any event, the Water District expressly stipulates that there shall be no liability for damages resulting there from.
11. The Water District will not assume any liability for conditions in the consumer's plumbing or appliances, which may be the cause of the trouble, coincident with the following repairs made to any part for the supply system by the Water District.
12. Service pipes or fixtures of any description, which are connected with the mains of the Water District, shall not under any circumstances be connected with any other sources of water supply.
13. The Water Commissioners reserve the right to shut off water for the purpose of making alterations or repairs. A water service may be shut off from any taker for non-compliance with the Rules and Regulations, non-payment of the water rates and/or fees and violation of Massachusetts General Laws relating to water supply. When water has been shut off because of disregard of Rules or non-payment of rates and/or fees it will be turned on again when the Commissioners are satisfied that there will be no further cause of complaint and on the payment of \$100.00 (One Hundred Dollars). With the approval of the Department of Environmental Protection (Chapter 40, Section 41A, Massachusetts General Laws), the Commissioners reserve the right to restrict the use of water if necessary in any manner deemed appropriate.
14. The Fire Department will have control of the hydrants in case of fires and for necessary practice. In no other case will any person be allowed to handle hydrants or other water apparatus without permission of the Water Commissioners.
15. No water taker will be allowed to supply water to others except by special permit from the Board of Water Commissioners and found doing so without a permit; the supply will be shut off.

16. Owners shall notify the Water District to shut off water if the building becomes vacant. Water will be turned on again when the owner notifies the Water District and upon payment of \$50.00 (Fifty Dollars) for turn-on charge.
17. All bills for new services, repairing old services, supplies, and labor, must be paid within thirty days (30) from the date of the bill.
18. The water may be turned off after a seventy-two hour (72) signed shut off notice by the Water Commissioners or Agent and is delivered by hand or mail to premises to be shut off, when bills for water remain unpaid for forty-five days (45) after they become due, which is forty-five days (45) from the date of issue.
  - a. Under the State Sanitary Code, Chapter II, the owner shall provide, for the occupant of every dwelling, dwelling unit, and rooming unit, a supply of potable water sufficient in quantity and pressure to meet the ordinary needs of the occupant, connected with the public water supply system, or with any other source that the board of health has determined does not endanger the health of any potential user. (See 105 CMR 410.350 through 410.352).
  - b. In dwellings that are in compliance with the requirements of M.G.L. c. 186, § 22, the owner may charge the occupants for actual water usage in accordance with M.G.L. c. 186, § 22. An owner may not shut off or refuse water service to an occupant on the basis that the occupant has not paid a separately assessed water usage charge.
  - c. Unpaid water bills are now liens on real estate and, collections may be made on the sale of property: Massachusetts Legislature, Act of 1923, Chapter 391.
19. Any person who shall remove, change, alter or willfully damage or injure any meter, will be liable for all damages. Any change in meter location shall be done under the direction of the Superintendent.
20. On all Commercial and Residential customers, dwelling houses, apartments, condominiums, and buildings a minimum charge shall be made for water for each family or living unit for which the owner or owners shall be liable, if it is desired that all water flow through one meter. Larger quantities of water shall be charged on the above same basis.

The Water Superintendent or authorized Agent shall be empowered by the Commissioners to confer with the owner or his agent to establish the number of facilities for which the minimum service charge shall be made. The minimum payment will be applied toward the charge for the water at the rates established under the Rules and Regulations for the Water Commission; but, if less quantity of water is used than the quantity for which the minimum charge would be due, no deduction from the minimum charge will be made.

21. Any person violating any order restricting water use imposed by vote of the Commissioners shall be fined not more than \$300.00 (Three Hundred Dollars) for each offense, which shall inure to the Water District for such uses as the Commissioners may direct. Fines shall be recovered by indictment or on complaint before the District Court, or by non-criminal

disposition in accordance with Section Twenty-One D of Chapter 10 of the General Laws. Every day that such violation continues shall constitute a separate offense. See Appendix for Water Management Program information, Violation forms, and Lawn Irrigation Permits.

22. If a meter is out of order and fails to register, the consumer will be charged at the average daily consumption as shown by the meter when in order. An average will be taken of the last three (3) corresponding readings.  
There will be a minimum \$100.00 (Eighty Dollar) non-refundable transfer fee for all new customers for a final reading and transfer.
23. Any and all penalties for violations of these Regulations or arrearages for non-payment of water rates or charges, may be collected as authorized by law in a civil action.
24. The Commissioners shall regulate the use of water in such manner as they deem for the best interest of the Water District, fix and collect process and rates for the use thereof, prescribe the time and manner of the payment of such prices and rates. The Commissioners shall have exclusive charge and control of the water department and water system, subject to all lawful by-laws and subject to such instructions as the Water District may from time to time impose by its vote.
25. The Water District will have an inspector on sites where new water mains and necessary fittings are installed in new developments, private roads, business and commercial sites. The Water District shall charge an hourly fee which will be paid to the Water District by the owner, contractor or developer at the rate of 1 ½ times the employees hourly rate. All materials used shall meet the specifications and approvals of the North Chelmsford Water District.
26. No person shall turn on or tamper with water mains or hydrants or other devices used for water supply, or install a bypass around a water meter without first procuring a written permit to do so from the Water Commissioners or authorized Agent from the Water District. Any person violating said section shall be fined not more than \$200.00 (Two Hundred Dollars) for each offense, which shall inure to the Water District or be recovered by indictment or on complaint before the District Court or by non-criminal disposition in accordance with Section 21D of Chapter 40 of the General Laws. Every day that such violation continues shall constitute a separate offense. This section shall not curtail the Fire Department of Water District in the normal course of providing fire protection or water supply.
27. Taken from Municipal Bulletin No. 29, Massachusetts General Laws, Chapter 40 Section 39H "Right to aid other governmental units; compensation": "A city, town or district through its water department, if any, if thereunto authorized by ordinance or by-law, or by-law or vote of its governing body if a district, or a water company, as defined in section one of chapter one hundred and sixty five, may go to aid in any other city, town or district or any other water company, as so defined, in repairing and maintaining the physical properties of its water supply system. Any such ordinance, by-law or vote may authorize the head of the water department to extend such aid, subject to such conditions and restrictions as may be prescribed therein. Members of water departments of cities, towns, and districts while in the performance of their

duties in extending such aid shall have the same immunities and privileges as if performing the same work in their respective cities, towns and districts. Any city, town, district or water company aided under this section shall compensate any city, town, district or water company rendering aid as aforesaid, for such aid and for the whole or any part of any damage to its property sustained in the course of rendering such aid."

28. Any person making application for water use having a design demand in excess of 5,000 gallons per day, shall submit a concept plan with sufficient information so that the Water District can generate a Water Impact Report. This report shall: 1) define the plan's impact on the Water District's current and future water demand and existing water supply system, and 2) stipulate conditions that the applicant shall meet to mitigate the effects of this impact. This Water Impact Report shall be reviewed and approved by the Water Commissioners. Costs associated with generating the Water Impact Report shall be borne by the applicant.

29. A) PUBLIC BUILDINGS having meters, paying current minimum and overage rates:

- Chelmsford Highway Department
- North Chelmsford Fire Department
- Mackay Library
- Old North Town Hall

B) PUBLIC BUILDINGS including CEMETERIES waived from paying a minimum rate, but monitored to a minimal usage, no automatic lawn sprinklers or excessive water usage allowed:

- Wotton Lane Sewer Pump Station- waived 1/7/91
- Richardson Road Sewer Pump Station- waived 1/7/91
- Wiede Street Sewer Pump Station- waived 1/7/91
- Riverside Cemetery- waived 4/1/91
- Fairview Cemetery
- Southwell Field Sewer Pump Station
- Willis Drive Sewer Pump Station
- Ledge Road Sewer Pump Station
- Vinal Square Common

30. The Water Commissioners reserve the right to change the water rates or the Rules and Regulations.

**REGULATIONS FOR THE  
CONTROL OF BACKFLOW AND CROSS CONNECTIONS  
IN THE NORTH CHELMSFORD WATER DISTRICT**

**CROSS CONNECTION CONTROL AUTHORITY**

Under Public Law 93-523, the Safe Drinking Water Act of 1974, and Massachusetts Regulation 310 CMR, Section 22.22. Protection of Sources of Water, the water purveyor has the primary responsibility for preventing water from unapproved sources, or any other substances, from entering the public potable water system.

**SECTION 1. CROSS CONNECTION CONTROL- GENERAL POLICY**

1. PURPOSE

- 1.1. The purpose of this regulation is:  
To protect the public potable water supply of the area served by the NORTH CHELMSFORD WATER DISTRICT from the possibility of contamination or pollution by isolating within its customers internal distribution system(s) such contaminants or pollutants which could backflow or back -siphon into the public water supply system; and
- 1.2. To promote the elimination or control of existing cross connection, between its customers' in-plant potable water system(s) and non-systems, plumbing fixtures and industrial piping systems; and
- 1.3. To provide for the maintenance of a continuing program of cross connection control which will systematically and effectively prevent the contamination or pollution of all potable water systems by cross connection.

2. RESPONSIBILITY

The WATER DISTRICT shall be responsible for the protection of the public potable distribution from contamination or pollution due to the backflow or back-siphonage of contaminants or pollutants through the water service connection. If, in the judgment of said Water District an approved backflow prevention device is required, at the District's water service connection to any customers premises, for the safety of the water system, the WATER DISTRICT or its designated agent shall give notice in writing to said customer to install such an approved backflow prevention device at each service connection to his premises. The customer shall, within 30 days, install such approved device or devices at his own expense, and failure, refusal or inability on the part of the customer to install said device or devices, within 30 days, shall constitute a ground for disconnecting water service to the premises until such device or devices have been properly installed.

In the event that an extension of time is required to plan and install the devices, the customer shall request, in writing, an extension. The WATER DISTRICT will decide whether to allow an extension of time.

**SECTION 2. DEFINITIONS**

2.1 Water District- The Water District or its designated agent in charge of Water Safety for the NORTH CHELMSFORD WATER DISTRICT is vested with the authority and responsibility for the implementation of an effective cross connection control program and for the enforcement of the provisions of this ordinance.

2.2 Approved- Accepted by the DISTRICT as meeting an applicable specification stated or cited in this regulation, or as suitable for the proposed use.

2.3 Auxiliary Water Supply- Any water supply on or available to the premises other than the purveyor's approved public water supply.

2.4 Backflow- The flow of water or other liquids, mixtures or substances under pressure into the distribution pipes of a potable water supply system from any source or sources other than the intended source.

2.5 Back-siphonage- The flow of water or other liquids, mixtures or substances under pressure into the distribution pipes of a potable water supply system from any source or sources other than its intended source caused by the sudden reduction of pressure on the potable water supply system.

2.6 Back-Flow Preventer- A device or means designed to prevent backflow or siphonage.

2.6.1. Air Gap- 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 rim of said vessel. An approved air-gap shall be required by department standards.

2.6.2. Reduced Pressure Principle Device- An assembly of two independently operating approved check valves with an automatically operating differential relief valve between the two check valves, tightly closing shutoff valves on either side of the check valves, plus properly located test cocks for the testing of the check and relief valves.

2.6.3. Double Check Valve Assembly- An assembly of two independently operating approved check valves with tightly closing shutoff valves on each side of the check valves, plus properly located test cocks for the testing of each check valve.

2.6.4. Pressure Vacuum Breaker- A device containing one or two independently operating loaded check valves and an independently operating loaded air inlet valve located on the discharge side of the check or checks.

2.7 Contamination- Means an impairment of the quality of the potable water or sewage, industrial fluids or waste liquids, compounds or other materials to a degree which creates an actual hazard to the public health through poisoning or through the spread of disease.

2.8 Cross Connection- Any physical connection or arrangement of piping or fixtures between two otherwise separate piping systems one of which contains potable water and the other non-potable water or industrial fluids of questionable safety, through which, or because of which, backflow or back-siphonage may occur into the potable water system.

2.9 Cross Connections- Controlled- A connection between a potable water system and a non-potable water system with an approved back flow prevention device properly installed that will continuously afford the protection commensurate with the degree of the hazard.

2.10 Cross Connection Control by Containment- The installation of any approved backflow prevention device at the water service connection to any customers' premises, or the installation of an approved backflow prevention device on the service line leading to and supplying a portion of a customers' water system where there are actual or potential cross connections which cannot be effectively eliminated or controlled at the point of cross connection. All services will be contained.

2.11 Hazard, Degree of- The term is derived from an evaluation of the potential risk to public health and the adverse effect of the hazard upon the potable water system.

2.11.1. Hazard-Health (High Hazard)- Any conditions, device, or practice in the water supply system or its operation which could create, or, in the judgment of the Department, may create a danger to the health and well-being of the water user.

2.11.2. Hazard-Plumbing (High Hazard)- A plumbing type cross connection in a consumer's potable water system that has not been properly protected by a vacuum breaker, air-gap separation or backflow prevention device. Unprotected plumbing type cross connections are considered to be a health hazard.

2.11.3. Hazard-Pollutional (Low Hazard)- An actual or potential threat to the physical properties of the water system or to the potability of the public or the consumers potable water system but, which would constitute a nuisance or be aesthetically objectionable or could cause damage to the system or its appurtenances, but, would not be dangerous to health.

2.12 Industrial Fluids System- Any system containing a fluid or solution which may be chemically, biologically, or otherwise contaminated or polluted in a form or concentration such as would constitute a health, system, or pollutional or plumbing hazard if introduced into an approved water supply.

2.13 Pollution- Means the presence of any foreign substance (organic, inorganic, or biological) in water which tends to degrade its quality so as to constitute a hazard to impair the usefulness or quality of the water to a degree which does not create an actual hazard to the public health but which does adversely and unreasonably affect such waters for domestic use.

2.14 Water-Potable- Water from a source which has been approved by the Massachusetts Water Supply and Pollution Control Commission for Human Consumption.

2.15 Water-Non-Potable- Water which is not safe for human consumption or which is or questionable potability.

2.16 Water- Service Connections- The terminal end of a service connection from the public potable water system; ie. Where the water purveyor loses jurisdiction and sanitary control over the water at its point of delivery to the customers water system. If a meter is installed at the end of the service connection, then the service connection shall mean the downstream end of the meter. Service connection shall also include

water service connection from a fire hydrant and all other temporary or emergency water service connections from the public potable water system.

2.17 Water- Used- Any water supplied by a water purveyor from a public potable water system to a consumers' water system after it has passed through the point of delivery and is no longer under the sanitary control of the water purveyor.

### **SECTION 3. REQUIREMENTS**

#### **3.1 Water System**

3.1.1. The water system shall be considered as made up of two parts: The utility system and customer system.

3.1.2. The Utility System shall consist of the source facilities and the distribution system; and shall include all those facilities of the water system under the complete control of the utility, up to the point where the customer's system begins.

3.1.3. The source shall include all components of the facilities utilized in the production, treatment, storage and delivery of water to the distribution systems.

3.1.4. The distribution system shall include the network of conduits used for the delivery of water from the source to the consumers' system.

3.1.5. The customer's system shall include those parts of the facilities beyond which are utilized in conveying utility delivered domestic water to points of use.

#### **3.2 Policy**

3.2.1. No water service connection to any premises shall be installed or maintained by the NORTH CHELMSFORD WATER DISTRICT unless the water supply is protected as required by Massachusetts State Law and this regulation. Service of water to any premises shall be discontinued by the District if a backflow prevention device required by this regulation is not installed, tested and maintained, or if an unprotected cross connection exists on the premises. Service will not be restored until such conditions or defects are corrected.

3.2.2. The customers' system should be opened for inspection at all reasonable times to authorized representatives of the District to determine whether cross connections or structural or sanitary hazards, including violations of this regulation exist. When such a condition becomes known, the District shall deny or immediately discontinue service to the premises by providing for a physical break in the service line until the customer has corrected the condition(s) in conformance with State and District Ordinances relating to plumbing and water supplies and the regulations adopted pursuant thereto. All expenses relating to the disconnection and reconnection shall be at the customers' expense.

3.2.3. An approved backflow prevention device where required shall be installed on each service line to a customers' water system at or near the property line or immediately inside the building being served; but, in all cases before the first branch line leading off their service line wherever the following conditions exist.

3.2.3a In the case of premises having an auxiliary water supply which is not or may not be safe bacteriological or chemical quality and which is not acceptable as an additional source by the District supply, the public water system shall be protected against backflow from the premises by installing a backflow prevention device in the service line appropriate to the degree of hazard.

3.2.3b In the case of premises on which any industrial fluids or any other objectionable substance is handled in such a fashion as to create an actual or potential hazard to the public water system, the public water system shall be protected against backflow from the premises by installing a backflow prevention device in the service line appropriate to the degree of hazard.

3.2.3c In the case of premises having (1) internal cross connection that cannot be permanently corrected and controlled, or (2) intricate plumbing and piping arrangements or where entry to all portions of the premises is not readily accessible for inspection purposes, making it impractical or impossible to ascertain whether or not dangerous cross connections exist, the public water system shall be protected against backflow from the premises by installing a backflow prevention device in the service line.

3.2.4. The type of protective device required under subsections 3.2.3a, b and c shall depend upon the degree of hazard which exists as follows:

3.2.4a In the case of any premises where there is an auxiliary water supply as stated in subsections 3.2.3a of this section; or

3.2.4b Where there is any material dangerous to health which is handled in a fashion as to create an actual or potential hazard to the public water system; or

3.2.4c Where there are "uncontrolled" cross connections, either actual or potential, the public water system shall be protected by an approved air-gap separation or an approved reduced pressure principle backflow prevention device at the service connector.

3.2.4d In the case of any premises where there is water or substance that would be objectionable but not hazardous to health, if introduced into the public water system, the public water system shall be protected by an approved double check valve assembly.

3.2.4e In the case of any premises where, because of security requirements or other prohibitions or restrictions it is impossible or

impractical to make a complete in-plant cross connection survey, the public water system shall be protected against backflow or back-siphonage from the premises by the installation of a backflow prevention device in the service line. In this case, maximum protection will be required; that is an approved air-gap separation or an approved reduced pressure principle backflow prevention device shall be installed in each service to the premises.

3.2.5. Any backflow prevention device required herein shall be of a model and size approved by the Water District. The term "approved backflow prevention device" shall mean a device that is in the D.E.P. "approved list of backflow preventers and double check valves". Said approval lists have been adopted by the WATER DISTRICT. Final approval rests with the DISTRICT.

3.2.6. It shall be the duty of the customer/user at any premise where backflow prevention devices are installed to have certified inspections and operational tests made at least once per year as required under Massachusetts Regulations and this Regulation. The WATER DISTRICT will conduct testing on these devices twice a year. The owner of the devices will be charged for these tests. The Water District may have these tests performed by a designated representative. In those instances where the WATER DISTRICT deems the hazard to be great enough, it may require certified inspections at more frequent intervals. These inspections and tests shall be performed by WATER DEPARTMENT personnel or by a certified tester approved by the Water District and approved by the Commonwealth of Massachusetts. It shall be the duty of the WATER DISTRICT to see that timely tests are made. The WATER DISTRICT shall notify the customer/user in advance when the tests are to be undertaken so that he or his representative may witness the test if so desired. These devices shall be repaired, overhauled, or replaced at the expense of the customer/user whenever said device(s) are found to be defective. Records of such tests shall be kept by the Water District.

3.2.7. All presently installed backflow prevention devices which do not meet the requirements of this section, but, were approved devices for the purposes described herein at the time of installation and which have been properly maintained, shall, except for the inspection and maintenance requirements, be excluded from the requirements of these rules so long as the Water District gives its approval in writing and is assured that they will satisfactorily protect the utility system. Whenever the existing device is moved from the present location or requires more than minimum maintenance or the Department finds that the maintenance constitutes hazard to health, the unit shall be replaced by a backflow prevention device meeting the requirements of this section. This provision is not applicable to fire sprinkler systems.

#### **SECTION 4.**

4.1 All testing and/or maintenance performed on backflow devices by the NORTH CHELMSFORD WATER DISTRICT or its agent will be charged to the owner of the device.

4.2 No backflow device may be removed without the written consent of the NORTH CHELMSFORD WATER DISTRICT.

4.3 All plumbing modifications must be approved by the TOWN OF CHELMSFORD Plumbing Inspector and follow the rules and regulations of the MASSACHUSETTS PLUMBING CODE.

4.4 All decisions relating to determination of backflow will be made by the WATER DISTRICT or its designated representative. Failure to comply with any directive from this office will result in termination of water service.

4.5 All administrative costs associated with the operation of the NORTH CHELMSFORD WATER DISTRICT backflow program will be supported by a fee for submittals on survey results, plan approvals, testing results, and permitting of testable devices. The WATER DISTRICT reserves the right to set ALL fees required for the implementation and operation of a successful backflow program.

4.6 All commercial, industrial, and institutional customers using water from the NORTH CHELMSFORD WATER DISTRICT must have installed at the point of connection (ie. Immediately downstream of the water meter, if water meter exists), a state approved reduced pressure backflow device, or state approved double check valve assembly.

4.7 Any backflow device installed produced by any manufacturer requiring special tools for maintenance and repair must have such tools attached to device installed. This mandate reflects state and local requirements.

4.8 Repair kits for all devices are required to be on hand and in the proximity of the device, in the event that maintenance is required.

4.9 All costs associated with the mandated cross connection control survey is the direct responsibility of the owner of the premises being surveyed and/or the individual(s) leasing or renting such property. In the absence of clearly assigned responsibility the OWNER OF THE PREMISES SHALL BE HELD RESPONSIBLE.

ADOPTED AS PART OF THE RULES AND REGULATIONS OF THE NORTH CHELMSFORD WATER DISTRICT ON NOVEMBER 2, 1987.

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Signed:

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Bruce H. Clark, Chairman

Date:

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David M. Irvine

Date:

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Robert M. Leavitt, Clerk

Date:

BOARD OF WATER COMMISSIONERS