

CHAPTER 18

WATER

**ARTICLE I
WATER DEPARTMENT**

SECTION 18-1: CREATED: COMPOSITION

There is hereby created a Water Department. The Water Department shall consist of the Water Superintendent and such other officers and employees as may be assigned to it by the Village President and Board of Trustees.

SECTION 18-2: GENERAL DUTIES OF WATER SUPERINTENDENT

The Water Superintendent shall have charge of the water works, the water mains, hydrants, and other fixtures which are a part of the water works system of the Village, and he shall see that the same are kept in proper working order to furnish an adequate and pure supply of water to the Village. In these matters he shall be subject to the control of the President and the Village Board.

SECTION 18-3: DUTY TO MAKE TESTS AND MAKE REPORTS

It shall be the duty of the Water Superintendent to conduct tests of the water supply and submit such reports as may be required by the State Department of Public Health or other agencies of the State of Illinois. As soon as possible, after the close of any fiscal year, the Public Works Director shall make a report on the operations of the department to the Village Board. The Public Works Director shall promptly make recommendations to the Board of Trustees of required repairs and improvements in the plans and system.

SECTION 18-4: DUTY TO RECEIVE AND FILE APPLICATIONS FOR WATER USE

The Water Superintendent shall receive all applications for the supply of water and file the same with the Village Clerk.

SECTION 18-5: DUTY TO SUPERVISE WORK OF DEPARTMENT

It shall be the duty of the Village Engineer to direct the laying of all water pipes in the streets, alleys, and public grounds of the Village and the making of all connections with the water pipes or mains for private consumers or public use.

SECTION 18-6: RIGHT TO ENTER PREMISES

The Water Superintendent, the Village Engineer, and all other employees of the Village, shall have the right to enter and have free access at all reasonable hours to all premises to examine meters and ascertain the location of all hydrants, pipes, meter, or other fixtures attached to the water works system, and in the event that said person finds the water is wasted on account of negligence or for want of repairs, if such waste is not immediately remedied after due notice is given, the service leading to such premises shall be detached from the Village water system.

SECTION 18-7 through 18-14. RESERVED

SECTION 18-15: ONLY AUTHORIZED PERSON TO TURN ON WATER

No water from the municipal water supply shall be turned on for service into any premises by any person other than the Water Superintendent or a person authorized by him to do so.

SECTION 18-16: PERMIT FOR WATER SERVICE: ISSUANCE SPECIAL PERMITS

Parties desiring to use water from the Village water works supply must make application upon printed blanks for this purpose which may be received at the office of the Village Clerk and must be subscribed to and agreed to be bound by the provisions of this division covering the use of water. If no valid objection exists, the Water Superintendent shall then issue to such licensed plumber as may be selected to the applicant a permit authorizing him to do the work. A special permit must be issued for each branch connection when more than one connection is made by one service pipe.

No permits may be issued for the extension, alteration, or connection of water mains, service lines and pipes, for property lying outside the corporate limits without the approval of the Board of Trustees for the Village of Lena.

SECTION 18-17: REGISTRATION OF APPLICANT; PAYMENT OF ACCOUNTS; REPORT OF DELIQUENT BILLS

The Village Clerk shall register all applications for the supply of water and keep a full and accurate account with each water user. All monies due for water use shall be payable to the office of the Clerk and the Clerk shall pay over to the Village Treasurer all monies received by the Village Clerk and an accounting as to when said monies are received for water use as required by ordinance.

SECTION 18-18: PROVISIONS OF CHAPTER TO BE PART OF CONTRACT WITH USERS; CUTTING WATER OFF FOR VIOLATIONS; PENALTY

The provisions of this chapter as the same now exist or may be hereafter altered or modified shall be considered a part of the contract with every person that is supplied with water through the water system of this Village, and every such person by taking water shall be bound thereby; and whenever the provisions of this chapter or those of any other ordinance which may be hereafter enacted are violated, the water shall be cut off from the building or place of such violation, and the person or persons guilty of such violation shall be subject to the penalty provided for in this Code.

SECTION 18-19: CLAIMS AGAINST THE VILLAGE NOT ALLOWED ON ACCOUNT OF INTERRUPTION OF WATER SUPPLY, BROKEN PIPES

No claims shall be allowed against the Village on account of interruptions of the water supply caused by the breaking of pipe or machinery or by stoppage for repairs, or on account of fire or other emergency; and no claim shall be allowed for any damages caused by the breaking of any pipe or equipment. The Village reserves the right to shut off the water without notice to make repairs and also the Village reserves the right to make regulations and rates for the use of water. The Village will not be responsible for accidents resulting from insecure boilers or from variation or from collapse of any water fixture from any cause whatsoever.

SECTION 18-20: INTERFERING WITH FIRE HYDRANTS AND VALVES

No person, except an employee of the Public Works department of the Village shall open, close, take water from or in any way interfere with any fire hydrants or valve belonging to the Village without first having received a permit issued by the Village.

SECTION 18-21: DEVICES FOR OBTAINING WATER TO BE INSIDE PROPERTY LINE; EXCEPTION

Hydrants, faucets or any other device which the consumer may adopt for obtaining water from the service pipes, except on business property, must be inside the property line.

SECTION 18-22. RESERVED

**ARTICLE II
USERS OUTSIDE VILLAGE LIMITS**

SECTION 18-23: RESIDENTIAL WATER USERS OUTSIDE THE VILLAGE BOUNDARIES

(A) Homes outside of residential subdivisions.

1. In exchange for the Village of Lena agreeing to extend its municipal water system to the property line of an owner residing outside of the Village of Lena, but in a residential subdivision, the owner of said property shall be required to execute and file with the Village Clerk for the Village of Lena, an Annexation Agreement agreeing to the annexation of said property to be serviced by the Village water system upon said property becoming contiguous to the Village of Lena.

2. At the time of the extension of the water supply to the property owner's property line, the property owner will pay the current hook-up fee of \$1,000 or the amount being then currently charged by the Village of Lena.

3. At the time of the extension of the municipal water supply to the property owner's property line, the property owner shall be responsible for any additional expenses incurred by the Village as a result of bringing the water supply to the property line, unless specifically waived by the President and Board of Trustees.

4. The property owner will be charged a rate of one hundred percent (100%) above the established water rates for the Village residents and businesses.

(B) Homes located within existing subdivisions.

1. The Village of Lena will not provide water to individual homes within existing subdivisions unless and until a Petition has been signed by a minimum of fifty-one percent (51%) of the actual property owners requesting the extension of the municipal water supply to the subdivision.

2. The extension of the Village water lines referred to paragraph (B)(1) above will not be extended until one hundred percent (100%) of the property owners located within each subdivision requesting the extension of water service agree and execute a contract to connect to the Village water lines upon their availability.

3. The property owner will be charged a rate of one hundred percent (100%) above the established water rates for the Village residents and businesses and, further, shall pay hook-up fee currently being charged by the Village of Lena.

4. Any subdivision requesting the extension of the Village of Lena's water supply to service said subdivision, must present to the Village authorities contemporaneously with the request for the water line extensions a signed annexation agreement by one hundred percent (100%) of the property owners and by the requisite number of electors located on said property individually upon becoming contiguous to the different property at the Village's option.

SECTION 18-24: EXTENSION OF VILLAGE WATER SUPPLY TO SUBDIVISIONS WITH EXISTING PRIVATE WATER SYSTEMS

1. Upon a request by a private water utility company for an extension or connection to the Village of Lena's water system, through an existing subdivision, the Village and the private water utility company shall negotiate the terms for the extension and/or connection.

2. The private utility company shall, contemporaneously with its request for the extension or connection of/or to the Village water supply, submit to the Village an annexation petition signed by one hundred percent (100%) of the current owners and the requisite number of electors residing thereon of all homes located and serviced by the private water utility company in the requisite subdivision.

3. The utility shall be charged at the established outside user rate based upon total water consumption.

4. The private water utility company shall be billed directly by the Village for total water consumption and it shall be the responsibility of the private water utility company to collect the appropriate fees from the various individual users.

5. The private water utility company shall retain ownership of the existing water lines within the subdivision unless agreed to the contrary.

SECTION 18-25 through 18-29. RESERVED

**ARTICLE III
SERVICE PIPES AND CONNECTIONS**

SECTION 18-30: INSTALLATIONS TO BE UNDER SUPERVISION OF WATER SUPERINTENDENT

Installation of service pipes shall be made under the supervision of the Water Superintendent or his authorized representatives.

SECTION 18-31: INSTALLATIONS TO BE AT EXPENSE OF OWNER OR APPLICANT

All service pipes from the curb stop to the premises to be served shall be installed by and at the expense of the owner of the property to be served or the applicant for the service.

SECTION 18-32: DEPTH OF SERVICE PIPES

All service pipes shall be laid at least four and one-half feet (4 ½') below the surface of the ground.

SECTION 18-33: TAPPING MAINS; COSTS

The Village shall tap the water mains, inserting a stop-cock, which shall be known as a "corporation cock", connect the service pipe and lay the same in a straight line to the property line, and there set a stop-cock with round waterway, which shall be known as a "curb stop."

SECTION 18-34: MAINTENANCE AND REPAIRS

After inspection by the Water Superintendent or some person authorized by him to do so, the Water Department will keep the section of water service between the corporation cock and the curb stop in good repair, this part of the service being on city property and being installed and inspected according to this Chapter. All other water service lines installed from the curb stop to the building shall be installed at the expense of the property owner.

SECTION 18-35: LOCATION OF SERVICE PIPES; PARTIES SERVED BY SERVICE PIPE

Along streets where water mains are laid service pipes shall not be allowed to run across lots, that is, from one lot to another, but must be taken from the main in front of the premises or some point in the street adjacent to the same except by special permit from the Water Superintendent. Not more than one (1) house shall be supplied from one tap, except by special permission from the Board of Trustees.

SECTION 18-36: ONLY ONE BILL TO BE MADE WHEN SERVICE PIPES SERVICE TWO OR MORE SEPARATE PREMISES OR TENEMENTS

When service pipes are intended to serve two (2) or more distinct premises or tenements, and where only one (1) curb stop is used, the person or persons owning the property must pay the water rent of all of the parties.

SECTION 18-37: PERMISSION REQUIRED FOR EXTENSION

Special application must be made and permission obtained from the Water Superintendent for making any extension to the plumbing of any house, residence or place beyond that for which permission may have already been granted including yard sprinklers which must be installed in compliance with the Illinois Plumbing Code.

SECTION 18-38: DUTY OF OWNERS TO KEEP IN GOOD REPAIR

Persons using Village water must keep their service pipes and all fixtures connected therewith in good repair and protected from frost at their own expense, and must prevent all unnecessary waste, in default of which the Water Superintendent may authorize the shut off of the water to the premises.

SECTION 18-39: TYPE OF SERVICE PIPES

(A) All service pipes extending from the "corporation cock": to the "curb-stop" shall be of copper and shall be of Type K with inside diameter conforming to standard iron pipe dimensions but not smaller than one inch inside diameter and shall in each case be connected with flared joints or compression couplings if the service is underground.

(B) All service pipes extending from the "curb stop" to the water meter shall be of Type K copper, or plastic pipe that meets the Illinois Plumbing Code; has a minimum 220 P.S.I. rating; and is approved by the Village Water Superintendent and shall have an inside diameter conforming to standard iron pipe dimensions but not smaller than one inch 1" inside diameter and shall in each case, if underground, be connected with flared joints; or compression couplings. (Amended 02/12/07)

SECTION 18-40: EXCAVATIONS

Excavations for installing service pipe or repairing the same shall be made in compliance with the regulations relating to the making of excavations in streets, provided that it shall be unlawful to place any service in the same excavation with or directly over any drain or sewer pipe. No person or persons shall connect or cause to be connected any water service pipe to the water main belonging to the Village nor to any lateral pipe line nor to any curb-stop unless the said service pipe be laid in a separate ditch excavated for that purpose, which said ditch shall be at least ten (10) feet in distance on a horizontal line and eighteen (18) inches on a vertical line or plane from any sewage or drain tile. In places where this is impossible, special permission must be obtained from the President and the Board of Trustees.

SECTION 18-41: INSPECTION

All plumbing shall be done in a manner required by the designated engineer, Water Superintendent, or building inspector and subject to their inspection and approval, and the patters and appurtenances shall in like manner be subject to their approval, and no work underground shall be covered up until examined by one of these parties or their designated agent.

SECTION 18-42: REPORT AND DUTIES OF PLUMBER

It shall be the duty of all plumbers performing work in the Village to ask for inspection and approval from the designated engineer, Water Superintendent, or building inspector on all underground work before it is covered. Before the water shall be turned on a water meter must be obtained from the Village Water Department, giving a description and location of the curb-stop and meter setting with the name and address of the occupants and the owner of such premises. It shall be the duty of all plumbers to obtain special permit before making any changes in any connections that have been made with water mains except where meters are already in use.

SECTION 18-43 through 18-69. RESERVED

ARTICLE IV WATER DISTRIBUTING SYSTEM SPECIFICATIONS

SECTION 18-70: GENERAL

Water mains, service connections and appurtenances shall be constructed in accordance with the Standard Specifications for Water and Sewer Main Construction in Illinois and with the American Water Works Association Standard C600 and subject to the provisions of the Code of Ordinances.

SECTION 18-71: MAIN LOCATION AND TRENCH DEPTH

(A) Water mains shall, in general, be located between the curb and sidewalk. Water mains parallel to the curbs shall be located at least three (3) feet from the back of curb.

(B) Trenches shall be excavated to a depth sufficient to provide a minimum of five and one-half (5 1/2) feet of cover as measured from the top of the pipe to the finished grade.

SECTION 18-72: JOINTS

All ferrous pipe joints shall be of the slip-on mechanical joint type as provided in the material specifications cited above as the AWWA Standard C600. All mechanical type joints shall be provided with ductile iron retainer glands.

SECTION 18-73: DEAD ENDS

All dead ends on new mains shall be closed with case iron plugs, or caps. Where a dead end is not equipped with a fire hydrant, the last pipe shall be fitted with a bleeder plug and valve. The valve shall be a two (2) inch corporation stop. The bleeder valve shall be located in a bleeder vault which shall be a temporary structure three (3) feet in diameter with no foundation ring, but otherwise constructed in the manner of a valve vault. In order to reduce cost and allow future main extension to be made without interruption of water service, mains should, where possible, end one (1) pipe length beyond a control valve. The stub end must be capped, but the bleeder valve may be located in the control valve vault provided no service connections are made to the stub.

SECTION 18-74: SETTING HYDRANT

Hydrants shall be located as shown on the plans or as otherwise directed as to provide complete accessibility and minimize the possibility of damage from vehicles or injury to pedestrians. One (1) hydrant shall be set at each street intersection. Intermediate hydrants shall be set so that hydrants are no more than three hundred (300) feet apart in commercial/industrial developments or five hundred (500) feet apart in residential developments.

All hydrants shall stand plumb and shall have their nozzles parallel with or at right angles to the curb, with the pumper nozzle facing the curb. No portion of the pumper or hose cap shall be less than twenty four (24) inches from the gutter face of the curb. Hydrants shall be set to the finished grade, with all nozzles at least eighteen (18) inches above the finished grade.

Each hydrant shall be connected to the main by a six (6) inch diameter branch line controlled by an independent six (6) inch gate valve placed within eighteen (18) inches of the front of the hydrant. Each hydrant shall be placed upon a two (2) foot square concrete base set upon undisturbed soil. The hydrant shall be braced until the vault is built and a backfill made.

Each hydrant shall be provided with a hydrant vault constructed in the manner previously specified for valve vaults except that it shall be larger in diameter at the bottom to accommodate the hydrant branch valve and the base of the hydrant. The neck of the vault shall be drawn to the front of the hydrant where a manhole rim and cover shall be installed.

SECTION 18-75: SERVICE CONNECTIONS

All service connections sizes shall be approved by the Village prior to their installation. Service branch pipes two (2) inches in diameter and smaller shall be copper or plastic pipe that meets the Illinois Plumbing Code; has a minimum 220 P.S.I. rating; and is approved by the Village Water Superintendent. Service branch pipes larger than two (2) inches shall be ductile iron, or plastic that meets the Illinois Plumbing Code; has a minimum 220 P.S.I. rating; and is approved by the Village Water Superintendent. (Amended 02/12/07)

Each service shall be provided with a valve at the point of connection with the main. For copper services the valve at the main shall be a corporation stop; for iron services, a distribution gate valve. Corporation stops shall be buried. Gate valves shall be provided with a valve vault.

The table below lists the largest service sizes that may be directly tapped into the main for each size of main:

MAIN SIZE	LARGEST DIRECT TAP
4 inch	¾ inch
6 inch	1 inch
8 inch	1 ½ inch
10 inch	2 inch
12 inch	2 inch
16 inch	2 inch

Service connections larger than those listed above shall be made using service clamps.

Each copper service shall be provided with a curb stop valve and box located between the curb and property line (usually one-half (0.5) feet off property line). The curb stop valve shall not be located beneath any sidewalk or driveway.

SECTION 18-76: HYDROSTATIC TESTING

Hydrostatic testing shall be done in accordance with AWWA C600. All newly laid pipe, or valved sections thereof, shall be subgauge (100 PSIG). The duration of each pressure test shall be not less than one (1) hour.

Each valved section of pipe shall be slowly filled with water and the specified test pressure, based on the elevation of the highest point of the line or section under text and corrected to the elevation of the test gauge, shall be applied. Before applying the specified test pressure, all air shall be expelled from the pipe. The contractor shall install corporation stops at all points located at a higher elevation than the immediately adjacent sections of main so that the air can be expelled as the line is filled with water. After the air has been expelled, the corporation stops shall be closed and the test pressure applied.

All exposed pipes, fittings, valves, hydrants, and joints shall be carefully examined. All joints showing visible leaks shall be repaired by the contractor. Any cracked or defective pipes, fittings, valves, or hydrants discovered in consequence of the pressure test shall be removed and replaced by the contractor. The test shall be repeated until satisfactory to the Village.

A leakage test shall be conducted after the pressure test has been satisfactorily completed. The duration of each leakage test shall be two (2) hours, and during the test the main shall be subjected to the pressure previously specified for the pressure test.

Leakage shall be defined as the quantity of water that must be supplied into the newly laid pipe, or any valve section thereof, to maintain the specified pressure.

No pipe installation will be accepted if the leakage is greater than the determined by the formula:

$$\frac{L=NDP}{3700}$$

in which L is the allowable leakage in gallons per hour; N is the number of joints in the length of the pipeline tested; D is the minimal diameter of the pipe in inches; and P is the average test pressure pipe in pounds per square inch gauge.

SECTION 18-77: BACKFILL BELOW PIPE CENTERLINE, OVER PIPE AND TO GRADE

(A) All trenches shall be backfilled, from the bottom of the trench to the centerline of the pipe, with granular backfill or approved native material. The backfill material shall be deposited in the trench for its full width on each side of the pipe simultaneously, distributed evenly by hand, and compacted by tamping.

(B) All trenches shall be backfilled, from the centerline of the pipe to a depth of one (1) foot above the top of the pipe, with granular backfill or approved native material compacted by tamping. The contractor shall use special care in placing this portion of the backfill so as to avoid injuring or moving the pipes.

(C) When the type of backfill material is not indicated in the plans or elsewhere specified, the trench shall be backfilled from one (1) foot above the pipe to the finished grade, with native material or other materials approved by the Village in twelve (12) inch layers compacted by tamping.

SECTION 18-78: BACKFILL UNDER PAVEMENT

Where the excavation is made through or within three (3) feet of permanent pavements, curbs, driveways, or sidewalks, or where such structures are undercut by the excavation, or where such structures may reasonably be expected to be constructed over or within three (3) feet of the excavation within one (1) year after backfilling, the entire backfill to the subgrade of the structures shall be made with granular material compacted by tamping to 95% of ASTM D 698 density. When granular backfill is required under pavements, curb, driveways, or sidewalks planned to be constructed within one (1) year after backfilling, the areas requiring such granular backfill shall be indicated in the plans.

SECTION 18-79: DISINFECTION

After the backfill has been completed, the contractor shall disinfect the pipeline in accordance with the provisions of American Water Works Association Standard C601-68 and the provisions therein specified.

Prior to disinfection, the pipeline or valved section thereof, shall be flushed at a minimum flow velocity of two and one-half (2 ½) feet per second. Following full development of flow, flushing shall continue until the discharge runs clear or until the Village shall direct flushing operations to cease. In no event shall the duration of flushing be less than ten (10) minutes. Water used in flushing the pipeline shall be introduced into the pipeline at a point of connection with the existing distribution system designated by the Village.

After flushing the Continuous Feed Method described in AWWA C601-68 shall be used to disinfect the pipeline or valved section thereof. Water used in disinfecting the pipeline shall be introduced into the pipeline through the pressure test connection made under the provisions of Section 18-76.

Bacteriological samples shall be collected from the pipeline on two (2) successive days following disinfection and final flushing. All samples shall be collected by the Village and transported to the Stephenson County Health Department laboratory for analysis. If either sample shows the presence of coliform organisms, the Contractor shall repeat the disinfection procedure.

If a valved section of the pipeline is disinfected separately, each such section shall be considered a separate pipeline for disinfection and flushing a separate pipeline for disinfection and flushing until disinfection of the upstream section has been satisfactorily completed as determined by bacteriological analysis.

SECTION 18-80: IRON PIPE

All pipe shall be; centrifugally cast ductile iron and shall fully comply with the provisions of AWWA Standard C151-76 (ANSI Standard A21.11-1976).

All pipe shall be cement mortar lined, and such lining shall fully comply with the provisions of AWWA Standard C104-74 (ANSI A21.1974). The lining shall be of standard thickness with bituminous seal coat.

Joints shall be of the mechanical of push-on types. All joints shall fully comply with the provisions of AWWA Standard C111-72 (ANSI A21.1972).

The thickness of each class and size of pipe shall fully comply with the provisions of AWWA Standard C150-76 (ANSI Standard A21-50-1976).

All pipe shall be supplied with provisions to ensure electrical continuity between pipe sections. Such continuity provision shall be adequate to carry 1000 AMPS without damage to the pipe or gasket.

SECTION 18-81: IRON FITTINGS

All fittings shall be ductile iron and shall fully comply with the provisions of AWWA Standard C110-71 (ANSI Standard A21.10-1971).

All Fittings shall be cement mortar lined, and such lining shall fully comply with the provisions of AWWA Standard C104-74 (ANSI Standard A21.4-1974).

All fittings shall be of the mechanical joint type with ductile iron retainer glands, in full compliance with the provisions of AWWA Standard C111-72 (ANSI Standard A21.11-1974).

SECTION 18-82: VALVES AND VALVE VAULTS

(A) All valves up to and including twelve (12) inches in size shall be gate valves. Gate valves shall be two-faced, non-rising stem, double disc gate valves with parallel seats, opening left and shall fully comply with the provisions of AWWA Standard C500-71. Gate valves shall be furnished with o-ring stem seals and shall have mechanical joint ends.

Valves larger than twelve (12) inches in size shall be butterfly valves. Butterfly valves shall be rubber-seated tight closing type with underground operator, class 150B in full compliance with AWWA Standard C504-74. Butterfly valve operators shall be equipped with a two (2) inch AWWA operating nut, opening left. Butterfly valves shall have mechanical joint ends.

A complete shop drawing shall be provided for every type of valve supplied, showing the name, part number, and material of construction for every part of the valve.

(B) Valve vaults shall be of precast concrete or of concrete brick or block, laid up in alternate courses of header and stretchers, placed upon a precast foundation ring six (6) inches thick with an inside diameter of four (4) feet at the bottom. The top of the foundation shall be at the same elevation as the horizontal plane passing through the axis of the pipe. The brick or block shall be set in mortar, with the vertical joints broken to provide drainage. The cone of the vault shall not be more than thirty-six (36) inches in height and at grade shall accept the manhole rim and cover specified below. The excavation around the vault shall be backfilled with granular material to provide drainage.

Hydrant vaults shall be constructed in the manner previously specified for valve vaults except that it shall be larger in diameter at the bottom to accommodate the hydrant branch valve and the base of the hydrant. The neck of the vault shall be drawn to the front of the hydrant where a manhole rim and cover shall be installed.

SECTION 18-83: MANHOLE RIMS AND COVERS

Heavy rims and covers shall be Neenah No. R-1670 with type C non-rocking cover, total weight three hundred fifty (350) pounds. Heavy rims and covers shall be used in roadways.

Light rims and covers shall be Neenah No. R-1711-B with type C lid, total weight one hundred seventy-five (175) pounds. Light rims and covers shall be used in parkways.

Covers shall be supplied with a checkered pattern top lettered "Water."

SECTION 18-84: FIRE HYDRANTS

All fire hydrants purchased by or installed in the Village of Lena shall comply with all provisions of the American Water Works Association (AWWA) Standard C502-73 (Dry Barrel Fire Hydrants). They shall be Mueller Centurion Hydrants or their equivalent as determined by the following provisions: (Ord. 94-43).

(A) Three-way type with two (2) 2 ½ inch hose connections with National Standard Hose Coupling Thread and one (1) 4 inch Pumper Nozzle with National Standard Hose Coupling Thread. Centerline of all nozzles shall not be less than eighteen (18) inches above groundline mark on lower barrel.

(B) Bury (trench) depth shall be six (6) feet unless otherwise required by the plans or specifications.

(C) Inlet connections shall be six (6) inch standard mechanical-joint conforming to AWWA Standard C111 and furnished with all joint materials.

(D) Directions of opening shall be to the right (clockwise).

(E) Operating nut and nozzle cap wrench nuts shall be 7/8 inch square with a minimum height of one (1) inch.

(F) The main valve shall be a water compression type closing with the water pressure.

(G) Minimum I.D. of main valve seat ring shall be five (5) inch and friction losses through the hydrant shall not exceed 2.5 psi at a flow rate of 100 GPM, through the pumper connection when flow tested in accordance with paragraph 3.8, AWWA C502073 as certified by a certified friction loss curve from the manufacturer, applicable of the specific model to be furnished.

(H) Bronze to bronze threading of main valve seat ring to show assembly to assure easy removal of stem and valve assembly with a short, light-weight wrench.

(I) Fully automatic double drain valve system with two (2) or more bronzed-lined outlets in the shoe that are fed by two (2) inlet holes in the bronze seat ring that are capable of draining the hydrant at a rate of five (5) GPM when the hydrant is properly installed.

(J) Integrally cast barrel and shoe flanges below the groundline with no threads or grooves cut into the barrel wall as a means of flange retention. Flanges, barrel and shoe castings below the groundline shall be constructed of gray iron or ductile iron, but in no combinations thereof so as to assure uniform strength of these components.

(K) Traffic "breakaway" design that permits full three hundred sixty (360) degrees facing of nozzles by infinite degree. The safety flange shall not utilize breakable bolts but fail at a groove cast inside the bolt circle upon vehicular impact. The safety stem coupling shall be designed so as to fail only in tension, but not to fail from excessive torque applied to the operation nut in either direction. The coupling shall be located below the flange to prevent a vehicle wheel from depressing the stem and opening the valve.

(L) Main valve assembly and operation stem shall be removable through the top of the upper barrel without the need of removing the upper barrel or nozzle section.

(M) Dry top design in which the threads and bearing surfaces of the operating mechanism are sealed from the waterway by two (2) O-ring stem seals, and from the atmosphere by O-rings and a weather shield.

(N) Operating mechanism shall incorporate an oil chamber and automatic lubrication system that circulates a low viscosity oil to all operating threads and bearing surfaces each time the hydrant is operated, effectively to -30 degree F. There shall be an externally accessible oil filler plug to permit checking or adding oil if required, but so positioned as to prevent over-filling.

(O) Painting and coating shall be in accordance with AWWA C502-73 with a yellow finish coat or any other color approved by the Village above the groundline.

(P) Contractors and/or suppliers shall furnish two (2) copies of detailed shop drawings from the manufacturer of the specific hydrant model to be furnished if requested by the engineer. The drawings shall list applicable ASTW numbers of all components.

(Q) The use of hydrants other than specified herein, or any deviation from these specifications will require the approval of the engineer not later than twenty-four (24) hours prior to bid date.

SECTION 18-85: TAPPING VALVES

Tapping gate valves shall be a AWWA mechanical joint, inside screw, non-rising stem, parallel seat bronze trimmed with O-ring constructions, opening left, like Mueller H0667, in working pressures of 200 PSIG, for cold water service.

SECTION 18-86: TAPPING SLEEVES AND COPPER TUBING

(A) Tapping sleeves shall be AWWA mechanical joint like Mueller H-616, in 200 PSIG working pressure, for cold water service.

(B) Tubing shall be seamless Type K copper tubing supplied in conformance with ASTM Specification B-88-62 "Type K", suitable for underground service.

SECTION 18-87: CORPORATIONS STOPS

Corporation stops for ¾ inch, 1 inch, and 2 inch connections shall be Mueller H-15000 or approved equal.

SECTION 18-88: SERVICE CLAMPS

Service clamps shall be double strap, corporation stop thread, malleable iron body galvanized for cast iron, for 500 PSIG working pressure with neoprene gasket cemented in place.

SECTION 18-89: CURB STOPS AND CURB BOX

(A) Curb stops for ¾ inch through 2 inch connections shall be Mueller H-15204 or equal and must have round full openings. The T-head of all stops must be capable of making a fully 360 degree turn.

(B) Cut-off boxes shall have adjustable steel pipe stems and screwed caps, shall be designed for a six (6) foot trench depth, and shall include 36 inch cut-off box rods. Boxes for ¾ inch and 1 inch stops shall be Mueller H-10314 or equal. Boxes for two (2) inch stops shall be Mueller H-10386 or equal.

SECTION 18-90: GRANULAR BACKFILL

When granular backfill is indicated in the plans or elsewhere specified, such granular backfill shall consist of sand or gravel.

All sand used for backfill shall be natural run sand, uniformly graded from fine to course, not lumpy or frozen, and free from slag, cinder, ashes, rubbish, or other material that is objectionable or deleterious. Sand shall contain no more than 10% by weight of loam and clay, and all material must be capable of passing through a three-fourth (¾) inch sieve.

Gravel used for backfill shall consist of natural bank run gravel of good durability, reasonably uniformly graded from fine to course with no stones larger than two (2) inch in size. It shall be free from slag, cinders, ashes, refuse, or other deleterious or objectionable materials. Gravel shall not contain more than 10% by weight of loam and clay and shall not be frozen.

**ARTICLE V
CROSS-CONNECTION CONTROL**

SECTION 18-91: CROSS-CONNECTION CONTROL

(A) That all plumbing installed with the Village of Lena, Illinois, shall be installed in accordance with the Illinois Plumbing Code, 77 Ill. Adm. Code 890. That, if in accordance with the Illinois Plumbing Code or in the judgment of the Water Superintendent, an approved backflow prevention device is necessary for the safety of the public water supply system the Water Superintendent will give notice to the water customer to install such an approved device immediately. The water customer shall, at his own expense, install such an approved device at a location and in a manner in accordance with the Illinois Plumbing Code, Illinois Environmental Protection Agency and all applicable local regulations, and shall have inspection and tests made of such approved devices upon installations and as required by the Illinois Plumbing Code, Illinois Environmental Protection Agency and local regulations.

(B) That no person, firm or corporation shall establish or permit to be established or maintain or permit to be maintained any connection whereby a private, auxiliary or emergency water supply other than the regular public water supply of the Village of Lena, Illinois, may enter the supply or distribution system of said municipality, unless such private, auxiliary or emergency water supply and the method of connection and use of such supply shall have been approved by the Water Superintendent and the Illinois Environment Protection Agency.

(C) That it shall be the duty of the Water Superintendent to cause surveys and investigations to be made of commercial, industrial and other properties served by the public water supply to determine who the actual or potential hazards to the public water supply may exist. Such surveys and investigations shall be made a matter of public record and shall be repeated at least every two years, or as often as the Water Superintendent shall deem necessary. Records of such surveys shall be maintained and available for review for a period of at least five years.

(D) That the approved cross-connection control device inspector shall have the right to enter at any reasonable time any property served by a connection to the public water supply or distributions system of the Village of Lena's water supply for the purpose of verifying the presence or absence of cross-connections, and that the Water Superintendent or their authorized agent shall have the right to enter at any reasonable time any property served by a connection to the public water supply or distribution system of the Village of Lena's water supply for the purpose of verifying information submitted by the customer regarding the required cross-connection control inspection. On demand, the owner, lessees or occupants of any property so served, shall furnish to the Water Superintendent any information which they may request regarding the piping system or systems or water use on such property. The refusal of such information when demanded, shall, within the discretion of the Water Superintendent, be deemed evidence of the presence of improper connections as provided in this Ordinance.

(E) That the Water Superintendent is hereby authorized and directed to discontinue, after reasonable notice to the occupant thereof, the water service to any property wherein any connection is in violation of the provisions of this Ordinance is known to exist, and to take such other precautionary measures as he may deem necessary to eliminate any danger of contamination to the public water supply distributions mains. Water service to such property shall not be restored until such conditions have been eliminated or corrected in compliance with the provisions of this Ordinance, and until a re-connection fee of One Hundred Dollars (\$100.00) is paid to the Village of Lena. Immediate disconnection with verbal notice can be effected when the Water Superintendent is assured that imminent danger of harmful contamination of the public water supply. Neither the Water Superintendent or his agents or assigns shall be liable to any customer for any injury, damages or lost revenues which may result from termination of said customer's water supply in accordance with the terms of this Ordinance, whether or not said termination was with or without notice.

(F) That the consumer responsible for back siphoned or back pressured material or contamination through backflow, if contamination of the potable water supply system occurs through an illegal cross-connection or an improperly installed, maintained or repaired device, or a device which has been bypassed, must bear the cost of clean-up of the potable water supply system.

SECTION 18-92: CROSS CONNECTION CONTROL—GENERAL POLICY

1. *Purpose.* The purpose of these rules and regulations is:

(a) To protect the public water supply system from contamination or pollution by isolating within the customer's water system contaminants or pollutants which could backflow through the service connection into the public water supply system.

(b) To promote the elimination or control of existing cross-connection actual or potential, between the public or consumer's potable water system and non-potable water systems, plumbing fixtures and sources or systems containing substances of unknown or questionable safety.

(c) To provide for the maintenance of a continuing program of cross-connection control which will prevent the contamination or pollution of the public and consumer's potable water systems.

2. *Application.* These rules and regulations shall apply to all premises served by public potable water supply system of the Village of Lena.

3. *Policy.* The owner or official custodian shall be responsible for protection of the public water supply system from contamination due to backflow or backsiphonage of contaminants through the customer's water service connection. If, in the judgment of the Water Superintendent or his authorized representative, and approved backflow prevention device is necessary for the safety of the public water supply system, the Water Superintendent shall give notice to the consumer to install such approved backflow prevention device at each service connection to the premises. The consumer shall immediately install such approved device or devices at his own expense: failure, refusal or inability on the part of the consumer to install such device or devices immediately shall constitute grounds for discontinuing water service to the premises until such device or devices have been installed. The consumer shall retain records of installation, maintenance, testing and repair as required in Section 3D(4) below for a period of at least five years. The Water Superintendent may require the consumer to submit a cross-connection inspection report to the Village of Lena to assist in determining whether or not service line protection will be required. All cross-connection inspections shall be conducted by a Cross-Connections Control Device Inspector certified by the Illinois Environmental Protection Agency.

SECTION 18-93: DEFINITIONS

(A) The following definitions shall apply in the interpretation and enforcement of these regulations:

1. **"AGENCY"** means Illinois Environmental Protection Agency.
2. **"APPROVED"** means backflow prevention devices or methods approved by the Research Foundation for Cross-Connection Control of the University of Southern California, Association of State Sanitary Engineers, American Water Works Association, American National Standards Institute or certified by the National Sanitation Foundation.
3. **"AUXILIARY WATER SYSTEM"** means any water source or system on or available to the premises other than the public water supply system and include the water supplied by the system. These auxiliary waters may include water from a source such as wells, lakes, or streams, or process fluids; or used water. These waters may be polluted or contaminated or objectionable or constituted a water source or system over which the water purveyor does not have control.
4. **"BACKFLOW"** means the flow of water or other liquids, mixtures, or substances into the distribution pipes or a potable water system from any source other than the intended source of the potable water supply.
5. **"BACKFLOW PREVENTION DEVICE"** means any device method, or type of construction intended to prevent backflow into a potable water system. All devices used for

backflow prevention in Illinois must meet the standard of the Illinois Plumbing Code and the Illinois Environmental Protection Agency.

6. **“CONSUMER” or “CUSTOMER”** means the owner, official custodian, or person in control of any premises supplied by or in any manner connected to a public water system.

7. **“CONSUMER’S WATER SYSTEM”** means any water system located on the customer’s premises. A building plumbing system is considered to be a customer’s water system.

8. **“CONTAMINATION”** means an impairment of the quality of the water by entrance of any substance to a degree which could create a health hazard.

9. **“CROSS-CONNECTION”** means any physical connection or arrangement between two otherwise separate piping systems, one of which contains potable water and the other a substance or unknown or questionable safety of quality, whereby there may be a flow from one system into the other.

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

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

10. **“DOUBLE CHECK VALVE ASSEMBLY”** means an assembly composed of single, independently acting check valves approved under ASSE Standard 1015. A double check valve assembly must include tight shutoff valves located at each end of the assembly and suitable connections for testing the water-tightness of each check valve.

11. **“FIXED PROPER AIR GAP”** means the unobstructed vertical distance through the free atmosphere between the water discharge point and the flood level rim of the receptacle.

12. **“HEALTH HAZARD”** means any condition, device or practice in a water system or its operation resulting from a real or potential danger to the health and well-being of consumers. The word “severe” as used to qualify “health hazard” means a hazard to the health of the user that could be expected to result in death or significant reduction in the quality of life.

13. **“INSPECTION”** means plumbing inspection to examine carefully and critically all materials, fixtures, piping and appurtenances, appliances and with requirements of the Illinois Plumbing Code, 77 Ill. Adm. Code 890.

14. **“NON-POTABLE WATER”** means water not safe for drinking, personal, or culinary use as determined by the requirements of 35 Ill. Adm. Code 604.

15. **“PLUMBING”** means the actual installation, repair, maintenance, alteration or extension of plumbing system by any person. Plumbing includes all piping, fixtures, appurtenances and appliances for a supply of water for all purposes, including without limitation lawn sprinkler systems, from the source of a private water supply on the premises or from the main in the street, alley or at the curb to, within and about any building or buildings where a person or persons live, work or assemble. Plumbing includes all piping, from discharge of pumping units to and including pressure tanks in water supply systems. Plumbing includes all piping, fixtures, appurtenances, and appliances for a building drain and a sanitary drainage and related ventilation system of any building or buildings where a person or persons live, work, or

assemble from the point of connection of such building drain to the building sewer or private sewage disposal system five feet beyond the foundation walls.

16. **"POLLUTION"** means the presence of any foreign substance (organic, 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.

17. **"POTABLE WATER"** means water which meets the requirements of 35 Ill. Adm. Code 604 for drinking, culinary, and domestic purposes.

18. **"POTENTIAL CROSS-CONNECTION"** means a fixture or appurtenance with threaded hose connection, tapered spout, or other connection which would facilitate extension of the water supply line beyond its legal termination point.

19. **"PROCESS FLUID(S)"** means any fluid or solution which may be chemically, biologically or otherwise contaminated or polluted in a form or concentration such as would constitute a health, pollution, or system hazard if introduced into the public or a consumer's potable water system.

- (a) polluted or contaminated waters;
- (b) process waters;
- (c) used waters originating from the public water supply system which may have deteriorated in sanitary quality;
- (d) cooling waters;
- (e) questionable or contaminated natural waters taken from wells, lakes, streams, or irrigation systems;
- (f) chemicals in solution or suspension;
- (g) oils, gases, acids, alkalis and other liquid and gaseous fluids used in industrial or other processes, or for fire fighting purposes;

20. **"PUBLIC WATER SUPPLY"** means all mains, pipes and structures through which water is obtained and distributed to the public, including wells and well structures, intakes and cribs, pumping stations, treatment plants, reservoirs, storage tanks and appurtenances, collectively or severally, actually used or intended for use for the purpose of furnishing water for drinking or general domestic use and which serve at least 15 service connections or which regularly serve at least 25 persons at least 60 days per year. A public water supply is either a "community water supply" or a "non-community water supply".

21. **"REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION DEVICE"** means a device containing a minimum of two independently acting check valves together with an automatically operated pressure differential relief valve located between the two check valves and approved under ASSE Standard 1013. During normal flow and at the cessation of normal flow, the pressure between these two checks shall be less than the supply pressure. In case of leakage of either check valves, the differential relief valve, by discharging to the atmosphere, shall operate to maintain the pressure between the check valves at less than the supply pressure. The unit must include tightly closing shutoff valves located at each end of the device, and each device shall be fitted with properly located test cocks.

22. **"SERVICE CONNECTION"** means the opening, including all fittings and appurtenances, at the water main through which water is supplied to the user.

23. **"SURVEY"** means the collection of information pertaining to a customer's piping system regarding the location of all connections to the public water supply system and must

include the location, type and most recent inspection and testing date of all cross-connection control devices and methods located within that customer's piping system. The survey must be in written form, and should not be an actual plumbing inspection.

24. **"SYSTEMS HAZARD"** means a condition through which an aesthetically objectionable or degrading material not dangerous to health may enter the public water supply system or a consumer's potable water system.

25. **"USED WATER"** means any water supplied by a public water supply system to a consumer's water system after it has passed through the service connection and is no longer under the control of the water supply official custodian.

26. **"WATER PURVEYOR"** means the owner or official custodian of a public water system.

SECTION 18-94: WATER SYSTEM

(A) The water system shall be considered as made up of two parts: the public water supply system and the consumer's water system.

(B) The public water supply system shall consist of the source facilities and the distribution system, and shall include all those facilities of the potable water system under the control of the Water Superintendent up to the point where the consumer's water system begins.

(C) The source shall include all components of the facilities utilized in the production, treatment, storage, and delivery of water to the public water supply distribution system.

(D) The public water supply distribution system shall include the network of conduits used to deliver water from the source to the consumer's water system.

(E) The consumer's water system shall include all parts of the facilities beyond the service connection used to convey water from the public water supply distribution system to points of use.

SECTION 18-95: CROSS-CONNECTION PROHIBITED

(A) Connections between potable water systems and other systems or equipment containing water or other substances of unknown or questionable quality are prohibited except when and where approved cross-connection control devices or methods are installed, tested and maintained to insure proper operation on a continuing basis.

(B) 1. No physical connection shall be permitted between the potable portion of a supply and any other water supply not of equal or better bacteriological and chemical quality as determined by inspection and analysis by the Agency.

2. There shall be no arrangement or connection by which an unsafe substance may enter a supply.

SECTION 18-96: SURVEY AND INVESTIGATIONS

(A) The consumer's premises shall be open at all reasonable times to the approved cross-connection control device inspector for the inspection of the presence or absence of cross-connections within the consumer's premises, and testing, repair and maintenance of cross-connection control device within the consumer's premises.

(B) On request by the Water Superintendent, or his authorized representative, the consumer shall furnish information regarding the piping system or systems or water use within the customer's premises. The consumer's premises shall be open at all reasonable times to the Water Superintendent for the verification of information submitted by the inspection consumer to the public water supply custodian regarding cross-connection inspection results.

(C) It shall be the responsibility of the water consumer to arrange periodic surveys of water use practices on his premises to determine whether there are actual or potential cross-connections to his water system through which contaminants or pollutants could backflow into his or the public water system. All cross-connection control or other plumbing inspections must be conducted in accordance with all applicable statutes and/or regulations.

(D) It is the responsibility of the water consumer to prevent backflow into the public water system by ensuring that:

1. All cross-connections are removed; or approved cross-connection control devices are installed for control of backflow and back-siphonage.

2. Cross-connection control devices shall be installed in accordance with the manufacturer's instructions.

3. Cross-connection control devices shall be inspected at the time of installation and at least annually by a person approved by the Village of Lena as a cross-connection control device inspector (CCDI). The inspection of mechanical devices shall include physical testing in accordance with the manufacturer's instructions.

4. Testing and Records

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

(b) Records submitted to the community public water supply shall be available for inspection by Agency personnel.

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

(d) A maintenance log shall be maintained and include:

- (1) date of each test;
- (2) name and approval number of person performing the test;
- (3) test results;
- (4) repairs or servicing required;
- (5) repairs and date completed; and
- (6) servicing performed and dated completed.

SECTION 18-97: WHERE PROTECTION IS REQUIRED

(A) An approved backflow device shall be installed on all connections to the public water supply as described in the Plumbing Code, and the Agency's regulations. In addition, an approved backflow prevention device shall be installed on each service line to a consumer's water system servicing premises, where in the judgment of the Water Superintendent, actual or potential hazards to the public water supply system exist.

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

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

(C) An approved backflow device shall be installed on all connections to the public water supply as described in the Plumbing and the State Agency's regulations. In addition, an approved backflow prevention device shall be installed on each service line to a consumer's water system serving, but not necessarily limited to, the following types of facilities unless the Water Superintendent determines that no actual or potential hazard to the public water supply system exists:

1. Hospitals, mortuaries, clinics, nursing homes.
2. Laboratories.
3. Piers, docks, waterfront facilities.
4. Sewage treatment plants, sewage pumping stations or storm water pumping stations.
5. Food or beverage processing plants.
6. Chemical plants.
7. Metal plating industries.
8. Petroleum processing or storage plants.
9. Radioactive material processing plants or nuclear reactors.
10. Car Washes.
11. Pesticide, or herbicide or extermination plants and trucks.
12. Farm service and fertilizer plants and trucks.

SECTION 18-98: TYPE OF PROTECTION REQUIRED

(A) The type of protection required under these regulations shall depend on the degree of hazard which exists as follows:

1. An approved fixed proper air gap separation shall be installed where the public water supply system may be contaminated with substance that could cause a severe health hazard.
2. Double check valve assemblies shall be inspected and tested at time of installation and at least annually thereafter, and required service performed within five (5) days.

3. Reduced pressure principle backflow prevention assemblies shall be tested at the time of installation and at least annually or more frequently if recommended by the manufacturer, and required service performed within five (5) days.

(B) Testing shall be performed by a person who has been approved by the Agency as competent to service the device. Proof of approval shall be in writing.

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

(D) A maintenance log shall be maintained and include”:

1. date of each test or visual inspection;
2. name and approval number of persons performing the test or visual inspection;
3. test results;
4. repairs or servicing required;
5. repairs and date completed; and,
6. servicing performed and date completed.

(E) Whenever backflow prevention devices required by these regulations are found to be defective, they shall be repaired or replaced at the expense of the consumer without delay as required by Section 9A.

(F) Backflow prevention devices shall not be bypassed, made inoperative, removed or otherwise made ineffective without specific authorization by the Water Superintendent.

SECTION 18-100: USE OF AUXILIARY WATER SYSTEMS

Auxiliary Water Systems shall be used only when:

1. Emergency conditions temporarily disable the Public Water Supply System and the Public Water Supply System is unable to supply water to the user having an Auxiliary Water System.
2. The Village of Lena, acting through a duly authorized agent, gives written permission authorizing the use of the Auxiliary Water System. The Village of Lena shall clearly state the time period when use of the Auxiliary Water System will be allowed.

SECTION 18-101: BOOSTER PUMPS

(A) Where a booster pump has been installed on the service line to or within any premises such pump shall be equipped with a low pressure cut-off device designed to shut-off the booster pump when the pressure in the service line on the suction side of the pump drops to 20 psi or less.

(B) It shall be the duty of the water consumer to maintain the low pressure cut-off device in the proper working order and to certify to the Water Superintendent, at least once a year that the device is operable.

SECTION 18-102: VIOLATIONS

(A) The Water Superintendent shall deny or discontinue after reasonable notice to the occupants thereof, the water service to any premises therein any backflow prevention device required by these regulations is not installed, tested, maintained and repaired in a manner acceptable to the Water Superintendent, or if it is found that the backflow prevention device has been removed or bypassed, or if an unprotected cross-connection exists on the premises, or is a low pressure cut-off required by these regulations is not installed and maintained in working order.

(B) Water service to such premises shall not be restored until the consumer has corrected or eliminated such conditions or defects in conformance with these regulations and to the satisfaction of the Water Superintendent, and the required reconnection fee is paid.

(C) Water service to such premises shall not be restored until the consumer has corrected or eliminated such conditions or defects on the conformance with these Regulations and to the satisfaction of the Water Superintendent.

(D) Neither the Village of Lena, the Water Superintendent, or its agents or assigns shall be liable to any customers or Village of Lena for any injury, damages or lost revenues which may result from termination of said customer's water supply in accordance with the terms of this ordinance, whether or not said termination of the water supply was with or without notice.

(E) The consumer responsible for back-siphoned material or contamination through backflow, if contamination of the potable water supply system occurs through an illegal cross-connection or an improperly installed, maintained or repaired device, or a device, which has been bypassed, must bear the cost of clean-up of the potable water supply system.

(F) Any person found to be violating any provision of this Ordinance shall be served with written notice stating the notice of the regulation and providing a reasonable time limit for the period of time stated in such notice, permanently cease all violation.

(G) Any person violating any of the provisions of this Ordinance in addition to the fine provided shall become liable to the Village by reason of such violation, whether the same was caused before or after notice.