**CHAPTER 38: UTILITIES**

**CHAPTER** **38:** **UTILITIES**

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***ARTICLE I. IN GENERAL***

**38‑1 PENALTY.**

Any violation of this chapter subjects the offender to a civil penalty of $500, as provided in  1‑6.

(2001 Code,  38‑1)

**38‑238‑30 RESERVED.**

***ARTICLE II. WATER SYSTEM***

***Statutory reference:***

*Authority to regulate public enterprises, see G.S.  160A‑311 et seq.*

**38‑31 BOARD SUPERVISION.**

The water system of the town shall be under the direct supervision and control of the Board of Commissioners and the Town Manager. The Board, and with its supervision, the Town Manager may from time to time make rules and regulations not inconsistent with this chapter as they may deem necessary.

(1970 Code,  8‑1; 2001 Code,  38‑31)

**38‑32 APPLICATION FOR PERMIT FOR WATER.**

All applications for the use of water must be made at the town office in the manner prescribed by the Town Manager or his or her authorized agent. The application, whether oral or written, when approved shall be a contract to take the supply of water for not less than one year unless a shorter term is specifically agreed upon, and shall bind the applicant, so long as the water is taken, to pay the town the established rate and comply with all reasonable rules and regulations prescribed by the town.

(1970 Code,  8‑3; 2001 Code,  38‑32)

**38‑33 CONNECTIONS.**

(A) The town will furnish all material and make all connections to the water mains and install all water service pipes from the main to the inside of the property line. Each separate business, residence or other structure shall have a separate water connection.

(B) All plans for private fire protection shall be submitted to and a permit obtained from the Town Manager before installations or extensions to existing installations are made. No person shall be allowed to make a cross connection between the Water Departments supply and a private well, spring or other source. There shall be no cross connection between the town water line and air line used for washing automobiles or for any other purpose. Where water passes through the recirculating systems, such as cooling towers and the like, there shall be no physical connection between the waterworks system and the pressure lines from the recirculating system.

(1970 Code,  8‑4; 2001 Code,  38‑33)

***Statutory reference:***

*Authority to require water service connection, see G.S.  162-6*

**38‑34 METERS REQUIRED.**

No person within or without the corporate limits of the town shall connect with the town water system or with the water lines belonging to any person connected with the town system unless a meter approved by the town for measuring the amount or quantity of water used is installed in conjunction with the connection.

(1970 Code,  8‑5; 2001 Code,  38‑34)

**38‑35 MAINTENANCE OF CONNECTIONS.**

There shall be installed on each line at a convenient place a corporation stop for the control of the water service by the property owner, or his or her agent or his or her tenant. The pipe and connections in the streets shall be maintained by the town without expense to the consumer or owner of the property. All fixtures within the premises must be kept in repair by the property owner or consumer.

(1970 Code,  8‑6; 2001 Code,  38‑35)

**38‑36 WORK ON PRIVATE PROPERTY.**

(A) The property owner shall be responsible for installing a water line from the property line to connect with the towns system.

(B) All water lines, fixtures and plumbing shall be installed by a plumber licensed to engage in plumbing work in the town by the state; and all material used in the installation shall be approved by the town.

(C) Water shall not be turned on at any premises until the installation on private property has been inspected and approved by the town.

(1970 Code,  8‑7; 2001 Code,  38‑36)

**38‑37 WATER SERVICE CHARGES.**

Charges for water service, connections, amounts of water used and any other charge or fee shall be in accordance with the schedule of rates and charges determined by the Board of Commissioners from time to time, which shall be filed in the town office with the Town Manager.

(1970 Code,  8‑8; 2001 Code,  38‑37)

**38‑38 WATER SERVICE CHARGES.**

All businesses, residences and other structures which are adjacent to town water lines shall be charged at least the minimum billing rate as set from time to time for water. This billing rate shall be applicable even though water connections are not actually connected.

(2001 Code,  38‑38) (Ord. passed 1‑1‑1976)

***Statutory reference:***

*Authority to fix and enforce rates, see G.S.  160A‑314*

**38‑39 PAYMENT OF WATER CHARGES; DISCONTINUANCE OF SERVICE.**

(A) Water meters shall be read monthly, and bills for water charges shall be due and payable on or before the 15th of each month. If the bill is not paid by the 25th of the month and a nonpayment fee will be assessed and service can be discontinued. Service will remain disconnected until all fees are paid. No services will be disconnected between 5:00 p.m. on Thursday and 8:00 a.m. on Monday.

(B) For purposes of this section, a ***CUSTOMER*** shall be a person, a business, the same family or living unit at the same address, a business that consists of the same ownership or related ownership whether the name has changed or not, or any other circumstance where the primary makeup of the household or business remains the same.

(C) When a customer has service shut off for non-payment by the town, a disconnection charge as set from time to time and contained in the annual budget ordinance shall be assessed to that account.

(D) To have the service reinstated, a reconnection fee as set from time to time and contained in the annual budget ordinance shall be assessed, which shall be paid along with the disconnection fee.

(E) In the event of reconnection after a second disconnection caused by non-payment within any 12‑month period, a deposit shall be required equal to the largest previous outstanding bill for that customer or the minimum deposit amount as set from time to time and contained in the annual budget ordinance whichever is greater, regardless of whether the customer owns the property or is renting.

(F) The meter shall be re‑read prior to reconnect to assure the meter was not subject to tampering.

(G) If meters or hydrants are tampered with in any way, the Police Department will be notified immediately and a tampering fee of an amount as determined in the annual budget ordinance will be charged to the customer. Tampering includes the turning on or off of water meters or hydrants without prior consent, attempting to alter the meter or hydrant in any way or cause damage to either the hydrant or meter. There will be no exceptions to this policy.

(H) A meter charge as set from time to time and contained in the annual budget ordinance will also be assessed if the meter has to be pulled from the customer because of tampering. In addition, any other costs incurred by the town to remove and replace the meter will be added to this meter charge.

(1970 Code,  8‑9; 2001 Code,  38‑39) (Ord. 1997‑09, passed 7‑8‑1997; Ord. 2008-07-01, passed 7‑1‑2008)

**38‑40 UNLAWFUL TO USE WATER WHEN SERVICE DISCONNECTED.**

It shall be unlawful for any person to turn on water service which has been disconnected by the town under the provisions of this article. When service has been discontinued for non-payment of water charges, the Town Manager or his or her authorized agent may order the corporation cock or the water meter to be removed if, in his or her opinion, it is necessary to prevent the further use of water.

(1970 Code,  8‑10; 2001 Code,  38‑40)

**38‑41 AUTHORITY TO TEMPORARILY DISCONTINUE SERVICE.**

The town reserves the right at any time to shut off water in any main in case of accident or damage or for the purpose of making connections, alterations or repairs.

(1970 Code,  8‑11; 2001 Code,  38‑41)

**38‑42 UNAUTHORIZED USE OF WATER.**

It shall be unlawful for any person to fill any lake, pool, pond or other reservoir or use a stream of water larger than two inches for washing or flushing purposes without permission from the Town Manager or his or her authorized agent. It shall be unlawful to supply or sell water, either before or after use, to other persons or families; nor shall any person take away or carry away water from any hydrant, public fountain or other outlet without the consent of the Town Manager. The fire hydrants are for the use of the Fire Department and are not to be used by any other person for any other purpose without permission from the Town Manager.

(1970 Code,  8‑12; 2001 Code,  38‑42)

**38‑43 DAMAGING OR TAMPERING WITH SYSTEMS PROHIBITED.**

It shall be unlawful for any person other than a duly authorized employee of the town to tamper with, manipulate, damage, remove, obstruct or otherwise harm the water mains, service lines or other apparatus or appurtenances which are a part of the water system of the town.

(1970 Code,  8‑14; 2001 Code,  38‑43)

**38‑44 TESTING WATER METER.**

Any consumer of town water may have a test of his or her water meter made upon payment in advance of a fee as set from time to time and contained in the annual budget ordinance for any meter one inch or less in size. The fee for test of meters larger in size than one inch shall be the actual cost of the test, the cost to be paid in advance after being ascertained upon application to the Town Manager. If the test shows the meter to be defective, the fee paid for the test shall be returned to the person paying the fee. A defective meter is one which registers more than 2‑1/2% too fast, that is, more than 2‑1/2% more water than it should.

(1970 Code,  8‑15; 2001 Code,  38‑44)

**38‑45 UNAUTHORIZED CLIMBING OF ELEVATED TANKS; CONTAMINATION.**

It shall be unlawful for any person other than an authorized employee of the town to climb or attempt to climb any elevated tank belonging to the town or to contaminate any portion of the towns water supply, wherever it may be stored, by throwing trash or any other substance into or around the water supply.

(1970 Code,  8‑16; 2001 Code,  38‑45)

**38‑46 SUPERINTENDENT.**

The Town Manager shall appoint a Superintendent, who, subject to the supervision and control of the Town Manager and the Board of Commissioners, shall operate the Water Department. The Superintendent shall perform the duties as may be prescribed by ordinance or by direction of the Town Manager or the Board of Commissioners.

(1970 Code,  8‑2; 2001 Code,  38‑46)

***Cross-reference:***

*Officers and employees, see  2‑91 et seq.*

**38‑47 WATER CONSERVATION.**

(A) *General.* A water shortage shall be deemed to exist when water demand by customers connected to the towns water system reaches the point where continued or increased demand will equal or exceed the system supply and transmission capabilities. When demand results in the condition whereby customers cannot be supplied with water to protect their health and safety, then demand must be substantially curtailed to relieve the water shortage.

(B) *Declaration of water shortage.* In the event it appears that water demand on the towns water system may exceed supply and transmission capabilities, the Public Utilities Director may recommend to the Town Manager that voluntary water conservation measures be implemented. The Town Manager, following consultation with the Board of Commissioners, may declare a Stage I (Voluntary) Water Shortage Condition Advisory requesting voluntary water conservation by consumers. In the event that voluntary conservation measures fail to relieve the demand on the system, the town may advance to a Stage II (Mandatory) or Stage III (Emergency) Water Shortage Condition. The Town Manager, following consultation with the Board of Commissioners, may, with or without the recommendation of the Public Utilities Director, declare that a Stage II or Stage III Water Shortage Condition exists.

(C) *Stage I Water Shortage Condition.*

(1) In the event a Stage I Water Shortage Condition is declared, the following guidelines shall apply.

(a) An extensive publicity campaign will be initiated using public media and specialized methods to inform the public of an impending or existing water shortage.

(b) Conservation measures will be encouraged and recommended.

(2) In the event a Stage I Water Shortage Condition is declared, the following guidelines shall be encouraged to adhere to the following:

(a) Limit car washing to a minimum;

(b) Limit lawn and garden watering to that which is necessary for plants to survive;

(c) Do not wash down outside areas such as sidewalks, patios, parking lots, service bays or aprons and the like;

(d) Do not leave faucets running while shaving or rinsing dishes;

(e) Water shrubbery to the minimum required, reusing household water when possible;

(f) Limit uses of clothes washers and dishwashers and when used, operate fully loaded;

(g) Use of showers for bathing, rather than bathtub, and limit showers to no more than four minutes;

(h) The use of disposable and biodegradable dishes is encouraged;

(i) The use of flow restrictive and water‑saving devices;

(j) Limit hours of operation of water‑cooled air conditions; and

(k) All residents, business and institutions are requested to temporarily delay new landscape work until the water shortage has ended.

(D) *Stage II Water Shortage Condition.*

(1) In the event the Town Manager issues a declaration of a Stage II Water Shortage Condition, then it shall be unlawful for any person, firm or corporation to use or permit the use of water from the towns water system for any purpose hereinafter set forth, until the times as the declaration of water shortage has been rescinded. In exercising the authority for declaring a water shortage condition, consideration shall be given to water storage levels, available sources of supply, available usable storage on hand, draw‑down rates, the projected supply capability, outlook for precipitation, daily water use patterns and availability of water from other sources.

(2) In the event that a Stage I Water Shortage Condition is in effect and the elevated tank drops to 18 feet or less of storage and the ground storage tank drops to seven feet or less of storage for more than two hours, or 50% of the system wells run for more than 12 hours per day for three consecutive days or the Board of Commissioners determines it to be needed, a Stage II Advisory may be proclaimed. In addition to the voluntary guidelines already in effect, it shall be unlawful to use water supplied by the towns water system in the following manner:

(a) To water lawns, grass, shrubbery, trees, flowers and vegetable gardens, except in accordance with the following schedule set forth below for specific areas of the town. The watering shall be done by handheld hose or container or drip irrigation system only;

(b) Addresses ending with an odd number (1, 3, 5, 7, 9): water on odd‑numbered dates. Addresses ending with an even number (2, 4, 6, 8): water on even‑numbered dates;

(c) To fill newly constructed swimming and/or wading pools or refill swimming and/or wading pools which have been drained;

(d) To wash automobiles, trucks, trailers, boats, airplanes or any other type of mobile equipment, including commercial washing;

(e) To wash down outside areas such as streets, driveways, service station aprons, parking lots, office buildings, exteriors of existing or newly constructed homes or apartments, sidewalks or patios, or to use water for other similar purposes;

(f) To use water from public or private fire hydrants for any purpose other than fire suppression or other public emergency;

(g) To operate or induce water into any ornamental fountain, pool or pond or other structure making similar use of water;

(h) To serve drinking water in restaurants, cafeterias or other food establishments, except upon request;

(i) To operate water‑cooled air conditioners or other equipment that does not recycle cooling water, except when health and safety are adversely affected; and

(j) To use water for any unnecessary purpose or to intentionally waste water.

(E) *Stage III Water Shortage Condition.*

(1) In the event the Town Manager issues a declaration of Stage III Water Shortage Condition, then it shall be unlawful for any person, firm or corporation to use or permit the use of water from the towns water system for any purpose hereinafter set forth until the time as the declaration of water shortage has been rescinded. In exercising the authority for declaring a water shortage condition, consideration shall be given to water storage levels and available sources of supply, available usable storage on hand, draw‑down rates, the projected supply capability, outlook for precipitation, daily water use patterns and availability of water from other sources.

(2) In the event a Stage I or Stage II Water Shortage Condition exists and the elevated storage tank drops to 12 feet or less and the ground storage tank drops to five feet or less for more than two hours, or if a 60% reduction in normal well levels is noted in one or more of the production wells, if the pump times of one or more of the wells increase 60% in order to maintain previous rates or the Board of Commissioners determines it to be needed, then a Stage III Water Shortage may be declared. In addition to the restrictions for Stage I and Stage II Water Shortage Conditions, the following restrictions shall also apply:

(a) To induce water into any pool;

(b) Use water outside a structure for any use other than an emergency involving a fire;

(c) Fire protection to be maintained by drafting of ponds, rivers and the like whenever possible;

(d) The use of disposable utensils and plates is encouraged and recommended at all eating establishments; and

(e) To operate an evaporative air conditioner which recycles water, except during the operating hours of business.

(F) *Lifting of restriction imposed during a water shortage.*

(1) Water shortage conditions will expire when the Town Manager, after consultation with the Board of Commissioners and the Public Utilities Director, deems that the condition which caused the alert has abated.

(2) The expiration or cancellation of a water shortage declaration shall be promptly and extensively publicized.

(G) *Penalties.* Any violation of the provisions of this section shall constitute a misdemeanor, punishable upon conviction by a fine not to exceed $1,000 or imprisonment not exceeding 30 days as provided by G.S.  14‑4 and, in addition thereto, the violation may be enjoined and restrained as provided in G.S.  153A‑123.

(H) *Discontinuance of service.* Pursuant to the provisions of G.S.  162A‑88, and this article, service may be temporarily discontinued for willful disregard of this section and a reconnect fee as determined by the annual budget ordinance may be imposed before restoration of service. In the event of continued gross non‑compliance of this section, the removal of the meter will be deemed proper and service will be discontinued and all tap fees and deposits forfeited. Reconnection will only be made by payment of past due and current due amounts and new tap fees and deposits shall be paid.

(I) *Variances.* The Town Manager, or his or her designee, may, in writing, grant temporary variance for existing water uses otherwise prohibited under this plan if it is determined that failure to grant the variance would cause an emergency condition adversely affecting the health, sanitation or fire protection for the public or the person requesting the variance meets certain conditions.

(Ord. 2007‑10‑01, passed 10‑9‑2007)

**38‑4838‑80 RESERVED.**

***ARTICLE III. SEWER SYSTEM***

***Statutory reference:***

*Authority to regulate public enterprises, see G.S.  160A‑311 et seq.*

**38‑81 DEFINITIONS.**

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning.

***BOD (***denoting ***BIOCHEMICAL OXYGEN DEMAND).*** The quantity of oxygen utilized in the biochemical oxidation of organic matter as measured by standard laboratory methods.

***COD (***denoting ***CHEMICAL OXYGEN DEMAND).*** The quantity of equivalent oxygen utilized in the chemical oxidation of organic matter as measured by standard laboratory methods, expressed in mg/l.

***COLOR.*** The true color due to substances in solution which cause any variation in the hue of the receiving stream.

***DOMESTIC SEWAGE.*** Water‑carried waste from bathrooms, toilet rooms, kitchens and home laundries.

***EXCESSIVE RADIATION DOSE.*** A dose of radiation in excess of the maximum permissible dose.

***GARBAGE.*** Solid wastes from the preparation, cooking and dispensing of food that has been shredded to a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one‑half inch in any dimension.

***INDUSTRIAL WASTES.*** The water‑carried wastes from institutional, commercial and industrial processes and operations as distinct from domestic sewage.

***IOD (***denoting ***IMMEDIATE OXYGEN DEMAND).*** The quantity of oxygen utilized by an industrial waste in excess of that normally attributable to sewage as measured by using standard laboratory methods, expressed in mg/l .

***MAXIMUM PERMISSIBLE DOSE.*** A dose of radiation to any part of the body, internal or external or both, that in the light of present knowledge is not expected to cause appreciable bodily injury to a person at any time during his or her lifetime.

***pH.*** The logarithm (base 10) of the reciprocal of the hydrogen ion concentration, and indicates the degree of acidity or alkalinity of a substance. A ***pH*** value of 7.0 is neutral, above 7.0 is alkaline and below 7.0 is acid.

***ppm.*** Parts per million by weight expressed in pounds.

***PUBLIC SEWER.*** A sewer in which all owners of abutting properties have equal rights and is controlled by the town.

***RECEIVING STREAM.*** The body of water, stream or watercourse receiving the discharge water from the waste treatment plant or formed by the waters discharged from the waste treatment plant.

***SANITARY SEWER.*** A sewer which carries sewage or industrial wastes.

***SEWAGE.*** A combination of the water‑carried wastes from residences, business buildings, institutions and industrial establishments.

***SEWER.*** A pipe or conduit for carrying sewage.

***SEWER SYSTEM.*** All facilities for collecting, pumping, treating and disposing of sewage.

***STANDARD METHODS.*** The latest edition of *Standard Methods for the Examination of Water, Sewage and Industrial Wastes*, published by the American Public Health Association.

***STORM SEWER AND STORM DRAIN.*** A sewer which carries storm waters or surface waters and drainage, but excludes sewage and industrial wastes.

***SUSPENDED SOLIDS.*** Solids that either float on the surface of or are in suspension in water, sewage or other liquids, and which are removable by laboratory filtering.

***WASTE TREATMENT PLANT.*** Any arrangement of devices and structures used for treating and disposing of sewage.

(2001 Code,  38‑81) (Ord. passed 8‑10‑1976)

***Cross-reference:***

*Definitions generally, see  1‑2*

**38‑82 PENALTIES.**

(A) Any person found to be violating any provision of this article, except  38‑91 shall be served by the town with written notice stating the nature of the violation and providing a reasonable time limit for its satisfactory correction. The offender within the period of time stated in the notice shall permanently cease all violations.

(B) Any person who shall continue any violation beyond the time limit provided in subsection (A) of this section shall be subject to a civil penalty as contained in  1‑6.

(C) Any person violating any of the provisions of this article shall become liable to the town for any expense, loss or damage occasioned by the town by reason of the violation.

(2001 Code,  38‑82) (Ord. passed 8‑10‑1976)

**38‑83 SUPERVISION.**

The sewer system of the town shall be under the general control and supervision of the Board of Commissioners, and the Town Manager and the system shall be regulated and operated as they shall from time to time direct. The Town Manager shall appoint a Wastewater Supervisor, who shall be responsible for the general supervision of the system.

(1970 Code,  8‑21; 2001 Code,  38‑83)

**38‑84 SEWER CONNECTION REQUIRED.**

Every person owning a dwelling, building or other structure which is used for human habitation or occupancy within the town, situated on a lot or parcel of land which abuts or adjoins a street or other public way along which is located a sanitary sewer shall connect the dwelling, building or structure to the sewer system; however, a connection shall not be required to the system unless the lot or parcel of land on which the dwelling, building or other structure is situated is accessible within 200 feet; but no person shall be required to cross the private property of any other person to make the connection. Where connections are required, all toilets, sinks and other plumbing fixtures shall be installed, arranged or rearranged to drain into the sanitary sewer. Properties which are not accessible to the sewer system for the reason that they are more than 200 feet from the system shall install septic tanks or other facilities as provided for by ordinance of the town or as required by the County Board of Health.

(1970 Code,  8‑22; 2001 Code,  38‑84)

***Statutory reference:***

*Authority to require sewer connections, see G.S.  160A‑317*

**38‑85 PERMIT FOR CONNECTION REQUIRED; APPEAL FOR REFUSAL.**

(A) No person shall make any connection to the sewer system unless and until a permit has been issued by the town. Permits shall be issued for connections only after the Town Manager or other authorized official has determined the type of connection required, the type of waste to be placed in the system and has approved the plumbing system to be installed within the dwelling, building or structure.

(B) Any permittee refused a permit may request in writing within ten days of notice of refusal a hearing before the Board of Commissioners. The Board shall conduct a review hearing within a reasonable time.

(1970 Code,  8‑23; 2001 Code,  38‑85)

**38‑86 SEWER CONNECTION AND SERVICE CHARGES.**

Prior to the time a permit for a sewer connection is issued, the connection charge shall be paid in full. Connection charges and charges for sewer service shall be determined by the Board of Commissioners, and all current charges for connections and service shall be filed with the Town Manager and the Town Clerk.

(1970 Code,  8‑24; 2001 Code,  38‑86)

**38‑87 SEPARATE CONNECTIONS REQUIRED.**

Each separate dwelling, structure or other building shall have a separate connection to the sewer system; but apartments or other multiple use or occupancy buildings may have one combined connection.

(1970 Code,  8‑25; 2001 Code,  38‑87)

**38‑88 DETERMINATION OF CHARACTER AND CONCENTRATION OF WASTES.**

(A) The industrial waste of each person discharging the wastes into the public sewers shall be subject to periodic inspection and a determination of character and concentration of the wastes shall be made quarterly or more often as may be deemed necessary by the town. The inspection and tests shall also be made immediately after any process change which may affect the quantity or quality of the wastes discharged.

(B) Samples shall be collected in a manner as to be representative of the actual quality of the waste. Laboratory methods used in the examination of the waste shall be those set forth in *Standard Methods*, a copy of which is on file with the Town Clerk for inspection by any interested parties.

(2001 Code,  38‑88) (Ord. passed 8‑10‑1976)

**38‑89 POWERS AND AUTHORITY FOR INSPECTION.**

(A) The town through its authorized agents shall be permitted to enter upon all properties at all reasonable times for the purpose of inspection, observation, measurement, sampling and testing in accordance with the provisions of this article.

(B) All tests and analyses of the characteristics of waters and wastes to which reference is made in this article shall be made in accordance with the procedure given in *Standard Methods for the Examination of Water, Sewage and Wastewater*, 20th edition, published by the American Public Health Association, the American Water Works Association, and the Water Environment Federation. The tests and analyses shall be determined at the control manhole provided for in  38‑92, or at the point of discharge of any waters or wastes at the site of their origin on the premises of any person discharging the wastes into the sanitary sewers.

(2001 Code,  38‑89) (Ord. passed 8‑10‑1976)

**38‑90 MEASUREMENT AND FLOW.**

(A) The volume of flow used in determining the total discharge of industrial wastes shall be based upon:

(1) Metered water consumption as shown in the records of meter readings maintained by the town. If a person discharging wastes into the public sewers produces evidence to the town that more than 10% of the total annual volume of water used for all purposes does not reach the public sewers, an estimated percentage of total water consumption to be used in determining industrial waste discharge may be agreed upon between the town and the person discharging the industrial wastes into the public sewer; and

(2) At the individual dischargers option, other flow measuring devices which measure the actual volume of wastewater discharged to the sewer. The devices shall be accessible and safely located, and the measuring system shall be installed in accordance with plans approved by the town. The metering system shall be provided by the owner at his or her expense and shall be maintained continuously in satisfactory operation by the owner at his or her expense.

(B) Where any person discharging wastes to the sanitary sewers procures all or any part of his or her water supply from sources other than the town, the person discharging the waste shall install and maintain, at his or her expense, sewer meters of a type approved by the town for the purposes of determining the proper volume of waste discharged to the sewers.

(2001 Code,  38‑90) (Ord. passed 8‑10‑1976)

**38‑91 PROHIBITED USE OF PUBLIC SEWERS,**

(A) No person shall discharge or deposit any of the following waste materials into any town sanitary sewer:

(1) Any clothing, rags, textile remnants or waste, cloth or scraps, except fibers of scrap that will pass through a one‑fourth‑inch mesh screen or its equivalent in screening ability;

(2) Any liquid or vapor having a temperature higher than 150°F;

(3) Any water or waste which may contain more than 100 mg/l of fat, oil or grease;

(4) Any gasoline, benzene, naphtha, fuel oil, motor oil or other flammable or explosive liquid, solid or gas;

(5) Any garbage that has not been properly shredded;

(6) Any ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, paunch manure or any other solid or viscous substance capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewer system;

(7) Any waters or wastes in which the suspended solids exceed 250 mg/l, except as provided in  38‑92;

(8) Any water or wastes in which the BOD exceeds 250 mg/l, except as provided in  38‑92;

(9) Any waters or wastes in which the COD exceeds 600 mg/l, except as provided in  38‑92;

(10) Any waters or wastes in which the IOD exceeds 5.0 mg/l, except as provided in  38‑92;

(11) Any waters or wastes having a stabilized pH lower than 5.5 or higher than 9.0 or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewer system except as provided in  38‑92;

(12) Any waters or wastes containing measurable amounts of chromium, zinc, nickel, copper or other heavy metals which are in an ionic or chemically active state;

(13) Any waters or wastes containing cyanide or other poisonous substances;

(14) Any waste containing toxic, poisonous or other substances in sufficient quantities to interfere with the biological processes used in the waste treatment works or that will pass through the waste treatment works and harm persons, livestock or aquatic life utilizing the receiving stream;

(15) Any noxious or malodorous gas or substance capable of creating a public nuisance;

(16) Any solid radioactive materials or radioactive materials in solution which can be removed by chemical means and disposed of in solid form;

(17) Any materials which form excessive amounts of scum that may interfere with the operation of the waste treatment works or cause undue additional labor in connection with its operation;

(18) Any waters or wastes containing suspended solids of a character and quality that unusual attention or expense is required to handle the materials at the waste treatment plant;

(19) Any waters or wastes containing dyes or other color of a character and in a quantity as to prevent removal by biological processes and which require special chemical treatment; and

(20) Any waters or wastes which in concentration of any given constituent or in quantity of flow exceeds for any period of duration longer than 15 minutes more than five times the average 24‑hour concentrations or flows during normal operation.

(B) No person shall discharge or cause to be discharged any storm water, surface water, groundwater, roof runoff, subsurface drainage, cooling water or unpolluted industrial or commercial process water into any sanitary sewer.

(2001 Code,  38‑91) (Ord. passed 8‑10‑1976)

**38‑92 PERMISSIVE USE OF PUBLIC SEWERS FOR INDUSTRIAL WASTE.**

(A) Any person who shall discharge any industrial wastes into the towns sanitary sewers or who desires to discharge any industrial wastes into the sewers shall make application to the town. Approval will be granted the applications when evidence is submitted by the applicant that the discharge of wastes into the public sewer will comply with this article.

(B) Persons shall provide, at their own expense, the preliminary handling as may be necessary to control the quantities and rates of discharge of the waters or wastes over a 24‑hour period. Plans, specifications and any other pertinent information relating to proposed preliminary treatment or handling facilities shall be submitted for the approval of the town; and no construction of the facilities shall be commenced until the approval is obtained in writing.

(C) Any waters or wastes discharged by any person which have the following characteristics may be admitted into the sanitary sewers when discharge is approved in writing by the town:

(1) A BOD greater than 250 mg/l;

(2) Containing suspended solids of more than 250 mg/l; or

(3) Having other characteristics prohibited in  38‑91.

(D) When the concentration of BOD or suspended solids in the industrial waste discharge to the towns sanitary sewers exceeds the limits prescribed in this section, a monthly surcharge shall be imposed upon the offending industrial user. The surcharge shall be based upon the excess pounds of BOD or suspended solids, whichever is greater, contained in the offending industrial users sewage flow when the excess is calculated using actual water flow and the difference between actual BOD or suspended solids concentration and the permissible limits of 250 ppm and 250 ppm, respectively. This surcharge shall be invoked in addition to the existing sewer service charge. The sewer surcharge shall be established by the Board of Commissioners. The surcharge shall reflect the total cost of treating the excess pounds of industrial waste, including necessary cost of administration of this article. Approval will be granted the applications for the discharge of industrial waste when evidence is submitted by the applicant that the discharge of wastes into the public sewer will comply with this article.

(E) Grease, oil and sand interceptors shall be provided when, in the opinion of the town, they are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand or other harmful, ingredients; except that, the interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be maintained by the owner at his or her expense in continuously efficient operation at all times.

(F) Notice shall be given the town when normal operations of the industry will be interrupted for 24 hours or longer, and wastes will not be available for discharge, or when a change of process is contemplated which will alter demands on the municipal treatment facilities.

(G) Where preliminary treatment or holding facilities are provided for any purpose, they shall be maintained continuously in satisfactory and effective operation by the owner at his or her expense.

(H) Any person discharging industrial wastes into the public sewers may be required to construct and maintain a suitable control or inspection manhole either downstream from any treatment, storage or other approved works or if pretreatment works are not required, at the point where the wastes enter the public sewer. The manhole shall be located so as to be readily accessible and shall be constructed in a manner as may be approved by the town so as to facilitate the inspection or measuring as may be necessary for proper sampling and/or control of the waste discharged.

(2001 Code,  38‑92) (Ord. passed 8‑10‑1976)

**38‑93 MAINTENANCE IN REPAIR OF CONNECTIONS.**

Whenever any service to any building or premises becomes clogged, broken, out of order, or in any condition detrimental to the use of the sewer, the owner, agent or occupant having charge of the building or premises shall be responsible for the immediate renewal or repair of the system necessary to maintain an uninterrupted sanitary disposal system. Renewal or repair of sewer services from the main to the property line shall be made at the expense of the property owner or occupant.

(1970 Code,  8‑27; 2001 Code,  38‑93)

**38‑94 DAMAGING OR OBSTRUCTING SYSTEM PROHIBITED.**

It shall be unlawful for any person to damage, tamper with or otherwise do harm to the mains, pipes, apparatus or other part of the sewer system, or to place or cause to be placed any object of any nature whatsoever into the system which will block, obstruct or impede its normal operation or prevent, hinder or damage the towns disposal facilities.

(1970 Code,  8‑28; 2001 Code,  38‑94)

**38‑9538‑100 RESERVED.**

***ARTICLE IV. BACKFLOW AND CROSS-CONNECTIONS***

**38‑101 INTRODUCTION.**

(A) The purpose of this article is to define the town as the water purveyor in the elimination of all cross‑connections within its public potable water supply.

(B) This article shall apply to all consumers connected to the towns public potable water supply.

(C) This article will comply with the Federal Safe Drinking Water Act being 42 U.S.C. 300f et seq. (Pub. Law No. 93‑523), the State Administrative Code (Title 15A, Subchapter 8C) and the State Building Code (Volume II) as they pertain to cross‑connections with the public water supply.

(D) In accordance with G.S.  160A‑12, the town is authorized and empowered to adopt this article.

(Ord. 2009‑02‑01, passed 2‑17‑2009)

**38‑102 OBJECTIVES.**

The specific objectives of this article are as follows:

(A) To protect the public potable water supply of the town from the possibility of contamination or pollution by isolating within the consumers water system the contaminants, waterborne health hazards and other significant pollutants which could backflow into the public water systems;

(B) To eliminate or control existing cross‑connections, actual or potential, between the consumers potable water system(s) and non-potable water system(s), plumbing fixtures and industrial piping systems; and

(C) To provide a continuing inspection program of cross‑connection control which will systematically and effectively control all actual or potential cross‑connections which may be installed in the future.

(Ord. 2009‑02‑01, passed 2‑17‑2009)

**38‑103 DESIGNATION OF RESPONSIBILITY.**

(A) *Health agencys responsibility.*

(1) The State Department of Environment and Natural Resources (Division of Environmental Health) has the responsibility for promulgating and enforcing laws, rules, regulations and policies applicable to all water purveyors in the state in carrying out an effective cross‑connection control program.

(2) The Division of Environmental Health also has the primary responsibility of ensuring that the water purveyor operates a public potable water system free of actual or potential sanitary hazards, including unprotected cross‑connections. The Division of Environmental Health also has the responsibility of ensuring that the water purveyor provides an approved water supply at the service connection to the consumers water system and, further, that the purveyor requires the installation, testing and maintenance of an approved backflow prevention assembly on the service connection when required.

(B) *Towns responsibility.*

(1) Except as otherwise provided herein, the town is the water purveyor and is responsible for ensuring a safe water supply begins at the source and includes all of the public water distribution system, including the service connection, and ends at the point of delivery to the consumers water systems. In addition, the town shall exercise reasonable vigilance to ensure that the consumer has taken the proper steps to protect the public potable water system. The town will determine the degree of hazard or potential hazard to the public potable water system, the degree of protection required, and will ensure proper containment protection through an ongoing inspection program. The town will identify all facilities where approved backflow prevention assemblies are required to be installed.

(2) When it is determined that a backflow prevention assembly is required for the protection of the public system, the town shall require the consumer, at the consumers expense, to install an approved backflow prevention assembly at service connection, to test immediately upon installation and thereafter at frequency as determined by the town, to properly repair and maintain assembly or assemblies and to keep adequate records of each test and subsequent maintenance and repair, including materials and/or replacement parts.

(3) *Plumbing inspectors responsibility.*

(a) The Plumbing Inspection Departments of the town have the responsibility to not only review building plans and inspect plumbing as it is installed but, they have the explicit responsibility of preventing cross‑connections from being designed and built into the plumbing system within its jurisdiction. Where the review of building plans suggests or detects the potential for cross‑connections being made an integral part of the plumbing system, the Plumbing Inspector has the responsibility, under the State Building Code, for requiring that the cross‑connections be either eliminated or provided with backflow prevention equipment approved by the State Building Code.

(b) The Plumbing Inspectors responsibility begins at the point of delivery downstream of the first installed backflow prevention assembly and continues throughout the entire length of the consumers water system. The Inspector should inquire about the intended use of water at any point where it is suspected that a cross‑connection might be made or where one is actually called for by the plans. When it is discovered, it shall be mandatory that a suitable, approved backflow prevention assembly approved by the State Building Code, State Department of Environment and Natural Resources and the town be required by the plans and be properly installed.

(4) *Consumer responsibility.* The consumer has the primary responsibility of preventing pollutants and contaminants from entering his or her potable water system or the public potable water system. The consumers responsibility starts at the point of delivery from the public potable water system and includes all of his or her water system. The consumer, at his or her expense, shall install, operate, test and maintain approved backflow prevention assemblies as directed by the town. The consumer shall maintain accurate records of tests and repairs made to backflow prevention assemblies and shall maintain the records for a minimum period of three years. The records shall be on forms approved by the town and shall include the list of materials or replacement parts used. Following any repair, overhaul, re‑piping or relocation of an assembly, the consumer shall have it tested to ensure that it is in good operating condition and will prevent backflow. Tests, maintenance and repairs of backflow prevention assemblies shall be made by a certified backflow prevention assembly tester.

(5) *Certified backflow prevention assembly tester responsibility.*

(a) When employed by the consumer to test, repair, overhaul or maintain backflow prevention assemblies, a certified backflow prevention assembly tester (tester) will have the following responsibilities. The tester will be responsible for making competent inspections and for repairing, or overhauling backflow prevention assemblies and making reports of the repair to the consumer and the town on forms approved by the town. The tester shall include the list of materials or replacement parts used. The tester shall be equipped with and be competent to use all the necessary tools, gauges, manometers and other equipment necessary to properly test, repair and maintain backflow prevention assemblies. It will be the testers responsibility to ensure that original manufactured parts are used in the repair of or replacement of parts in a backflow prevention assembly. It will be the testers further responsibility not to change the design, material or operational characteristics of an assembly during repair or maintenance without prior approval of the town. A tester shall perform the work and be responsible for the competency and accuracy of all tests and reports. The tester shall provide a copy of all test and repair reports to the consumer and to the town within ten business days of any completed test or repair work. A tester shall maintain records for a minimum period of three years.

(b) All certified backflow prevention assembly testers must obtain and employ backflow prevention assembly test equipment which has been evaluated and/or approved by the town. All test equipment shall be registered with the town. All test equipment shall be checked for accuracy annually (at a minimum), calibrated, if necessary, and certified to the town as to such calibration, employing an accuracy/calibration method acceptable to the town.

(Ord. 2009‑02‑01, passed 2‑17‑2009)

**38‑104 DEFINITIONS.**

For the purpose of this article, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

***AIR GAP.*** A physical separation between the free‑flowing discharge end of a potable water supply pipeline and an open or non‑pressure receiving vessel. An ***APPROVED AIR GAP*** shall be at least double the diameter of the supply pipe measured vertically above the overflow rim of the vessel in no case less than one inch (2.54 cm).

***APPROVED CHECK VALVE.*** A check valve that is drip‑tight in the normal direction of flow when the inlet pressure is at least one psi and the outlet pressure is zero. The ***CHECK VALVE*** shall permit no leakage in a direction reversed to the normal flow. The closure element (e.g., clapper, poppet or other design) shall be internally loaded to promote rapid and positive closure. An ***APPROVED CHECK VALVE*** is only one component of an approved backflow prevention assembly (i.e., pressure vacuum breaker, double‑check valve assembly, double‑check detector assembly, reduced pressure principle assembly or reduced pressure detector assembly).

***ATMOSPHERIC TYPE VACUUM BREAKER.*** Also known as the ***NON‑PRESSURE TYPE VACUUM BREAKER***. A device containing a float‑check, a check seal and an air inlet port. The flow of water into the body causes the float to close the air inlet port. When the flow of water stops the float falls and forms a check valve against backsiphonage and at the same time opens the air inlet port to allow air to enter and satisfy the vacuum. A shutoff valve immediately upstream may be an integral part of the device. An ***ATMOSPHERIC VACUUM BREAKER*** is designed to protect against a non-health hazard (isolation protection only) under a backsiphonage condition only.

***AUXILIARY WATER SUPPLY.*** Any water supply on or available to the premises other than the purveyors approved public water supply will be considered as an auxiliary water supply. These waters may be contaminated or polluted or they may be objectionable and constitute an unacceptable water source over which the water purveyor does not have sanitary control.

***BACKFLOW.*** The undesirable reversal of flow of water or mixtures of water and other liquids, gases or other substances into the distribution pipes of the potable supply of water from any source or sources. See terms ***BACKPRESSURE*** and ***BACKSIPHONAGE***.

***BACKFLOW PREVENTION ASSEMBLY ‑ TYPE A.*** An assembly used to prevent backflow into a consumer or public potable water system. The type of assembly used should be based on the degree of hazard either existing or potential (as defined herein). The types are:

(1) Double‑Check Valve Assembly (DCVA);

(2) Double‑Check Detector Assembly (Fire System) (DCDA);

(3) Pressure Vacuum Breaker (PVB);

(4) Reduced Pressure Principle Assembly (RP); and

(5) Reduced Pressure Principle‑Detector Assembly (Fire System) (RPDA).

***BACKPRESSURE.*** Any elevation of pressure in the downstream piping system (by pump, elevation of piping, or steam and/or air pressure) above the supply pressure at the point of consideration which would cause, or tend to cause, a reversal of the normal direction of flow.

***BACKSIPHONAGE.*** A form of backflow due to a reduction in system pressure which causes a sub-atmospheric pressure to exist at a site in the water system.

***CERTIFIED BACKFLOW PREVENTION ASSEMBLY TESTER.*** A person who has proven their competency to the satisfaction of the town. Each person who is certified to make competent tests, or to repair, overhaul and make reports on backflow prevention assemblies shall be knowledgeable of applicable laws, rules and regulations, shall be a licensed plumber or have at least two years experience under and be employed by a state-licensed plumber or plumbing contractor, or have equivalent qualifications acceptable to the town, and must hold a certificate of completion from an approved training program in the testing and repair of backflow prevention assemblies.

***CONSUMER.*** Any person, firm or corporation using or receiving water from the town.

***CONSUMERS POTABLE WATER SYSTEM.*** The portion of the privately-owned potable water system lying between the point of delivery and point of use and/or isolation protection. This system will include all pipes, conduits, tanks, receptacles, fixtures, equipment and appurtenances used to produce, convey, store or use potable water.

***CONSUMERS WATER SYSTEM.*** Any water system commencing at the point of delivery and continuing throughout the consumers plumbing system located on the consumers premises, whether supplied by public potable water or an auxiliary water supply. The systems may be either a potable water system or an industrial piping system.

***CONTAINMENT.*** Preventing the impairment of the public potable water supply by installing an approved backflow prevention assembly at the service connection.

***CONTAMINATION.*** An impairment of the quality of the water which creates a potential or actual hazard to the public health through the introduction of hazardous or toxic substances or waterborne health hazards in the form of physical or chemical contaminants or biological organisms and pathogens.

***CROSS‑CONNECTION.*** Any unprotected actual or potential connection or structural arrangement between a public or a consumers water system and any other source or system through which it is possible to introduce any contamination or pollution, other than the intended potable water with which the system is supplied. Bypass arrangements, jumper connections, removable sections, swivel or changeover devices and other temporary or permanent devices through which or because of which backflow can or may occur are considered to be ***CROSS‑CONNECTIONS***.

***DEGREE OF HAZARD.*** Derived from the evaluation of conditions within a system which can be classified as either a pollutional (non-health) or a contaminations (health) hazard.

***DOUBLE‑CHECK DETECTOR ASSEMBLY.*** A specially designed assembly composed of a line‑size approved double‑check valve assembly with a specific bypass water meter and a meter‑sized approved double‑check valve assembly. The meter shall register (in U.S. gallons) accurately for only very low rates of flow and shall show a registration for all rates of flow. This assembly shall only be used to protect against a non-health hazard (i.e., pollutant). Device must be approved by Foundation for Cross‑connection Control and Hydraulic Research.

***DOUBLE‑CHECK VALVE ASSEMBLY.*** An assembly composed of two independently acting, approved check valves, including tightly closing shut‑off valves attached at each end of the assembly and fitted with properly located test cocks. This assembly shall only be used to protect against a non-health hazard (i.e., pollutant). Device must be approved by Foundation for Cross‑Connection Control and Hydraulic Research.

***HEALTH AGENCY.*** The State Department of Environment and Natural Resources.

***HEALTH HAZARD.*** An actual or potential threat of contamination of a physical, chemical, biological, pathogenic or toxic nature to the public or consumers potable water system to a degree or intensity that there would be a danger to health. Examples of waterborne health hazards include, but are not limited to:

(1) Physical: radioisotopes/radionuclides;

(2) Chemical: lead, mercury and other heavy metals, organic compounds, other toxins and hazardous substances; and

(3) Biological: microorganisms and pathogens like Cryptosporidium, typhoid, cholera and E. Coli.

***INDUSTRIAL FLUIDS.*** 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, or non-health hazard if introduced into a public or consumer potable water system. The fluids may include, but are not limited to: process waters; chemicals in fluid form; acids and alkalis; oils, gases; and the like.

***INDUSTRIAL PIPING SYSTEM.*** A system used by the consumer for transmission, conveyance or storage of any fluid, solid or gaseous substance other than an approved water supply. A system would include all pipes, conduits, tanks, receptacles, fixtures, equipment and appurtenances used to produce, convey or store substances which are or may be polluted or contaminated.

***ISOLATION.*** The act of confining a localized hazard within a consumers water system by installing approved backflow prevention assemblies. (Disclaimer: the town may make recommendations, upon facility inspection, as to the usages of isolation devices/assemblies, but does not assume or have responsibility whatsoever for the installations.)

***NON-HEALTH HAZARD.*** An actual or potential threat to the quality of the public or the consumers potable water system. A ***NON-HEALTH HAZARD*** is one that, if introduced into the public water supply system could be a nuisance to water customers, but would not adversely affect human health.

***POLLUTION.*** An impairment of the 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 the aesthetic qualities of the waters for domestic use.

***POLLUTIONAL HAZARD.*** An actual or potential threat to the quality or the potability of the public or the consumers potable water system, but which would not constitute a health or a system hazard, as defined. The maximum degree or intensity of pollution to which the potable water system could be degraded under this definition would cause a nuisance or be aesthetically objectionable or could cause minor damage to the system or its appurtenances.

***POINT OF DELIVERY.*** At the back side of the meter, adjacent to the public street where the towns water distribution mains are located. The consumer shall be responsible for all water piping and control devices located on the consumers side of the ***POINT OF DELIVERY***.

***POTABLE WATER.*** Water from any source which has been approved for human consumption by the State Department of Environment and Natural Resources (NCDENR).

***PRESSURE TYPE VACUUM BREAKER.*** An assembly containing an independently operating internally loaded check valve and an independently operating loaded air inlet valve located on the discharge side of the check valve. The assembly is to be equipped with properly located test cocks and tightly closing shutoff valves attached at each end of the assembly. This assembly is designed to protect against a health hazard (i.e., contaminant) under a backsiphonage condition only.

***PUBLIC POTABLE WATER SYSTEM.*** Any publicly or privately owned water system operated as a public utility, under a current NCDENR permit, to supply water for public consumption or use. This system will include all sources, facilities and appurtenances between the source and the point of delivery such as valves, pumps, pipes, conduits, tanks, receptacles, fixtures, equipment and appurtenances used to produce, convey, treat or store potable water for public consumption or use.

***REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY.***

(1) An assembly containing within its structure a minimum of two independently acting, approved check valves, together with a hydraulically operating, mechanically independent, pressure differential relief valve located between the check valves and at the same time below the first check valve. The first check valve reduces the supply pressure to a predetermined amount so that during normal flow and at cessation of normal flow, the pressure between the checks shall be less than the supply pressure. In case of leakage of either check valve, the pressure differential relief valve, by discharge to atmosphere, shall operate to maintain the pressure between the checks less than the supply pressure.

(2) The unit shall include tightly closing shutoff valves located at each end of the assembly and each assembly shall be fitted with properly located test cocks. The assembly is designed to protect against a health hazard (i.e., contaminant). Device must be approved by Foundation for Cross‑Connection Control and Hydraulic Research.

***REDUCED PRESSURE PRINCIPLE DETECTOR ASSEMBLY.*** A specially designed assembly composed of a line‑size approved reduced pressure principle backflow prevention assembly with a specific bypass water meter and a meter‑sized approved reduced pressure principle backflow prevention assembly. The meter shall register (in U.S. gallons) accurately for only very low rates of flow and shall show a registration for all rates of flow. This assembly shall be used to protect against health hazard (i.e., contaminant). Device must be approved by Foundation for Cross‑Connection Control and Hydraulic Research.

***SERVICE CONNECTIONS.*** The terminal end of a service connection from the public potable water system (i.e., where the town loses jurisdiction and control over the water at its point of delivery to the consumers water system).

***WATER PURVEYOR.*** The consumer or operator of a public potable water system providing an approved water supply to the public.

***UNAPPROVED WATER SUPPLY.*** A water supply which has not been approved for human consumption by the NCDENR.

***USED WATER.*** Any water supplied by a water purveyor from a public water system to a consumers water system after it has passed through the point of delivery and is no longer under the control of the water purveyor.

(Ord. 2009‑02‑01, passed 2‑17‑2009)

**38‑105 RIGHT OF ENTRY.**

(A) Upon presentation of proper credentials and identification, authorized representatives from the town system shall have the right to enter any building, structure or premises during normal business hours or at, any time during the event of an emergency, to perform any duty imposed by this article. Those duties may include sampling and testing of water, or inspections and observations of all piping systems connected to the public water supply. Where a consumer has security measures in force which would require proper identification and clearance before entry into their premises, the consumer shall make necessary arrangements with the security guards so that upon presentation of suitable identification, the towns personnel will be permitted to enter without delay for the purpose of performing their specific responsibilities. Refusal to allow entry for these purposes may result in discontinuance of water service.

(B) On request, the consumer shall furnish to the town any pertinent information regarding the water supply system on the property where cross‑connections and backflow are deemed possible.

(Ord. 2009‑02‑01, passed 2‑17‑2009)

**38‑106 ELIMINATION OF CROSS‑CONNECTIONS; DEGREE OF HAZARD.**

(A) When cross‑connections are found to exist, the owner, his or her agent, occupant or tenant will be notified in writing to disconnect the same within the time limit established by the town. The degree of protection required and maximum time allowed for compliance will be based upon the potential degree of hazard to the public water supply system. If, in the judgment of the town, an imminent health hazard exists, water service to the building or premises where a cross‑connection exists may be terminated unless an air gap is immediately provided, or the cross‑connection is immediately eliminated.

(B) The maximum time limits are as follows.

(1) Cross‑connections with private wells or other auxiliary water supplies require immediate disconnection.

(2) All facilities which pose a potential health hazard to the potable water system must have a reduced pressure principle backflow prevention assembly within 60 days of notification by the town.

(3) All industrial and commercial facilities not identified as a health hazard shall be considered non-health hazard facilities. All non-health hazard facilities must install a double‑check valve assembly within 90 days of notification by the town.

(C) Water mains served by the town, but not maintained by the town shall be considered cross‑connections, with degree of hazard to be determined by the town. Degree of protection shall be based upon the degrees of hazard, as determined by the town.

(D) In the event that the town personnel do not have sufficient access to every portion of a private water system (i.e., classified research and development facilities; federal government property) to allow a complete evaluation of the degree of hazard associated with such private water systems, an approved reduced pressure principle backflow prevention assembly shall be required as a minimum of protection.

(E) No person shall fill special use tanks or tankers containing pesticides, fertilizers, other toxic chemicals or their residues from the public water system, except at a town approved location equipped with an air gap or an approved reduced pressure principle backflow prevention assembly properly installed on the public water supply.

(Ord. 2009‑02‑01, passed 2‑17‑2009)

**38-107 INSTALLATION OF ASSEMBLIES.**

(A) All backflow prevention assemblies shall be installed in accordance with the specifications furnished by town and/or in the latest edition of the State Building Code, whichever is most restrictive.

(B) All new construction plans and specifications, when required by the State Building Code and the State Division of Environment Health, shall be made available to the town for review and approval and to determine the degree of hazard.

(C) Ownership, testing and maintenance of the assembly shall be the responsibility of the consumer.

(D) All double‑check valve assemblies must be installed in drainable pits wherever below ground installation is necessary, in accordance with detailed specifications provided by the town. Double‑check valve assemblies may be installed in a vertical position with prior approval from the town; provided, the flow of water is in an upward direction.

(E) Reduced pressure principle backflow prevention assemblies must be installed in a horizontal position and in a location in which no portion of the assembly can become submerged in any substance under any circumstance. Pit and/or below grade installations are prohibited.

(F) The installation of any backflow prevention assembly which is not approved by the town must be replaced by one which is approved by the town.

(G) The consumer is responsible to make sure a backflow prevention assembly is working properly upon installation and is required to furnish the following information to the town within 15 days after a reduced pressure principle backflow preventer (RP), double‑check valve assembly (DCVA), pressure vacuum breaker (PVB), double‑check‑detector assembly (DCDA) or reduced pressure principle detector assembly (RPDA) is installed:

(1) Service address where assembly is located;

(2) Owner (and address, if different from service address);

(3) Description of assemblys location;

(4) Date of installation;

(5) Installer (include name, plumbing company represented, plumbers license number);

(6) Type of assembly and size of assembly;

(7) Manufacturer, model number, serial number; and

(8) Test results/report.

(H) When it is not possible to interrupt water service, provisions shall be made for a parallel installation of backflow prevention assemblies. The town will not accept an unprotected bypass around a backflow preventer.

(I) Upon notification by town, the consumer shall install the appropriate containment assembly not to exceed the following time frame:

(1) Health hazard: 60 days; and

(2) Non-health hazard: 90 days.

(J) Following installation, all RP, DCVA, PVB, DCDA and RPDA are required to be tested by a certified backflow prevention assembly tester within ten days.

(Ord. 2009‑02‑01, passed 2‑17‑2009)

**38‑108 TESTING AND REPAIR OF ASSEMBLIES.**

(A) Testing of backflow prevention assemblies shall be made by a certified backflow prevention assembly tester approved by the town. The tests are to be conducted upon installation and annually thereafter or at a frequency established by the town. A record of all testing and repairs is to be retained by the consumer. Copies of the records must be provided to the town within ten business days after the completion of any testing and/or repair work.

(B) Any time that repairs to backflow prevention assemblies are deemed necessary, whether through annual or required testing, or routine inspection by the consumer or by the town, these repairs must be completed within a specified time in accordance with the degree of hazard. In no case shall this time period exceed:

(1) Health hazard facilities: seven days; and

(2) Non‑health hazard facilities: 21 days.

(C) All backflow prevention assemblies with test cocks are required to be tested annually or at a frequency established by the town.

(D) All certified backflow prevention assembly testers must obtain and employ backflow prevention assembly test equipment which has been evaluated and/or approved by the town. All test equipment shall be registered with the town and shall be checked for accuracy annually (at a minimum), calibrated if necessary, and certified to the town as to accuracy/calibration, employing a calibration method acceptable to the town. (See  38‑103(B)(5).)

(E) It shall be unlawful for any consumer or certified backflow prevention assembly tester to submit any record to the town which is false or incomplete in any material respect. It shall be unlawful for any consumer or certified tester to fail to submit to the town any record which is required by this article. The violations may result in any of the enforcement actions outlined in  38‑112.

(Ord. 2009‑02‑01, passed 2‑17‑2009)

**38‑109 FACILITIES REQUIRING PROTECTION.**

(A) Approved backflow prevention assemblies shall be installed on the service line to any facility that the town has identified as having a potential for backflow.

(B) The following types of facilities or services have been identified by the town as having a potential for backflow of non-potable water into the public water supply system. Therefore, an approved backflow prevention assembly may be required on all services according to the degree of hazard present. Other types of facilities or services not listed below may also be required to install approved backflow prevention assemblies if determined necessary by the town. As a minimum requirement, all commercial services will be required to install a double‑check valve assembly, unless otherwise listed below.

|  |  |
| --- | --- |
| ***Abbreviations*** |  |
| DCVA | Double‑Check Valve Assembly |
| RP | Reduced Pressure Principle Assembly |
| DCDA | Double‑Check Detector Assembly |
| RPDA | Reduced Pressure Detector Assembly |
| AG | Air Gap |
| PVB | Pressure Vacuum Breaker |

(1) Automotive services stations, dealerships and the like:

(a) No health hazard: DCVA; and

(b) Health hazard: RP.

(2) Auxiliary water systems:

(a) Approved public/private water supply: DCVA;

(b) Unapproved public/private water supply: AG; and

(c) Used water and industrial fluids: RP.

(3) Bakeries:

(a) No health hazard: DCVA; and

(b) Health hazard: RP.

(4) Beauty shops/barber shops:

(a) No health hazard: DCVA; and

(b) Health hazard: RP.

(5) Beverage bottling plants: RP;

(6) Breweries: RP;

(7) Buildings; hotels, apartment houses, public and private buildings or other structures having unprotected cross‑connections:

(a) (Under five stories) no health hazard: DCVA;

(b) (Under five stories) health hazard: RP; and

(c) (Over five stories) all: RP.

(8) Canneries, packing houses and rendering plants: RP;

(9) Commercial carwash facilities: RP;

(10) Commercial greenhouses: RP;

(11) Commercial sales establishments (department stores, malls and the like):

(a) No health hazard: DCVA; and

(b) Health hazard: RP.

(12) Concrete/asphalt plants: RP;

(13) Dairies and cold storage plants: RP;

(14) Dye works: RP;

(15) Film laboratories: RP;

(16) (a) Fire systems three-fourths inch to two inches:

1. No health hazard: DCDA; and

2. Health hazard: (booster pumps, foam, antifreeze solution and the like): RP.

(b) Fire systems two and one-half inches to ten inches (or larger):

1. No health hazard: DCDA; and

2. Health hazard: (booster pumps, foam, antifreeze solution and the like): RPDA.

(c) Fire trucks: RP.

(17) Hospitals, medical buildings, sanitariums, morgues, mortuaries, autopsy facilities, nursing and convalescent homes, medical clinics and veterinary hospitals: RP;

(18) Laundries:

(a) No health hazard: DCVA; and

(b) Health hazard: (i.e., dry cleaners): RP.

(19) Lawn irrigation systems (split taps):

(a) No health hazard: DCVA; and

(b) Health hazard: (booster pumps, chemical systems): RP.

(20) Metal manufacturing, cleaning, processing and fabricating plants: RP;

(21) Mobile home parks:

(a) No health hazard: DCVA; and

(b) Health hazard: RP.

(22) Oil and gas production, storage or transmission properties: RP;

(23) Pest control (exterminating and fumigating): RP;

(24) Power plants: RP;

(25) Restaurants:

(a) No health hazard: DCVA; and

(b) Health hazard: RP.

(26) Restricted, classified or other closed facilities: RP;

(27) Sand and gravel plants: RP;

(28) Schools and colleges: RP;

(29) Sewage and storm drain facilities: RP;

(30) Swimming pools: RP; and

(31) Waterfront facilities and industries: RP.

(C) All assemblies and installations shall be subject to inspection and approval by the town.

(Ord. 2009‑02‑01, passed 2‑17‑2009)

**38‑110 CONNECTIONS WITH UNAPPROVED SOURCES OF SUPPLY.**

(A) No person shall connect or cause to be connected any supply of water not approved by the NCDENR to the water system supplied by the town. Any connections allowed by the town must be in conformance with the backflow prevention requirements of this article.

(B) In the event of contamination or pollution of a public or consumer potable water system, the consumer shall notify the town immediately in order that appropriate measures may be taken to overcome and eliminate the contamination or pollution.

(Ord. 2009‑02‑01, passed 2‑17‑2009)

**38‑111 FIRE PROTECTION SYSTEMS.**

(A) All connections for fire protection systems connected with the public water system two inches and smaller shall be protected with an approved double‑check valve assembly as a minimum requirement. All fire systems using toxic additives or booster pumps shall be protected by an approved reduced pressure principle detector assembly at the main service connection.

(B) All connections for fire protection systems connected with the public water system greater than two inches shall be protected with an approved double‑check detector assembly as a minimum requirement. All fire protection systems using toxic or hazardous additives or booster pumps shall be protected by an approved reduced pressure principle detector assembly at the main service connection.

(C) All existing backflow prevention assemblies two and one-half inches and larger installed on fire protection systems that were initially approved by the town shall be allowed to remain on the premises, as long as they are being properly maintained, tested and repaired as required by this article. However, if the existing assembly must be replaced (once it can no longer be repaired), or in the event of proven water theft through an un‑metered source, the consumer shall be required to install an approved double‑check detector assembly or reduced pressure principle detector assembly as required by this provision.

(Ord. 2009‑02‑01, passed 2‑17‑2009)

**38‑112 ENFORCEMENT.**

(A) The consumer or person in charge of any installation found not to be in compliance with the provisions of this article shall be notified in writing with regard to the corrective action(s) to be taken.

(B) The notice must explain the violation and give the time period within which the violation must be corrected. The time period set to correct a violation shall not exceed 30 days after receiving notice unless otherwise specified by subsection (D) below. If the violation has been determined by the town to be an imminent hazard the consumer shall be required to correct the violation immediately.

(C) In the event a consumer is found in violation of this article and fails to correct the violation in a timely manner or to pay any civil penalty or expense assessed under this section, water service may be terminated, and shall be reestablished when the violation is corrected and any applicable civil penalties are paid.

(D) The violation of any section of this article may be punished by a civil penalty listed as followed:

(1) Unprotected cross‑connection involving a private water system which creates an imminent hazard: $1,000 per day not to exceed $10,000; and

(2) Unprotected cross‑connection involving a private water system which is of a moderate or high hazard: $500 per day not to exceed $5,000.

(3) If, in the judgment of the town, any consumer, manager, supervisor or person in charge of any installation is found to be in non-compliance with the provisions of this article and/or neglects their responsibility to correct a violation, water service may be discontinued until compliance is achieved.

(4) Failure of a consumer or certified tester to submit any record required by this article, or the submission of falsified reports/records may result in a civil penalty of up to $500 per violation. If a certified backflow prevention assembly tester submits falsified records to the town, the town shall permanently revoke that tester.

(5) Failure to test or maintain backflow prevention assemblies as required: $200 per day.

(E) Enforcement of this program shall be administered by the Director of Public Works for the town or his or her authorized representative.

(Ord. 2009‑02‑01, passed 2‑17‑2009)