

ORDINANCE NO. _____

**AN ORDINANCE TO AMEND ARTICLE VI
OF CHAPTER 12 OF APEX TOWN CODE**

THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF APEX AS FOLLOWS:

Section 1. Article VI of Chapter 12 of the Town of Apex Code of Ordinances is hereby amended to read as follows with additions shown as bold underlined text and deletions shown as strikethrough text:

Sec. 12-156. Purpose.

- (a) The purpose of this article is to define the Town of Apex as the water purveyor in the elimination of all cross connections within its public potable water supply. This article shall apply to all consumers connected to the town's public potable water supply. This article will be periodically revised to maintain compliance with the Federal Safe Drinking Water Act (P.L. 93-523), the North Carolina State Administrative Code (Title 15A, Subchapter 18C), and the North Carolina Plumbing Code as they pertain to cross connections with the public water supply. In accordance with G.S. 160A-312(b), the town is authorized to adopt "adequate and reasonable rules" to protect and regulate public enterprise systems such as water and wastewater systems.
- (b) The purposes of this article are as follows:
 - (1) To protect the public potable water supply of the town from the possibility of contamination or pollution by containing within the consumer's water system such contaminants, waterborne health hazards and other significant pollutants which could backflow into the public water systems.
 - (2) To eliminate or control existing cross connections, actual or potential, between the consumer's potable water system(s) and non-potable water system(s), plumbing fixtures and industrial piping systems.
 - (3) 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.

Sec. 12-157. Designation of responsibility.

- (a) *Health agency's responsibility.* The North Carolina Department of Environmental Quality (NCDEQ) has the responsibility for promulgating and enforcing laws, rules, regulations, and policies applicable to all water purveyors in the State of North Carolina in carrying out an effective cross connection control program. The division of environmental health has the primary responsibility: for ensuring that the water purveyor operates a public potable water system free of actual or potential sanitary hazards including unprotected cross connections; for ensuring that the water purveyor provides an approved water supply at the service connection to the consumer's water system; and, that the purveyor requires the installation,

testing, and maintenance of an approved backflow prevention assembly on the service connection when required.

- (b) *Town of Apex's responsibility.* 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 consumer's 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. 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 consumer's expense, to install an approved backflow prevention assembly at the service connection, to test that backflow prevention assembly immediately upon installation, **replacement, repair, rebuild, relocation,** 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. The required testing date will be determined by the town and may be adjusted as necessary. But in no circumstance shall more than one ~~annual~~ test be required in a ~~42~~ **36** month time period for ~~law~~ **residential** irrigation systems, **unless said systems apply or dispose chemical feeds.**

- (c) *Code enforcement officer's responsibility.*

(1) The town has the responsibility to ~~not only~~ review building plans and inspect plumbing as it is installed, ~~but they have~~ **as well as** 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 North Carolina Plumbing Code, for requiring that such cross connections be either eliminated or provided with backflow prevention equipment approved by the North Carolina Plumbing Code.

(2) The inspector ~~will~~ **shall** inquire about the intended use of water at any point where it is suspected that a **potential or actual** cross connection might be made ~~or where one is actually called for by the plans~~. When such is discovered it shall be mandatory that a suitable, approved backflow prevention assembly approved by the North Carolina Plumbing Code, **NCDEQ** ~~North Carolina Department of Environment and Natural Resources~~, and the town be required by the plans and be properly installed.

- (d) *Consumer responsibility.*

(1) The consumer has the primary responsibility of preventing pollutants and contaminants from entering the consumer's potable water system or the public potable water system.

(2) In those cases in which a backflow assembly was installed by a prior owner, the town, or any other person, the responsibility for maintenance, testing, and maintenance thereof, shall be with the current owner or consumer.

- (3) The cost of any backflow assembly, and any other plumbing modifications necessary and convenient to install a containment assembly, and the testing and maintenance thereof, shall be paid for by the owner or consumer.
- (4) The consumer shall, upon notification pursuant to Sec. 12-164 of this article, install a containment assembly as required by this article.
- (5) The consumer is responsible for scheduling the backflow test with a certified tester and ensuring the town approved backflow tester has submitted the passing backflow test to the town's designated electronic reporting system. The consumer account will be considered non-compliant until the passing backflow test is submitted to the town's designated electronic reporting system. Any consumer that fails to ensure the certified tester has submitted the passing backflow test report(s) to the town's designated electronic reporting system by the test due date shall be subject to enforcement actions and remedies provided in Sec. 12-166 of this Code.
- (6) Any repair, replacement, relocation, or rebuild of the backflow assembly will require a backflow test to ensure the backflow assembly is in good operating condition. The consumer shall maintain accurate records of tests and repairs made to backflow prevention assemblies and shall maintain such records for a minimum of four (4) years.
- (7) The consumer shall complete the town backflow prevention assembly survey with every request for a change of business name or occupancy, or when altering any space or system receiving town water.
- (8) In the event of contamination or pollution of a public or consumer potable water system, the consumer shall notify the town immediately to ensure appropriate measures are taken to overcome and eliminate the contamination or pollution.

The consumer's responsibility starts at the point of delivery from the public potable water system and includes all of the consumer's water system. The consumer, at his/her consumer's 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 such records for a minimum period of three years. The consumer shall complete the town backflow prevention assembly survey with every request for a change of business name or occupancy, or when altering any space or system receiving town water. The consumer shall have the certified backflow tester submit the report(s) to the online cross connection control assembly tracking system (online system). Following any repair, overhaul, re-piping, or relocation of an assembly, the consumer shall have that backflow prevention assembly tested to ensure that it is in good operating condition and will prevent backflow. A certified backflow prevention assembly tester shall make tests, maintenance and repairs of backflow prevention assemblies. Failure to submit the test report(s) representing the site to the online system will subject the consumer to the enforcement actions and remedies provided in section 12-166 of this chapter.

- (e) *Certified backflow prevention assembly tester responsibility.* When employed by the consumer to test, repair, overhaul **rebuild**, or maintain backflow prevention assemblies, a

certified ~~backflow prevention assembly~~ tester (~~tester~~) will have the following responsibilities:

- (1) Each person wishing to test, repair, ~~overhaul~~ **rebuild**, or maintain backflow prevention assemblies shall provide a **plumbing license or school** certificate(s) to the town and the online system which sets forth that such person has met the minimum qualification standards established by the town for certification as a ~~backflow prevention assembly tester~~, as outlined in the definition of ~~backflow prevention assembly~~ **certified** tester in section 12-158. If at any time the tester(s) **license or** certification is revoked, suspended, or flagged as inactive, the tester(s) shall not submit any test report(s) to the town or the online system for approval. The tester(s) shall be considered inactive and subject to enforcement as outlined in section 12-166.
- (2) The tester will be responsible for making competent inspections and for repairing, or ~~overhauling~~ **rebuilding** backflow ~~prevention~~ assemblies and making reports of such repair to the consumer, the town and the online system. The tester shall provide the list of materials or replacement parts **as part of the report submitted** used to the online system ~~during the online submittal procedure~~. 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, **rebuild**, and maintain backflow ~~prevention~~ assemblies. It will be the tester's responsibility to ensure that original manufactured parts (OEM) are used in the repair of or replacement of parts in a backflow ~~prevention~~ assembly. It will be the tester's further responsibility not to change the design, material or operational characteristics of ~~an~~ **a backflow** 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** online system, ~~and to the town~~ within ten business days of any completed test or repair work. New commercial, domestic, fire, and residential irrigation test report(s) that have not been previously recorded by the water resources department shall be submitted to the water resources department within ten days of **test** completion. A tester shall maintain such records for a minimum period of ~~three~~ **four** years.
- (3) All certified ~~backflow prevention assembly~~ testers must obtain and employ backflow ~~prevention~~ assembly test equipment. **Test equipment and the mandatory annual calibration certificate shall be submitted on the testers profile via the online system.** ~~that has been evaluated and/or approved by the town before registering the tester's equipment on the online system. All test equipment shall be registered with the town through the online system. All test equipment shall be checked for accuracy annually (at a minimum), calibrated, if necessary, and certified to the town through the online system as to such calibration, employing an accuracy/calibration method acceptable to the town.~~
- (4) Copies of all ~~p~~**Passing** test results shall be entered into **submitted to** the online system and a copy sent to the water resources department. **Failed tests will not be accepted on the online system. Testers shall provide failed backflow test reports to the Water Resources department via email and inform the customer or owner of the requirement to repair and retest the backflow assembly.**

- (5) Each backflow **certified** tester ~~or individual~~ performing backflow testing within the town jurisdiction shall ~~set up~~ **register for** an account in the online system, supplying and maintaining required information pertaining to the testing company, testers, test kits, ~~and licenses,~~ **and/or certifications**. Each tester shall create a **unique** user name and password to ~~be used on~~ **access** the online system. Each tester or individual shall adhere to all procedural policies and agree to all terms specified in the online system.
- (6) **A fee is payable by the certified tester at the time of submission of each passing backflow assembly test to the online system.** For each backflow test report submitted by the testing company or individual via the online system, the testing company or individual will be required to pay a filing fee due at the time of submittal. All backflow test reports must be submitted electronically via the online system. The filing fee shall be paid directly to the firm acting as the town's authorized online system provider. The tester may elect to absorb the filing fee for competitive marketing purposes or pass it along to the assembly owner when invoicing for the test.
- (7) ~~Each backflow test report submitted by the testing company or individual via the online system shall be in a passing state or status. Test reports that fail shall be repaired and be in passing status before submitting to the online system.~~
- (8) ~~Only plumbers currently licensed in North Carolina are permitted to repair or replace a backflow prevention assembly. Backflow prevention assembly testers shall comply with all federal, state and local laws, rules and regulations while performing any testing activities in the town.~~

Sec. 12-158. Definitions.

Air gap means **the unobstructed vertical distance through free atmosphere between the lowest effective opening from any pipe or faucet conveying a water or waste to a tank, plumbing fixture, receptor, or other assembly and the flood level rim of the receptacle.** 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 ~~side~~ pipe **diameter** measured vertically above the overflow rim of the vessel—in no case less than one inch (2.54 cm) **above the receiving vessel flood rim.**

Approved backflow schools means schools that the town recognizes **that meet or exceed the NC American Water Works Association (AWWA)** for testing and repairs curriculum ~~and school hours that are the same as the NC AWWA state schools.~~

Approved check valve means a check valve that is drip-tight in the normal direction of flow when the inlet pressure is at least one psi (pounds per square inch) 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.

Appurtenance means any accessory to the water system that would allow water to flow from the pipe or hose outlet.

Atmospheric type vacuum breaker or non-pressure type vacuum breaker means a device containing a float-check, a check seat, 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 back siphonage 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 back siphonage condition only.

Auxiliary intake means any piping connection or other device whereby water may be obtained from a source other than the town's public **potable** water supply.

Auxiliary water supply means any water supply on or available to the premises other than the purveyor's approved public **potable** water supply **as defined herein; including, but not limited to, recycled water, grey water, rainwater, well water, cistern water, and reuse water**. 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.

Back pressure means 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.

Back siphonage means 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.

Backflow means 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 "back pressure" and "back siphonage."

*Backflow prevention assembly **or backflow assembly*** ~~—type~~ means a mechanical valve assembly **arrangement** used to ~~prevent backflow into a consumer or~~ **protect the** public potable water system, that meets or exceeds standards set forth by both the University of Southern California for Cross Connection Control and Hydraulic Research (USCFCCHR) and the American Society of Sanitary Engineering (ASSE) and appearing on *both* of the agencies' approval lists. A backflow prevention assembly used on fire suppression systems must have the additional approval of the Factory Mutual Research Corporation (FM) and comply with the National Fire Protection Association (NFPA) code. ~~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).~~
- ~~(5) Reduced pressure principle detector assembly (fire system) (RPDA).~~
- ~~(6) Residential dual check (RDC).~~

Below grade means underneath the surface of the earth or beneath material placed on the surface of the earth.

Building story means a building floor, section or division equal to ten feet in height.

Certified ~~backflow prevention assembly tester or testers~~ means a **licensed plumber or person who has proven their competency to test and make reports on backflow assemblies as evidenced by a certificate from an approved backflow school.** ~~person who has proven their competency to the satisfaction of the town. Only a state licensed plumber or the owner of the property where the backflow prevention assembly is installed, may repair, replace or repair backflow prevention assemblies. Only a fire sprinkler contractor can install, replace or repair backflow preventers that are part of a fire sprinkler system. Each person who is certified to make competent tests and make reports on backflow prevention assemblies shall:~~

(1) ~~Be knowledgeable of applicable laws, rules, and regulations applying to backflow prevention assemblies in the state and in the town.~~

(2) ~~Hold a certificate of completion from a town recognized, and approved North Carolina cross connection school in the testing and repair of backflow prevention assemblies.~~

Certified licensed plumber means a person that holds a plumbing class I license or plumbing class II license by the North Carolina State Board of Examiners of Plumbing, Heating, and Fire Sprinkler Contractors or licensed as a utility contractor issued by the North Carolina General Contractors Licensing Board.

Consumer means any person, partnership, association, organization, body politic or corporate and any other group acting as a unit, as well as individuals, using or receiving water from the Town of Apex water system.

Consumer's potable water system means that 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.

Consumer's water system means any water system commencing at the point of delivery and continuing throughout the consumer's plumbing system located on the consumer's 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* means preventing the impairment of the public potable water supply by installing an approved backflow prevention assembly at the service connection.~~

Containment assembly means a backflow prevention assembly installed at the point of separation between the public water supply and a private service or private distribution system or at a point of metering.

Contamination means 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 means any ~~unprotected actual or potential~~ **physical** connection ~~or structural arrangement between a public or a consumer's~~ **potable water supply system and any piping system, sewer fixture, container, or device, whereby water or other liquids, mixtures, or substances may flow into or enter the potable water supply system; any**

potable water supply outlet that is submerged or is designed or intended to be submerged in non-potable water or in any source of contamination; or an air gap that does not meet the State requirements. ~~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.~~

Cross connection control coordinator means the official position established by the town and designated by the town water resources director to administer this section. The cross-connection control coordinator shall be a certified tester and may serve as operator in responsible charge in accordance with 15A NCAC 18D.0701.

Degree of hazard is derived from the evaluation of conditions within a system, which can be classified as either a "pollution" (non-health) or a contamination (health) hazard.

Double-check-detector assembly (DCDA) means 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 ~~(USCFCCHR)~~ The University of Southern California Foundation for Cross-Connection Control and Hydraulic Research **(USC FCCCHR)** and the ~~(ASSE)~~ The American Society of Sanitary Engineering **(ASSE)** by being on the agencies' approval list.

Double-check valve assembly (DC) means 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 ~~(USCFCCHR)~~ The University of Southern California Foundation for Cross-Connection Control and Hydraulic Research **(USC FCCCHR)** and the ~~(ASSE)~~ The American Society of Sanitary Engineering **(ASSE)** by being on the agencies' approval list.

Dual check valve means a type of backflow device manufactured pursuant to ASSE Standard 1024.

Due date means the day by which the required backflow testing must be completed by **the customer** ~~a residential, commercial, or industrial address, parcel, or site.~~

Electronic reporting system or online system means the electronic system(s) adopted by the town to administer portions or the entire adopted cross connection control program.

Enclosure means a physical above ground or below ground apparatus **that** provides protection to backflow assemblies. ~~The above ground apparatus shall meet ASSE 1060 specifications. (If the backflow assembly is designed to be removed during cold weather, a decorative enclosure may be substituted for purpose.) Below ground apparatuses shall meet current Town of Apex Construction Specifications and current North Carolina Plumbing Code specifications.~~

Finish grade means any surface which has been cut or built to the elevation requested, indicated, or approved for that point. Surface elevation of lawn, driveway, flower bed, patio or other improved surfaces after completion of grading operations are considered finish grade.

Fire line means a system of pipes and equipment used to supply water in an emergency for extinguishing fire.

Health agency means the North Carolina Department of Environmental and Quality (**NCDEQ**) and/or Wake County Health Department.

Health hazard means an actual or potential **cross-connection involving any substance that could, if introduced into the potable water supply, cause illness or death, spread disease, or have a high probability of causing such effects.** ~~threat of contamination of a physical, chemical, biological, pathogenic or toxic nature to the public or consumer's potable water system to such 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/radio-nuclides;~~
- ~~(2) *Chemical*—Lead, mercury and other heavy metals, organic compounds, other toxins and hazardous substances;~~
- ~~(3) *Biological*—Pathogenic micro-organisms like cryptosporidium, typhoid, cholera and E. Coli.~~

Imminent hazard means a condition that presents a substantial and immediate risk to the public's health.

~~*Industrial fluids* 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, or nonhealth hazard if introduced into a public or consumer potable water system. Such fluids may include, but are not limited to process waters; chemicals in fluid form; acids and alkalis; oils, gases; etc.~~

Industrial piping system means a system used by the consumer for transmission, conveyance or storage of any fluid, solid or gaseous substance other than an approved water supply. Such 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.

Interconnection means any system of piping or other arrangement whereby the public water supply is connected directly to a sewer, drain, conduit, pool, heat exchanger, storage reservoir, or other device which contains or could contain sewage or other waste or substance which would be capable of imparting contamination to the public water supply.

Irrigation season means the time of year that irrigation is used in the Town of Apex. For the purposes of this article the irrigation season is March 1 through ~~September~~ **October** 30 of each year.

Irrigation system means any system supplying dry land with water by means of ditches, streams, piping, and appurtenances.

Isolation means the act of confining a localized hazard within a consumer's water system by installing approved backflow prevention assemblies. Disclaimer: The Town of Apex may make suggestions, upon facility inspection, as to the usage of isolation devices/assemblies, but does not assume or have responsibility whatsoever for such installations.

Isolation assembly means a backflow prevention assembly required by the North Carolina Plumbing Code that is installed within a private plumbing or distribution system to isolate a localized hazard from the remainder of the private system.

Lead free means **not containing more than 0.2 percent lead when used with respect to solder and flux; and not more than a weighted average of 0.25 percent lead when used with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures.** a material content in the backflow preventers of less than or equal to 0.25%.

Licensed plumber means **a person that holds a plumbing class I license or plumbing class II license by the North Carolina State Board of Examiners of Plumbing, Heating, and Fire Sprinkler Contractors or licensed as a utility contractor issued by the North Carolina General Contractors Licensing Board.**

NCDEQ means the North Carolina Department of Environmental Quality.

Non-health hazard means **a cross-connection or potential cross-connection involving any substance that generally would not be a health hazard but would constitute a nuisance or be aesthetically objectionable if introduced into the potable water supply.** ~~an actual or potential threat to the quality of the public or the consumer's 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.~~

Non-potable water supply means water not approved for drinking or other household uses.

~~*Online cross-connection assembly tracking system (online system)* means the electronic system(s) adopted by the town to administer portions or the entire adopted cross-connection control program.~~

Owner means any person who has legal title to, or permission or obligation to operate or inhabit, a property upon which a cross-connection inspection is to be made or upon which a cross-connection is present.

Permanent irrigation system means any system supplying dry land with water with means of piping and appurtenances *below ground or finish grade* which is not readily accessible.

Point of delivery means, generally, at the backside of the meter, adjacent to the public street where the town's water distribution mains are located. The consumer shall be responsible for all water piping and control devices located on the consumer's side of the point of delivery.

Pollution means 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 such waters for domestic use.

~~*Pollution hazard* means an actual or potential threat to the quality or the potable of the public or the consumer's 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.~~

Potable water means, water approved for drinking or other household uses, for the purposes of this article, water from any source that has been approved for human consumption by the North Carolina Department of Environmental Quality (NCDEQ).

Pressure type vacuum breaker (PVB) means 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 back siphonage condition only. The assembly must be approved by and listed on the USFCCHR and ASSE approval list.

Private water system means a water system composed of private appurtenances such as groundwater residential wells, cisterns, piping, hoses, meters, and fittings that are connected to the public potable water system.

Public potable water system means any publicly or privately owned water system operated as a public utility, under a current NCDEQ 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.

~~*Readily accessible* means access is available without the need to remove obstructions or items.~~

Reduced pressure principle backflow prevention assembly (RP) means 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.~~ 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). The assembly must be approved by and listed on the USFCCHR and ASSE approval list. ~~Device must be approved by the University of Southern California Foundation for Cross Connection Control and Hydraulic Research (USFCCHR) and the American Society of Sanitary Engineering (ASSE) by being on the agencies' approval list.~~

Reduced pressure principle-detector assembly (RPDA) means 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). The assembly must be approved by and listed on the USFCCHR and ASSE approval list. ~~Device must be approved by the University of Southern California Foundation for Cross Connection Control and Hydraulic~~

Research (USCFCHR) and the American Society of Sanitary Engineering (ASSE) by being on the agencies' approval list.

~~Residential irrigation season~~ means the months in which all residential irrigation will be scheduled for annual backflow testing. For the purposes of this article, the residential irrigation season is March 1 through September 30 of every year.

Service connections means **a piped connection from a water main for the purpose of conveying water to a building or onto premises for human use. A service connection begins at the point downstream of a service meter for metered service and at the point of connection to the potable water supply system for unmetered service.** 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 consumer's water system.

Unapproved water supply means a water supply which has not been approved for human consumption by the NCDEQ.

Water purveyor means the consumer or the operator in responsible charge of a public potable water system providing an approved water supply to the public.

~~Unapproved water supply~~ means a water supply which has not been approved for human consumption by the NCDEQ.

~~Used water~~ means any water supplied by a water purveyor from a public water system to a consumer's water system after it has passed through the point of delivery and is no longer under the control of the water purveyor.

Sec. 12-159. Right of entry.

- (a) Upon presentation of proper credentials and identification, authorized representatives from the town 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 town 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 until **a reduced pressure principle assembly the degree of protection determined by the cross connection control coordinator** has been installed or a right-of-entry has been granted.
- (b) On request, the consumer shall furnish to the town any pertinent information regarding the water supply system on such property where cross connections and backflow is deemed possible.

Sec. 12-160. Elimination of cross connections; degree of hazard.

- (a) When cross connections are found to exist, the owner, owner's 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, a 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. The maximum time limits are as follows:

- (1) Cross connections with private wells or other auxiliary water supplies require immediate disconnection **and installation of an RP or RPDA. Water service will be restored when the violation is corrected.**
- (2) All facilities which pose a potential health hazard to the potable water system must have a **RP or RPDA installed** ~~reduced pressure principle backflow prevention assembly~~ within 30 days of notification by the town.
- (3) **Non-health hazard locations are exempt from the requirement to install a DC; however, the Town may elect to pay all associated costs to install a DC if the Water Resources Director or their designee requires the protection.** ~~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 60 days of notification by the town.~~
- (b) 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.
- (c) 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~~ **RP** shall be required as a minimum of protection.
- (d) No person shall fill special use tanks or tankers containing pesticides, pathogenic micro-organisms, 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 **RP** ~~reduced pressure principle backflow prevention assembly~~ properly installed on the public water supply. **Hydrant meters and temporary meters constructed for use by a contractor or provided by another municipality are prohibited from use in the Town's public potable water system.**
- (e) **Any containment assembly that has not been installed in accordance with Sec. 12-161 and whose location does not pose a health hazard to the public potable water system shall be considered pre-existing and compliant with this Article. However, any pre-existing, compliant approved backflow assembly will be allowed to remain only in its original location for as long as the backflow prevention assembly can be repaired with original manufactured parts. If a change in use of the property represents a health hazard, then such containment assembly shall no longer be considered pre-existing and compliant and shall be replaced with an approved backflow prevention assembly pursuant to Sec. 12-161.**

- (f) Any existing assembly two and one-half inches (2-1/2) or larger backflow assembly installed on fire protection systems that were initially approved by the town and installed in accordance with Sec. 12-161 and whose location does not pose an imminent health hazard to the public potable water system shall be considered pre-existing and compliant with this Article. However, any pre-existing, compliant approved backflow assembly will be allowed to remain only in its original location and must be repaired with approved parts. If the containment assembly is removed or repaired with parts that are not approved or parts are no longer available, or in the event of proven water theft through an unmetered source, the consumer shall be required to install an approved lead-free DCDA or RPDA. In addition, any site obtaining an alteration permit, which use is deemed a health hazard, will be required to install or upgrade the backflow prevention assembly to current North Carolina Plumbing, Fire Code, Town standards and ordinances.

Sec. 12-161. Installation of assemblies.

- (a) All backflow prevention assemblies shall be lead-free and installed in accordance with the specifications furnished by the town and/or in manufacturers' recommendations and specifications, the town of Apex Standard Specifications and Details Manual Section 620, and the latest edition of the North Carolina Plumbing and Fire Code.
- (b) All new construction plans and specifications, when required by the North Carolina Plumbing Code and the North Carolina Department of Environmental Quality, 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~~ RPs and DCs shall be installed 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.
- (e) Private distribution systems shall have a master meter and a master backflow assembly at each connection to the public water supply. ~~Reduced pressure principle backflow prevention assemblies shall be installed according to their listing 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) Any backflow assembly not approved by the town shall be replaced with an assembly; which is approved by town.
- (g) No backflow prevention assembly shall be installed in a traffic area, public utility easement, or town right-of-way unless pre-approval is obtained in writing from the ~~town cross-connection control coordinator~~ water resources director or their designee.
- (h) 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 and the online system within 10 days after a ~~reduced pressure principle backflow assembly (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) Facility name. (name registered with the town)
 - (2) Facility address. (physical address, city, state, zip code); where assembly is located)
 - (3) Property owner name.
 - (4) Property owner address, city, state, zipcode. (If different from service address)
 - (5) Property owner phone number.
 - (6) Property owner email address, if available.
 - (7) Description of assembly's location. (Hotbox, mechanical room, inside structure, vault)
 - (8) Date of new installation.
 - (9) Installer. (Include name, plumbing company represented, plumber's license number, phone number, address)
 - (10) Type of assembly. (RPA, DCVA, RPDA, DCDA, PVB, air gap)
 - (11) Assembly manufacturer name, model number, serial number and size.
 - (12) Health level.
 - (13) Assembly orientation.
 - (14) Type of test. (Domestic, irrigation, commercial, pool)
 - (15) Passing test results/report.
 - (16) Tester signature and date of submittal.
 - (17) Date of test.
 - (18) Permit number, if necessary.
 - (19) Line pressure.
 - (20) Any repairs or replacement of assembly.
 - (21) A passing designation for the assembly status.
- (i) When it is not possible to interrupt water service, provisions shall be made for a "parallel installation" of backflow prevention assembly ies equal to that of the main line. The town will not accept an unprotected bypass around a backflow assembly. Any and all water meter bypasses shall be locked, tagged and the tag dated with the last date that it was secured.
- (j) Upon notification by the town, the consumer shall install the appropriate containment assembly not to exceed the following time frame:
- (1) Imminent hazard — Immediate correction
- (2) Health hazard — 30 days
- (3) Non-health hazard — 60 days

- (k) Following installation, all ~~RP, DCVA, PVB, DCDA, and RPDA~~ **backflow assemblies** are required to be tested by a certified ~~back flow prevention assembly~~ tester within ten days **and submitted to the town's electronic reporting system.**
- (l) Backflow prevention assembly installations with exposure to cold weather shall comply with ASSE 1060 specifications. Backflow prevention assemblies installed for lawn irrigation shall be designed for removal during cold weather exposure or installed in compliance with ASSE 1060 specifications.
- (m) ~~All backflow preventers installed in the town water distribution system shall be "lead free" as defined by Section 12-158 of this article.~~ **No backflow prevention assembly shall be modified in the field.**
- (n) **Any containment assembly required to be installed by the provisions of this article or by a corrective order issued by the Water Resources Director or their designee shall be installed by one of the following:**
 - (1) **Licensed Class I Plumber: can install, replace, or repair irrigation, domestic, and fire (outside installations only) containment assemblies for all structures.**
 - (2) **Licensed Class II Plumber: can only install, replace, or repair irrigation, domestic, and fire containment assemblies for single-family residential dwellings, excluding townhomes. A fire sprinkler certification is required to install, replace, or repair a fire sprinkler system.**
 - (3) **Limited Plumbing License: can install, replace, or repair irrigation or domestic containment assemblies of two-inch diameter or smaller.**
 - (4) **Licensed Fire Sprinkler Contractors: can only install, replace, or repair containment assemblies that are a part of the fire sprinkler system. They cannot install, replace, or repair irrigation or domestic containment assemblies.**
 - (5) **Licensed Utility Contractor: can install, replace, or repair irrigation, domestic, and fire containment assemblies within 5-feet of the building.**

Sec. 12-162. Testing and repair of assemblies.

- (a) A certified ~~backflow prevention assembly~~ tester approved by the town and the online system shall make testing of backflow prevention assemblies. **For backflow assemblies on residential irrigation systems which do not apply or dispose chemical feeds, such tests are to be conducted upon installation and every thirty-six (36) months thereafter. For all other backflow prevention assemblies,** ~~Such 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. Test reports/records must be submitted through the online system ~~to the town~~ within ten business days after the completion of any testing, replacement, 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 **ten (10) days for health hazard facilities and thirty (30) days for non-health hazard facilities.** ~~a specified time in accordance with the degree of hazard. In no case shall this time period exceed:~~

~~(1) Health hazard facilities — 7 days.~~

~~(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 such accuracy/calibration, employing a calibration method acceptable to the town (see subsection 12-157(e)(3)).
- (e) It shall be unlawful for any consumer or certified ~~backflow prevention assembly~~ tester to submit any record to the town and the online system, which is false or incomplete in any material respect. It shall be unlawful for any consumer or certified tester to fail to submit any record, which is required by this article to the town. Such violations may result in any of the enforcement actions outlined in section 12-166.
- (f) Any consumer or owner that has not submitted the required backflow test report(s) to the town or the online system via the retained backflow tester before the due date is non-compliant and subject to the enforcement actions in section 12-166.
- (g) Upon providing the proper notice as provided in this subsection (g), the Town of Apex may change any due date identified in the Town of Apex Cross Connection Control program for the purpose of making the program more effective or efficient. Notice of a change in due date shall be provided to the consumer or owner no less than two months before the due date currently identified in the Cross Connection Control program and may be provided by either phone, email, or letter. A change in the due date shall not increase the number of required tests in a 12-month **or 36-month** period, **as determined by subsection (a) above,** unless otherwise required by this article VI.
- (h) All residential irrigation consumers or owners shall have **a** ~~an annual~~ backflow due date within the ~~residential~~ irrigation season.
- (i) Certified testers may make repairs or rebuilds to residential irrigation and domestic containment assemblies only. Changes to any plumbing configuration on either side of the backflow assembly is prohibited. All other installations, repairs, and replacements shall be made by licensed plumbers, fire sprinkler contractors, or utility contractors as required by Sec. 12-161.**
- (j) Certified testers and licensed plumbers shall only use lead-free, original manufactured parts to repair a backflow prevention assembly and shall not change the design, material, or operational characteristics of an assembly during repair, replacement, or maintenance without prior approval by the town.**

Sec. 12-163. Facilities requiring protection.

- (a)** Approved backflow prevention assemblies shall be installed on new service lines and on the service line to any facility pursuant to the North Carolina Plumbing Code or the North Carolina Fire Code due to retrofit or upfit/fit-up to the customer's plumbing, facility addition on the customer's property, change in use of the property served by the connection, or when otherwise required by state or federal law. ~~that the town has identified as having a potential for backflow.~~ The town has identified the following types of facilities or services 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 such 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 and mixed use services will be required to install a DCVA ~~double-check valve assembly~~, unless otherwise listed below. All assemblies and installations shall be subject to inspection and approval by the town.

Abbreviations used below:

~~DCVA—Double check valve assembly.~~

~~RDC—Residential dual check.~~

~~RP—Reduced pressure principle assembly.~~

~~DCDA—Double check detector assembly.~~

~~RPDA—Reduced pressure detector assembly.~~

~~AG—Air gap.~~

~~PVB—Pressure vacuum breaker.~~

~~FDC—Fire Department Connection~~

(1) Automotive services stations, dealerships, etc.: RP

(2) Auxiliary water systems:

- a. Approved public/private water supply: RP
- b. Unapproved public/private water supply: RP
- c. Used water and industrial fluids: RP

(3) Bakeries:

- a. No health hazard: DCVA
- b. Health hazard: RP

(4) Beauty shops/barber shops:

- a. No health hazard: DCVA
- b. Health hazard: RP

(5) Beverage bottling plants: RP

- (6) Breweries, wineries, distilleries: RP
- (7) Buildings —Hotels, apartment houses, public and private buildings, or other structures having unprotected cross connections: RP
- (8) Canneries, packing houses, and rendering plants: RP
- (9) Commercial car wash facilities: RP
- (10) Commercial greenhouses: RP
- (11) Commercial sales establishments (department stores, malls, etc.):
 - a. No health hazard: DCVA
 - 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) Fire systems three-fourths-inch to two inches:
 - a. No health hazard: DCVA
 - b. Health hazard (booster pumps, foam, antifreeze solution, FDC, etc.): RP
- (17) Fire systems two and one-half inches to ten inches (or larger).
 - a. No health hazard: DCDA
 - b. Health hazard (booster pumps, foam, antifreeze solution, FDC, etc.): RPDA
- (18) Fire trucks: RP
- (19) Fire systems (residential): RP
- (20) Hospitals, medical buildings, sanitariums, morgues, mortuaries, autopsy facilities, nursing and convalescent homes, medical clinics, and veterinary hospitals: RP
- (21) Laundries (i.e., dry cleaners): RP
- (22) Lawn irrigation systems (split taps): RP
- (23) Metal manufacturing, cleaning, processing, and fabricating plants: RP
- (24) Mixed use business and residential occupancy:
 - a. No health hazard: DCVA
 - b. Health Hazard: RP
- (25) Mobile home parks: RP
- (26) Oil and gas sales (bulk wholesale, or retail) distribution, production, storage or transmission properties: RP
- (27) Pest control (exterminating and fumigating): RP

- (28) Electrical power plants: RP
- (29) Restaurants: RP
- (30) Residential (single-family homes; individually metered duplexes, triplexes, multiplexes, apartments, townhouses, condominiums, etc.): RDC or RP
- (31) Restricted, classified, or other closed facilities: RP
- (32) Sand and gravel plants: RP
- (33) Schools and colleges: RP
- (34) Sewage and storm drain facilities: RP
- (35) Swimming pools: RP
- (36) Waterfront facilities and industries: RP
- (37) Yard hydrant: RP

~~All assemblies and installations shall be subject to inspection and approval by the town.~~

(b) Approved backflow prevention assemblies shall be installed on existing service lines where the degree of hazard from the customer's connection is determined to be high by NCDEQ. As may be modified from time to time by NCDEQ, the following connections are determined to be high hazard service connections:

- (1) Lawn sprinkler systems with chemical injection or booster pump**
- (2) Wastewater treatment plants**
- (3) Connection to an unapproved water system or unapproved auxiliary water supply**
- (4) Connection to tanks, pumps, lines, steam boilers or vessels that handle sewage, lethal substances, toxic or radioactive substances**
- (5) Fire sprinkler systems with booster pump facilities or chemical additives**
- (6) Buildings with five or more stories above ground level**
- (7) Hospitals and other medical facilities**
- (8) Morgues, mortuaries and autopsy facilities**
- (9) Metal plating facilities**
- (10) Bottling plants (subject to back pressure)**
- (11) Canneries**
- (12) Battery manufacturers**
- (13) Exterminators and lawn care companies**
- (14) Chemical processing plants**
- (15) Dairies**
- (16) Film laboratories**
- (17) Car wash facilities**

(18) Dye works

(19) Laundries

(20) Swimming pools

(21) Waterfront facilities

Sec. 12-164. Connections with unapproved sources of supply.

- (a) No person shall connect or cause to be connected any supply of water not approved by the NCDEQNR to the **public potable** water system supplied by the town. Any connections allowed by the town must be in conformance with the ~~back-flow~~ **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.~~

Sec. 12-165. 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 **DC** ~~double-check valve assembly~~ as a minimum requirement. All fire systems using toxic additives, booster pumps, or having an FDC shall be protected by an approved **RPDA** ~~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 **DCDA** ~~double-check detector assembly~~ as a minimum requirement. All fire protection systems using toxic or hazardous additives, booster pumps, or having an FDC shall be protected by an approved **RPDA** ~~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 unmetered 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.~~

Sec. 12-166. Enforcement.

- (a) The consumer or person in charge of any installation found to be in violation of the provisions of this article shall be notified in writing with regard to the corrective action(s) to be taken.
- (b) Such notice shall be served by personal delivery, registered mail, or certified mail to the consumer or person in charge, and shall explain the violation(s) and give the time period within which the violation(s) must be corrected. The time period set to correct a violation shall not exceed 30 days after receiving notice unless otherwise specified by section 12-160. If the violation has been determined by the town to be a potential hazard to the public

health, safety or welfare, 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 upon the town's written demand of payment therefor, water service may be terminated without additional notice, and service shall be reestablished when the violation is corrected and any applicable civil penalties and other required fees are paid.
- (d) The violation of any section of this article may be punished by a civil penalty listed as follows, to be recovered by the town in a civil action in the nature of a debt if the offender does not pay the penalty within the prescribed period of time after the offender has been cited for violation. The water resources director may assess a civil penalty in accordance with this subsections ~~12-166(d)(1) — (6), inclusive~~. The civil penalty must be paid within 30 days of receipt of written citation by the consumer or person in charge. Each individual violation shall be a separate and distinct offense. Notwithstanding anything to the contrary in this article the provisions of this section may be enforced by an appropriate equitable remedy issuing from a court of competent jurisdiction.
 - (1) Unprotected cross connection involving a private water system, which creates a health hazard—up to \$1,000.00 per day, not to exceed \$10,000.00.
 - (2) Unprotected cross connection involving a private water system, which is of a non-health hazard—up to \$500.00 per day, not to exceed \$5,000.00.
 - (3) The town may immediately discontinue water service to any consumer if, in the judgment of the town, any consumer or person in charge of any installation
 - a. Is found to be in noncompliance with the provisions of this article and neglects the consumer's responsibility to correct a violation after having been given notice thereof, and such violation constitutes or presents an imminent hazard to the public health, safety and welfare, and/or
 - b. Has a water connection to the town's system that, in the judgment of the town, constitutes or presents an imminent hazard to the public health, safety or welfare; **and/or**
 - c. **Has an unprotected service connection determined by NCDEQ to be a high hazard service connection, and/or**
 - d. **Has an unprotected service connection which was installed without all required permits, and if the consumer's service connection was installed pursuant to such permits a backflow assembly would have been required.**
 - (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 \$500.00 per violation. If a certified ~~backflow prevention assembly~~ tester submits falsified records to the town or the online system, the town shall permanently revoke that tester's privilege to test cross connection devices/assemblies. In the event a certified ~~backflow prevention assembly~~ tester fails to submit any record within the timeframe required by this article or fails to exercise the same degree of care, skill and judgment in the performance of services to the citizens of the town as is ordinarily

provided by a similar professional under the same or similar circumstances, then the water resources director or cross connection control coordinator or designee of same has the discretion to remove the tester from the list of available certified testers.

- (5) Failure to test or maintain backflow prevention assemblies as required: ~~up to \$200.00 per day.~~
- a. **Backflow prevention assemblies installed on non-sewer meters and domestic meters for non-residential use: The water meter shall be locked by town staff until the date of the scheduled backflow test or repair.**
 - b. **Backflow prevention assemblies installed on a single residential meter for irrigation: The backflow prevention assembly shall be locked by town staff until the date of the scheduled backflow test or repair.**
 - c. **Backflow prevention assemblies installed on fire protection systems for non-residential use: The water meter on the domestic service shall be locked by town staff until the date of the scheduled backflow test or repair.**
 - d. **Backflow prevention assemblies installed on fire protection systems for single-family homes: Civil penalties of one hundred dollars (\$100.00) per day, not to exceed \$3,000.**
 - e. **For consumers where the use of water is critical to the continuance of normal operations or protection of life, property, or equipment and any other customer that is served with an action notice may elect to request a civil penalty assessment in lieu of water service termination. Request for civil penalty may be requested in writing to the cross connection control coordinator. Civil penalty assessment will be based on the degree of hazard.**
 - 1. **Health Hazard: two hundred fifty dollars (\$250) per day, not to exceed \$7,500**
 - 2. **Non-Health Hazard: one hundred dollars (\$100) per day, not to exceed \$3,000**
- (6) Requests for extension of time shall be made in writing to the water resources director. All other appeals shall be made in accordance with the following procedures:
- a. *Adjudicatory hearings.* A consumer assessed a civil penalty under this section shall have the right to an adjudicatory hearing before a hearing officer designated by the town manager upon making a written demand, identifying the specific issues to be contended, to the town manager within 30 days following notice of final decision to assess a civil penalty. Unless such demand is made within the time specified in the subsection, the decision on the civil penalty assessment shall be final and binding.
 - b. *Appeal hearings.* Any decision of the hearing officer made as a result of an adjudicatory hearing held under subsection 12-166(d)(6)a. may be appealed by any party to the **Board of Adjustment** ~~town council~~.

Failure to make written demand within the time specified in this subsection shall bar further appeal. The **Board of Adjustment** ~~town council~~ shall hold a hearing and make a decision on the appeal within 90 days of the date the appeal was filed and shall transmit a written copy of its decision to the appellant by registered or certified mail.

- c. *Official record.* When a final decision is issued under subsection 12-166(d)(6)b., the town shall prepare an official record of the case that includes:
 1. All notices, motions, and other like pleadings;
 2. A copy of all documentary evidence introduced;
 3. A certified transcript of all testimony taken, if testimony is transcribed. If testimony is taken and not transcribed, then a narrative of any testimony taken;
 4. A copy of the final decision of the Town of Apex.
- d. *Judicial review.* Any consumer against whom a final decision of the **Board of Adjustment** ~~town council~~ is entered, pursuant to the hearing procedure under subsection 12-166(d)(6)b. may appeal the order or decision by filing a written petition for judicial review within 30 days after receipt of the order or decision to the General Court of Justice of Wake County, and serving a copy of such petition on the Town of Apex in accordance with Rule 4 of the North Carolina Rules of Civil Procedure. Within 30 days after receipt of service of the petition of judicial review, the town shall transmit to the reviewing court the original or a certified copy of the official record, as outlined in subsection 12-16(d)(6)c.
- e. The water resources director, cross connection control coordinator, or his/her director's authorized representative, shall administer enforcement of this program.

Sec. 12-167 – Limitation of Liability

The town shall not be held liable, for any cause, for failure to detect any containment assembly failing to operate adequately, or failure to identify any specific hazard, which may result in contamination of its public potable water system, nor shall this article diminish the responsibility of any owner from whose property a contamination of the public potable water system.

Secs. 12-168—12-190. Reserved.

Section 2. It is the intention of the governing body, and it is hereby ordained that the provisions of this ordinance shall become and be made a part of the Code of Ordinances, and the sections of this ordinance may be renumbered to accomplish such intention.

Section 3. Severability, Conflict of Laws. If this ordinance or application thereof to any person or circumstances is held invalid, such invalidity shall not affect other provisions or applications of the ordinance which can be given separate effect and to the end the provisions of this ordinance are declared to be severable. All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed.

Section 4. Effective Date. This ordinance shall be effective upon adoption.

Introduced by Council Member: _____

Seconded by Council Member: _____

This the ____ day of _____, 2025.

Jacques K. Gilbert
Mayor

ATTEST:

Allen L. Coleman, CMC, NCCCC
Town Clerk

APPROVED AS TO FORM:

Laurie L. Hohe
Town Attorney