

# Town of Pollocksville

## Cross Connection Control Policy

Effective Date: June 8, 2021

According to Rule .0307(c) of the Rules Governing Public Water Systems (15ANCAC Subchapter 18c)

### ARTICLE (X). WATER QUALITY PROTECTION

#### Section 8-0001. Definitions

As used in this article, the following terms *shall* have the meanings provided in this section unless the context clearly indicates otherwise.

**Air-Gap Separation.** An unobstructed vertical distance through the atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture, or other device and the flood level rim of the receptacle. An approved air-gap vertical separation *shall* be at least double the diameter of the supply pipe. In no case *shall* the air-gap be less than one (1) inch.

**Approved:** Certified in writing by the (Person in Responsible Charge) as an acceptable device or methodology for the purpose of backflow prevention.

**Auxiliary Intake:** Any piping connection or other device whereby water *may* be secured from a source other than public water supply.

**Backflow:** Any flow of water into the public water supply from any other source due to a cross-connection, auxiliary intake, interconnection, backpressure, backsiphonage, any combination thereof, or other cause.

**Backpressure:** Any pressure on any source of water other than the public water supply that may be greater than the pressure on the public water supply and *may* result in a backflow.

**Backflow Prevention Device:** An approved effective device method used to prevent backflow from occurring in the potable water supply. The type of device required *shall* be based on degree of hazard, existing or potential.

**Back-Siphonage:** Any circumstance in which the pressure on the public water supply *may* be reduced to the point that the elevation and atmospheric pressure on a source of water other than the public water supply *may* result in a pressure to be greater than the pressure on the public water supply and *may* result in a back flow.

**Certified Tester:** A person who has proven his/her competency to test, repair, overhaul and make reports on backflow prevention devices as evidenced by certification of successful completion of a training program approved by the (Person in Responsible Charge).

**Confinement Device:** A backflow prevention device, as approved and required, installed within a private plumbing or distribution system to isolate a localized hazard from the remainder of said system.

**Consumer:** Any person, firm, or corporation responsible for any property at which water from the (County, City, etc.) public water supply is received. In the absence of other parties or the failure of other parties to accept the responsibilities herein set forth, the owner of record *shall* be ultimately responsible. A backflow prevention device as approved installed at the point of separation between the public water supply and a private service or private distribution system or at the point of metering.

**Contamination:** The presence of any foreign substance (organic, inorganic, radiological, or biological) in water that tends to degrade its quality as to constitute a hazard or impair the usefulness of the water.

**Containment Device:** A backflow prevention device, as approved and required, installed at the point of separation between the public water supply and a private service or private distribution system or at the point of metering.

**Cross-connection:** Any physical connection whereby the public water supply is connected with any other water supply system, whether public or private, either inside or outside of any building or buildings, in such a manner that a flow of water into the public water supply is possible either through the manipulation of valves or because of ineffective check or back-pressure valves, or because of any other arrangement.

**Cross-Connection Control Coordinator:** The official position established and authorized by the (County, City, etc.) designated by the (Person in Responsible Charge) to administer, interpret this section and who *shall* be a certified tester.

**Double Check Valve Backflow Prevention Device:** An approved assembly composed of two (2) single, spring-loaded independently operating check valves, including tightly closing shut-off valves located at each end of the assembly, and having suitable connections for testing the water tightness of each check valve.

**Dual Check Valve:** An approved device containing two (2) independently acting check valves in series.

**Fire Line:** A system of pipes and equipment used to supply water in an emergency for extinguishing fire.

**Interconnection:** Any system of piping or other arrangement whereby the public water supply is connected directly with a sewer, drain, conduit, pool, heat exchanger, storage reservoir, or other device which does or *may* contain sewage or other waste or substance which would be capable of imparting contamination to the public water supply.

**Pressure Vacuum Breaker:** An approved assembly containing an independently operating spring loaded check valve and an independently operating loaded air inlet valve located on the discharge side of the check valve. The assembly must be equipped with suitable connections for testing the proper operation of the device and tightly closing shut-off valves located at each end of the assembly.

**Public Water Supply:** The water and waterworks system of the (County, City, etc.) and its customers outside the (County, City, etc.) limits, for general use and which supply recognized as the public water supply by the North Carolina Department of Environmental Health and Natural Resources.

**Reduced Pressure Zone Principle Backflow Prevention Device (RPZ):** An approved device containing within its structure, two (2) spring loaded independently operating check valves, together with an automatically operating pressure differential relief valve located between the two check valves. The first check valve reduces the supply pressure 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 pressures. In case of leakage of either check valve, the differential relief valve, by discharging to the atmosphere, *shall* operate to maintain the pressure between the check valves less than the supply pressure. This device *shall* have suitable connections for testing the proper operation of the device, including tightly closing shut-off valves located at each end of the device.

## **Town of Pollocksville Cross Connection Policy**

### **Section 8-0002. Compliance with Federal and State Law**

The Town of Pollocksville will comply with the Federal Safe Drinking Water Act, the North Carolina Drinking Water Act, and North Carolina State Building Code, which pertain to cross-connections, auxiliary intakes and interconnections, and establish an effective ongoing program to control potential sources of contamination of the public water supply.

### **Section 8-0003. Unlawful Connections**

It *shall* be unlawful for any person to cause a cross-connection, auxiliary intake or inter-connection to be made; or allow one to exist for any purpose whatsoever.

### **Section 8-0004. Inspection of Property**

It *shall* be the duty, upon request of the Operator in Responsible Charge for the Town of Pollocksville, to cause inspections to be made of properties served by the public water supply where cross-connections with the public water supply are deemed possible. The frequency of inspections and reinspection's *shall* be set by the Operator in Responsible Charge for the Town of Pollocksville.

### **Section 8-0005. Right of Access**

The Operator in Responsible Charge for the Town of Pollocksville, or authorized representative, *shall* have the right to enter, at any reasonable time, onto any residential or nonresidential property served by a connection to the Town of Pollocksville's public water supply for the purpose of performing the duties of this article. In those cases in

which the property owner chooses not to provide such access, the Operator in Responsible Charge for the Town of Pollocksville, or authorized representative, *may* designate the location as a high hazard in accordance with Section 8-0007.

#### Section 8-0006. **Existing Conditions**

Any consumer *shall* be allowed ninety (90) days to correct any cross-connections, auxiliary intakes, interconnections or other hazard as defined by Section 8-0007 of this code in violation of the provisions of this ordinance. The ninety (90) days will be from the date of receipt of the notification given by Operator in Responsible Charge for the Town of Pollocksville.

#### Section 8-0007. **Hazardous Uses**

(a) The following uses *shall* be classified as hazardous uses;

1. Hazardous uses include, but are not limited to: pumps and tanks handling sewage, radioactive, lethal, or toxic substances, boiler and steam connections, sewer waste lines, low inlets to receptacles containing toxic substances, coils or jackets used as heat exchangers, flush valve toilets without vacuum breaks, bacterial and viral materials, private wells or other private water supply, irrigation systems, water systems or hose connections, with booster pumps, carbonation equipment, or similar hazard potential as determined by the cross connection coordinator.

Any location at which the nature or mode of operations within a premises are such that frequent alterations are made to the plumbing or at which there is a likelihood in the determination of Operator in Responsible Charge for the Town of Pollocksville, that protective measures may be subverted, altered, or disconnected.

2. Any facility which contains, but is not limited to, a bottling plant, cannery, building have five (5) or more stories, battery manufacturer, exterminator, greenhouse, chemical processing plant, dairy, dye works, film laboratory, car wash, hospital, commercial laboratory, laundry, metal fabricating operations, mortuary, swimming pool, morgue, x-ray equipment, medical office with laboratory, aspirator, medical washing equipment, packing house, plating plant, poultry house, power plant, nuclear reactor, those fire sprinkler systems equipped with facilities for introduction of freeze preventive chemicals or other substances other than water, dental office, any radioactive material, restaurant, shopping mall with tenant conducting any activity listed in this section and sewage pump or treatment facilities.

(b) All installations described in Section 8-0007 of this code *shall* be deemed hazardous uses, and must have a containment device in the form of a reduced pressure zone backflow prevention device provided that, if the consumer demonstrates to the satisfaction of Operator in Responsible Charge for the Town of Pollocksville that sufficient internal confinement devices have been installed and tested. The Operator in Responsible Charge for the Town of Pollocksville may require that the consumer provide engineering drawings sealed by a professional engineer of installations within the premises, which provide complete internal protection against cross-connection as approved by the Operator in Responsible Charge for the Town of Pollocksville or cross connection coordinator. Any such connection *shall* be

considered another connection for determining the type of containment device required. Each internal confinement device *shall* be one of the following, as approved by the Operator in Responsible Charge for the Town of Pollocksville or his authorized representative: reduced pressure zone principle backflow prevention device, double check valve backflow prevention device, air gap, vacuum break-pressure type, or dual check valve. Each reduced pressure zone principal backflow prevention device serving as an internal confinement device shall have a mesh strainer immediately upstream of the inlet gate valve.

(c) No person *shall* fill any tanks or tankers which include the following: those containing pesticides, fertilizers, other toxic chemicals or residues, flush trucks, street sweepers, and nonportable water tankers from a public water system except with an approved air gap fill or an approved reduced pressure backflow preventor properly installed on the tank or tanker or on the public water supply fill pipeline or hose. The request for performing this task must be approved by the Operator in Responsible Charge for the Town of Pollocksville prior to performing this task.

#### Section 8-0008. **Other Connections**

(a) Services to single family residential units, not otherwise required by this code to have other containment devices, may have a containment device in the form of an approved dual check valve on all such services which meters are applied more than ninety (90) days following the date of adoption of this ordinance, said dual check valves or other containment devices as required *shall* be installed by the owner's representative prior to the installation of the meter by the Town of Pollocksville. On all such services for which meters have been applied prior to that date, said dual check valve shall be installed by Town of Pollocksville, provided that the Town of Pollocksville reserves the right to charge the owner or occupant of any residence for the cost of said device and its installation. Maintenance of dual check valve containment devices installed in accordance with this section *shall* be conducted by the owner. Testable containment devices that are required on lawn irrigation water systems and must be tested every three (3) years by a contractor that has been approved by the Town of Pollocksville.

(b) All other connections to the public water supply of the Town of Pollocksville *shall* have containment devices in the form of a double check valve backflow prevention device as set forth in Section 8-0008 of this code. This *shall* include water mains installed to Town of Pollocksville's standard, and with Town of Pollocksville's supervision, but which are not maintained by the Town of Pollocksville, including but not limited to manufactured home parks, apartments, group housing projects, and other private distribution systems, or similar hazard potential as determined by the (Person in Responsible Charge), or his authorized representative. Private distribution systems *shall* be configured so as to provide looped mains, with two (2) or more containment devices on each building water service connection and at dead-end branch mains.

#### Section 8-0009. **Installation of Containment Devices**

(a) The containment devices *shall* be located off street right-of-way on the water main side of any plumbing connections. When installed in a building, the device *shall* be located on

the service line immediately after its entrance into the building. Each containment and confinement device *shall* be installed in a location that is physically accessible for inspection and testing as determined by the cross-connection coordinator. Containment devices, which have been buried in the ground, do not satisfy the provisions of this code. Each reduced pressure principle zone device shall be installed such that flooding of the device is unlikely as determined by the Operator in Responsible Charge for the Town of Pollocksville.

- (b) The Operator in Responsible Charge for the Town of Pollocksville *shall* maintain a list of approved manufacturers and models of hazard containment devices and drawings of standard installation, copies to be made available through the Town of Pollocksville. All reduced pressure zone principle backflow prevention devices and double check valve backflow prevention devices shall be approved by the Foundation for Cross Connection Control and Hydraulic Research. All vacuum breaks and dual check valve devices shall be approved by the American Society for Sanitary Engineers. All installations and materials shall conform to standards as set by the Operator in Responsible Charge for the Town of Pollocksville.
- (c) In those cases in which containment and/or confinement devices have been previously installed by prior owners, or other parties, the responsibility for maintenance, testing, and replacement as applicable *shall* be with the consumer.
- (d) The cost of said means of containment, and any other plumbing modifications necessary and convenient thereto, and the testing and maintenance thereof is to be paid for by the consumer.

#### Section 8-0010. **New Construction**

All buildings, proposing to connect to the public water system of the Town of Pollocksville (receiving building permits, on or after the effective date of this ordinance, *shall* be equipped with an approved and tested as properly functioning backflow prevention device(s), as prescribed herein, prior to the issuance of a Certificate of Code Compliance for that building. If a building permit was issued for the building prior to the effective date of the Article, or a building permit was not required, the building *shall* be considered to be an existing building prior to the effective date, in accordance with Section 8-0004 of this code.

#### Section 8-0011. **Notification of Consumer**

Upon identification of a hazard, or hazard potential, as defined in Sections 8-0007 through 8-0008 of this code, the Operator in Responsible Charge for the Town of Pollocksville, *shall* notify the consumer, of record, of the property on which the hazard exists of the following:

- (a) Location of Hazard
- (b) Nature of Hazard Observed
- (c) Date Hazard Observed

- (d) Section of Code Applicable
- (e) Requirements of Code

Such notification to be made by certified mail, with return receipt requested.

Section 8-0012. **Change in Nature of Use**

The Operator in Responsible Charge for the Town of Pollocksville, *shall* be notified by the consumer the nature of use of the property changes so as to change the hazard classification of that property, as set forth in Sections 8-0007 through 8-0008 of this code.

Section 8-0013. **Consumer Responsibilities**

- (a) The consumer *shall*, upon notification, as defined in Section 8-0011 of this code, install the hazard containment device(s) as required within 90 days from the date of notification.
- (b) If, after expiration of ninety (90) days, the containment device(s) has not been installed in conformance with standards set by the Operator in Responsible Charge for the Town of Pollocksville, in a proper working condition, the Operator in Responsible Charge for the Town of Pollocksville, may discontinue the public water supply service at that premises, and service shall not be restored until such devices have been installed. The Operator in Responsible Charge for the Town of Pollocksville may permit an extension of up to ninety (90) additional days if compliance efforts are underway and the existence of hardship can be demonstrated.
- (c) The Town of Pollocksville *shall* bear no liability for direct or consequential damages proximately caused by the discontinuance of service pursuant to this section.

Section 8-0013. **Testing and Maintenance of Devices**

The consumer at each property at which containment and/or confinement device(s) have been installed, except those with devices installed in accordance with Section 8-0008 (a) of this code, shall have each containment and/or confinement device(s) tested on an annual basis, and perform any routine maintenance to such device as recommended by the manufacturer, and provide the cross connection coordinator with a report of that inspection and work. The consumer *shall* cause such maintenance, or repairs to be made, rendering the device fully operational. Failure of the consumer to perform that testing and maintenance *shall* be cause for the premises to be deemed an immediate public health hazard. The Operator in Responsible Charge for the Town of Pollocksville, *may* immediately thereafter discontinue public water supply service to that premises and service *shall* not be restored until such devices have been rendered operational. Where the use of water is critical to the continuance of normal operations or protection of life, property, or equipment, duplicated containment or confinement devices shall be provided by the property owner to avoid the necessity of discontinuing water service to test or repair the device or devices.

Section 8-0014. **Enforcement by Civil Penalty**

- (a) **Penalty.**

Violation of any provision of this article *may* subject the offender to a civil penalty to be recovered by the Town of Pollocksville in a civil action in the nature of debt if the offender does not pay the penalty within thirty (30) days after the assessment has become final by exhaustion of the appeal process established by this section, or by failure to appeal the assessment.

The civil penalty for violation of any provision of this crossconnection control article *shall* not exceed five hundred dollars (\$500) per day for each day of continuous violation, or a cumulative or single civil penalty of ten thousand dollars (\$10,000). The civil penalty for willful violation of any provision of this article *shall* not exceed one thousand dollars (\$1,000) per day for each day of a continuous violation, or a cumulative or single civil penalty of twenty thousand dollars (\$20,000).

**(b) Assessment.**

Any civil penalty *shall* be assessed by the Town of Pollocksville, upon the recommendation of the Operator in Responsible Charge for the Town of Pollocksville, and *shall* be based upon the reasonable estimated cost of correcting the cited violation, the magnitude of the potential risk posed to the public health, safety and welfare by the violation, and the cost of the public safety or other emergency response caused by the violation. The Town of Pollocksville, *shall* serve written notice of the civil penalty assessment to the offender and set out with reasonable care the basis of the amount so assessed.

**(c) Equitable Relief.**

An appropriate equitable remedy, including a mandatory or prohibitory injunction, issuing from a court of competent jurisdiction may endorse the provisions of this article.

**(d) Enforcement option.**

The penalties and enforcement provisions established by this article *may* be applied in additional to or instead of the penalties established by other sections of this code.

Section 8-0015. **Limitation of Liability**

The Town of Pollocksville *shall* not be held liable, for any cause, for failure to detect any unit failing to operate adequately, or failure to identify any specific hazard, which *may* result in contamination of its public water supply, nor *shall* this ordinance diminish the responsibility of any property owner from whose property a contamination of the public water supply *may* originate.