

PROTECTING OUR WATER:

Town of Gate City's Cross Connection Control Program

INTRODUCTION:

Town of Gate City's Public Works Department and Water Treatment Plant Operators strives to continuously ensure the safety of your drinking water. A vital link in this effort is the Town's Cross Connection and Backflow Prevention Control Program. The Commonwealth of Virginia's Department of Health Waterworks Regulations requires drinking water suppliers to establish and enforce a cross-connection and backflow prevention program. The goal of the program is to prevent contamination of the Town's drinking water supply caused by backflow or backsiphonage.

WHAT IS CROSS CONNECTION?

Cross Connection is a physical connection between a possible source of contamination and the public drinking water system piping.

This connection, if not properly protected, can lead to the contamination of the drinking water system through a backflow event.

WHAT IS BACKFLOW?

Backflow is the reversal of water flow through a cross connection from a possible source of contamination into the public drinking water system. Backflow may be caused by either backpressure or backsiphonage. A loss of pressure in the public drinking water system may lead to backsiphonage through unprotected cross connections, or backpressure may be created when the water pressure of a facility's internal water system is elevated above the supply pressure of the public drinking water system resulting in backflow through unprotected cross connections.



THE WATER SYSTEM'S ROLE

The Town's role begins with good system maintenance and sound operations. By replacing pipes before they break, taking steps to ensure that system pressures do not fall during periods of high demand, and asking for the cooperation of customers when there is a risk that system pressures could fall below safe levels.

In 2007 the Town adopted the Cross Connection and Backflow Prevention Program. Under this program we must identify locations where the risk of cross connection is high and ensure that the proper measures are taken to minimize that risk. For example, these and other businesses would be required to install high-grade backflow prevention assemblies and have them tested by a certified inspector yearly:

- School and Churches
- Laundry Mats
- Commercial Car Washes
- Greenhouses
- Properties with In-Ground Irrigation Sprinklers
- Properties with Swimming Pools connected to Public Water Supply.
- Clinics and Laboratories (Including Veterinary Hospitals)
- Medical and Dental Offices
- Funeral Parlors
- Apartment Complexes and Large Residential Dwellings with Treated Water Boilers
- Water Treatment Plants or Facilities with Multiple Water Services Lines with Roof Tanks and/or Elevated Storage Tanks
- Restaurants
- Nursing Homes
- Barber Shops and Beauty Salons

If your property or business type is not included in the above list and you have a specific question about your legal requirements, please call the Town Hall.

WHY DO BACKFLOW PREVENTERS HAVE TO BE TESTED YEARLY?

Mechanical backflow preventers have internal seals, springs, and moving parts that are subject to fouling, wear, or fatigue. Also, mechanical backflow preventers and air gaps can be bypassed. Therefore, all backflow preventers have to be tested periodically to ensure that they are functioning properly. A visual check of air gaps is sufficient, but mechanical backflow preventers have to be tested with properly calibrated gauge equipment.

YOUR ROLE AS A WATER CUSTOMER

By taking steps to control cross connections and prevent the possibility of backflow at your home, you will help to protect the public water supply and ensure that your family continues to enjoy safe drinking water.

The most common cross-connection is a typical garden hose, which is left submerged in a volume of water or other fluid (i.e. a garden hose left in a bucket of soapy water). Other cross-connections include kitchen sprayers in a sink filled with dirty water, irrigation systems, boilers and other appliances supplied by water.

LEGAL REFERENCES

Virginia Code section is 32.1-170

Administrative Code, refer to 12VAC5-590-580 through 12VAC5-590-630

Virginia Uniform Statewide Building Code section 312.9



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