

## Fort Belvoir Businesses & Agencies

# HELP PREVENT CROSS CONNECTION AND BACKFLOW

To help protect your drinking water and the health of our communities, non-residential and multi-dwelling premises are required to install proper backflow prevention equipment.

### SAFE DRINKING WATER IS PRICELESS

Water that meets federal and state drinking water standards can become contaminated if an unprotected physical connection—a cross connection—exists between a utility's pipeline and a water source of lesser quality, and where a difference in pressure allows that water of lesser quality to backflow into the community's water system.

### WHAT CAN YOU DO TO CONTROL CROSS CONNECTIONS AND PREVENT BACKFLOW?

Backflow contamination can be prevented. American Water at Fort Belvoir has a cross connection control program to protect the integrity of drinking water in the distribution system. The goal of the program is to prevent contamination of the distribution system through cross connection after backflow events. The program is a Virginia Department of Health (VDH) requirement. Surveys are required on a routine basis. The type of activities conducted at a specific facility determines the type of backflow preventers required for proper protection. Non-residential and multi-dwelling premises are required to have

an approved and functioning backflow prevention device and/or assembly installed and tested, as required.\* This also applies to bypass lines, and fire and lawn sprinkler lines and systems. It's also important that the equipment be installed properly. Generally, backflow equipment is installed at the service connection or on the service line after the meter.

\*More information on backflow equipment, installation and testing requirements can be found on our website. Testing requirements vary depending on the device or assembly.

(continued)

### BOOSTER PUMPS

According to the Virginia Waterworks Regulations, facilities having booster pumps shall be equipped with a low suction pressure cut-off device to shut off the pump when the pressure in the water distribution system drops to a minimum of 20 PSIG.



### VDH REGULATION EFFECTIVE JANUARY 2023

Starting January 1, 2023, persons testing and repairing backflow prevention assemblies and backflow prevention devices shall be certified by a Commonwealth of Virginia tradesman certification program (identified by DPOR as backflow prevention device workers).



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## WHO IS RESPONSIBLE TO PAY FOR BACKFLOW EQUIPMENT AND MAINTENANCE?

Costs related to purchasing backflow equipment, as well as the installation and maintenance, is the responsibility of the customer. It is recommended that customers obtain more than one cost estimate before installing.

## WHAT HAPPENS IF I DON'T COMPLY?

Failure to comply with cross connection requirements can result in water service disconnection.

## WHAT REGULATIONS AND PLUMBING CODES APPLY?

- **Virginia Administrative Code:**  
Water works regulation (12 VAC5-590-610)
- **State of Virginia Plumbing Code:**  
Section 608

**Any water or sewer projects or potential connections impacting Fort Belvoir American Water must be reviewed AND approved by American Water. This includes any temporary connections to hydrants or other infrastructure.**

## WE'RE HERE TO HELP

Have questions or need help determining if you are in compliance with cross connection requirements? Contact us:

- **By Phone:** 571-339-8087
- **In Person:** 6035 16th Street, Building 739, Fort Belvoir
- **By Email:** Submit any non-emergency requests at [fortbelvoirsubmittals@amwater.com](mailto:fortbelvoirsubmittals@amwater.com)



To learn more about backflow prevention and qualified testers, scan the QR code or visit [amwater.com/corp/products-services/military-services/fort-belvoir](https://amwater.com/corp/products-services/military-services/fort-belvoir)

## DEFINITIONS

**Cross Connection** is any actual or physical connection between a potable (drinkable) water supply and any source of non-potable liquid, solid or gas that could contaminate drinking water under certain circumstances.

**Backflow** is the reverse flow of water or other substances through a cross connection into the treated water distribution system. There are two types of backflow: backpressure and backsiphonage.

- **Backpressure** occurs when the pressure of the contaminant source exceeds the positive pressure in the water distribution main. An example would be if a potable water supply main has a connection to a hot water boiler system that is not protected by an approved and functioning backflow preventer. If pressure in the boiler system increases to where it exceeds the pressure in the water distribution system, backflow from the boiler to the drinking water supply system may occur.
- **Backsiphonage** is caused by a negative pressure (vacuum or partial vacuum) in the water distribution system. This situation is similar in effect to sipping water through a straw. Negative pressure in the water distribution system can occur because of a water main break or when a hydrant is used for fire fighting.