

Gettysburg Municipal Authority

CROSS CONNECTION & BACKFLOW PREVENTION

At Gettysburg Municipal Authority, (GMA), we take great pride in providing you with the highest quality drinking water possible. In order to consistently maintain the high level of quality we strive for, GMA along with a NAWSC has initiated a comprehensive backflow prevention/cross-connection control program. According to the PA State Plumbing Code International Plumbing Code (IPC) and the PA Safe Drinking Water Regulations, Chapter 109 we are authorized and required by state regulations to have you install, at your expense, an inline testable backflow prevention device. All customers are required to have cross control/ backflow prevention measures in place.

Backflow prevention devices are mechanical plumbing devices installed in a plumbing system to prevent water from flowing backward in the system. A properly installed, tested and maintained backflow preventer at the service entrance to a building or property can reliably prevent the back-flow of water of an unknown quality from flowing back into the community water system. Backflow prevention is important to protect GMA's customers against accidental contamination of the public water supply due to a direct connection of a non-drinkable substance to the normal drinking water piping.

The type of backflow device necessary depends on the degree of hazard present at your location. The degree of hazard depends on the use of water at your location and what could potentially enter the system. Types of backflow devices range from a "Residential Dual Check Valve" (RDCV) and is non-testable and suitable for most residential applications. Residential properties that have fire sprinklers and / or lawn sprinklers, along with commercial and industrial properties require a testable backflow assembly such as a Double Check Valve Assembly (DCVA), Reduced Pressure Principle Assembly (RPZ) or a Pressure Vacuum Breaker (PVB). This includes a annual test performed by an American Society of Sanitary Engineering (ASSE) certified tester. Your certified plumber should be able to assist in seeing that the proper device is installed at your property.

Gettysburg Municipal Authority's program has begun with all commercial, industrial and fire protected properties receiving letters requesting testing and or installation of proper backflow devices. Along with directions on properly submitting the test forms back to our Cross-Connection Control Department. Questions can be directed to the CCC department at 844-605-5213.

Understanding Backflow Prevention

NAWSC

National Water Specialties Company



GETTYSBURG MUNICIPAL AUTHORITY

Flowing with reliable advancements and service

What You Need to Know About Backflow Prevention Systems

**Do you have a public water
service connection?**

**Are you a commercial or
industrial property?**

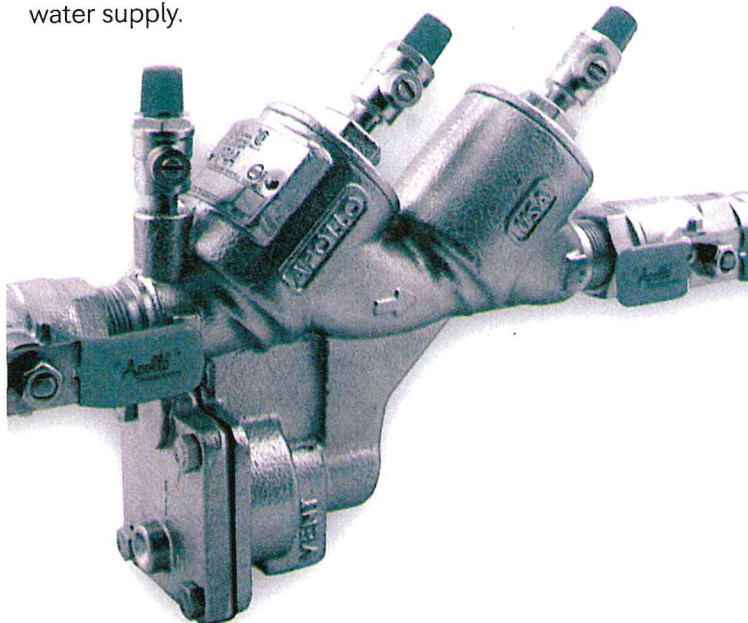
**Is there a kitchen, bathroom,
or faucet in your building?**

If you answered "Yes" to any
of these questions, you're in
danger of contaminating your
water supply.

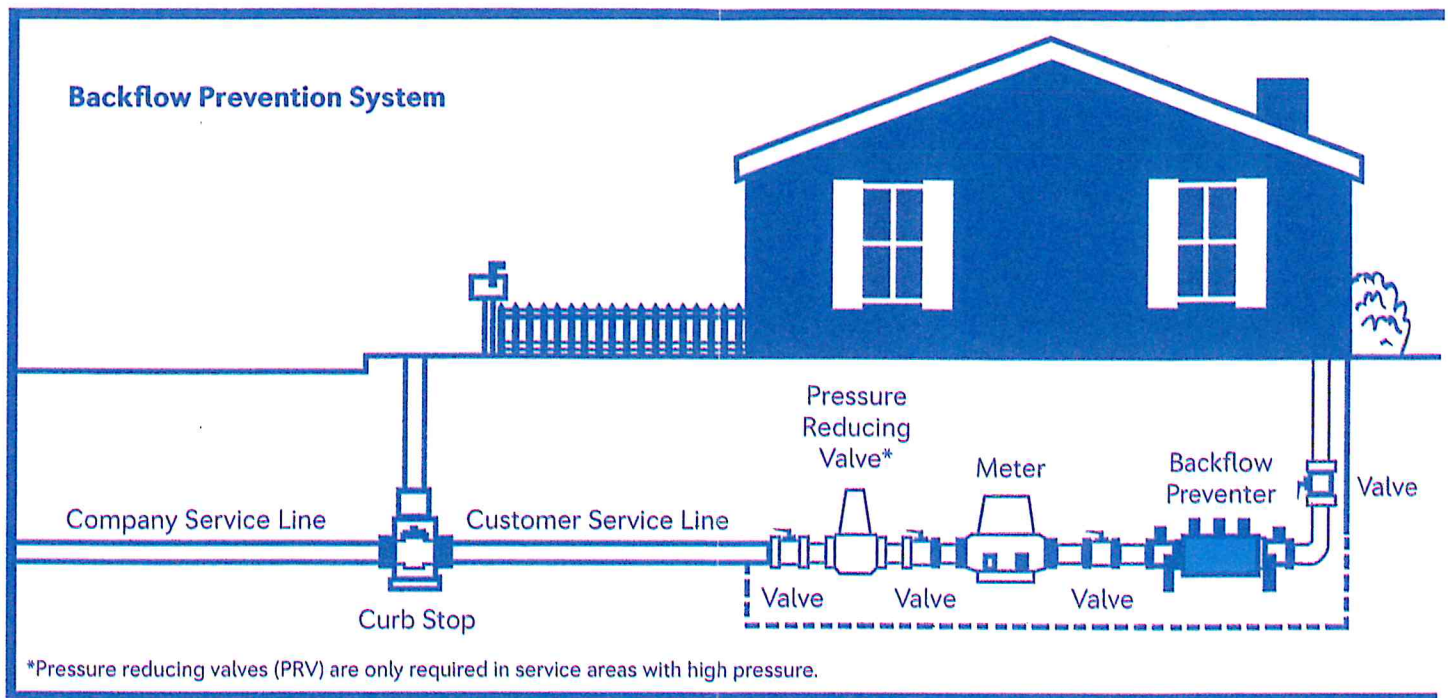
Contact NAWSC

at 844.605.5213
or NAWSC.net

For information
about cross-
connections at
your home or
business.



Backflow Prevention System



What is Cross-Connection?

According to the US Environmental Protection Agency (EPA), a cross-connection is any point in the water supply system where non-potable, or non-drinkable, water may be introduced to potable, or clean, sources. All service lines connected to public water systems are therefore potential cross-connections.

You, the business or home owner, are responsible for these cross-connections.

What is backflow?

Backflow is the undesirable reversal of the flow of water from its intended direction in any pipeline or plumbing system. Put simply, a typical water distribution system allows

water to flow from a service line to your establishment. Hydraulic conditions within the system may deviate from the normal conditions, causing the water to flow in the opposite direction. Eventually, this will lead to the local public water supply, and create potentially hazardous "cross-connection".

Why do we need to prevent backflow incidents?

With any backflow incident there is a risk of non-potable materials – those not intended for human consumption – flowing back into the local water system. This could include wastewater, industrial fluids, chemicals, fire sprinklers, or lawn irrigation water.



What causes backflow?

There are two main causes of backflow: back-siphonage and backpressure.

Back-siphonage


When a negative or reduced pressure is applied at a building's tap, creating the potential for contaminants to be siphoned into the drinking water system. A pressure change could be caused by:

- Heavy water usage on the system (i.e. fighting a large fire)
- Water main breaks
- Unauthorized use of a fire hydrant

Backpressure

Backpressure incidents can occur when the pressure on an individual system exceeds the pressure in the distribution system, resulting in undesirable gasses or liquids being introduced into the drinking water supply.

Some examples include:

- A car wash that re-circulates soapy water
 - A manufacturing plant that uses substantial water pressure for production
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How can we prevent backflow incidents?

For your safety – and required by law – all customers must install and maintain backflow prevention devices in their water systems.

Additionally, customers should implement good usage habits to reduce the potential for backflow incidents. Best practices include:

- Never leaving a hose submerged in a bucket of non-potable liquid.
- Ensuring the water level in any tank of liquid is below any type of faucet or inlet level.

Following this advice will create an “air gap” that can help prevent a backflow incident.

Taking action for safety

Under the Safe Drinking Water Act, the Environmental Protection Agency and OSHA as well as the individual laws of many states through their Departments of Environmental Protection require that customers eliminate cross-connections or install backflow prevention devices. These regulations apply to individual homes, businesses, and commercial and industrial establishments.

The regulation requires that backflow prevention devices be tested at least once each year. When necessary, they must be repaired to ensure proper operation.

What is a Cross-Connection Control Program?

The purpose of a Cross-Connection Control Program is to protect the public potable water supply from the possibility of contamination or pollution by isolating, within its customers' internal distribution system, contaminants or pollutants which could backflow or back-siphon into the public water system.

The program will promote the elimination (or control) of existing cross-connections between potable water systems and non-potable systems.

National Water Specialties Company (NAWSC) is committed to protecting drinking water quality and is working to solve this problem by reducing the potential for backflow incidents to occur.



Contact NAWSC

at 844.605.5213 or NAWSC.net
for more information about cross-connections at your home or business.