

Cross Connection and Backflow Prevention Program- Frequently Asked Questions

What is a cross-connection?

A cross-connection is described in plumbing code as any physical connection or arrangement between two otherwise separate piping systems, one of which contains potable water and the other either water of unknown or questionable safety, whereby there exists the possibility for flow from one system to the other.

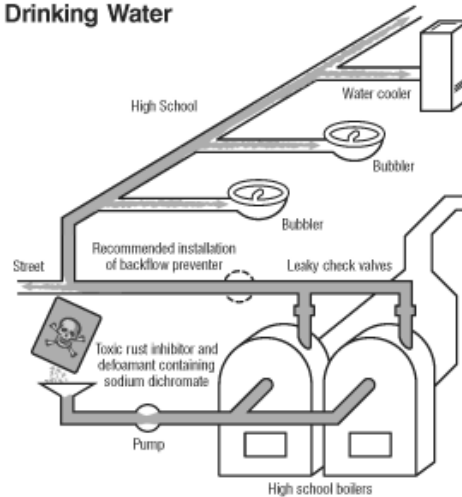
Examples of common commercial cross-connections are:

- Carbonator for soda machine
- Coffee and/or tea brewers
- Chemical dispensers
- Boilers

What is a backflow prevention device?

A fixture that prevents the reverse flow of water from a building into the public water system. A properly installed device will prevent cross-connections contaminants from entering the water system. Common Backflow Prevention Devices include:

Boiler Water Enters High School Drinking Water



Reduced Pressure Valve Assembly
(domestic service)



Double Check Valve Assembly
(fire service)

Why does my commercial water line need a device installed?

PWSA delivers quality water to all users of the system. Building owners must ensure that contaminated water from building systems does not enter waterlines and affect the health and safety of those who use the water supply. Undetected contaminants can cause illness or death.

Does my fire system supply line need a backflow prevention device installed?

Yes, all water lines that connect to the public water system must have a PWSA approved device installed and tested annually. PWSA recommends installing a double check valve assembly for fire service lines.

Do residential units need a backflow prevention device?

Multi-family units are considered commercial properties and would need to install a device. Single-family units may need to install a device if an irrigation system is present. It is best to consult a plumber if you have an irrigation system to ensure all regulations are met.

Where can I find the PWSA rules and regulations on backflow devices?

Effective August 31, 2018, PWSA's Rules and Regulations Part III Section B – Construction and Maintenance of Facilities state

“7. Backflow Prevention Device: The installation of a Backflow device of the type approved by the Authority is required if, in the Authority's opinion, such a device is needed to protect the integrity of the Authority's system. The Backflow prevention device shall be installed, owned, tested, and maintained by the customer at the customer's expense. The location of the backflow prevention device shall be approved by the Authority. The Authority requires the installation of approved double check valves for service lines providing service to residential units.”

Are backflow prevention devices only regulated by PWSA?

No, the Allegheny County Health Department (ACHD Plumbing Code Chapter 860) and the Pennsylvania Department of Environmental Protection (Title 25 Pennsylvania Code, Section 109.709) also address standards and regulations for installing and testing a backflow prevention device.

Do I need a permit to install a new device?

When installing a new device, a certified plumber must get a plumbing permit and inspection from ACHD. Test results must be forwarded to PWSA annually after installation. It is the customer's responsibility to notify PWSA of any new, repaired, replaced, or removed devices. If you do not comply, you are subject to water shut off.

How often do I need to test my device?

The backflow prevention device is required to be tested yearly at minimum. Typically, PWSA will send a letter notifying the property owner of the testing result due dates. If you do not receive a letter from PWSA, you are still required to mail your results to our cross-connection prevention department.

Do I need to notify PWSA if I repair my backflow device?

Yes, devices must be tested after repairs are made. Results of the testing must be forwarded to PWSA using our backflow device testing form.

How do I get in touch with the PWSA Cross-Connection Compliance team?

Pittsburgh Water and Sewer Authority
1200 Penn Avenue
Pittsburgh, PA 15222
backflowinfo@pgh2o.com

Visit our Cross-Connection and [Backflow Prevention website](#) for more information and resources.