Help us protect UBC’s drinking water.

Control Program

Cross Connection

Vacuum Breaker Assembly

Reduced Pressure

Double Check

Vacuum Breaker

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Double Check

Vacuum Breaker Assembly

Examples of Testable Devices (shown)

Non-Testable Devices

The devices used for low hazard locations (most residential homes) are typically hose vacuum breakers. Double Check Valve Assemblies could be a part of the protection of these devices. Additional protection for the public distribution system of a backflow prevention device to provide condition of water service. A home or business may require a a
What is Cross Connection?
A cross connection is any actual or potential connection between the drinking water system and any source of pollution or contamination (harmful chemicals and/or bacteria).

How Contamination Occurs
Water normally flows in one direction, from the public drinking water system through a building’s cold or hot water plumbing to a sink tap or other plumbing fixture.

Under certain conditions, water can flow in the opposite direction. This is known as backflow. Backflow occurs when a back siphonage or back pressure condition is created in a water line.

Back siphonage is when water flows in the opposite direction caused by a negative pressure in the water line. This can happen in any building where there is a reduction or stoppage of the main water supply pressure because of nearby fire fighting, repairs or breaks in watermains.

Back pressure can be created when a source of pressure, such as a pump, creates a pressure greater than the one supplied from the water distribution system. The primary sources of backpressure are booster pumps, thermal expansion from a boiler, elevated plumbing or interconnection with other piping systems with higher pressure.

Where are Cross Connections Typically Found?
Cross connections are found in all plumbing systems; some more obvious than others:
- Boilers
- Wash basins and service sinks
- Soft drink beverage dispensers
- Air conditioners
- Swimming pools
- Hot tubs, decorative ponds and fountains
- Some irrigation and sprinkler systems
- Soap dispensers
- Drain hoses in floor drains
(This is not an exhaustive list)

Cross Connection Control Program
The purpose of the program is to safeguard the public water supply from backflow occurrences at the water service. Under UBC Utilities’ cross connection control program, UBC Utilities personnel or a representative may inspect your facilities to ensure compliance with this program.

Responsibility
Safeguarding UBC’s drinking water is everyone’s responsibility.

Legislation has made cross connection control programs mandatory for all municipalities in Canada. UBC Utilities meets its responsibility by supplying excellent drinking water that is well within the guidelines provided in the Drinking Water Protection Act.

Owners and occupants have a responsibility too. They must ensure no cross connections exist on their property, as per the BC Plumbing Code and the Canadian Standards Association.

The potential health hazard created by a cross connection determines the type of device that is required for backflow prevention. The following page describes some common backflow prevention assemblies.

These devices must be tested upon installation and annually thereafter to ensure that they function continuously. UBC Utilities recognizes that significant costs could be involved for some facilities.

We are committed to working with you to minimize any disruptions and to recommend the most economical way to make necessary retrofits.