Why Do We Need a Cross-Connection Control Program?

Under provincial regulations, the District of Lake Country is responsible to **provide safe drinking water**. A Cross-Connection Control Program helps **establish protocols** to **protect** the drinking **water supply** from potential contamination through cross-connection and backflow .

The District's Permit to Operate (issued by the Interior Health Authority) requires the District to have a comprehensive Cross-Connection Control Program.

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Life. The Okanagan Way.

District of Lake Country

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Cross-Connection Control Program

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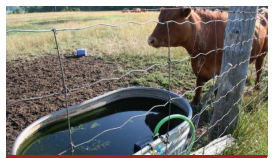
What is Cross-Connection?

HIGH HAZARD CROSS-CONNECTION!

A cross-connection is a connection between potable water (safe for human consumption) and non-potable water (not safe for human consumption).

If a cross-connection exists, it is possible for contaminants to enter the potable water system.

What is Backflow?



Any submerged outlet is a cross-connection

Backflow is the reversal of the normal flow of water within a piping system. If a cross-connection exists, backflow can cause contaminants to enter the potable water system.

How does Backflow happen?

Backflow happens when the water supply pressure drops, causing water from the private side to be sucked or siphoned backwards ("back siphonage"). Backflow can also occur if the water pressure on the private side is increased above the municipal pressure and forced back into the potable supply.

Backflow Prevention Devices

A backflow prevention device allows water to flow in one direction and to stop the water flow in the reverse direction. There are many different types of devices with varying degrees of protection. Higher risk of backflow and contamination warrants a higher level of protection. Here are examples of commonly used devices:

LOW HAZARD

Hose Connection Vacuum Breaker
This non-testable device simply attaches to the water faucet and is available in hardware stores. It can also be installed on your laundry sink.

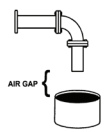
Tap with Built-in Vacuum Breaker
The *National Plumbing Code of Canada* requires this non testable device in all new homes.

Non-Testable Dual Check Valve
Typical on residential underground sprinkler systems.

MODERATE HAZARD

Testable Backflow Preventer
Double check valve assembly (DCVA).

HIGH HAZARD



Air Gap
Physical gap where pressurized potable water leaves the system.

Testable Backflow Preventer
Reduced Pressure Backflow Assembly (RPBA).

What do I need for my...

House?

All new construction or renovations are subject to BC Building Code. All hose-bib connections require a vacuum breaker. Fire suppression sprinkler systems are a moderate hazard ands require double check valve assembly.

Underground Sprinkler?

In accordance to BC Building Code and the DLC Water Rates and Regulation Bylaw, a non-testable dual check or approved anti-siphon device is required on your standard underground sprinkler system.

Agricultural Connections?

All agricultural irrigation connections are deemed a moderate risk and must be equipped with a testable backflow prevention device.

Additionally the following will require a higher level of protection:

- Improper air gap on chemical tank filling stations
- Fertigation practices
- Livestock watering units without approved air gap
- Auxiliary water supply