TYPICAL CROSS CONNECTIONS

Cross connections are typically made by connecting the drinking water supply directly to the following:

**Commercial Examples**
- wash basins and service sinks
- laboratory equipment (i.e. medical, industrial)
- processing tanks
- industrial fluid systems and compressors
- boilers; (i.e. hydronic, steam)
- water re-circulating systems

**Residential Examples**
- lawn irrigation and sprinkler systems
- garden hoses connected to weed and feed dispensers or laying in pools of water
- water conditioners

CROSS CONNECTION CONTROL PROGRAM

The purpose of the program is to safeguard the public water supply from backflow occurrences at the water service. Under the Town of Blackfalds cross connection control program, licensed inspectors will inspect your commercial or business facility to ensure compliance with this program. Subsequent to this, a Dual check valve for Backflow Protection is now required on all new residential properties. The Town encourages existing home owners to install a Dual check valve after the water meter if there is no other method of backflow prevention present.

RESPONSIBILITY

Safeguarding Blackfalds’ drinking water is everyone’s responsibility.

The Province of Alberta meets its responsibility by setting high standards for water quality and by monitoring Blackfalds water supply system.

The Town of Blackfalds in partnership with the NWRWSC meets its responsibility by supplying excellent drinking water and testing that is meets or exceeds the “Recommended Canadian Drinking Water Guidelines” and the “License to Operate”, issued by Alberta Environment.

Owners and occupants have a responsibility too. They must ensure that no cross connections exist on their property as stated in the Town of Blackfalds utility bylaws, the Alberta Safety Codes Act, National Plumbing Code of Canada, and the Canadian Standards Association (CSA) B64.10 “Manual for the Selection, Installation, and Field Testing of Backflow Prevention Devices.”

Together, protecting our drinking water, now and into the future.

Contact the Infrastructure and Property Services Department at 403.885.4677 for further information.
WATER CONTAMINATION

Improper plumbing connections on private property can contaminate the public water supply with harmful chemicals and/or bacteria which could result in a boil water order or in the case of a chemical contamination, completely unusable water.

LIABILITY

If an improper plumbing connection caused a public health hazard, the cross connection can be traced back to the source and the responsible property owners and occupants may be held liable for extensive damages.

CROSS CONNECTIONS

A “cross connection” refers to an actual or potential link from the Town’s potable water system to a contaminated source that could render the Town’s water non-potable or lethal. This can be as simple as a cross connection between our drinking water and a contaminated source such as a garden hose connected to a weed and feed dispenser. To protect our drinking water, you should eliminate all avoidable cross connections in your plumbing and protect the water supply. At any unavoidable cross connections an approved cross connection control assembly/device needs to be installed.

BACKFLOW

A backflow is a flowing back or reversal or the normal direction of flow. This reverse flow or ‘backflow’ can force harmful chemicals or dirty water into the Towns public water supply. A backflow can be caused by a heating system or any other system that operates at a higher pressure than the public water supply. Backflow can also be caused when a siphon is created by undersized piping or by an interruption of the water supply during plumbing or water utility repairs. Since all water supplies are subject to backflow, they need to be protected by CSA approved backflow prevention devices.

CSA APPROVED BACKFLOW DEVICES

The potential health hazard created by a cross connection determines the type of device that is required for backflow prevention. Listed are some common backflow preventers. Contact a plumber or the Town for further details.

*Reduced Pressure Principle Backflow Prevention Assembly (R.P.A.)

*Double Check Valve Assembly (D.C.V.A.)

*The industrial or business owner must have the above backflow prevention assemblies tested upon installation and annually thereafter to ensure that they function continuously as designed.

The Town of Blackfolds registers and provides a list of qualified Commercial Cross Connection Inspectors as backflow prevention assembly testers. See our website at www.blackfalds.com for our current list of registered inspectors or for further information.

Approved Air Gap (A.G.)

Dual Check Valves (Du.C.V.)

Double Check with Atmospheric Port (D.C.A.P.)

Hose Connection/Facet Bib Vacuum Breakers (H.C.V.B./F.B.V.B.)