

**If you wouldn't want to
drink it, don't connect
water to it...**

UNLESS you protect it!

The following examples illustrate what can happen in the absence of appropriate cross connection controls.

For Example:

City of Stratford, March 7, 2005

On Monday, March 7th, 2005, a local car wash contaminated Stratford's water supply when a chemical from their operation was forced back in the City's water main via a booster pump. Residents were advised not to drink tap water or use the water to bath, wash their hands or give to their pets. The water emergency lasted a total of 56 hours. The car wash responsible for the incidence was fined \$75,000 by the Ministry of the Environmental in 2006. The overall cost surrounding this incident is not yet available as resolution of claims may take a significant period of time.

City of Guelph, Labour Day Weekend, 1997

Industrial lubricant from a manufacturing plant entered Guelph's water mains. High pressure on the cooling injection system forced contaminated water into the city's water main. The northern half of the community was advised via the radio, to not drink their water until the mains were flushed and the water was deemed safe. Parts of Guelph were without water for up to 3 days. As a result, several lawsuits, targeting the City of Guelph, were initiated by customers who lost earnings due to lack of water required for business.

Questions?

For technical questions regarding Building Code concerns, contact:

Building Department
PHONE: 519-759-4150.

For questions/comments regarding compliance with bylaw, contact:

Environmental Services Department
PHONE: 519-759-1350

OR

Check out our website at: www.brantford.ca



Help Stop Backflow!

Have you ever opened a water tap
and got something other...

than clean, safe water?



What is Backflow?

A potable (drinking) water supply can become contaminated. It can happen by accident, through hazardous connections to the piping system known as a cross connection. Water supply professionals, plumbing contractors, health agencies, and many lay persons know of such hazards - but many do not.

Under certain conditions, the flow of water in a supply line can be reversed, and if this happens when connected to something containing non-potable water or chemical, contaminants can flow backwards into the drinking water supply line, usually unbeknownst to the user.

Water can flow backwards, otherwise known as "BACKFLOW", when the following conditions arise:

1. Water pressure on the supply side drops, usually as a result of watermain repairs, a watermain break, or the use of hydrant water for fire fighting. Low water pressure can cause suction on the potable supply side, and without adequate protection, can actually siphon or pull contaminants back with it, otherwise known as "BACKSIPHONNAGE". An example of this would be if a hose were sitting in a mop bucket during a mainbreak, dirty water could be siphoned back into the potable water supply.



2. High pressure on the "non-potable" side could also force contaminants into the supply line if the pressure were greater than city water pressure, also known as "BACKPRESSURE". An example of this would be if a pressure washer were connected to a water supply without an approved backflow prevention device installed, detergent laden water could be forced back into the potable water supply.

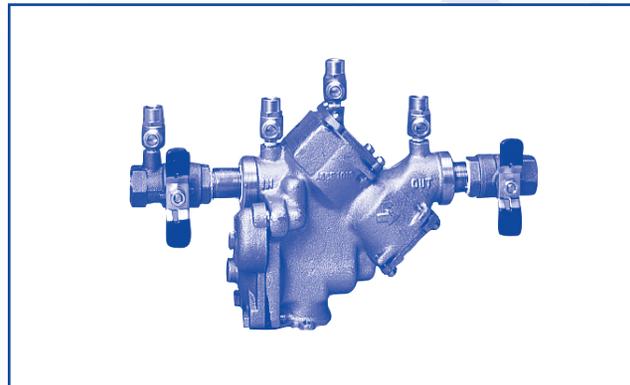
How can you protect your potable water supply from incidents of backflow ?

If you must connect your water to something you wouldn't want to drink, then you MUST ensure that the supply end is protected with an approved BACKFLOW PREVENTION DEVICE.

Double Check Valve Assembly (DCVA)



Reduced Pressure Principle Assembly (RP)



If your property does not already have a testable backflow prevention device, appropriate to the hazard level of your facility installed where your water supply enters your building, the following steps need to be taken:

STEP 1: Cross-Connection Survey

In order to determine the hazard rating of your property, have a survey performed by a qualified professional to determine what cross-connections exist throughout your facility. A plumbing contractor or engineer with tester certification will recommend what level of protection is required for you to isolate your premises from the municipal water supply in the form of a backflow prevention device.

STEP 2: Building Permit

Obtain a Building Permit from the City's Building Department for installation of device and inspection of work done.

STEP 3: Backflow Prevention Device

Have the recommended, testable backflow prevention device installed to isolate your premises by a qualified plumbing contractor.

STEP 4: Testing

Ensure that your backflow prevention device is tested upon installation and annually thereafter. Submit your test report to the City.

NOTE:

In order to fully protect yourself from incidents of backflow, ALL cross-connections identified within your facility should be protected from backflow. The safety of building occupants is the owner's responsibility.