



Date: July 15, 2003

To: Municipal Clerks Office – Please forward this information package and bylaw to the mayor (s) and all councilors, the commissioner of works and the chief building official.

RE: MODEL BACKFLOW PREVENTION BYLAW

I am writing to request your consideration in adopting a Backflow Prevention Bylaw for your municipality. I have enclosed material/information compiled by the Ontario Backflow Prevention Bylaw Committee to assist you / your municipality in this process along with a model backflow prevention bylaw.

The Ontario Backflow Prevention Bylaw Committee (O.B.P.B.C.) has been established to draft and distribute a model bylaw for a **re-inspection program pertaining to backflow prevention for existing buildings**. This model bylaw, along with an information package, is being made available to all municipalities in Ontario.

Most municipalities in Ontario that have experienced a serious backflow situation have initiated and are currently enforcing a backflow prevention bylaw. We recommend you act now to ensure a safe drinking water supply to your municipality.

The Ontario Backflow Prevention Bylaw Committee has representation from many government agencies and organizations. A list of members and their affiliations is attached. If your council requires more information, the O.B.P.B.C. will be glad to make a presentation to your council or provide additional information.

Please contact John Gunn at (905) 989-2883, or at email address: jgunn@rogers.com

Sincerely,

John Gunn, C.P.S.I., C.B.C.O.
Chairperson
Ontario Backflow Prevention Bylaw Committee

QUESTIONS AND ANSWERS – FACT SHEET

FOR MUNICIPALITIES CONSIDERING A BACKFLOW PREVENTION BYLAW/PROGRAM

WHAT IS BACKFLOW?

Backflow is when the normal direction of flow of water in a water distribution system is reversed and a condition is created where contaminants may enter the water distribution system. A backflow situation may be created by either back syphonage or backpressure or a combination of both of these conditions.

WHAT CAUSES A BACKFLOW SITUATION?

There are many reasons for backflow to occur, the most common is when there is a watermain break and the area must be isolated and repaired. At this time the distribution pipeline will begin to backflow and syphon back from the point of use to the repair site. All municipalities that provide water to their residents may experience watermain breaks.

WHAT ARE THE RESULTS OF A BACKFLOW SITUATION?

The degree or potential hazard of the backflow situation depends on many things; including:

- the type and concentration of contaminant
- the length of time the situation continues unchecked
- and any protective devices that may be in place.

If the backflow is water from a swimming pool it creates a low hazard, but if the backflow is from a funeral home or a plating plant the result can be very serious.

HOW CAN WE PREVENT BACKFLOW?

The most effective means of backflow prevention is an “air gap”. An air gap is a minimum of a one-inch separation between the outlet of a potable water system and any source of contamination. If an air gap cannot be achieved, then a mechanical device known as a backflow preventer must be installed.

WHY MUST WE TEST SOME BACKFLOW PREVENTERS ANNUALLY?

There are a variety of minerals and impurities in our drinking water that can corrode or scale valves in a plumbing system (e.g. calcium, lime, etc.). Backflow preventers are mechanical devices subject to normal wear and tear and therefore must be tested annually to confirm they are still functioning properly. The devices that require annual testing are detailed in the Canadian Standards Association Standard # B64.10.1.

WHY SHOULD YOUR MUNICIPALITY INITIATE A BACKFLOW PREVENTION PROGRAM?

We believe it is the municipality's responsibility to provide safe drinking water to their consumers. The municipality should also ensure that the distribution system cannot be contaminated by a cross connection.

The Ontario Building Code states that testable backflow preventers must be tested on installation and the local building inspection departments are to receive a copy of the test results. There is no requirement in the OBC to retest these devices. Municipalities that do not have the resources to implement a reinspection program for existing building may choose to initiate a program to annually retest the testable backflow preventers that the municipality has on record. This can be accomplished by deleting Section 5 from the Bylaw Section 5 refers to the reinspection program for existing buildings.

Listed below are the participants of the Ontario Backflow Prevention Bylaw Committee:

PARTICIPANT

AFFILIATION

Michael Birks	Ontario Backflow Prevention Association
Bill Pennock	Ontario Backflow Prevention Association
Bill Gauley	Ontario Water Works Association
John Braam	Ontario Water Works Association
Kent Pengelly	Canadian Standards Association
Robin Del Favero	Ontario Building Officials Association
Don Del Vecchio	Mechanical Contractors Association of Ontario
Stephen Patrick	Mechanical Contractors Association of Ontario
David Green	Health Canada
John Gunn	Ontario Plumbing Inspectors Association, Chair
Kirk Johnstone	Ontario Plumbing Inspectors Association, Secretary
Mike Haslam	Community Colleges
Danny Hui	Ministry of Municipal Affairs & Housing
Vince Kacaba	The Ontario Pipe Trades Council
Wayne Simpson	Ontario Clean Water Agency
Andy Valickis	Ontario Clean Water Agency
Galina Veltman	Metro Area Plumbing Advisory Committee