BY-LAW NO. 220
TOWN OF SACKVILLE
BACKFLOW PREVENTION BY-LAW

The Council of the Town of Sackville enacts the following by-law pursuant to its authority under ***Section 189 of the Municipalities Act, R.S.N.B. - (1973), Chapter M-22***

Definitions

1. In this by-law:

"Act" means the *Municipalities Act*, R.S.N.B. 1973, Chapter M-22.

"CAN/CSA" means Canadian Standards Association;

"Chief Administrative Officer" means the Chief Administrative Officer of the Town of Sackville or his/her authorized representative;

"Cross-Connection" means a connection or a potential connection between any part of the Town Water System and any other environment containing or potentially containing other substances in a manner which, under any circumstances, could allow such other substances to enter the Town Water System;

"Owner" means the person or persons (including a corporation) who owns the Premises;

"Premises" means any building or group of buildings which is connected to the Town Water System;

"Town Water System" means the system by which potable water is supplied by the Town of Sackville to its residents;

"Water Main" means a water distribution pipe which is owned by the Town and which distributes potable water within the Town of Sackville;

"Water Service Pipe" means a pipe running from the Water Main to any Premises, which is intended to carry potable water from the Town Water System to the Premises.

Cross-Connection Control

2(1) No Owner or any other person acting on the Owner's behalf shall connect, cause to be connected, or allow to remain connected, any piping, fixture, fitting, container or appliance, in a manner which, under any circumstances, could allow water, waste water, or any other substance to enter the Town Water System by reason of reverse flow (backflow), as identified as Moderate or Severe in Appendix 'B'.

2(2) If a condition is found to exist which, in the opinion of the Chief Administrative Officer, is contrary to subsection (1) hereof, the Chief Administrative Officer may:

(i) Without prior notice to the Owner, shut off the supply of potable water from the Town Water System to the Premises in question, until such time as section 3(1) of this By-Law is complied with; or

(ii) Without limiting the foregoing, Demand that the Owner correct the fault within a specified period, failing which the supply may be shut off in accordance with subsection (i) hereof.

2(3) The Chief Administrative Officer, in his/her sole discretion, may require cross-connection control devices (also known as backflow preventers) to be installed, at the Owner's expense, on any piping, fixture, appliance or other connection with the Town Water System at the source of any potential contamination, so as to eliminate the risk of backflow contamination of the Town Water System. Such cross-connection control device shall be installed at or near the entrance to the Premises, on the Water Service Pipe. In the absence of such a cross-connection control device, the Chief Administrative Officer may, in his/her sole discretion, take such steps as he/she deems advisable, in accordance with subsection 3(2) hereof.

2(4) Where, in accordance with Schedule A hereto (Table B1, Appendix B of CAN/CSA-B64, 10-01, as amended from time to time), the type of cross-connection is categorized as a "severe" degree of hazard, such cross-connection shall be considered a high risk of contamination to the Town Water System and the Owner shall ensure that the Premises are equipped with both premises isolation and zone/individual isolation, as per Schedule A.

Backflow Preventers

3(1) No person shall install or cause to be installed any bypass piping or other device capable of reducing the effectiveness of a cross-connection control device/backflow preventer.

3(2) Where a cross-connection control device/ backflow preventer is required under this By-Law, it shall be tested upon installation, and thereafter annually, by a person who holds a valid backflow prevention device tester's license, granted or renewed under Regulation 84-187, enacted under the Plumbing Installation and Inspection Act.

3(3) Cross-connection control devices / backflow preventers shall be selected, installed, maintained and field tested in compliance with CAN/CSA B64, 10-01, "Backflow Prevention Devices – Selection, Installation, Maintenance and Field Testing."

3(4) Notwithstanding anything else herein, the Chief Administrative Officer may permit the temporary connection to the Water Service System for construction purposes without the use of a cross-connection device / backflow preventer, for a limited time,

provided that adequate provisions are made to reduce the risk of backflow into the Water Service System.

3(5) All cross-connection control devices/backflow preventers shall be installed as recommended by the manufacturer and meet CSA standards.

3(6) The Chief Administrative Officer shall maintain a master list of persons in possession of a valid backflow prevention device inspection license and such master list shall be made available to the public during regular Town Hall business hours.

This by-law shall come into force and take effect on the date of final passing thereof.

Read a first time this 11th day of April, 2011.

Read a second time this 9th day of May, 2011.

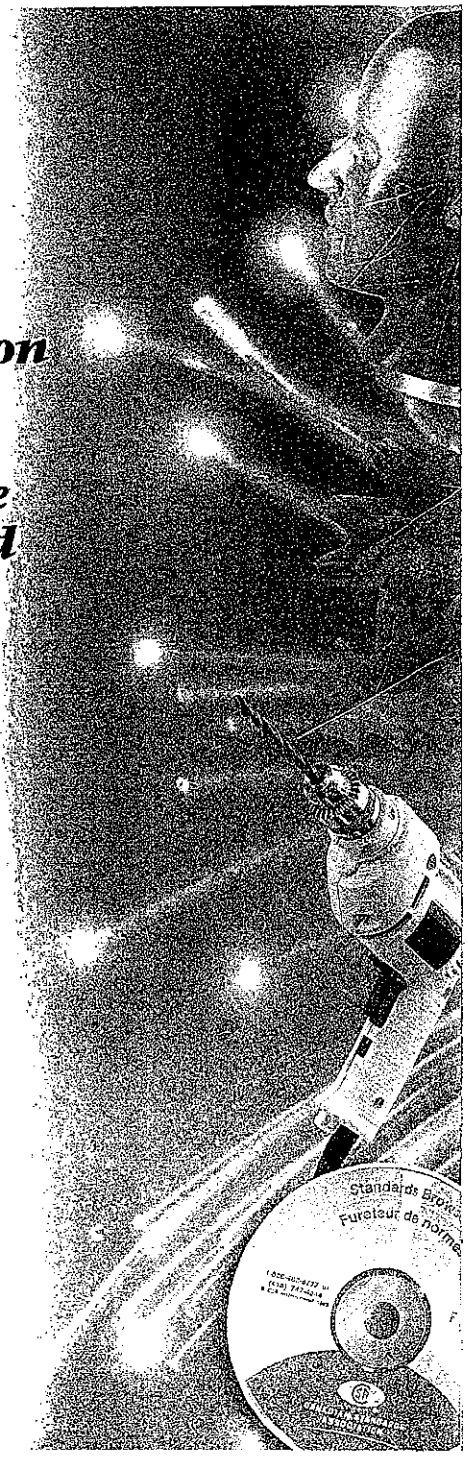
Read a third time and done and passed Council this 9th day of May, 2011.

Patricia Polstahoob
Mayor

Rhonda Power
Clerk

B64.10-01/B64.10.1-01

Manual for the Selection and Installation of Backflow Prevention Devices/Manual for the Maintenance and Field Testing of Backflow Prevention Devices



CANADIAN STANDARDS ASSOCIATION

Appendix B
Guide to the Assessment of Hazard

Note: *This Appendix is not a mandatory part of this Standard.*

B1.

To protect the public and consumers' water systems from contamination, the authority administering the local cross-connection control program has several options available when determining the location of backflow preventers within industrial, commercial, and residential developments:
(a) The first option is based on a containment theory according to which backflow protection is installed on the incoming service, providing premises isolation that utilizes a minimum number of backflow preventers to isolate the public water system from the consumer's, but that does not protect the consumer from the source of contamination via internal cross-connections.
(b) The second option is based on internal protection: backflow preventers are either installed on individual water usages or zones of usage. This approach protects the consumer's water system from internal contamination, but does not adequately protect the public water system, because of the complexity of the plumbing system, plumbing modifications, occupancy changes, etc, that are inherent in industrial, commercial, or residential developments.
(c) The third option is based on combining premises, zone, and/or individual protection to ensure that both the public and consumers' water systems are protected from contamination.

Table B1

Type of cross-connection	Degree of hazard
Abattoirs	Severe
Air compressor oil cooler	Moderate
Agricultural chemicals (sprayers)	Severe
Animal watering	Moderate
Apartment building	Moderate
Aspirator (toxic)	Severe
Aspirator (nontoxic)	Moderate
Autoclave	Severe
Automotive repair	Severe
Autopsy and mortuary equipment	Severe
Auxillary water supply	Severe
Baptistry	Moderate
Basin	Moderate
Bathtub (all)	Moderate
Bedpan washer	Severe
Bidet	Severe
Bottle washer	Moderate
Beverage processing plant	Severe
Canopy washers	Severe
Carwash	Severe
Chemical feed tanks	Severe
Chemical plant	Severe
Chiller tanks	Severe
Chlorinator	Severe
Clothes washer (residential)	Moderate

(Continued)

Table B1 (Continued)

Type of cross-connection	Degree of hazard
Commercial coin-operated laundry	Moderate
Commercial laundry	Severe
Commercial premises	Moderate/Severe
Condensate tank (top feed)	Moderate
Condensate tank	Severe
Cooking kettles	Minor
Cooling condenser, AC unit (solenoid upstream)	Minor
Cooling condenser, AC unit (solenoid downstream)	Severe
Cooling tower	Severe
Cuspidor	Severe
Deaerator (top feed)	Moderate
Deaerator (bottom feed)	Severe
Degreasing equipment	Severe
Dental vacuum pump	Severe
Dental delivery system (water supply)	Minor
Detergent dispenser	Severe
Dishwasher (residential)	Moderate
Dish rinse unit with flex hose	Moderate
Dishwasher (commercial)	Moderate
Distiller	Minor
Dockside marine facilities	Severe
Dye plants	Severe
Dry cleaning plants	Severe
Emergency eyewash/shower	This equipment must be installed upstream of the area isolation
Flexible shower heads with hose	Minor
Floor drain with flushing rim	Severe
Flush tanks	Moderate
Flushing equipment devices	Severe
Flushometers	Severe
Food processing plant	Severe
Fountain, ornamental	Moderate
Fountain, ornamental (chemicals added)	Severe
Funeral home	Severe
Garbage disposal unit	Severe
Garbage can washer	Severe
Heating systems (copper/plastic; no chemicals)	Minor
Heating systems (no chemicals added)	Moderate
Heating systems (chemicals added)	Severe
Hose bibbs	Moderate
Hospitals (non-treatment area)	Moderate
Hospitals (active treatment area)	Severe
Hot tubs	Moderate
Humidifier	Moderate
Humidifier with sump (chemicals added)	Severe
Hydrotherapy bath	Moderate

(Continued)

Table B1 (Continued)

Type of cross-connection	Degree of hazard
Industrial fluid system	Severe
Industrial premises	Severe
Industrial premises	Moderate
Irrigation system (chemical injected)	Severe
Irrigation system (no chemical added)	Moderate
Lab bench equipment (toxic)	Severe
Lab bench equipment (nontoxic)	Minor
Laboratory	Severe
Laundry machines	Moderate
Lavatory	Moderate
Lethal substance	Severe
Livestock equipment	Severe
Manufacturing plant (not specified)	Moderate
Meat packing plant	Severe
Milk processing plant	Severe
Mixing tees with steam and water	Moderate
Mobile home park	Moderate
Mortuary or morgue	Severe
Nonpotable water	Severe
Oil refinery	Severe
Paint manufacturing plant	Severe
Penitentiary	Moderate
Petroleum processing or storage facilities	Severe
Photo lab sinks	Severe
Pipette washer	Severe
Piping to hose bibbs	Minor
Piping to hose bibbs	Moderate
Piping to hose bibbs	Severe
Plants using radioactive material	Severe
Plastic manufacturing plants	Severe
Plating shops	Severe
Plating tank	Severe
Pleasure-boat marina	Severe
Potato peeler	Moderate
Premises where access is prohibited	Severe
Pressure washer (no aspirator)	Minor
Pressure washer (with aspirator)	Severe
Printing plant	Severe
Private water source	Severe
Pump primer line (toxic)	Severe
Pump primer line (nontoxic)	Moderate
Radiator shop	Severe
Refinery, petroleum processing	Severe
Residential premises (with severe hazards on premises)	Severe
Residential premises	Minor
Research buildings	Severe
Restricted area	Severe
Reverse osmosis	Minor
Reverse osmosis with chemical cleaning	Severe

(Continued)

Table B1 (Concluded)

Type of cross-connection	Degree of hazard
School, elementary/junior high	Moderate
School, senior high	Moderate
Serrated faucets	Severe
Sewage treatment plant	Severe
Sewage ejectors	Severe
Sewage pump	Severe
Shampoo sinks	Moderate
Sizing vats	Severe
Solar energy units	Severe
Solution tanks	Severe
Specimen tanks	Severe
Steam boiler plants	Severe
Steam table	Minor
Steam generator	Moderate
Steam cleaner	Moderate
Sterilizer (condensate cooling only)	Moderate
Sterilizer (connection into chamber)	Severe
Stills	Minor
Swimming pools	Moderate
Swimming pools (direct connection)	Moderate
Swimming pool facilities	Moderate
Swimming pool makeup tank	Moderate
Technical institutes	Moderate
Trap primer	Severe
University	Moderate
Wash tanks	Moderate
Wash racks	Severe
Wash tanks (toxic)	Severe
Water closet (tank type)	Moderate
Water closet (flushometer type)	Moderate
Water hauling equipment (nontoxic) (see Appendix C)	Moderate
Water hauling equipment (toxic) (see Appendix C)	Severe
Water softener	Minor
Water softener drain	Severe
X-ray equipment	Severe
Veterinary clinic	Moderate
Veterinary clinic (special equipment)	Severe
Vending machines (with no carbonators)	Minor