Model Backflow Prevention Bylaw

1 Protection from Contamination and Backflow Prevention

1.1 No *person*, shall connect, cause to be connected, or allow to remain connected to the *plumbing* system or water distribution system any piping, fixture, fitting, container or appliance, in a manner which under any circumstances, may allow, untreated water, waste water, any source of pollution or any other liquid, chemical or substance to enter the plumbing system or water distribution system.

2. Inspection for cross connections – access

- 2.1 The *municipality* shall be allowed access, with reasonable notice, to any *premises* that are connected to the *water distribution system* for the purpose of performing inspections to locate possible *cross connections*. The *municipality* may require a routine *cross connection* inspection of the *premises* (at the owner's expense) to be performed by an approved company or person as described in the *authorized functions list* (see appendix A).
- 2.2 The *municipality* shall be allowed access, with reasonable notice, to any *premises* that are connected to the *water distribution system* for the purpose of performing inspections to verify compliance with Section 7 of this Bylaw.
- 2.3 Where the access referred to in Sections 2.1 and 2.2 is not provided, a written notice by the *municipality* may be issued providing the time frame to allow access. If access is not provided within this time frame, the *municipality* may, at their discretion, shut off the supply of water to the *premises* until such time as the access is provided.
- 2.4 If a condition is found to exist which is contrary to Section 1 of this By-law, the *municipality* may immediately carry out an inspection and may issue such notice or notices to the *person* as the case may be, as may be required to obtain compliance with Section 1 of this By-Law.

3. Order to correct cross connection

- 3.1 If the *person* to whom the *municipality* has issued a notice fails to comply with that notice, the *municipality*, at their discretion, may:
 - (a) Give notice to *person* to correct the fault at their expense within a specified time period and if the notice is not complied with, the *municipality* may then shut off the water service or services; or
 - (b) Issue an unsafe order under *unsafe requirements* in accordances with the Ontario Building Code Act. In a condition that could be hazardous to the health or safety of persons in the normal use of the building, persons outside the *building* or persons whose access to the building has not been reasonably prevented, or
 - (c) without notice to the consumer, shut off water service, where the Commissioner of Works has determined, in his/her sole discretion, that an immediate threat of contamination to the water system exists that may endanger public safety or health.

4. Premise isolation

4.1.1 Where in the opinion of the *municipality*, a risk of possible contamination of the *water distribution* system exists, a person, on notice from the *municipality*, shall install premise isolation in addition to any other source of protection devices on the premise.

- 4.1.2 *Premise isolation* shall be installed:
 - (a) in *buildings* of high or severe hazard in accordance with premise isolation requirements as stated in the Ontario Building Code Part 7 Plumbing OR
 - (b) as specified by the *municipality*,

5. Surveys required

- 5.1 A cross connection survey of the plumbing system of all existing industrial, commercial, institutional and multi-residential buildings and structures, except buildings of residential occupancies within the scope of Part 9 of the Ontario Building Code shall be completed by approved personnel as described in the authorized functions list (see appendix A) at the owners expense.
- 5.2 The *cross connection* survey shall be completed along with the report and sent to the *municipality* within 30 days of the date of the request. The *cross connection* survey report shall include existing *backflow prevention* devices, cross connections discovered, corrective measures, recommendations and a schedule of work to be completed.
- 5.3 A *cross connection* survey shall be completed at a frequency of every 5 years from the date of the first survey that was requested and completed or as required by the *municipality*.

6. Selection and installation of cross connection control methods

6.1 The method of *cross connection* control or selection and installation of *backflow prevention devices* shall be in accordance with the Ontario Building Code as amended.

7. Maintenance and field-testing of cross connection control methods

- 7.1 Where required by the Ontario Building Code as amended and CSA B64.10.1 as amended, all *back* flow prevention devices shall be inspected and tested at the expense of the *person* to demonstrate that the device is in good working condition.
- 7.2 When the results of a test referred to in Section 7.1 of this By-law show that a *back flow prevention device* is not in good working condition, the *person* shall make repairs or replace the device within 5 days.
- 7.3 If a *person* does not make the appropriate repairs or replace the defective device within the 5 days, the *municipality* may issue a notice as described in 2.4 or may shut the water service or services off.
- 7.4 If a *person* fails to have a *back flow prevention device* tested, the *municipality* may notify the *person* that the back flow prevention device must be tested within a specified time.
- 7.5 If a person fails to have a *back flow prevention device* tested within the specified time of the notice, when requested by the *municipality*, the *municipality* may shut off the water service or water services until the *back flow prevention device* has been tested and approved as required by Section 7.1 of this By-law.
- 7.6 Failure to comply with Sections 7.1 to 7.5 may result in penalties as described in Section 3.

8. Removal of backflow prevention devices prohibited

8.1 No person shall remove a backflow prevention device or part there of after it has been installed, and

no owner of a *building* or *structure* in which a backflow prevention device is installed shall cause or permit the removal of such device, unless such removal is:

- (a) To facilitate the repair of the device and such device is replaced immediately after such repair is carried out.
- (b) To replace the device with another device that meets or exceeds the provisions of this By-law.

9. Authorized functions

9.1 Only those persons listed in the *Authorized Functions List* (see appendix A) shall carry out the corresponding functions set out in such list.

10. Backflow Test Equipment Maintenance

10.1 Where required by the Ontario Building Code as amended and CSA B64.10.1 as amended, all equipment used to test backflow preventers shall be verified or calibrated for accuracy.

11. Definitions (words in italic's)

For the purposes of this Schedule, the following terms shall have the corresponding meanings:

"Authorized Functions List" means the list of functions and the persons authorized to carry out such functions as set out as Appendix "A" of this Schedule;

"backflow" means the flowing back of or reversal of the normal direction of flow of water;

"backflow prevention device" means a device that prevents backflow

"building" shall have the same meaning as set out in the Building Code Act, S.O. 1992, chap. 23, as amended, or any successor thereof;

"Municipality" means the Corporation of the ______ and includes its employees, servants and agents;

"cross-connection" means any actual or potential connection between a *potable water* supply or system and any source of pollution or contamination and includes any by-pass, jumper connection, removable section of pipe, swivel or changeover device and any other temporary or permanent connecting arrangement through which *backflow* may occur;

"person" means any person, firm or corporation having control over property to which this Schedule applies and includes the *owner* registered on the title of the property and any occupant of any *building* or *structure* located on such property;

"potable water" means water that is safe for human consumption:

"premise isolation" means isolation of the water located within a building or structure from the City's water supply;

APPENDIX "A" To SCHEDULE "A" of Municipality of (fill-in) By-law Number (DRAFT)

AUTHORIZED FUNCTIONS LIST

ITEM	FUNCTION	Profession al Engineer with Tester's Licence	* Certified Engineering Technologist with Tester's Licence	Licensed Master Plumber with Contractor and Tester's Licence	** Journeyman Plumber with Tester's Licence	Apprentice Plumber with Tester's Licence	Fire System Sprinkler Fitter with a Tester's Licence	Lawn Irrigation System Installer with Tester's Licence
1	Carry out Cross Connection Survey	√	√	✓	~			
2	Install, Relocate or Replace Backflow Prevention Device			√	✓	√		
3	Repair of Backflow Prevention Device	√	✓	√	✓	✓		
4	Test Backflow Prevention Device	√	✓	√	✓	✓		
5	Items 1, 2, 3 & 4 above in Respect of Fire Protection Systems	√	√	√	~	✓	~	
6	Items 3 & 4 above in Respect of Lawn Sprinkler Systems	√	√	✓	√	√		√

Required to be under the direction of a Professional Engineer.

Required to be employed by a Licensed Plumbing Contractor.

Required to be employed by a Licensed Plumbing Contractor and under the direct supervision of a Journeyman Plumber or Master Plumber.