

THE CORPORATION OF THE TOWN OF HAWKESBURY

BY-LAW N° 59-2012

A By-law on Backflow prevention

WHEREAS subsection 11 (2) (6) of the *Municipal Act, 2001*, as amended, authorizes a municipality to pass by-laws respecting health, safety and well-being of persons;

AND WHEREAS subsection 11 (3) (4) of the *Municipal Act, 2001*, as amended, authorizes a municipality to pass by-laws respecting public utilities;

AND WHEREAS section 445 of the *Municipal Act, 2001*, as amended, states that if a municipality is satisfied that a contravention of a by-law of the municipality passed under this Act has occurred, the municipality may make an order requiring the person who contravened the by-law or who caused or permitted the contravention or the owner or occupier of the land on which the contravention occurred to do work to correct the contravention;

AND WHEREAS section 446 of the *Municipal Act, 2001*, as amended, states that if a municipality has the authority under this or any other Act or under a by-law under this or any other Act to direct or require a person to do a matter or thing, the municipality may also provide that, in default of it being done by the person directed or required to do it, the matter or thing shall be done at the person's expense;

AND WHEREAS the Municipal Council deems expedient to adopt a by-law to regulate cross-connections for the protection of its Potable water.

NOW THEREFORE, the Municipal Council of the Corporation of the Town of Hawkesbury enacts as follows:

1. DEFINITIONS

Authorized Functions List means the list of functions and the persons authorized to carry out such functions, as outlined in Schedule "A" hereto and as amended;

Backflow means the reversal of the normal direction of the flow of water;

Backflow Preventer means a device that prevents Backflow;

Building shall have the same definition of "building" in the Ontario *Building Code Act, 1992*, as amended;

Building Code Act means the Ontario *Building Code Act, 1992*, S.O. 1992, Chapter 23, as amended;

Building Code means Ontario Regulation 350/06, as amended;

Chief Building Official means the employee or his/her designate appointed by the Council to administer and to enforce the present By-law;

Council means the Municipal Council of the Corporation of the Town of Hawkesbury;

CSA B64.10/B64.10.1 means the document entitled “Selection and installation of Backflow Preventers / Maintenance and field testing of Backflow Preventers” by the Canadian Standards Association, as amended;

Cross-connection means any actual or potential connection between a Potable water system and any source of pollution or contamination and includes any by-pass, jumper connections, removable sections of pipe, swivel or changeover devices, and any other temporary or permanent connection arrangements through which Backflow can occur;

Cross-connection survey means a report that shall include existing or recommended Backflow Preventers, assessment of the degree of hazard, cross-connections discovered, corrective measures and recommendations, and a schedule of work to be completed, and any other relevant information;

High or severe hazard means any type of cross-connection or potential cross-connection involving water that has additives or substances that, under any concentration, can create a danger to health, as outlined in Schedule “D” hereto, as amended;

Minor hazard means any type of cross-connection or potential cross-connection that involves a substance that constitutes a nuisance and that results in a reduction in only the aesthetic qualities of water, as outlined in Schedule “D” hereto, as amended;

Moderate hazard means any minor hazard connection that has a low probability of becoming a severe hazard. This category includes, but is not limited to, connections involving water where the aesthetic qualities of the water have been reduced and, under certain conditions, can create a danger to health, as outlined in Schedule “D” hereto, as amended;

Municipal Drinking Water System means the Town’s system of works, excluding plumbing, that is established for the purpose of providing users of the system with drinking water and that includes:

- (a) anything used for the collection, production, treatment, storage, supply or distribution of water,
- (b) anything related to the management of residue from the treatment process or the management of the discharge of a substance into the natural environment from the treatment system, and
- (c) a well or intake that serves as the source or entry point of raw water supply for the system.

Owner means any person, firm, or corporation having control over a property to which this By-law applies;

Potable water means water safe for human consumption;

Premises isolation means isolation of the water located within a Building or structure from the Municipal Drinking Water System;

Operating Authority means the Corporation of the Town of Hawkesbury, including its employees, servants and agents, in respect of the operation, management, maintenance or alteration of the Municipal Drinking Water System.

2. GENERAL PROVISION

This By-law shall apply to all industrial, commercial, institutional and multi-residential Buildings and structures existing at the time of adoption of this By-law and new ones, except Buildings of residential occupancies within the scope of Part 9 of the Ontario *Building Code*.

3. CONTAMINATION AND BACKFLOW PREVENTION

3.1 No Owner shall connect, cause to be connected, or allow to remain connected to the Municipal Drinking Water System any piping, fixture, fitting, container, or appliance that, under any circumstances, might allow any untreated water, waste water, pollutant, or any other liquid, chemical, or substance to enter the Municipal Drinking Water System.

3.2 No Owner of a property to which this By-law applies shall fail to ensure that a Backflow Preventer is installed in every Building or structure connected to the Municipal Drinking Water System.

4. REQUIRED SURVEYS

4.1 A Cross-connection survey of the plumbing systems on all new 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 at the Owner's expense by the approved personnel specified in the Authorized Functions List at least once and thereafter upon notification by the Operating Authority. For existing industrial, commercial, institutional, and multi-residential buildings, a Cross-connection survey shall be completed upon request by the Operating Authority.

- 4.2 The cross-connection survey shall be completed along with a report and sent to the Operating Authority within 30 days of the date of the request or before the issuance of the partial occupancy permit.
- 4.3 A cross-connection survey may be required upon change of use or at the discretion of the Operating Authority.
- 4.4 Upon identification of high or severe hazard, the approved company or person as prescribed in the Authorized Function List and/or the Owner shall, within 24 hours, notify in writing the Operating Authority.

5. SELECTION AND INSTALLATION OF BACKFLOW PREVENTERS

The selection and installation of Backflow Preventers shall be in accordance with the Ontario *Building Code Act, 1992*.

Backflow Preventers shall be installed within the timeframe below depending to the degree of hazard:

High or severe hazard	Within 30 days from the date of identification of hazard
Moderate and minor hazard	Within 90 days from the date of identification of hazard

6. INSPECTION FOR CROSS-CONNECTIONS – ACCESS

- 6.1 The Operating Authority shall be allowed access, with reasonable notice, to any premises connected to the Municipal Drinking Water System for the purpose of performing inspections to locate possible cross-connections. The Operating Authority may request a routine cross-connection inspection of the premises to be performed at the Owner's expense by an approved company or person as described in the Authorized Functions List.
- 6.2 The Operating Authority shall be allowed access, with reasonable notice,

to any premises connected to the Municipal Drinking Water System for the purpose of performing inspections to verify compliance with section 9.

- 6.3 Where the access requirements of sections 6.1 and 6.2 are not fulfilled, a written notice may be issued by the Operating Authority outlining a revised deadline for access to the premises in question. If access is not provided by this deadline, the Operating Authority may, at its discretion, shut off the supply of water to the premises until the access is provided.
- 6.4 If a condition is found to violate section 3, the Operating Authority may immediately carry out an inspection at the Owner's expense, may issue any notice required to obtain compliance with section 3 and may shut off the supply of water to the premises.

7. NOTICES AND ORDERS TO CORRECT CROSS-CONNECTIONS

If the Owner to whom the Operating Authority has issued notice fails to comply with that notice, the Operating Authority may:

- a) give further notice to the Owner to correct the fault at his/her expense within a specified time period; if the notice is not complied with, the Operating Authority may then shut off the water service and have the necessary works or repairs done at the Owner's expense;
- b) issue an order, citing unsafe conditions, in accordance with the Ontario *Building Code Act, 1992*, as amended to correct the condition that could be hazardous to the health or safety of persons in the normal use of the Building, persons outside the Building, or person whose access to the Building has not been reasonably prevented; or
- c) without notice to the Owner, shut off the water service where the Operating Authority has determined, in its sole discretion, that an immediate threat of contamination to the Municipal Drinking Water System exists that can endanger public health or safety.

8. PREMISES ISOLATION

- 8.1 Where, in the opinion of the Operating Authority, a risk of possible contamination of the Municipal Drinking Water System exists, the Owner, on notice from the Operating Authority, shall install Premises isolation in addition to any other Backflow protection devices on the premises.
- 8.2 Notwithstanding subsection 8.1, Premises isolation shall be installed:
- in Buildings of high or severe hazard in accordance with the

- Premises isolation requirements outlined in the Ontario *Building Code Act, 1992*; or
- as required by the Operating Authority.

9. MAINTENACE AND FIELD-TESTING OF BACKFLOW PREVENTERS

- 9.1 Backflow Preventers shall be inspected and tested at the Owner's expense by the approved personnel specified in the Authorized Functions List to demonstrate that the devices are in proper working condition.
- 9.2 Inspection and testing of Backflow Preventers and frequency shall be done in accordance with the Schedule "B" attached hereto and reporting on the forms attached hereto as Schedule "C" or other forms acceptable to the Operating Authority.
- 9.3 Upon initial installation of Backflow Preventers, test reports shall be submitted to the Operating Authority within ten (10) days. Reports thereafter shall be made available on site for review as required by the Operating Authority and shall be kept for a period of not less than seven years.
- 9.4 When the results of the inspection and test in section 9.1 demonstrate that a Backflow Preventer is not in proper working condition, the Owner shall make all necessary repairs or replace the device within 5 days.
- 9.5 If the Owner does not make the appropriate repairs or replace the defective device within 5 days, the Operating Authority may issue a notice under section 6.4 or may shut off the water service or have the necessary works or repairs done at the Owner's expense.
- 9.6 If the Owner fails to have a Backflow Preventer tested, the Operating Authority may notify the Owner that the Backflow Preventer must be tested within a specified time.
- 9.7 If the Owner fails to have a Backflow Preventer tested within the specified time in the notice described in section 9.6 the Operating Authority may shut off the water service until the Backflow Preventer has been tested and approved as required by section 9.1 or may have it tested by an approved company or person as described in the Authorized Functions List at the Owner's expense.
- 9.8 Failure to comply with sections 9.1 to 9.5 can result in penalties as described in section 14.

10. REMOVAL OF BACKFLOW PREVENTERS

No person shall remove a Backflow Preventer or any part thereof after it has been installed, and no Owner of a Building or structure in which a Backflow Preventer is installed shall cause or permit the removal of such a device, unless the purpose of such removal is to:

- a) facilitate the repair of the device, with the device replaced immediately after the repair is carried out;
- b) replace the device with another device that meets or exceeds the provision of this By-law; or
- c) remove a device when a fixture or equipment has been taken out of service and removed.

11. BACKFLOW TEST EQUIPMENT MAINTENANCE

Where required by the Ontario *Building Code Act, 1992* and the CSA B64.10.1, all equipment used to test Backflow Preventers shall be verified or calibrated for accuracy.

12. AUTHORIZED FUNCTIONS

Only those persons listed in the Authorized Functions List shall carry out the corresponding functions set out in such list.

13. ENFORCEMENT

This By-law shall be enforced by the Chief Building Official or any other person appointed by the Council.

14. PENALTIES

Every person who contravenes any of the provisions of this By-law is guilty of an offence and is liable to the fine provided for under the *Municipal Act, 2001*, as amended.

Every person who contravenes any of the provisions of this By-law is guilty of an offence and upon conviction thereof is liable to a minimum fine of not less than Five Hundred Dollars (\$500.00) and not more than Twenty-Five Thousand Dollars (\$25,000.00). For continuous offences, the minimum fine

shall be Five Hundred Dollars (\$500.00) and not more than Ten Thousand Dollars (\$10,000.00) for each day or part of a day that the offence continues.

A director or officer of a corporation who knowingly concurs in the contravention of this By-law by the corporation is guilty of an offence and upon conviction is liable to a minimum fine of not less than Five Hundred Dollars (\$500.00) and not more than Fifty Thousand Dollars (\$50,000.00). For subsequent convictions for the same offence, the minimum fine shall be One Thousand Dollars (\$1,000.00) and the maximum fine One Hundred Thousand Dollars (\$100,000.00).

15. VALIDITY

If a court of competent jurisdiction declares any provision, or any part of a provision of this By-law to be invalid, or to be of no force and effect, the provision shall be deemed conclusively to be severable from this By-law.

No part of this By-law not declared by a court of competent jurisdiction to be invalid shall be affected by the provision severable from this By-law.

16. ENACTMENT

THAT this By-law shall come into force and effect on the date of its adoption.

**READ A FIRST, SECOND AND ADOPTED UPON THIRD READING
THIS 27th DAY OF AUGUST 2012.**

René Berthiaume, Mayor

Christine Groulx, Clerk

**THE CORPORATION OF THE TOWN OF HAWKESBURY
BY-LAW N° 59-2012
Schedule "A"**

AUTHORIZED FUNCTIONS LIST

Item	Authorized function	Professional engineer with tester's licence	Certified engineering technologist with tester's licence*	Licensed master plumber with contractor's 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 Preventer	—	—	√	√	√	—	—
3	Repair Backflow Preventer	√	√	√	√	√	—	—
4	Test Backflow Preventer	√	√	√	√	√	—	—
5	Complete Items 1, 2, 3 and 4 in relation to fire protection systems	√	√	√	√	√	√	—
6	Complete Items 3 and 4 in relation to lawn sprinkler systems	√	√	√	√	√	—	√

* Required to be under the direction of a professional engineer.

† Required to be employed by a licensed plumbing contractor or licensed fire sprinkler contractor.

‡ Required to be employed by a licensed plumbing contractor and under the direct supervision of a journeyman plumber or master plumber.

**THE CORPORATION OF THE TOWN OF HAWKESBURY
BY-LAW N° 59-2012
Schedule "B"**

Frequency requirements

Backflow Preventers shall be inspected and tested:

- a) upon installation;
- b) when cleaned, repaired, or overhauled;
- c) when relocated;
- d) annually, and;
- e) as required by the Operating Authority.

**THE CORPORATION OF THE TOWN OF HAWKESBURY
BY-LAW N° 59-2012
Schedule "C"**

Reporting forms

**THE CORPORATION OF THE TOWN OF HAWKESBURY
BY-LAW N° 59-2012
Schedule "D"**

Guide to degree of hazard