

THE CORPORATION OF THE TOWN OF  
NEW TECUMSETH

**BY-LAW**

*Number 2012-160*

**“WATER DISTRIBUTION SYSTEM – UTILITY SERVICES  
CROSS-CONNECTION CONTROL / BACKFLOW PREVENTION BY-LAW”**

A by-law to regulate cross-connection and backflow prevention in private plumbing systems as required to protect the drinking water system and supply from contamination in the Town of New Tecumseth

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**WHEREAS** Section 11 of the Safe Drinking Water Act, 2002 requires municipalities to ensure that their respective drinking water system meets prescribed drinking water standards to the point where the system is connected to a users plumbing system; and

**AND WHEREAS** Part 7 (Plumbing) of Division B of the Code authorized by the Ontario Building Code Act, S.O. 1992, C.23, as amended, requires potable water systems to be protected from contamination, but limited to specific building uses; and

**AND WHEREAS** under Section 11(2)6 of the Municipal Act, 2001, a municipality may regulate matters for purposes related to the health, safety and well-being of the inhabitants of the municipality;

**AND WHEREAS** the Municipal Act 2001, Section 11(2) grants to municipalities jurisdiction over services within the municipality, which includes municipal water services;

**AND WHEREAS** Section 391(1) of the Act provides that a municipality may pass by-laws imposing fees or charges on any class of persons:

- a) for services or activities provided or done by or on behalf of it;
- b) for costs payable by it for services or activities provided or done by or on behalf of any other municipality or local board; and
- c) for the use of its property including property under its control.

**AND WHEREAS** the Council of the Corporation of the Town of New Tecumseth deem it advisable and expedient to enact such a by-law.

**NOW THEREFORE** the Council of The Corporation of the Town of New Tecumseth hereby enacts as follows:

1. **DEFINITIONS**

For the purpose of this by-law, the following definitions shall apply:

- 1.1. “ASSE” means the American Society of Sanitary Engineering;
- 1.2. “AWWA” means the American Water Works Association;
- 1.3. “Authorized Functions List” means the list of functions and the persons authorized to carry out such functions as set out in Appendix “A” of this by-law;
- 1.4. “auxiliary water supply” means, when applied to any property or structure, any water supply on or available to the property or structure other than the Town’s primary potable water supply for the property or structure;
- 1.5. “backflow” means the flowing or reversal of the normal direction of flow of water;
- 1.6. “backflow prevention device” means a device that prevents backflow certified to the CSA Standard;

- 1.7. "building" as set out in the Building Code Act S.O. 1992, C23 as amended, or any successor thereof;
- 1.8. "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;
- 1.9. "cross-connection control survey form" means a form acceptable to the Town containing information related to the types of cross-connections and the method of protecting those cross-connections within any building or structure. The form must also contain owner and contact information for the property;
- 1.10. "CSA Standard" means the document entitled CAN/CSA B64.10-07/B64.10.1-07 Manual for the Selection and Installation of Backflow Preventers / Manual for the Maintenance and Field Testing of Backflow Preventers published in 2007 by the Canadian Standards Association, or any successor thereof;
- 1.11. "owner" means any person, firm or corporation having control over property to which this By-law applies and includes the owner registered on the title of the property and any occupant of any building or structure located on such property;
- 1.12. "potable water" means water that is safe for human consumption and that complies with section 10 of the Safe Drinking Water Act;
- 1.13. "premise isolation" means isolation of the water located within a building or structure from the Town's water supply;
- 1.14. "source isolation" means isolation of the water located within or having flowed through a source or potential source of contamination within a building or structure, including a device, machine, water system or the like, from any potable water system;
- 1.15. "structure" means anything constructed or built permanently or temporarily which is provided with a source of potable water;
- 1.16. "test report" means a test report acceptable to the Town containing information related to the qualified person's name, certification number, employer name, contact information, serial number of test kit and last calibration date of test kit. The test report must also contain the make, model, serial number, size, type, location, purpose, installation address and test results of the backflow prevention device. The form must also contain owner, occupant and contact information for the property;
- 1.17. "test tag" means a tag acceptable to the Town containing information related to the make, model, serial number, size, type, location, purpose, installation address and test history of the backflow prevention device;
- 1.18. "Town" means the Corporation of the Town of New Tecumseth and includes its employees, servants and agents;
- 1.19. "untreated water" means any water not subject to the requirements of the Safe Drinking Water Act, and / or water that is not under the direct control of the Town;
- 1.20. "water meter" means the water meter installed within a premise to record the amount of water supplied to such premises by the Town;
- 1.21. "zone isolation" means the isolation of the water within an area of a building or structure from any potable water system located within such building or structure.

## **2. APPLICATION OF BY-LAW**

- 2.1. This By-law applies to industrial, commercial, institutional and multi-residential buildings and structures except buildings of residential occupancies as described in Division A, Article 1.1.2.4 of Ontario Regulation 350/06 (the Ontario Building Code) or any successor thereof;

- 2.2. In addition to and notwithstanding section 2.1 of this by-law, this by-law applies where a condition exists in any building or structure that may be hazardous or detrimental to the potable water supply.

### **3. CROSS-CONNECTION PROHIBITED**

- 3.1. No person or owner shall connect, cause to be connected, or allow to remain connected to the Town's water supply or any other potable water system any piping, fixture, fitting, container, appliance, vehicle, machine or the like in a manner which may under any circumstances allow untreated water, waste water or any other liquid, chemical or substance to enter such supply or system, except in compliance with the provisions of this by-law;
- 3.2. In addition to Section 3.1 of the by-law and in accordance with all other provisions of this by-law; every owner of property to which this by-law applies shall ensure that a backflow prevention device is installed in respect of premise isolation, source isolation, and/or zone isolation in every building or structure where the Town's drinking water system supply or other potable water supply exists;
- 3.3. No person or owner shall connect, cause to be connected, or allow to remain connected to the Town's drinking water supply any auxiliary water supply without written approval from the Town.

### **4. PERSONS PERMITTED TO CARRY OUT WORK**

- 4.1. Only the persons listed in the Authorized Function List, Appendix A, shall carry out the corresponding functions set out in such list.

### **5. APPLICATION OF CSA STANDARD**

- 5.1. Except as otherwise set out in this by-law, the installation, maintenance and field testing of backflow prevention devices shall be in accordance with the CSA Standard;
- 5.2. Wherever the CSA Standard and the by-law are in conflict, the provisions which provide the highest degree of premise isolation shall apply or the provisions of this by-law shall prevail.

### **6. SELECTION OF BACKFLOW PREVENTION DEVICES**

- 6.1. Every owner of a building or structure of a type set out in Section 2 of this by-law shall, unless otherwise required by the Town, cause to be carried out a survey of each of their buildings and structures with respect to all existing cross-connections and all existing and required backflow prevention devices and:
  - 6.1.1. Shall ensure that such survey is carried out on a Cross-connection Control Survey form by a qualified person permitted to do so pursuant to the Authorized Functions List; and
  - 6.1.2. Shall ensure that a completed and acceptable Cross-connection Control Survey form is provided to the Town within 30 days of the survey being conducted.
- 6.2. Every owner shall ensure that every backflow prevention device for premise isolation on their property is a testable device and is the proper device to be used pursuant to Section 6.3 of the by-law;
- 6.3. Backflow prevention devices whether for premise isolation, source isolation or zone isolation shall be determined by using the Ontario Building Code and the CSA Standard;
- 6.4. Notwithstanding Section 6.3 of this by-law, the Town may require or permit a particular backflow prevention device be used in respect of any cross-connection;
- 6.5. Despite Section 6.3 of this by-law, the Town may permit an existing backflow prevention device that was previously approved so long as the safety of the water supply is maintained to the satisfaction of the Town in its sole discretion;
- 6.6. Despite Section 6.3 of this by-law, where a source isolation backflow prevention device has been installed by the manufacturer of the equipment, the owner is required to have the cross-connection reviewed by a qualified person pursuant to the Authorized Functions List to

determine if the backflow preventer complies with the requirements of the Ontario Building Code and the CSA Standard. These cross-connections shall be clearly identified on the Cross-connection Control Survey Form.

## **7. INSTALLATION OF BACKFLOW PREVENTION DEVICES**

- 7.1. Every person installing a backflow prevention device shall ensure that:
- 7.1.1. such device is installed in accordance with manufacturers specifications and the requirements of the CSA Standard; and
  - 7.1.2. such device is installed in an accessible location in a building or structure, not an access hole or a pit; and
  - 7.1.3. such device is located in such a manner so that in the event of backflow the device prevents contamination of the Town's water supply and any other potable water system; and
  - 7.1.4. where such device is installed in respect of premise isolation such device is located before the first branch line leading off the water supply line and not more than 3.0 metres downstream of the water meter, except where circumstances require the device to be installed upstream of the water meter and such location is to the satisfaction of the Town; and
  - 7.1.5. where such device is installed in respect of premise isolation, all piping between the water meter and such device is clearly labeled "no connection permitted"; and
  - 7.1.6. where such device is installed in respect of source or zone isolation, all piping between the point of contamination and the point at which the device is located, is labeled "non-potable water".
- 7.2. Every owner of property upon which a backflow prevention device is installed shall ensure that such device is in proper working order at all times.

## **8. TESTING OF DEVICES**

- 8.1. Every owner who has a backflow prevention device located on their property shall ensure that:
- 8.1.1. such device is tested by a qualified person when it is first installed and annually thereafter or when requested by the Town and also when the device is cleaned, repaired, overhauled, replaced or relocated; and
  - 8.1.2. in the event that such device is malfunctioning or otherwise not in proper working order, the device is immediately repaired or replaced; and
  - 8.1.3. in the event that the water supply to the device cannot be shutdown in order to facilitate annual testing, a by-pass shall be installed around the device with a suitable backflow prevention device installed in the by-pass to allow for annual testing of both devices.
- 8.2. Every person who tests a backflow prevention device shall carry out such testing in accordance with this by-law and the CSA Standard;
- 8.3. In addition to the testing methods set out in Section 6 of the CSA Standard, test procedures established by the ASSE or AWWA for testing backflow prevention devices may be employed;
- 8.4. Every person who tests a backflow prevention device shall:
- 8.4.1. Provide a legible test report to the owner of such test;
  - 8.4.2. Upon completing such test, complete and affix a test tag to the device or immediately adjacent to the device on the piping connected thereto; and

8.4.3. Upon finding such device is malfunctioning or otherwise not in proper working order, immediately notify the owner of the premise and the Town of such condition.

9. **INSPECTIONS**

9.1. The Town may, at any reasonable time, enter onto the property, building or structure to inspect for compliance with this by-law:

9.1.1. When carrying out an inspection pursuant to section 9.0 of this by-law, the Town may:

- a) Require the production for inspection of documents or things relevant to the inspection;
- b) Inspect and remove documents or things relevant to the inspection for the purpose of making copies or extracts;
- c) Require information from any person concerning a matter related to the inspection; and
- d) Make examinations or take tests, samples or photographs necessary for the purposes of the inspection.

9.2. Where an owner does not comply with any provision of this by-law, the Town may:

9.2.1. Order the owner to comply with the by-law requirements, and in so doing, shall provide reasonable particulars of the owner's non-compliance and prescribe the time period for compliance with such Order;

9.2.2. Shut off the water supply to the property or any portion thereof until such time as all provisions of this by-law are met.

10. **GENERAL PROVISIONS**

10.1. In addition to any other provision of this by-law, the Town may at any time order an owner to conduct tests, provide reports and undertake any other measures required for the prevention of backflow or protection of a cross-connection;

10.2. Appendix "A" shall form part of this by-law.

11. **ENACTMENT**

11.1. That this by-law shall be cited as the "Water Distribution System – Utility Services Cross-Connection Control / Backflow Prevention By-Law";

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

**READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 26<sup>th</sup> DAY OF NOVEMBER, 2012.**

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**MAYOR**

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**CLERK**

APPENDIX "A"  
TOWN OF NEW TECUMSETH  
BY-LAW NUMBER 2012-160

AUTHORIZED FUNCTIONS LIST

ITEM	FUNCTION	Professional Engineer with Tester's License	*Certified Engineering Technologist with Tester's License	Licensed Master Plumber with Contractor and Tester's License	** Journeyman Plumber with Tester's License	***Apprentice Plumber with Tester's License	Fire System Sprinkler Fitter with Tester's License	Lawn Irrigation System Installer with Tester's License
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