

**By-law Number 10 of 2015**

**of**

**The Corporation of the Village of Point Edward**

***Being a By-law to provide for backflow prevention.***

WHEREAS the Village of Point Edward wishes to protect the inhabitants and municipal water consumers of the Village from hazardous and detrimental infiltration of the Village's municipal potable water supply system from backflow;

AND WHEREAS the Village can prevent such backflow by regulating the connection of individual water services to the Village's potable water supply system;

AND WHEREAS section 11(2)(5) of the Municipal Act, SO 2001, c.25, as amended provides that a lower-tier municipality may enact by-laws to protect the environmental well-being of the municipality;

AND WHEREAS section 11(2)(6) of the Municipal Act, 2001, SO 2001, c.25, as amended provides that a lower-tier municipality may enact by-laws to protect the health, safety and well-being of persons;

NOW THEREFORE THE MUNICIPAL COUNCIL OF THE CORPORATION OF THE VILLAGE OF POINT EDWARD HEREBY ENACTS AS FOLLOWS:

1. This By-law shall come into full force and effect from and after the date of passing thereof.
2. By-law Number 23 of 2014 is hereby repealed.

READ A FIRST TIME:                      DATE: February 24, 2015

READ A SECOND TIME:                      DATE: February 24, 2015

PASSED:                                      DATE: February 24, 2015

\_\_\_\_\_  
Mayor

\_\_\_\_\_  
Clerk

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

# Backflow Prevention By-law

## Article 1

### Interpretation

1. "ASSE" means the American Society of Sanitary Engineering.
2. "AWWA" means the American Water Works Association.
3. "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 By-law.
4. "Backflow" means the flowing back of or reversal of the normal direction of flow of water.
5. "Backflow prevention device" means a device that prevents backflow.
6. "Building" shall have the same meaning as set out in the Building Code Act, 1992, S.O. 1992, Chapter 23, as amended.
7. "Compliance Schedule" means the schedule by which property owners will be required to submit cross-connection surveys for their property, or install appropriate backflow prevention devices.
8. "Cross-connections" means any actual or potential connection between the Village's potable water supply and any source of pollution or contamination and includes any by-pass, jumper connection, removable section of pipe, auxiliary water supply, swivel or changeover device and any other temporary or permanent connecting arrangement through which backflow may occur.
9. "Cross-Connection Survey Form" means the form set out as Appendix "C" of this By-Law.
10. "CSA Standard" means the document entitled National Standard of Canada – CAN/CSA-B64.10-94 & Amendments – Manual for the Selection, Installation, Maintenance, and Field Testing of Backflow Prevention Devices – Plumbing Products and Materials.  
A National Standard of Canada published in 1994 by the Canadian Standards Association, as amended.
11. "Hazard" means degree of danger posed to health by a cross-connection. Hazards shall be divided into the following three categories, as per section 4.2 of the CSA Standard:
  - (a) Minor hazard – any cross-connection or potential cross-connection that constitutes only a nuisance, with no possibility of any health hazard;

- (b) Moderate hazard – any minor hazard as defined in item (a) that has a low probability of becoming a severe hazard;
- (c) High or severe hazard – any cross – connection or potential cross-connection involving any substance that could be a danger to health.

- 12. “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 or any occupant of any building or structure located on such property.
- 13. “Potable water” means water that is safe for human consumption.
- 14. “Premise isolation” means isolation of the water located within a property from the Village’s water supply.
- 15. “Selection Guide” means the Backflow Preventions Device Selection Guides set out in Table B1 of Appendix B of the CSA Standard.
- 16. “Structure” means anything constructed or built permanently or temporarily which is provided with a source of Village’s potable water.
- 17. “Survey” means a cross-connection survey which is a complete review of a water system that receives potable water from the Village or systems located within a property to determine if any cross-connection exists.
- 18. “Tester” means a person who meets the requirements provided under the CSA Standard and is recognized by the Village as per the Authorized Functions List in Appendix “A”.
- 19. “Test Report” means a report in the form set out as Appendix “D” of this By-law.
- 20. “Village” means the Corporation of the Village of Point Edward.
- 21. “Water Manager” means the Water Manager, Engineering and Operational Services or designate.
- 22. “Water meter” means the water meter installed within a premise to record the amount of water supplied to such premises by the Village.

## **Article 2**

### **Application of By-law**

- 1. This By-law shall apply to all industrial, commercial, institutional, and multi-residential properties located within the Village that connect to the municipal water supply.
- 2. Every owner of property to which this By-law applies shall ensure that a backflow prevention device is installed as required by the By-law. The costs of the necessary survey, as well as the installation of the backflow device, will be the responsibility of the property owner.

## **Article 3**

### **Persons Permitted to Carry out Work**

- 1. Only the persons listed in the Authorized Functions List, Appendix “A”, shall carry out the corresponding functions set out in such list.

## Article 4

### Cross-Connection Surveys and Selection of Backflow Prevention Devices

1. Every owner of a property of a type set out in Article 2 of this By-law shall, carry out an initial survey of each of his or her properties with respect to all existing cross-connections and all existing and required backflow prevention devices as per the Compliance Schedule as set out in Appendix "B".
2. Every owner shall ensure that the survey is carried out by a person permitted to do so pursuant to the Authorized Functions List, Appendix "A", and that the survey is provided to the Village within 14 days of the survey being completed.
3. Every owner shall ensure that every backflow prevention device required for premise isolation on its property is a testable device and is the proper device to be used pursuant to Article 6 of this By-law.
4. Backflow prevention devices for premise isolation shall be determined using the Selection Guide in CAN/CSA-B64.10-94, as amended. If the type of cross connection is not identified in the Selection Guide, it shall be determined by a Professional Engineer using the CSA Standard.

The Professional Engineer must provide the rationale for selection of the device and provide this information on Appendix "C", Cross-Connection Survey Form.

5. Despite Article 6, when the type of cross-connection is not identified in the Selection Guide, the Village may require that a particular backflow prevention device be used in respect of any cross-connection.
6. Despite article 6 where the manufacturer of equipment has installed a source backflow prevention device, the cross-connection is required to be reviewed by the surveyor listed in Appendix A to determine if the backflow prevention device meets the requirements of the Selection Guide. Cross connections of this type are required to be included on the Cross Connection Survey described in Appendix "C".
7. When the owner of a property of a type set out in Article 2 makes any process or operational changes that may increase the hazard level, he or she shall perform a survey within 30 days of completion of the changes and that the survey shall be provided to the Village within 14 days of the survey being completed.
8. On the 5<sup>th</sup> year of the anniversary of the initial survey, and every 5 years thereafter, a follow-up survey must be performed and submitted to the Village within fourteen days of completion. If no operational or process changes were made within the previous 5 year period of time, the owner may indicate this on the Survey Form and forego the requirement to perform a new survey.
9. The owner will be exempted from the requirement to perform a survey if premises are isolated with an existing reduced pressure principle assembly (RP) backflow prevention device or if the owner chooses to install one. The owner shall either provide proof of an

existing RP or notify the Village of his or her intention to install an RP before the initial survey completion date. If the owner chooses to install an RP, the deadline to install shall be June 30, 2015.

**Article 5**

**Installation of Backflow Prevention Devices**

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.
2. Every person installing a backflow prevention device shall ensure that:
  - a. Such device is installed in accordance with acceptable engineering practices and the requirements of the Ontario Building Code. Ontario Regulation 350/06, as amended, this By-law, the Installation Guide and CSA Standard;
  - b. Such device is located in such a manner so that in the event of a backflow condition the device prevents contamination of the Village’s water supply;
  - c. Where such device is installed in respect of premise isolation, such device is located 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 authorized by the Water Manager;
  - d. Where such device is installed in respect of premise isolation, no connection shall be made between the property line and the backflow prevention device unless authorized by the Water Manager.
3. 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.
4. A building permit shall be required pursuant to the Building Code Act, 1992, S.O. 1992, Chapter 23, as amended to install a backflow prevention device. The owner or agent of the owner is responsible for acquiring all applicable permits.
5. Installation of an appropriate backflow prevention device shall occur prior to the date set out below for the corresponding degree of hazard:

Degree of Hazard According To Selection Guide	Compliance Schedule
Severe	Date: 15 days after completion of survey.
Moderate	Date: October 31, 2015
Minor	Date: March 31, 2016

**Article 6**

**Testing of Devices**

1. Every owner who has a backflow prevention device located on his or her property shall ensure that:

- a. such device is tested by a tester when it is first installed and as required thereafter or when requested by the Village and also when it is cleaned, repaired, replaced, overhauled or relocated;
  - b. when such device is tested, a Test Report, as attached as Appendix "D", or a suitable alternative approved by the Water Manager, is to be provided to the Village within 14 days of the test being conducted;
  - c. in the event that such device is malfunctioning or otherwise not in proper working order, the devices shall be immediately repaired or replaced.
  - d. All existing backflow prevention devices shall be tested as required by the by-law.
2. Every person who tests a backflow prevention device shall carry out such testing in accordance with this By-law and the CSA Standard.
  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.
  4. Every person who tests a backflow prevention device shall:
    - a. 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
    - b. upon finding that such device is malfunctioning or otherwise not in proper working order, immediately notifies the owner or agent of the owner of the premises and the Village of such condition.

### **General Provisions**

1. The Village may at any reasonable time enter onto the property of any owner to inspect the potable water system for compliance with this By-law.
2. Where the Village finds that a condition exists on any property that may allow contamination of the Village's water supply, including any residential building, the Village may:
  - a. Order the owner to eliminate the condition and in doing so may prescribe the time period for compliance with such Order; or
  - b. shut off the water supply to the property or any portion thereof until the condition is eliminated;
  - c. have such work done at the owner's expense and may recover the costs by adding the costs to the tax roll and collect them in the same manner as taxes if in default of compliance with such Order.
3. In addition to any other provision of this By-law, the Village 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 against a cross-connection.

4. Where a time frame is set out in this By-law for carrying out any action, the Water Manager may extend the time for compliance beyond the established time frame and the owner may be required to enter into a compliance program through a separate agreement.
5. A variance from complying with any condition of this By-law may be approved by the Water Manager if reasonable justification is provided.
6. Appendices “A” through “D” inclusive and the CSA Standard shall form part of this By-law.

### **General Prohibitions**

1. No person or owner shall connect, cause to be connected, or allow to remain connected to the Village’s potable water supply, any other potable water system or any piping, fixture, fitting, container, appliance, vehicle, machine or the like in a manner which may under any circumstance allow water, wasted water or any other liquid, chemical or substance to enter such supply or system.
2. No person or owner shall remove a backflow prevention device after it has been installed and no owner of a property 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; or
  - b. to replace the device with another device that meets or exceeds the provisions of this By-law.
3. While any device is being repaired or replaced, no bypass or temporary water supply line shall be used unless it is equipped with a backflow prevention device of the same level of protection as the existing device.

### **Enforcement**

1. Every person who contravenes any provision of this By-law is guilty of an offence and upon conviction is liable to pay a penalty provided for by of the Provincial Offences Act.
2. If there is a conflict between a provision of this By-law and a provision of any other Village By-law, then the more restrictive provision shall apply.

### **Severability**

1. The court in which the conviction has been entered, and any court of competent jurisdiction thereafter, may make an order prohibiting the continuation or repetition of the offence by the person convicted, and such order shall be in addition to any other penalty imposed on the person convicted.

### **Enactment**

This By-law shall come into full force and effect from and after the date of passing thereof.