

THE REGIONAL MUNICIPALITY OF PEEL

BY-LAW NUMBER 10-2017

A by-law respecting the prevention of Backflow into the Municipal Drinking Water System of The Regional Municipality of Peel.

WHEREAS, the Region operates the Municipal Drinking Water System pursuant to the Ontario *Safe Drinking Water Act, 2002*, S.O. 2002, c. 32

AND WHEREAS, section 11 of the *Municipal Act, 2001*, S.O. 2001, c. 25, provides that the Region has exclusive authority within its geographical boundaries to pass by-laws respecting the production, treatment, storage and distribution of water;

AND WHEREAS, section 8(1) of the *Municipal Act, 2001* provides that section 11 shall be interpreted broadly so as to confer broad authority on municipalities to enable them to govern their affairs as they consider appropriate and to enhance their ability to respond to municipal issues;

AND WHEREAS, Cross-Connection of another water system to, and Backflow from a plumbing system into, the Region of Peel's Municipal Drinking Water System could threaten the integrity of the water in the Region of Peel Municipal Drinking Water System and could prevent such water from meeting the requirements of the prescribed drinking water standards;

NOW THEREFORE, the Council of the Regional Municipality of Peel enacts as follows:

DEFINITIONS

1. In this By-law:

"Authorized Functions List" means the list of the classes of Persons and their associated qualifications together with the functions they are authorized to perform attached as Schedule "A" to this By-law;

"Backflow" means the flowing back of, or reversal of the normal direction of flow of water or any other substance, into the Municipal Drinking Water System;

"Backflow Prevention Device" means a testable device approved by the Region that is connected to a Drinking Water System or to Plumbing for the purpose of Backflow prevention;

"Backflow Prevention Device Report" means a report completed by a Qualified Person on a form as approved by the Commissioner,

containing the details and findings of quality control and assurance tests performed Backflow Prevention Device;

“Building” shall have the same meaning as set out in the *Building Code Act*;

“Building Code Act” means the *Building Code Act, 1992*, S.O. 1992, c. 23, as amended, and any successor thereto, and all current Ontario Regulations made under the authority of such Act;

“Certificate of Compliance” means a document completed by a Qualified Person, in a form as approved by the Commissioner, and containing the opinion of the Qualified Person as to whether or not an Owner is in compliance with this By-law;

“Commissioner” means the Commissioner of Public Works of the Region of Peel;

“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;

“Cross-Connection Survey” means an investigation of a Drinking Water System or of Plumbing to determine the presence or absence of any existing or potential Cross-Connections and to evaluate the need for ;

“Cross-Connection Survey Report” means a report completed by a Qualified Person on a form as approved by the Commissioner, containing the details and findings of a Cross-Connection Survey;

“CSA Standards” means the CSA International Standards *B64.10*, Manual for the Selection and Installation of Backflow Preventers, as amended and *B64.10.1*, Manual for the Maintenance and Field Testing of Backflow Preventers, as amended or equivalent standards as published by the CSA;

“Drinking Water” has the same meaning as provided for by the *Safe Drinking Water Act, 2002*, as amended;

“Drinking Water System” means a system of works, excluding plumbing, that is established for the purpose of providing users of the system with drinking water and that includes,

- (a) any thing used for the collection, production, treatment, storage, supply or distribution of water;
- (b) any thing 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;

“Enforcement Officer” means any person employed to enforce Regional by-laws as designated in the Region’s By-law 48-2014, as amended or replaced from time-to-time, and also known as a “By-Law Enforcement Officer”

“Land” means any real property situated in the Region of Peel and includes buildings and structures;

“Low-Risk Land” means real property:

- (a) that contains no Buildings other than residential Buildings of three or fewer storeys in building height and having a building area not exceeding 600 m²; and
- (b) that is not subject to any condition or circumstance which, in the opinion of the Commissioner, may be hazardous or detrimental to the Municipal Drinking Water System;

“Minor Hazard” means any type of Cross-Connection or potential Cross-Connection that involves a substance that constitutes only a nuisance and that results, or could result, in a reduction in only the aesthetic qualities of the water. This category includes those connections listed as Minor Hazards in the *CSA Standards* and any other connections as determined from time to time by the Commissioner;

“Moderate Hazard” means any type of Cross-Connection or potential Cross-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 water have been, or could be, reduced and, under certain conditions, can create a danger to health. This category includes those connections listed as Moderate Hazards in the *CSA Standards* and any other connections as determined from time to time by the Commissioner;

“Municipal Drinking Water System” means the Drinking Water System, or part of a Drinking Water System, owned by the Region, as defined by the *Safe Drinking Water Act, 2002*;

“Owner” means the registered owner of any real property situated in the Region of Peel that is connected to the Municipal Drinking Water System, save and except for Low-Risk Land;

“Person” means an individual or a corporation;

“Plumbing” means a system of works,

- (a) that comprise a “water system” for the purposes of the definition of “plumbing” in subsection 1 (1) of the *Building Code Act, 1992*, other than equipment installed in plumbing to treat water; and
- (b) that are connected to a Drinking Water System.

“Premise Isolation” means isolation of the water located within Land from the Region of Peel’s Municipal Drinking Water System;

“Qualified Person” means a Person authorized to undertake a task or duty pursuant to the Authorized Functions List;

“Region” or “Region of Peel” means the incorporated municipality known as The Regional Municipality of Peel or the geographical area whose inhabitants are incorporated, as the context requires;

“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. This category includes those connections listed as Severe Hazards in the *CSA Standards* and any other connections as determined from time to time by the Commissioner;

“Source Isolation” means isolation, from any Potable Water system, of the water located within or having flowed through a source or potential source of contamination, including a device, machine, water system or the like, on Land;

“Water Meter” means a device supplied and owned by the Region that measures the flow and quantity of Drinking Water that passes through it.

“Zone Isolation” means isolation of the water located on Land, from any Potable Water system located on such Land.

CROSS-CONNECTION SURVEYS

2. Every Owner shall, at the Owner’s expense, ensure that:
 - (a) a Cross-Connection Survey is undertaken by a Qualified Person, whenever required by this By-law;
 - (b) a Cross-Connection Survey Report is completed and submitted to the satisfaction of the Commissioner in respect of each such Cross-Connection Survey; and
 - (c) the completed Cross-Connection Survey Report is submitted to the Commissioner within fourteen (14) days after the survey is carried out.

3. Every Owner shall, at the Owner's expense, ensure the completion of an initial Cross-Connection Survey in respect of the Owner's Land within one year of the date when this By-law comes into effect or within the time limit specified by the Commissioner in a notice delivered to the Owner.
4. Where a Severe Hazard is present, the Owner shall, at the Owner's expense, ensure the completion of a subsequent Cross-Connection Survey in respect of the Severe Hazard within every three years of the previous Cross-Connection Survey or at such greater frequency as required by the Commissioner.
5. Where either a Moderate Hazard or Minor Hazard is present, the Owner shall, at the Owner's expense, ensure the completion of a subsequent Cross-Connection Survey in respect of the Moderate Hazard or Minor Hazard within every five years of the previous Cross-Connection Survey or at such greater frequency as required by the Commissioner.
6. Every Owner shall notify the Region within fourteen (14) days of any change in circumstances that would create or revive a pre-existing Minor Hazard, Moderate Hazard or Severe Hazard.
7. In every year subsequent to an initial Cross-Connection Survey except for years in which a follow-up Cross-Connection Survey is completed, the Owner shall submit to the Commissioner a Certificate of Compliance within fourteen (14) days of the anniversary date of the last Cross-Connection Survey.

ISOLATION OF HAZARDS

8. Every Owner shall, at the Owner's expense, ensure that a Backflow Prevention Device is installed whenever required by this By-law.
9.
 - (1) Where, in the sole discretion of the Commissioner, a risk of contamination to the Municipal Drinking Water System exists, an Owner upon receiving notice from the Commissioner, shall follow the direction contained in the notice and ensure the installation of the required number and type of Backflow Prevention Devices.
 - (2) Without limiting subsection 9(1), where either a Severe Hazard or a Moderate Hazard is identified, a minimum of two of the following shall be required: Source Isolation, Zone Isolation or Premise Isolation.

BACKFLOW PREVENTION DEVICES

10.
 - (1) The appropriate model of Backflow Prevention Device shall be selected by a Qualified Person in accordance with:
 - (a) the CSA Standards; or

- (b) when the type of Cross-Connection is not identified in the *CSA Standards*, by a Qualified Person having regard for the principles for backflow prevention contained in the *CSA Standards*.
 - (2) Notwithstanding subsection 10(1), the Commissioner may dictate that a particular type of Backflow Prevention Device be used in respect of any particular Cross-Connection.
11. Every Qualified 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 *Building Code Act*, the *CSA Standards*, and this By-law;
 - (b) such device is installed in such a way as to mitigate the potential for freezing;
 - (c) such device is located in such a manner that, in the event of Backflow, the device prevents contamination of the Municipal Drinking Water System and any other Drinking Water System;
 - (d) where such device is installed in respect of Source Isolation or Zone Isolation, all piping between the point of contamination or potential contamination and the point at which the device is located is labelled "Non-Potable Water";
 - (e) where such device is installed in respect of Premises Isolation, such device is located downstream of the Water Meter, and any meter by-pass, no closer than four times the diameter of the pipe and no further than 3.0 metres from such meter or by-pass, except where circumstances require the device to be installed upstream of the Water Meter and such location is to the satisfaction of the Commissioner; and
 - (f) where such device is installed in respect of Premises Isolation, all piping between the Water Meter and such device is clearly labelled "No Connection Permitted".
12. Every Owner of Land upon which is installed a Backflow Prevention Device shall ensure that such device is maintained in good repair at all times.
13. Every Owner of Land upon which is installed a Backflow Prevention Device, the proper functioning of which is capable of being tested, shall ensure that:
- (a) the device is tested by a Qualified Person when it is first installed and annually thereafter, within fourteen (14) days of the anniversary date of such installation, or as required by the *CSA Standards*, or earlier if

requested by the Commissioner, and also when the device is cleaned, repaired, overhauled or relocated;

(b) for each test of a Backflow Prevention Device, a Backflow Prevention Device Report of such test is submitted to the Commissioner within fourteen (14) days after installation; and

(c) for the initial test and each subsequent test, a Backflow Prevention Device Report of such test is retained on the premises for inspection by an Enforcement Officer for a period of not less than five (5) years from the date of the test.

14. Every Qualified Person who tests a Backflow Prevention Device shall, upon finding that such device is malfunctioning or otherwise not in proper working order, immediately notify the Owner of the device and the Commissioner by submitting the Backflow Prevention Device Report to each of them and contacting each of them by telephone, whereupon the Owner shall immediately notify the Commissioner in writing and by telephone of the Owner's response to the reported malfunction.

15. When testing demonstrates that a Backflow Prevention Device is malfunctioning or otherwise not in proper working order, the Owner of the device shall ensure that the device is repaired or replaced in accordance with the recommendations of a Qualified Person as needed within the time limit specified by the Commissioner.

16. All equipment used to test Backflow Prevention Devices shall be verified or calibrated for accuracy, as required by the CSA Standards and the Building Code Act.

17. Where a Backflow Prevention Device is required pursuant to this By-law, no Person shall remove, or cause or permit the removal of the Backflow Prevention Device or any part thereof after it has been installed unless:

(a) the removed device is immediately replaced with a device that meets or exceeds the requirements of this By-law; and

(b) the water supply is turned off for as long as the device is removed.

APPLICATION OF CSA STANDARDS

18. The selection, installation, maintenance and field testing of Backflow Prevention Devices pursuant to this By-law shall be performed in accordance with the CSA Standards.

19. Wherever the CSA Standards and this By-law are in conflict, the more stringent provisions shall prevail.

PERSONS AUTHORIZED TO CARRY OUT WORK

20. No Person shall carry out, and no Owner shall cause or permit any Person to carry out on the Owner's Land, any function pursuant to this By-law set out in the Authorized Functions List unless such Person is a Qualified Person.
21. Any Person who carries out work outlined in the Authorized Functions List shall produce, upon request by the Commissioner, applicable current credentials to establish the Person's qualifications to carry out such work.

DELEGATION

22. The Commissioner is authorized to approve all policies, procedures and forms and other documents and to make such decisions and approvals, and to exercise such discretion on behalf of the Region as necessary to administer this By-law.
23. The Commissioner is further authorized to delegate the responsibility for the administration of this By-law to any employee or agent of the Region.

ENFORCEMENT

24. The Commissioner, Enforcement Officers and any other Region staff members shall make all approvals, refusals, opinions, decisions and other actions required or permitted by this By-law, based on sound engineering principles and Regional Standards, policies and By-laws.
25.
 - (1) If an Enforcement Officer is satisfied that a contravention of this By-law has occurred, he or she may make an order requiring the Person who contravened this By-law or who caused or permitted the contravention, or the Owner or occupier of the Land on which the contravention occurred to discontinue the contravention.
 - (2) An order under subsection 26(1) shall set out:
 - (a) reasonable particulars of the contravention adequate to identify the contravention and the location of the Land on which the contravention occurred; and
 - (b) the date and time by which there must be compliance with the order, which may be of immediate effect should the Enforcement Officer determine that it is warranted in the circumstances.
26.
 - (1) If an Enforcement Officer is satisfied that a contravention of this By-law has occurred, or that an adverse condition exists on any Land that may allow contamination of the Municipal Drinking Water System, he or she may make an order requiring the Person who contravened this By-law or who caused or permitted the

contravention or the Owner or occupier of the Land on which the contravention occurred to do the work to correct the contravention or adverse condition.

(2) An order under subsection 27(1) shall set out:

- (a) reasonable particulars of the contravention adequate to identify the contravention and the location of the Land on which the contravention occurred;
- (b) the date and time by which there must be compliance with the order, which may be of immediate effect should the Enforcement Officer determine that it is warranted in the circumstances; and
- (c) the work to be completed which may include but is not limited to the requirement that:
 - i. prior to the performance of any work, all necessary permits or other approvals be applied for and obtained by the Person identified in the order;
 - ii. a Cross-Connection Survey be completed;
 - iii. a Backflow Prevention Device be installed, tested, repaired or replaced;
 - iv. a Backflow Prevention Device Report be completed and submitted to the Region; or
 - v. arrangements be made with the Region for shutting off the supply of water from the Municipal Drinking Water System under the work ordered to be done is complete.

27. Where an Enforcement Officer is satisfied that an offence of this By-law has been committed by a Person, the Enforcement Officer may require the name, address, and proof of identity of that Person, and the Person shall supply the required information.

28. Where a time period is set out in this By-law or in an order for carrying out any action, an Enforcement Officer or the Commissioner may extend the time for compliance beyond the established time period provided such extension is reasonable in the circumstances.

29.

- (1) Where a Person does not comply with a direction or a requirement, including an order, under this By-law to do a matter or thing, the Commissioner, with such assistance by others as may be required, may carry out such direction, requirement or order at the Person's expense.

- (2) The Region may recover the costs of doing a matter or thing under subsection 30(1) by action or by adding the costs to the tax roll and collecting them in the same manner as property taxes and such costs shall include interest calculated at a rate of 15 per cent, calculated for the period commencing on the day the Region incurs the costs and ending on the day the costs, including interest, are paid in full.
30. Without limiting the generality of any other section of this By-law, where the Commissioner has determined, in his or her sole discretion, that an immediate risk of contamination to the Municipal Drinking Water System exists that may endanger public health and safety, the Commissioner may shut off the water supply to any Land until the threat of contamination has been eliminated to the Commissioner's satisfaction.

POWERS OF ENTRY

- 31.
- (1) An Enforcement Officer may, at reasonable times, enter on Land, either alone or accompanied by a Person possessing special or expert knowledge or skills, for the purpose of performing inspections to locate existing or potential Cross-Connections.
 - (2) An Enforcement Officer may enter on Land at any reasonable time for the purpose of carrying out an inspection to determine whether or not the following are being complied with:
 - (a) this By-law;
 - (b) a direction or order of the Region made under the *Municipal Act, 2001*, S.O. 2001, c. 25 or this By-law; or
 - (c) an order made under section 431 of the *Municipal Act, 2001*, S.O. 2001, c. 25.
 - (3) For the purposes of an inspection under this By-law, an Enforcement Officer 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) alone or in conjunction with a Person possessing special or expert knowledge, make examinations or take tests, samples or photographs necessary for the purposes of the inspection.

- (4) In addition to any other provision of this By-law, and subject to the provisions of the *Municipal Act, 2001*, S.O. 2001, c. 25, a provincial judge or justice of the peace may issue an order authorizing the Region to enter on Land, including a room or place actually being used as a dwelling, for the purpose of carrying out an inspection to determine whether or not the following are being complied with:
- (a) this By-law;
 - (b) a direction or order of the Region made under the *Municipal Act, 2001*, S.O. 2001, c. 25 or this By-law; or
 - (c) an order made under section 431 of the *Municipal Act, 2001*, S.O. 2001, c. 25
- (5) Without limiting any other provision of this By-law, for the purposes of this section, the Region may shut off or reduce the supply of Drinking Water to the Land.
- (6) If the Region lawfully decides to cease the supply of Drinking Water to any Land, an Enforcement Officer, either alone or accompanied by a Person possessing special or expert knowledge or skills, may enter on the Land:
- (a) to shut off the supply of Drinking Water;
 - (b) to remove any property of the Region; or
 - (c) to determine whether the Municipal Drinking Water System has been or is being unlawfully used.

OBSTRUCTION

32. No Person shall hinder or obstruct, or attempt to hinder or obstruct, an Enforcement Officer lawfully carrying out a power, duty or direction under this By-law.

OFFENCES

33. Every Person other than a corporation who contravenes any provision of this By-law, is guilty of an offence and on conviction is liable, for every day or part thereof upon which such offence occurs or continues, to a fine of not more than \$10,000 for a first offence; and not and not more than \$25,000 for any subsequent conviction.
34. Every corporation which contravenes any provision of this By-law, is guilty of an offence and on conviction is liable, for every day or part thereof upon which such offence occurs or continues, to a fine of not more than \$50,000 for a first offence and not more than \$100,000 for any subsequent conviction.

35. Without limiting any other section of this By-law, every Person who contravenes any provision of this By-law is guilty of an offence and on conviction is liable to a fine in accordance with the Provincial Offences Act, R.S.O. 1990, c. P.33.
36. If any Person is in contravention of any provision of this By-law, and the contravention has not been corrected, the contravention of the provision shall be deemed to be a continuing offence for each day or part of a day that the contravention remains uncorrected.
37. Where any Person contravenes any provision of this By-law, such Person shall be responsible for all costs incurred by the Region directly related to the contravention.

SEVERABILITY

38. If any section or sections of this By-law, or parts thereof are found by any court of competent jurisdiction to be illegal or beyond the power of Regional Council to enact, such section or sections or parts thereof shall be deemed to be severable from this By-law and all remaining sections or parts of this By-law shall be deemed to be separate and independent therefrom and to be properly enacted and to be of full force and effect.

CONFLICT

39. In the event of a conflict between any provision of this By-law and any applicable Act or regulation, the provision that is the most restrictive prevails.

SCHEDULES

40. This By-law includes [Schedules "A"](#) and "B" attached hereto which forms part of the By-law.

EFFECTIVE DATE

41. This By-law shall come into force and take effect on April 1, 2017.

SHORT TITLE

42. This By-law may be referred to as the "Backflow Prevention By-law".

READ THREE TIMES AND PASSED IN OPEN COUNCIL this 9th day of February, 2017.

K. Lockyer

Regional Clerk

F. Dale

Regional Chair

**Schedule “A” to By-law 10-2017 - Authorized
Functions List**

Item	Authorized Function by Qualified Person	Professional Engineer Licensed in Accordance with CSA Standards	Certified Engineering Technologist Licensed in Accordance with CSA Standards ¹	Licensed Master Plumber Licensed in Accordance with CSA Standards	Journeyman Plumber Licensed in Accordance with CSA Standards ²	Apprentice Plumber Licensed in Accordance with CSA Standards	Fire System Sprinkler Fitter Licensed in Accordance with CSA Standards	Lawn Irrigation System Installer Licensed in Accordance with CSA Standards	Steamfitter Licensed in Accordance with CSA Standards	Region of Peel Staff Licensed in Accordance with CSA Standards
1	Perform Cross-Connection Survey	✓	✓	✓	✓	✓	✓	✓	✓	
2	Install, relocate or replace backflow prevention device			✓	✓	✓				
3	Repair backflow prevention device	✓	✓	✓	✓	✓				
4	Test backflow prevention device	✓	✓	✓	✓	✓				✓
5	Complete items 1, 2, 3, 4 in relation of fire protection systems	✓	✓	✓	✓	✓	✓			
6	Complete items 3 and 4 in relation to lawn sprinkler systems	✓	✓	✓	✓	✓		✓		
7	Complete items 1, 2, 3, 4 in relation to heating and cooling systems								✓	

¹ Required to be under the direction of a professional engineer.

² Required to be employed by a licenced plumbing contractor or licenced fire sprinkler contractor.

³ Required to be employed by a licenced plumbing contractor and under the direct supervision of a journeyman plumber or master plumber.

Schedule “B”

PART I: PROVINCIAL OFFENCES ACT

THE REGIONAL MUNICIPALITY OF PEEL

BY-LAW NUMBER 10–2017

**A BY-LAW TO REGULATE THE MUNICIPAL DRINKING WATER SYSTEM IN THE
REGIONAL MUNICIPALITY OF PEEL**

ITEM	COLUMN 1 Short Form Wording	COLUMN 2 Provision Creating or Defining Offence	COLUMN 3 Set Fine
1.	Failure to submit a completed Cross Connection Survey Report	s. 2	\$250
2.	Failure to submit a Certificate of Compliance	s. 6	\$250
4.	Failure to ensure installation of a Backflow Prevention Device	s. 8	\$500
5.	Failure to maintain a Backflow Prevention Device in good repair	s. 12	\$400
6.	Failure to submit a Backflow Prevention Device Report	s. 13	\$250
7.	Unauthorized removal of a Backflow Prevention Device	s. 18	\$500
8.	Unauthorized performance under Authorized Functions List	s. 21	\$500