

THE CITY OF VAUGHAN

BY-LAW

BACKFLOW PREVENTION

(Consolidated Version – Enacted as By-law [177-2020](#))

Last consolidated on December 15, 2022. City of Vaughan by-laws are provided on line for convenient public reference. By-laws are consolidated on an ongoing basis, but recent amendments may not be reflected in the latest consolidated version. Check the [Amendment History](#) to get a complete listing of all pertinent regulations. For further information contact the Office of the Director and Chief Licensing Officer.

A By-law to regulate backflow prevention and cross connections in the City of Vaughan in order to protect the City’s drinking water system from contamination, and to repeal and replace By-law 004-2018.

WHEREAS section 11 of the *Municipal Act, 2001*, S.O. 2001, c. 25, provides that the City of Vaughan may pass By-laws relating to public utilities, including matters affecting water distribution, and for the purposes related to health, safety and well-being of persons;

AND WHEREAS section 398 of *the Municipal Act, 2001* provides for fees and charges imposed by a municipality on a person to constitute a debt of the person and for the municipality to add such fees and charges to the tax roll and collect them in the same manner as municipal taxes;

AND WHEREAS subsection 434.1(1) of the *Municipal Act, 2001* provides for a municipality to require a person, subject to such conditions as the municipality considers appropriate, to pay an administrative penalty if the municipality is satisfied that the person has failed to comply with a by-law of the municipality passed under the Act;

AND WHEREAS sections 444 and 445 of the *Municipal Act, 2001* provide for a municipality to make an order to discontinue a contravening activity or correct a contravention, with either order setting out particulars of the contravention and the date by which compliance must be achieved;

AND WHEREAS subsection 11(1) of the *Safe Drinking Water Act, 2002*, S.O. 2002, c. 32, requires every owner of a municipal drinking water system to ensure that all water provided by the system meets the requirements of drinking water quality standards and that the drinking water system is operated in accordance with the *Safe Drinking Water Act, 2002*;

AND WHEREAS section 19 of the *Safe Drinking Water Act, 2002*, S.O. 2002, c. 32, requires every person who oversees or has decision-making authority over a municipal drinking water system to exercise the level of care diligence and skill that a reasonable prudent person would be expected to exercise in a similar situation and act honestly competently and with integrity with a view to ensuring the protection and safety of the users of the municipal drinking water system;

AND WHEREAS O. Reg. 332/12, being the *Ontario Building Code*, Part 7 - Plumbing requires potable water systems to be protected from contamination;

AND WHEREAS contamination of the City’s drinking-water system can arise as a result of a backflow incident from a private plumbing system that is attached to the City’s municipal drinking-water system and such contamination of the municipal drinking-water system can have an adverse impact on the health, safety and well-being of the users of the City’s drinking water;

AND WHEREAS the City seeks to put mechanisms in place so as to minimize the potential or discharging of a contaminating substance into the municipal drinking-water system;

NOW THEREFORE the Council of The Corporation of City of Vaughan enacts this By-law to regulate backflow prevention within the City of Vaughan’s Municipal Drinking Water System:

Table of Contents

1. Short Title.....	2
2. Applicability and Scope.....	2
3. Definitions and Interpretation.....	2
4. Backflow Prevention.....	5
5. Temporary Water.....	5
6. Owners’ Responsibilities.....	5
7. Persons Permitted.....	6
8. Cross Connections Control Survey and Report.....	6
9. Installation Requirements.....	7
10. Auxiliary Water Supply.....	7
11. Fire Service Isolation.....	7
12. Testing Requirements.....	7
13. Corrective Actions.....	8
14. Application of SCA Standard.....	8
15. Damage to Municipal Drinking Water System.....	8
16. Administration and Enforcement.....	8
17. Administrative Monetary Penalties.....	10
18. Fines.....	10
19. Fees.....	11
20. Implementation and Compliance.....	11
21. General Provisions.....	11
22. Designation of By-law.....	11
23. Effective Date and Repeal of Prior By-law.....	11
Schedule ‘A’ Authorized Function List.....	12
Schedule ‘B’ Premise Isolation Selection Guide	13
Schedule ‘C’ Offences and Corresponding Administrative Monetary Penalties.....	16

-  **1. Short Title**
 - (1) This By-law shall be known and may be cited as the “Backflow Prevention By-law”.
-  **2. Applicability and Scope**
 - (1) This By-law applies to *Parcels of Land* being supplied with *Potable Water* from the *City* via a *Service Connection* or a *Temporary Water Service Connection*.
 - (2) *Buildings* of residential occupancies as described in Division A of the *Ontario Building Code* are not required to be protected in respect of *Premise Isolation* unless the *City* determines that a condition exists in any *Building* or *Structure* that may be hazardous or detrimental to the *Municipal Drinking Water System*.
-  **3. Definitions and Interpretation**
 - (1) For the purposes of this By-law:
 - A. “Applicant” means a *Person* who applies for or requests a service;

- B. “Authorized Functions” means the functions listed on the *Authorized Function List*, which must be carried out by a *Qualified Person*;
- C. “Authorized Function List” means the list provided by the *City* that sets out certain functions, as set out in Schedule ‘A’ of this By-law, which must be performed by a *Qualified Person* and the qualifications that must be obtained to be a *Qualified Person*;
- D. “Auxiliary Water Supply” means any water supply, on or available to the *Property*, other than the *Potable Water* that is supplied by the *City*;
- E. “Backflow” means the flowing back or reversal of the normal direction of flow;
- F. “Backflow Preventer” means a device, as defined by the *Ontario Building Code*, that prevents *Backflow* to the *Municipal Drinking Water System*;
- G. “Backflow Preventer Replacement Form” means a form prescribed by the *City*, which shall record all work done by an *Owner* to remedy the deficiencies identified either on the *Cross Connection Control Survey Report* or on the *Backflow Preventer Test and Inspection Reports* for their *Property*;
- H. “Backflow Prevention Program” means a program initiated by the *City* to administer and regulate the selection, installation, testing and maintenance of *Backflow Preventers*;
- I. “Backflow Preventer Test and Inspection Report” means a document, prescribed by the *City*, of a *Backflow Preventer*, containing the make, model, serial number, size, type, installation date, location and installation address, the *Qualified Person(s)* who performed the test, and the test results;
- J. “Backflow Preventer Test Tag” means a tag, in a form satisfactory to the *City*, which contains the address of *Property*, type of device, manufacturer, serial number and size of the device, the test date, the *Qualified Person* printed name, the *Qualified Person Cross Connection Control Specialties* certificate number and the printed name of the *Qualified Company*;
- K. “Building” shall have the same meaning as set out in the *Building Code Act*;
- L. “Building Code Act” means the *Ontario Building Code Act, 1992*, S.O. 1992, c. 23;
- M. “City” means the Corporation of the City of Vaughan, including its *Municipal Law Enforcement Officers* and its designated representatives;
- N. “Cross Connection” means any actual or potential connection between a *Potable Water System* and any source of potential pollution or contamination;
- O. “Cross Connection Control Specialist” means an individual who is recognized as such, and who shall have completed and passed an Ontario Water Works Association endorsed *Cross Connection Control Specialist Course* or equivalent at an accredited school or college and shall have a current certificate issued by the accrediting association;
- P. “Cross Connection Control Survey Report” means a document, prescribed by the *City*, to be completed by a *Qualified Person* as listed on the *Authorized Function List*, which shall contain a description of all *Cross Connections* and all identified existing method of protecting those *Cross Connections* and corrective measure and recommendations;
- Q. “CSA Standard” means the Canadian Standards Association B64.10/B64.10.1 - Selection and installation of backflow preventers/Maintenance and field testing of backflow preventers;
- R. “Double Check Valve Assembly” means a *Backflow Preventer* that consists of two force-loaded, independently acting check valves and two resilient-seated shut-off valves located at each end and is fitted with resilient-seated test ports;
- S. “Drinking Water” means drinking water as defined in subsection 2(1) of the *Safe Drinking Water Act, 2002*, S.O. 2002, c. 32;
- T. “Dual Check Valve” means a *Backflow Preventer* that consists of two force-loaded, soft-seated check valves in series with no relief port or test ports

included;

- U. “Emergency” means a situation or an impending situation that could negatively affect the quality of *Potable Water* or constitutes danger to the *Municipal Drinking Water System*;
- V. “Fire Service Connection” means a pipe that is connected to the *Municipal Drinking Water System* and that is located on a *Property* that conveys *Potable Water* from the *Municipal Drinking Water System* to a *Parcel of Land* for firefighting purposes;
- W. “Information Request Form” means a document, prescribed by the *City*, which includes details regarding the *Owner* of the *Property* and their primary contact information, as well as information about any tenant(s) and business activities occurring on the *Property*;
- X. “Minor Hazard” means any type of *Cross Connection* or potential *Cross Connection* that involves a substance that constitutes only a nuisance and that results in reduction in only aesthetic qualities of the water as defined by the *CSA Standard*;
- Y. “Moderate Hazard” means any *Minor Hazard* connection that has a low probability of becoming a *Severe Hazard* and 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 defined by the *CSA Standard*;
- Z. “Municipal Act” means the *Municipal Act, 2001*, S.O. 2001, c. 25;
- AA. “Municipal Drinking Water System” means the drinking-water system as defined by subsection 2(1) of the *Safe Drinking Water Act, 2002*, S.O. 2002, c. 32;
- BB. “Municipal Law Enforcement Officer” means an employee of the *City* that is appointed to enforce the provisions of the *City’s* By-laws;
- CC. “Ontario Building Code” means Ontario Regulation 332/12 made under the *Building Code Act*;
- DD. “Owner” means a *Person* that has control over a *Property* and includes the *Owner* registered on the title of the *Property* and any occupant of any *Building* or *Structure* located on such *Property*;
- EE. “Parcel of Land” means a lot or block within a registered plan of subdivision;
- FF. “Person” means an individual, *Owner*, association, partnership, firm or corporation, as applicable;
- GG. “Potable Water” means water that is safe for human consumption and that complies with section 10 of the *Safe Drinking Water Act, 2002*, S.O. 2002, c. 32;
- HH. “Premise Isolation” means *Backflow* protection provided at the entrance to a *Building* or *Property*;
- II. “Property” includes a house, *Building*, *Structure*, land, lot or any part of a house, *Building*, *Structure*, land or lot within the *City* which receives *Potable Water* supplied by the *City*;
- JJ. “Qualified Company” means a company registered to the *Backflow Prevention Program* and possessing all up-to-date required qualifications;
- KK. “Qualified Person” means a *Person* with approved qualifications as set out in the *Authorized Function List* and currently employed by a *Qualified Company*;
- LL. “Qualified Company and Qualified Person Policy” means a policy, prepared by the *City*, that the owner of a *Qualified Company* and all registered *Qualified Person(s)* shall sign and abide by that states their roles and responsibilities as well as outlining the disciplinary actions for violations of the policy;
- MM. “Reduced Pressure Principle Assembly” means a *Backflow Preventer* that consists of a mechanically independently acting, hydraulically dependent relief valve located in a chamber between two independent operating, force-

loaded check valves and two resilient-seated shut-off valves located at each end and is fitted with resilient-seated test ports;

NN. "Service Connection" means the connection between the *Municipal Drinking Water System* and a user's system;

OO. "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 defined by the *CSA Standard*;

PP. "Structure" means anything that is erected which requires location on the ground or attached to something having a location on the ground, but does not include swimming pools constructed not more than 0.3 meters above finished grade;

QQ. "Temporary Water Service Connection" means a metered connection to the *Municipal Drinking Water System* created for the purpose of construction or other temporary purpose and removed upon completion of the *Structure* or purpose;

RR. "Water Meter" means all equipment installed for the purpose of measuring the water supplied by the *City*;

SS. "Water Meter Application" means a form prescribed by the *City* to request a *Water Meter* to be rented or purchased.

- (2) In the event of a conflict between the provisions of this By-law and the provisions of any other By-law, Act or regulation, the provisions that are the most restrictive shall prevail.
- (3) Where a court of competent jurisdiction declares any section or part of a section of this By-law invalid, the remainder of this By-law shall continue to be in force unless the court makes an order to the contrary.
- (4) Any reference in this By-law to any statutes, regulations, By-laws, or association standards shall be deemed to be a reference to such statutes, regulations By-laws, or association standards as amended, restated or replaced.

4. BACKFLOW PREVENTION

- (1) No *Person* shall directly or indirectly connect, permit, cause to be connected, or allow to remain connected, any piping, fixture, fitting, container, appliance, or equipment to the *Municipal Drinking Water System*, or any other connection which may under any circumstance allow any substance other than *Potable Water* to enter the *Municipal Drinking Water System*, except in compliance with the provisions of this By-law.
- (2) No *Person* shall directly or indirectly connect, permit, cause to be connected, or allow to remain connected, a well to the *Municipal Drinking Water System*.

5. TEMPORARY WATER

- (1) Any *Person* who requires a *Temporary Water Service Connection* shall:
 - A. Submit a *Water Meter Application* to the *City* with the location of the connection approved by the *City*;
 - B. Supply, install, maintain and annually test, a *Reduced Pressure Principle Assembly* in accordance with this By-law;
 - C. Ensure the test administered on the *Backflow Preventer* is witnessed by *City* staff prior to the water being turned on; and
 - D. Not remove a *Water Meter* and/or *Backflow Preventer* without *City* approval.

6. OWNERS' RESPONSIBILITIES

- (1) Within thirty (30) days of receiving a notice from the *City* requesting a completed *Information Request Form*, every *Owner* of a *Property* shall complete and submit said form to the *City*.
- (2) Every *Owner* shall install a *Backflow Preventer* as required by the *Building Code Act* for new *Buildings*, for each new water *Service Connection*, and when so directed by the *City*.

- (3) At the *Owner's* expense, every *Owner* is required to apply and obtain a Building Permit prior to the installation, replacement, relocation or removal of a *Backflow Preventer* and when so directed by the *City*.
- (4) Every *Owner* of *Property* shall ensure all *Backflow Preventers* are in proper working order at all times.
- (5) Upon receiving a *Backflow Prevention Program* notice from the *City*, every *Owner* of a *Property* shall comply with the requirements set out therein.
- (6) Every *Owner* shall ensure that all *Authorized Functions* are completed by a *Qualified Company* that is qualified to complete such task as set out in the *Authorized Function List*.

7. PERSONS PERMITTED

- (1) No *Person* shall carry out any *Authorized Functions* unless he/she has the necessary qualifications as set out in the *Authorized Function List*, and, if applicable, subsection 7(3) below.
- (2) No *Person* shall permit any other *Person* in its employ, or agent acting on its behalf, to carry out any *Authorized Functions* said employee/agent has the necessary qualifications as set out in the *Authorized Function List*, and, if applicable, subsection 7(3) below.
- (3) In addition to required qualifications listed in the *Authorized Function List*, those permitted to perform the *Cross Connection Control Survey Report* or testing of *Backflow Preventer* shall also have and submit proof of the following qualifications in a form satisfactory to the *City*:
 - A. Current and valid Certificate of Achievement in Cross Connection Control endorsed by the Ontario Water Works Association, or other recognized certification organization approved by the *City*, issued within five years prior to the date of the *Cross Connection Control Survey Report* or *Backflow Preventer Test and Inspection Report*;
 - B. Current and valid documentation establishing his or her professional qualifications, as set out in the *Authorized Function List*;
 - C. Current calibration certificate for the test equipment issued within the twelve (12) months prior to date of submission of a *Backflow Preventer Test and Inspection Report*;
 - D. Proof of Commercial General Insurance with minimum \$2 million coverage;
 - E. Adequate insurance requirements to perform the work; and
 - F. Copy of current *Backflow Preventer Test Tag*.
- (4) The owner of the *Qualified Company* and all employees who are registered as a *Qualified Person* must read the *Qualified Company and Qualified Person Policy*, as amended, and submit a signed copy of the policy acknowledgment form.

8. CROSS CONNECTION CONTROL SURVEY AND REPORT

- (1) Within thirty (30) days of receiving a notice from the *City* requiring a *Cross Connection Control Survey Report*, every *Owner* of a *Property* shall complete a *Cross Connection Control Survey Report* and submit it to the *City* within fourteen (14) days of the survey being conducted.
- (2) In addition to the requirement in section 8(1), every *Owner* shall ensure a *Cross Connection Control Survey Report* is completed and submitted to the *City*:
 - A. Every five (5) years from the date of the first survey requested by the *City*;
 - B. Upon change of ownership of the *Property*;
 - C. Where a *Property's* hazard classification as set out in Schedule 'B', changes, which results in a different type of *Backflow Preventer* being required;
 - D. When a new Service Connection to the *Municipal Drinking Water System* is made, and prior to making a request to the *City* to turn on the water valve; and/or
 - E. At the *City's* request.

← 9. INSTALLATION REQUIREMENTS

- (1) Except as otherwise set out in this By-law, every *Owner* shall ensure a *Backflow Preventer* is installed in respect of *Premise Isolation* for each *Structure* or *Building* to which *Potable Water* is delivered.
 - A. *Backflow Preventers* installed in respect of *Premise Isolation* shall be determined in accordance with Schedule 'B' of this By-law.
 - B. Despite paragraph 9(1)(A) of this By-law, the *City* has final approval on the selection of the *Backflow Preventer* to be installed.
- (2) Where a *Backflow Preventer* is installed in respect of *Premise Isolation* such device shall be located before the first branch line leading off the water supply line and not more than three (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 *City*.
- (3) *Backflow Preventers* shall be installed by a *Qualified Person* in accordance with good engineering and construction practices, manufacturers specifications and meet the requirements of the *Ontario Building Code* and the *CSA Standard*.
- (4) The *Owner* shall ensure that all *Backflow Preventers* are:
 - A. Located and installed in a such a manner so that in the event of *Backflow* the *Backflow Preventer* prevents contamination of the *Municipal Drinking Water System*;
 - B. Installed in readily accessible areas to facilitate inspection, field testing and maintenance while complying with the minimum and maximum clearances around the *Backflow Preventer* as outlined in the *CSA Standard*;
 - C. Supported and restrained to prevent lateral movement; and
 - D. Not bypassed.
- (5) Where a *Backflow Preventer* is installed in areas subject to freezing, the *Owner* shall ensure it is protected from freezing in a manner acceptable to the *City*.
- (6) Where a *Double Check Valve Assembly* is installed underground, the *Owner* shall ensure that all test ports are sealed water-tight.
- (7) Where a *Reduced Pressure Principle Assembly* is installed, the *Owner* shall ensure the atmospheric port is open to atmosphere and not directly connected to a drain.
- (8) All piping between the *Water Meter* and the *Backflow Preventer* is clearly and permanently labelled "no connections permitted".

← 10. AUXILIARY WATER SUPPLY

- (1) *Buildings* of residential occupancy that are exempt from this By-law and have access to an *Auxiliary Water Supply* are required to be protected from *Backflow* by a *Dual Check Valve* if the *Auxiliary Water Supply* is not connected to *Potable Water*.
- (2) No *Person* shall connect, cause or permit to be connected, or allow to remain connected any *Auxiliary Water Supply* to the *Municipal Drinking Water System* without the consent of the *City*.

← 11. FIRE SERVICE ISOLATION

- (1) When notified by the *City*, *Owners* are required to install a *Backflow Preventer* in respect to *Premise Isolation of the Fire Service Connection*.
- (2) All *Owners* shall ensure that the *Backflow Preventer* is in accordance with the *Ontario Building Code*, the *Ontario Fire Code* and the *CSA Standard*.

← 12. TESTING REQUIREMENTS

- (1) Every *Owner* who has a *Backflow Preventer* installed on their *Property* shall ensure that:
 - A. Such device is tested when it is first installed and annually thereafter unless a different timeframe is requested by the *City*, as well as when it is cleaned, repaired, overhauled or relocated;

- B. The completed *Backflow Preventer Test and Inspection Report* is submitted to the *City* within fourteen (14) days of the test being conducted;
 - C. A legibly marked *Backflow Preventer Test Tag* is affixed to the *Backflow Preventer*; and
 - D. When a new connection to the *Municipal Drinking Water System* is made, a *Qualified Person* shall complete and submit a *Backflow Preventer Test and Inspection Report* prior to the request for the turning on of the water valve by the *City*.
- (2) Every *Qualified Person* who tests a *Backflow Preventer* shall:
- A. Ensure that all testing is in accordance with this By-law and the *CSA Standard*;
 - B. Within fourteen (14) days of carrying out such test, provide a *Backflow Preventer Test and Inspection Report* to the *City* and *Owner*;
 - C. Upon completing such test, complete and affix a *Backflow Preventer Test Tag* in a form satisfactory to the *City*;
 - D. Upon finding that a *Backflow Preventer* is malfunctioning, or otherwise not in proper working order, immediately notify the *Owner*, occupant of the *Property* and the *City* of such condition; and
 - E. Ensure that the *Cross Connection Control Survey Report* submitted to the *City* does not contain inaccurate or false information.

← 13. CORRECTIVE ACTIONS

- (1) Where required by the *City*, every *Owner* shall take corrective actions to remedy the deficiencies that were identified on the *Cross Connection Control Survey Report* for their *Property*. Such corrective actions shall take place within the timeframe required by the *City*.
- (2) Every *Owner* shall take corrective actions to remedy the deficiencies identified on the *Backflow Preventer Test and Inspection Report* for their *Property*.
- (3) When a *Backflow Preventer* is found to be malfunctioning or not in proper working order, the *Owner* shall ensure all activities that may result in *Backflow* immediately cease and repair the device immediately.
 - A. If the device is unable to be repaired during the *Backflow Preventer* test, the *Owner* shall ensure the device is repaired within three (3) business days of the failed test.
- (4) Where a *Backflow Preventer* is installed, no *Person* shall not remove, or cause, or permit the removal of the *Backflow Preventer* or part thereof unless the removal is:
 - A. To facilitate the *Emergency* repair of the device and such device is replaced immediately after such repair is carried out, or
 - B. To replace the *Backflow Preventer* with another that meets or exceeds the provisions of this By-law, or such removal is required to change *Building* functions with written notification having been received by the *City*.
- (5) Within fourteen (14) days of implementing corrective actions, the *Owner* shall submit to the *City* the *Backflow Preventer Replacement Form*.

← 14. APPLICATION OF CSA STANDARD

- (1) Except as otherwise set out in this By-law, the selection, installation, maintenance, and testing of *Backflow Preventer* required pursuant to this By-law shall be undertaken in accordance with the current *CSA Standard*.

← 15. DAMAGE TO MUNICIPAL DRINKING WATER SYSTEM

- (1) Any *Person* who receives water from the *Municipal Drinking Water System* and creates an illegal *Cross Connection* shall be liable for all costs associated with related work undertaken by the *City* or its agents. Such costs may include, but are not limited to, the cost of investigation, disinfection, repairing or replacing any part of the system, to restore the *Municipal Drinking Water System*.

← 16. ADMINISTRATION AND ENFORCEMENT

- (1) Subject to the terms of the *Municipal Act*, the *City* may enter on a *Property* at any reasonable time for the purpose of carrying out an inspection to determine whether or not the following are being complied with:
 - A. The provisions of this By-law;
 - B. A notice or order issued under this By-law; or
 - C. An order of the court made pursuant to the *Municipal Act*.
- (2) Where an inspection is conducted by the *City*, the *Person* conducting the inspection may:
 - A. Require the production for inspection of documents relevant to the inspection;
 - B. Inspect and remove documents 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;
 - D. Alone or in conjunction with a *Person* possessing special or expert knowledge, make examination or take tests, samples or photographs necessary for the purposes of the inspection; and
 - E. Undertake an inspection pursuant to an order issued under section 438 of the *Municipal Act*.
- (3) Where the requirements of this By-law are not met or a condition exists on any *Property* that may allow contamination of the *Municipal Drinking Water System*, then the *City* may:
 - A. Issue and serve an order to the *Owner* requiring compliance with the requirements of this By-law and to eliminate the condition which may allow contamination. Said order may prescribe the time period for compliance with such order; the work required to be completed pursuant to the order may include but is not limited to:
 - i. An *Information Request Form* be completed and submitted to the *City*;
 - ii. A *Cross Connection Control Survey Report* be completed and submitted to the *City*;
 - iii. A *Backflow Preventer Test and Inspection Report* be completed and submitted to the *City*;
 - iv. Taking corrective actions on deficiencies identified either on the *Cross Connection Control Survey Report* or on the *Backflow Preventer Device Test and Inspection Report* for the *Property*;
 - v. A *Backflow Preventer* be tested annually;
 - vi. A *Backflow Preventer Test Tag* be installed to a *Backflow Preventer Device*;
 - vii. A Building Permit be applied for and obtained prior to installation, relocation, replacement or removal of a *Backflow Preventer*; and
 - viii. Installation, repair, and/or replacement of a *Backflow Preventer*.
- (4) If a condition exists on a *Property* which the *City* determines is a *Minor Hazard* or *Moderate Hazard* to the *Municipal Drinking Water System*, the *City* may shut off the water supply to the *Property* or any portion thereof until the condition is eliminated to the satisfaction of the *City*, provided reasonable advance notice has been provided to the *Owner*.
- (5) If a condition exists on a *Property* which the *City* determines is an *Emergency* or a *Severe Hazard* to the *Municipal Drinking Water System*, the *City* may immediately and without notice shut off the water supply to the *Property* or any portion thereof until the condition is eliminated to the satisfaction of the *City*.
- (6) Wherever this By-law directs or requires any work to be done, in default of it being done by the *Person* directed to do it, such work may be done by the *City* or its agents at the expense of the *Person* and the *City* may recover all expenses incurred in doing the work by action or by adding the costs to the tax roll and collecting them in the same manner as taxes.

- (7) In addition to any other provision of this By-law, the *City* may at any time issue an order to an *Owner* to conduct tests, provide reports and undertake any other measure required for the elimination of a *Cross Connection* and the prevention of *Backflow*.
- (8) No *Person* shall hinder, obstruct, or attempt to hinder or obstruct the *City* or other *Person* so authorized who is performing a duty or exercising a power under this By-law.
- (9) No *Person* shall refuse or neglect to give, produce or deliver any access, information, document or other thing that is requested by the *City* carrying out an inspection, except in accordance with the *Municipal Act*.
- (10) No *Person* shall provide any false or misleading information to the *City*, its agents or contractors in the exercise of an activity, power or performance of a duty or administrative function under this By-law, including but not limited to any information provided or submitted on or with any application or in respect to any inspection or enforcement of this By-law.

← 17. ADMINISTRATIVE MONETARY PENALTIES

- (1) Instead of laying a charge under the *Provincial Offences Act*, R.S.O. 1990, c. P.33 for a breach of any provisions of this By-law, a Municipal Law Enforcement Officer may issue an administrative monetary penalty to the *Person* who has contravened this By-law.
- (2) If a *Person* is required to pay an administrative monetary penalty under subsection 17(1), no charge shall be laid against that same *Person* for the same violation.
- (3) The amount of the administrative monetary penalty for a breach under this By-law is listed in Schedule 'C'.
- (4) A *Person* who is issued an administrative monetary penalty shall be subject to the procedures provided for in the Administrative Monetary Penalties By-law.
- (5) An administrative monetary penalty imposed on a *Person* that becomes a debt to the *City* under the Administrative Monetary Penalties By-law may be added to the municipal tax roll and collected in the same manner as municipal taxes.

← 18. FINES

- (1) Every *Person* who contravenes or fails to comply with any provision of this By-law, including an order or notice issued under this By-law, is guilty of an offence.
- (2) Every director or officer of a corporation who knowingly concurs in the contravention of a provision of this By-law or fails to comply with a notice or order made under this By-law is guilty of an offence.
- (3) Every *Person* who is convicted of an offence under this By-law is liable to a fine as provided for in section 61 of the *Provincial Offences Act*, R.S.O. 1990, c. P.33
- (4) Every *Person* who contravenes any provision of this By-law is, upon conviction, guilty of an offence and is liable:
 - A. On a first conviction, for each day or part of a day on which the offence occurs or continues, to a fine of not more than \$10,000; and
 - B. On any subsequent conviction, for each day or part of a day on which the offence occurs or continues, to a fine of not more than \$25,000.
- (5) Despite subsection 17(4), where the *Person* convicted is a corporation:
 - A. The maximum fine in paragraph 17(4)(A) is \$50,000; and
 - B. The maximum fine in paragraph 17(4)(B) is \$100,000.
- (6) Any *Person* who contravenes a notice or order made under this By-law, or an officer or director of a corporation who knowingly concurs in such a contravention by the corporation, is guilty of a continuing offence and upon conviction is liable to a daily fine or penalty of a maximum of \$10,000 for each day or part of a day that the offence continues, and despite subsections 17(4) and 17(5), the total of all the daily fines imposed for an offence is not limited by the fine amounts listed in those subsections.

- (7) For purposes of this By-law, an offence is a second or subsequent offence if the act giving rises to the offence occurred after a conviction had been entered at an earlier date for the same offence.

← **19. FEES**

- (1) Any fees and administrative costs associated with this By-law are non-refundable and are indicated in the *City's Fees and Charges By-law*.

← **20. IMPLEMENTATION AND COMPLIANCE**

- (1) Every *Owner* shall install a *Backflow Preventer* within the timeframe specified on an order, but no later than ninety (90) calendar days.

← **21. GENERAL PROVISIONS**

- (1) Where a timeframe is set out in this By-law for carrying out any action, the *City* may extend the time for compliance beyond the established timeframe provided such extension is approved by the *City* in writing.
- (2) The *Authorized Function List* and the *CSA Standard* shall form part of this By-law.

← **22. DESIGNATION OF BY-LAW**

- (1) Schedule 1 of the Administrative Monetary Penalties By-law is hereby amended by including this By-law as a Designated By-law.

← **23. EFFECTIVE DATE & REPEAL OF PRIOR BY-LAW**

- (1) This By-law comes into force on the day it is passed.
- (2) By-law 004-2018 is hereby repealed.

Enacted by City of Vaughan Council this 15th day of December, 2020.

Hon. Maurizio Bevilacqua, Mayor

Todd Coles, City Clerk

Authorized by Item No. 2 of Report No. 51
of the Committee of the Whole
Adopted by Vaughan City Council on
November 17, 2020.

← Schedule 'A' - Authorized Function List



**SCHEDULE 'A'
AUTHORIZED FUNCTION LIST**

Backflow Prevention By-law 177-2020

		Professional Engineer with CCCS ¹	Certified Engineering Technologist with CCCS ²	JP Plumber with CCCS ¹	AP Plumber with CCCS ³	JP Sprinkler & Fire Protection Installer with CCCS ¹	AP Fire & Sprinkler Installer with CCCS ⁴	Water Operator with CCCS ⁵	Irrigation Installer with CCCS ¹
Authorized Function To Complete	Cross Connection Control Survey	✓	✓	✓					
	Cross Connection Control Survey in respect to fire system	✓	✓	✓		✓			
	Install, relocate and/or replace Backflow Preventer			✓	✓				
	Install, relocate, replace, test and/or repair Backflow Preventer in respect to fire system			✓	✓	✓	✓		
	Test and/or repair Backflow Preventer	✓	✓	✓	✓			✓	
	Test and/or repair in respect to lawn irrigation	✓	✓	✓	✓				✓

- 1 Required to be employed by a Qualified Company
- 2 Required to be employed by a Qualified Company and under direct supervision of a Professional Engineer
- 3 Required to be employed by a Qualified Company and under direct supervision of a Journeyperson/Master plumber
- 4 Required to be employed by a Qualified Company and under direct supervision of a Journeyperson Sprinkler and Fire Protection Installer
- 5 Required to be employed by the City of Vaughan

For the purposes of this Authorized Function List:

"AP" means an Apprentice registered with the Ontario College of Trades

"CCCS" means a Cross Connection Control Specialist Certificate

"JP" means a Journeyperson registered with the Ontario College of Trades

"Qualified Company" means a company that is registered with the City of Vaughan Backflow Prevention Program who employ Qualified Person(s) that are permitted to carry out work under the Backflow Prevention By-Law

Please Note: In performing work related to the Backflow Prevention Program, it is the Qualified Company and Qualified Person's responsibility to comply with all applicable law including, but not limited to, Ontario Health and Safety Act - Regulation 632/05. If the City receives notice that a Qualified Company and Qualified Person has failed to comply with applicable law, the City may, without notice, remove the Company or Person from the City's Approved Qualified Company List.

 **Schedule 'B' - Premise Isolation Selection Guide**

Type of Building or Water Use	Degree of Hazard
Agricultural	Severe
Animal Feed Lot	Moderate to Severe
Animal Stock Yard	Moderate to Severe
Aquaculture Farm	Severe
Aquarium (Public)	Severe
Arena	Moderate
Asphalt Plant	Severe
Auto Body Shop	Severe
Auto Dealership	Moderate
Automotive Repair Shop	Severe
Beverage Processing Plant	Severe
Blood Clinic	Severe
Campsite	Moderate
Campsite with RV Hook-ups or Dump-stations	Severe
Carwash	Severe
Chemical Plant	Severe
Church	Moderate
College	Moderate
Commercial Premises	Moderate to Severe
Concrete Plant	Severe
Dental Office	Moderate
Dental Surgery Facility	Severe
Dry Cleaning Plant	Severe
Dye Plant	Severe
Exhibition Ground	Moderate to Severe
Farm	Moderate to Severe
Film Processing Facility	Severe
Fire Hydrant (Temporary Water Purposes)	Severe
Fire Service (With Chemical Addition)	Severe
Fire Service (Without Chemical Addition)	Moderate
Fire Station	Moderate to Severe
Fish Farms or Hatchery	Severe
Food Processing Plant	Severe
Fuel Dispensing Facility	Moderate to Severe
Funeral Home	Severe
Garbage Transfer Facility	Severe
Gas Station with Automotive Repair	Severe
Golf Course	Moderate to Severe
Greenhouse	Severe
Grocer	Moderate
Hair Salon	Moderate
Hospital	Severe
Hotel	Moderate
Industrial Premises	Moderate to Severe
Institutional Premises	Moderate to Severe

Irrigation System (With Chemical Addition)	Severe
Irrigation System (Without Chemical Addition)	Moderate
Kennel	Moderate
Laboratory	Severe
Laundry (Commercial)	Severe
Laundry (Commercial, Coin-operated)	Moderate
Manufacturing Plant	Moderate to Severe
Meat Packing Plant	Severe
Medical Clinic (Non-surgical)	Moderate
Medical Clinic (Surgical)	Severe
Medical Laboratories	Severe
Milk Processing Plant	Severe
Mining Facility	Severe
Mobile Home Park	Moderate
Mortuary or Morgue	Severe
Motel	Moderate
Motorcycle Repair Facility	Severe
Multi-service Interconnected Facility	Moderate to Severe
Multi-tenant Single-service Facility	Moderate
Nursing Home	Moderate
Office Building	Moderate
Oil Refinery	Severe
Paint Manufacturing Plant	Severe
Petroleum Processing or Storage Facility	Severe
Pharmaceutical Manufacturing Facility	Severe
Photo Processing Facility	Severe
Plants Using Radioactive Material	Severe
Plastic Manufacturing Plant	Severe
Poultry Farm	Severe
Power Generating Facility	Severe
Premises Where Access is Prohibited or Restricted	Severe
Printing Plant	Severe
Pulp or Paper Plant	Severe
Radiator Shop	Severe
Recycling Facility	Severe
Refinery, Petroleum Processing	Severe
Rendering Facility	Severe
Research Building	Severe
Residential (4 Floors or More)	Moderate to Severe
Residential Part 9	Minor
Restaurant	Moderate
School (Elementary, Junior High, and Senior High)	Moderate
Seasonal Pressurized Connection	Moderate to Severe
Shopping Mall	Moderate
Slaughterhouse	Severe
Steam Plant	Severe
Steel Manufacturing Plant	Severe

Stormwater Facility or Pump Station	Severe
Subway Station	Moderate to Severe
Swimming Pool Facility	Moderate
Trackside Facility for Trains	Severe
University	Moderate to Severe
Veterinary Clinic	Moderate to Severe
Waste Disposal Plant	Severe
Wastewater Facility or Pump Station	Severe
Wastewater Treatment Plant	Severe
Water Facility or Pump Station	Moderate to Severe
Water Filling Station	Severe
Water Park	Severe
Water Treatment or Pump Station	Severe
Zoo	Severe

← Schedule 'C' - Offences and Corresponding Administrative Monetary Penalties

Section	Description of Offence	AMP Amount
4(1)	Connect, permit, cause to be connected, or allow to remain connected an unprotected <i>Cross Connection</i> to the <i>Municipal Drinking Water System</i>	\$1000.00
4(2)	Connect, permit, cause to be connected, or allow to remain connected a well to the <i>Municipal Drinking Water System</i>	\$1000.00
5	Failed to comply with a requirement under Section 5	\$350.00
6(1) 8(1) 12(1)(B) 12(2)(B) 13(5)	Failed to provide a document within prescribed time	\$50.00
6(2)	Failed to install a <i>Backflow Preventer</i> when required	\$500.00
6(3)	Failed to apply and obtain a Building Permit	\$75.00
6(4)	Failed to ensure <i>Backflow Preventer</i> is in proper working conditions	\$250.00
6(5)	Failed to comply with a <i>Backflow Prevention Program</i> notice	\$50.00
6(6)	Failed to ensure <i>Qualified Company</i> is permitted to complete <i>Authorized Function</i>	\$250.00
7	Failed to comply with a requirement under Section 7	\$300.00
8(2)	Failed to complete or submit a <i>Cross Connection Control Survey Report</i>	\$350.00
9(1)	Failed to ensure <i>Premise Isolation</i> of the <i>Structure</i> or <i>Building</i>	\$350.00
9(2)	Failed to ensure <i>Backflow Preventer</i> installed in correct location	\$250.00
9(3)	Failed to ensure <i>Backflow Preventer</i> installed correctly	\$250.00
9(4)(A)	Failed to ensure <i>Backflow Preventer</i> located and installed to prevent contamination of <i>Municipal Drinking Water System</i>	\$500.00
9(4)(B)	Failed to ensure <i>Backflow Preventer</i> installed in area to facilitate inspection, testing and maintenance while complying with minimum and maximum clearances	\$250.00
9(4)(C)	Failed to ensure <i>Backflow Preventer</i> is supported and restrained	\$200.00
9(4)(D)	Failed to ensure <i>Backflow Preventer</i> is not bypassed	\$500.00
9(5)	Failed to ensure <i>Backflow Preventer</i> is protected from freezing conditions	\$200.00
9(6)	Failed to ensure that all <i>Double Check Valve Assembly</i> test ports are watertight when located underground	\$200.00
9(7)	Failed to ensure <i>Reduced Pressure Principle Assembly</i> atmospheric port is open to atmosphere or not connected to drain	\$200.00
9(8)	Failed to ensure all piping between <i>Water Meter</i> and <i>Backflow Preventer</i> is properly labelled "no connections permitted"	\$75.00
10(1)	Failed to ensure residential property with <i>Auxiliary Water Supply</i> is protected from <i>Backflow</i>	\$300.00
10(2)	Connect, permit, cause to be connected, or allow to remain connected an <i>Auxiliary Water Supply</i> to the <i>Municipal Drinking Water System</i>	\$1000.00
11	Failed to comply with a requirement under Section 11	\$750.00
12(1)(A)	<i>Owner</i> failed to test a <i>Backflow Preventer</i>	\$250.00
12(1)(C)	<i>Owner</i> failed to ensure a <i>Backflow Preventer Test Tag</i> is attached	\$25.00

12(1)(D)	Failed to test <i>Backflow Preventer</i> prior to the water valve being turned on by the <i>City</i>	\$250.00
12(2)	<i>Qualified Company</i> failed to comply with a requirement under Section 12(2)	\$300.00
13(1)	Failed to take corrective actions identified on the <i>Cross Connection Control Survey Report</i>	\$250.00
13(2)	Failed to take required corrective actions identified on the <i>Backflow Preventer Test and Inspection Report</i>	\$250.00
13(3)	<i>Owner</i> failed to repair a <i>Backflow Preventer</i>	\$200.00
13(4)	Unauthorized removal of a <i>Backflow Preventer</i>	\$500.00
16(8)	Hinder or obstruct the <i>City</i> or other <i>Person</i> exercising a power under the By-law	\$150.00
16(9)	Failed to provide access/information when requested by the <i>City</i> , except as authorized by the <i>Municipal Act</i>	\$50.00
19(1)	Failed to provide applicable fee within prescribed time	\$50.00
20(1)	<i>Owner</i> failed to install <i>Backflow Preventer</i> within prescribed time	\$500.00

