

By-law 2017-217

A By-law Respecting the Prevention of Backflow into the Municipal Drinking Water of the City of Greater Sudbury

Whereas Council of the City of Greater Sudbury desires to prevent the flow of water, other liquids, chemicals or substances back into the drinking water for which the City of Greater Sudbury is responsible;

And Whereas sections 8, 9, and 10 of the *Municipal Act 2001*, S.O. 2001, c. 25 (the "Act") authorize the City of Greater Sudbury to pass by-laws that are necessary or desirable for municipal purposes, and in particular paragraphs 4 through 8 of subsection 10(2) authorize by-laws respecting: public assets of the municipality; economic, social and environmental well-being of the municipality; health, safety and well-being of persons,; services and things that the municipality is authorized to provide and protection of persons and property, including consumer protection;

And Whereas contamination of the City of Greater Sudbury's drinking water can arise as a result of a backflow incident from a private plumbing system which is attached to the City's municipal drinking water system;

And Whereas the contamination of the municipal drinking water can have an adverse impact on the health, safety and well-being of the users of the City of Greater Sudbury's drinking water;

And Whereas section 425 of the Act authorizes the City of Greater Sudbury to pass by-laws providing that a person who contravenes a by-law of the City of Greater Sudbury passed under the Act, is guilty of an offence;

And Whereas the Act further authorizes the City of Greater Sudbury, amongst other things, to impose fees and charges on persons for services or activities provided or done by or on its behalf, to provide for inspections and inspection orders, and to make orders to discontinue activity or to do work;

Now Therefore, the Council of the City of Greater Sudbury hereby enacts as follows:

Part 1 – General - Interpretation - Application

Definitions

1. For the purposes of this By-law:

“ASSE” means the American Society of Sanitary Engineers;

“Authorized Function” means a task as set out in Schedule “A”, which must be performed by an Authorized Person;

“Authorized Person” means a Person who holds the qualifications in Column A of the chart on Schedule “A” to perform the corresponding Authorized Functions in Columns B-1 to B-4 on the chart on Schedule “A”, and who is registered in the City’s registry system as an Authorized Person to perform those Authorized Functions;

“Auxiliary Water Supply” means any water source or system, other than the Municipal Drinking Water System that may be available in a Building or Structure or on any Property;

“AWWA” means the American Water Works Association;

“Backflow” means a flowing back or reversal of the normal direction of flow of water;

“Backflow Prevention” means the prevention of the flow of water, or other liquids, chemicals or substances back into the water being supplied by the Municipal Drinking Water System;

“Backflow Prevention Device” means a device, including all valves and test ports, that has been approved under the CSA Standard for Backflow Prevention;

“Building” has the same meaning as set out in the *Building Code Act, 1992*, S.O. 1992, c. 23;

“Building Code” means the *Building Code*, O. Reg. 350/06 made under the *Building Code Act, 1992*, S.O. 1992, c. 23;

“City” means the geographic area of the City of Greater Sudbury or the municipal corporation as the context requires;

“Compliance Program” refers to a program for achieving compliance with Zone Isolation, which has been approved by the General Manager in writing in accordance with section 19;

“Cross Connection” means an actual or potential connection between a Drinking Water system and any source of pollution or contamination and may include as representative examples, a by-pass or a removable section of pipe;

“Cross Connection Control Manual” means the AWWA Canadian Cross Connection Control Manual, Edition #1, 2007, as amended from time to time or any successor thereof;

“Cross Connection Survey Report” refers to a report of the same name, in the form established by the General Manager from time to time in accordance with section 15;

“CSA Standard” means the CAN/CSA B-64 Series published by the Canadian Standards Association, in effect at the time of enactment of this By-law and as amended from time to time, or successor thereof;

“Drinking Water” means water that is fit for human consumption;

“Fire Protection System” means any system within a Building or Structure for the suppression of a fire, including but not limited to any system consisting of a water sprinkler system or dry foam, or a system described in the CSA Standard;

“General Manager” means the General Manager, Growth and Infrastructure for the City and includes his or her authorized designate or designates and any person who holds a successor position;

“Irrigation System” means a system for artificially supplying land with water for agriculture or landscaping, usually by means such as pipes and sprinklers;

“Minor Hazard” means any Cross Connection that constitutes only a nuisance, with no possibility of any health hazard, and which is identified as a minor hazard connection by the CSA Standards;

“Moderate Hazard” means any Cross Connection that has a low probability of becoming a severe or high hazard and under certain circumstances can create a danger to health and which is identified as a moderate hazard connection by the CSA Standards;

“Municipal By-Law Enforcement Officer” means any Person appointed by Council as a Municipal By-law Enforcement Officer for the enforcement of this By-law or all City by-laws and includes a duly sworn member of the Greater Sudbury Police Service;

“Municipal Drinking Water System” means the buildings, structures, plant, machinery, equipment, appurtenances, devices, conduits, intakes, outlets, underground pipelines and

installations, and other works designed for the transmission, distribution and storage of Drinking Water by the City, and includes lands occupied for such purposes and uses;

“Owner” includes the Person who is the registered owner of the Property, and also includes a receiver or manager, a mortgagee in possession, a beneficial owner of the Property, the Person for the time being who is managing or receiving the rent of the Property or premises whether on his own account, or as agent or trustee of any other person, or who would receive the rent if the Property and premises were let, and shall also include a lessee or occupant of the Property who, under the terms of a lease, is required to repair and maintain the Property in accordance with the standards for the maintenance and occupancy of the Property in the lease. Where the Person holding registered title to the Property is a condominium corporation, the owner is the condominium corporation and not its members;

“Person” includes an individual, a sole proprietorship, a partnership, an unincorporated association, a trust and a corporation;

“Plumbing” has the meaning in the *Safe Drinking Water Act* as set out below:

A system works:

- a) that comprise a “water system” for the purposes of the definition of the Building Code Act, other than equipment installed in plumbing to treat water, and
- b) that are connected to a drinking water system;

“Premise Isolation” means the prevention of Backflow into the Municipal Drinking Water System from a Building, Structure or Property by the installation of a suitable Backflow Prevention Device at the entrance of such Building, Structure or Property;

“Preventor Test Tag” means the tag of the same name, in the form established by the General Manager from time to time, in accordance with section 12;

“Property” means lands within the City and includes Buildings and Structures thereon and includes facilities where a boat or mobile home can connect to the Municipal Drinking Water System;

“Rates By-law” means By-law 2017-6, being A By-Law of the City of Greater Sudbury to Establish a Water and Wastewater Policy and Water and Wastewater Rates and Charges in General and for Special Projects, as amended or replaced from time to time and includes any successor by-law, whether or not such successor bylaw has a different name, which is intended to address rates and charges for sewer and water services;

“Severe Hazard” means any Cross Connection involving any substances that could be a danger to health and includes but is not limited to, Cross Connections for establishments involving chemical usage, high hazard uses as defined by the Building Code or “high or severe hazard” as defined in the CSA Standard and any use where the General Manager determines that Backflow Prevention is required;

“Structure” means anything constructed or built permanently or temporarily which is provided with a source of Drinking Water, including but not limited to a boat or mobile home;

“Test and Inspection Report” means the document of the same name in the form established by the General Manager from time to time in accordance with section 12;

“Water Meter” means a device or mechanism which is owned by the City and installed on a Property for the purpose of measuring the flow or quantity, or both, of water consumed; and

“Zone Isolation” means the isolation of the water located within an area of a building or structure from any Drinking Water system located within such Building or Structure.

Interpretation

2.-(1) Whenever this By-law refers to a person or thing with reference to gender or the gender neutral, the intention is to read the By-law with the gender applicable to the circumstances.

(2) References to items in the plural include the singular, as applicable.

(3) The words “include”, “including” and “includes” are not to be read as limiting the phrases or descriptions that precede them. Any examples provided are intended to be representative examples and not intended to be an exhaustive list.

(4) Headings are inserted for ease of reference only and are not to be used as interpretation aids.

(5) Specific references to laws in the By-law are printed in italic font and are meant to refer to the current laws applicable with the Province of Ontario as at the time the By-law was enacted, as they are amended, restate or replaced from time to time.

(6) Any reference to periods of time, stated in numbers of days, shall be deemed applicable on the first Business Day after a Sunday or Statutory holiday if the expiration of the time period occurs on a Sunday or Statutory holiday.

(7) The obligations imposed by this By-law are in addition to obligations otherwise imposed by law or contract.

(8) Where this By-law provides metric and imperial units of measure, the metric unit of measure shall prevail. For convenience only, approximate imperial measurements have been provided in parentheses but are of no force or effect.

(9) Terms with capitals shall be read with the meaning in section 1, and other words shall be given their ordinary meaning.

Severability / Conflict

3.-(1) If any section, subsection, part or parts of this By-law is declared by any court of law to be bad, illegal or ultra vires, such section, subsection, part or parts shall be deemed to be severable and all parts hereof are declared to be separate and independent and enacted as such.

(2) Nothing in this By-law relieves any person from complying with any provision of any federal or provincial legislation or any other By-law of the City.

(3) Where a provision of this By-law conflicts with the provisions of another By-law in force in the City or any of the provisions of any federal or provincial states or regulation, the provision that establishes the higher standard to protect the health, safety and welfare of the general public shall prevail.

Administration / Delegation

4.-(1) The administration of this By-law is assigned to the General Manager who is delegated the authority to:

- (a) take all actions and make all decisions required of the General Manager under this By-law;
- (b) perform all administrative functions and conduct all enquiries, inspections or investigations referred to herein and those incidental to and necessary for the due administration and implementation of this By-law; and
- (c) establish and amend from time to time, such forms, documents, agreements, and such standards, protocols and procedures as the General Manager may determine are required to implement and administer this Bylaw, and sign such forms, documents and agreements as required.

(2) Without limiting the generality of subsection 4(1), the General Manager is delegated the authority to:

- (a) give notice requiring the Owner of a Property which is subject to this By-law to complete and file a Cross Connection Survey Report by the date specified in the notice; and
- (b) require an Owner of a Property to which this By-law applies to conduct additional tests, provide additional reports and undertake any other measure required for the prevention of Backflow or protection of a Cross Connection.

(3) The General Manager may delegate the performance of any one or more of his or her functions under this By-law to one or more persons from time to time as the occasion requires and may impose conditions upon such delegation and may revoke any such delegation. The General Manager may continue to exercise any function delegated during the delegation.

(4) Unless specifically provided to the contrary in this By-law, the decisions of the General Manager are final and not subject to appeal.

Application

5.-(1) This By-law shall apply within the geographic limits of the City.

(2) A Backflow Prevention Device shall be installed, in accordance with this By-law in:

- (a) every Building or Structure which is connected to the Municipal Drinking Water System except a Building or Structure which has one or more residential occupancies, where each residential dwelling unit in the Building or Structure is individually serviced from the Municipal Drinking Water System through a single connection of less than 50 mm;
- (b) Plumbing in a Building or Structure with residential occupancies where the Building or Structure is connected to the Municipal Drinking Water System and there is:
 - (i) a Fire Protection System; or
 - (ii) an Auxiliary Water System; or
 - (ii) an Irrigation System; and
- (c) every Building or Structure or Property, whether or not within 5(2)(a) or (b), where, in the opinion of the General Manager, a condition exists or may exist which may be hazardous or detrimental to the Municipal Drinking Water System and the General Manager has given notice in writing to install a Backflow Prevention Device by the date specified in the notice. The notice may be given

to the Owner at the address shown in the tax roll for the Property as the address for service of tax bills, in accordance with the provisions for giving notice of an order under section 28.

(3) Subsection 5(2) applies whether the Building or Structure is constructed in whole or in part before or after this By-law comes into effect.

Backflow Prohibited

6. No Person shall connect, cause or permit to be connected or allow to remain connected to the Municipal Drinking Water System any piping, fixture, fitting, container, appliance, vehicle, machine or the like in a manner which may, under any circumstance, allow water, wastewater or any other liquid, chemical, pollutant or other substance to enter such Municipal Drinking Water System, except in compliance with the provisions of this By-law.

Part 2 – Backflow Prevention Devices

Backflow Prevention Device Required

7.-(1) Every Owner of a Property described in subsection 5(2) shall ensure that a Backflow Prevention Device is installed in accordance with this By-law in every Building or Structure or Property supplied by the Municipal Drinking Water System, in respect of:

- (a) Premise Isolation; and
- (b) Zone Isolation, where Zone Isolation is recommended in the Cross Connection Survey Report by the Authorized Person who conducted that Cross Connection Survey Report for that Property.

(2) Every Owner of a Property, Building or Structure who is served with a notice under paragraph 5(2)(c) shall install the Backflow Prevention Device by the date set out in the notice from the General Manager, or such later date as may be agreed to by the General Manager.

Backflow Prevention Device – Irrigation System / Fire Protection

8.-(1) Every Owner of a Property on which an Irrigation System has been installed in a manner that results in a Cross Connection, shall ensure that the Municipal Drinking Water System is protected against Backflow from the Irrigation System in accordance with the CSA Standard.

(2) Every Owner of a Property which has a Fire Protection System within a Building or Structure on the Property shall ensure that such Building or Structure is protected against Backflow in accordance with the CSA Standard.

Backflow Prevention Device- Auxiliary Water

9.-(1) No Person and no Owner shall connect or cause or permit any Auxiliary Water Supply System to be connected to or to remain connected to any Plumbing in any Building or Structure which is supplied by the Municipal Drinking Water System unless the written approval of the General Manager to the connection or continuing connection has been granted and the connection is and remains in accordance with the conditions of approval.

(2) An applicant for approval under subsection 9(1) shall:

- (a) apply in writing using the form established by the General Manager;
- (b) provide particulars of the proposed or existing connection method;
- (c) provide such other information and documentation as the General Manager may require to assess the application; and
- (d) pay any applicable application fee, determined in accordance with the Rates By-law.

(3) Every application approved by the General Manager under subsection 9(2) shall be conditional upon:

- (a) installation of adequate Backflow Prevention Devices, compliant with the CSA Standard; and
- (b) compliance with any conditions imposed by the General Manager.

(4) In the event that the General Manager refuses an application for a connection or continuing connection of an Auxiliary Water Supply System to the Municipal Drinking Water System, he or she shall advise the applicant in writing at the address provided in the application.

Installation of Backflow Prevention Devices

10.-(1) No Person other than an Authorized Person shall install a Backflow Prevention Device and no Owner of a Property or other Person shall authorize or permit any Person other than an Authorized Person to install a Backflow Prevention Device.

(2) Every Authorized Person who installs a Backflow Prevention Device and every Owner or other Person who causes or permits an Authorized Person to install a Backflow Prevention Device, whether for Premise Isolation or Zone Isolation, shall ensure:

- (a) that such device is selected in accordance with the CSA Standard;
- (b) such device is installed in accordance with acceptable engineering practices, the requirements of the CSA Standard, the Cross Connection Control Manual and

the manufacturer's specifications and in the event of a conflict, the provisions of the CSA Standard shall prevail;

- (c) such device is installed in a location and manner so as to be protected from freezing and damage;
- (d) where such device is installed in a Building or Structure, the Person has in addition to any other requirements:
 - (i) obtained any necessary building permit required under the *Building Code*; and
 - (ii) installed the device in accordance with the conditions of the building permit issued pursuant to the *Building Code*;
- (e) such device is located so as to prevent Contamination in the event of Backflow; and
- (f) where such device is installed for Premise Isolation, all piping between the Water Meter and such device is clearly labeled "no connection permitted" with labelling which is a minimum of 25 mm in height, green in color and which is affixed to the piping no more than 300 mm apart, at every bend and at every change of direction of the piping.

Testing of Devices – Duty of Owner

11.-(1) Every Owner of a Property on which a Backflow Prevention Device is installed shall, without notice by the City to do so, cause the device to be tested by an Authorized Person:

- (a) at the time the Backflow Prevention Device is first installed;
- (b) within a year of the anniversary of the date of installation, and annually thereafter; and
- (c) at the time of each replacement, relocation or repair of the Backflow Prevention Device.

(2) Every Owner of a property on which a Backflow Prevention Device is installed, in addition to complying with subsection 11(1), shall, upon receipt of a written notice from the General Manager, cause the device to be tested by an Authorized Person within the time period provided for in the written request.

Testing of Devices – Duty of Authorized Person

12.-(1) The General Manager may from time to time establish the form of, and make available for use pursuant to this By-law:

- (a) a Preventor Test Tag to be used in accordance with this section;
- (b) the seal by which a Preventor Test Tag is to be affixed; and
- (c) a Test and Inspection Report to be used in accordance with this section.

(2) Every Authorized Person testing a Backflow Prevention Device shall:

- (a) carry out such testing in accordance with this By-law and the CSA Standard, or using testing procedures for such devices established by the ASSE or AWWA, provided however that in the event of a conflict, the testing method set out in the CSA Standard shall prevail;
- (b) upon completion of testing, complete a Preventor Test Tag in a legible manner and affix the Preventor Test Tag to the device or immediately adjacent to the device on the piping connected thereto using a seal in the form established by the General Manager and available from the City for the fee established in the Rates By-law;
- (c) complete a Test and Inspection Report in a legible manner, entering the results of the testing and such other information as is required by the form, and sign, certifying the information in the Test and Inspection Report to be accurate;
- (d) file the completed and signed Test and Inspection Report with the General Manager within 14 days of completion of the testing; and
- (e) pay the City the necessary filing fees in accordance with the Rates By-law.

(3) In the event the testing reveals that the Backflow Prevention Device is malfunctioning the Authorized Person conducting the testing of the Backflow Prevention Device in accordance with subsection 12(2), shall, despite paragraph 12(2)(d), immediately notify both the Owner of the Property and the General Manager in writing of the malfunction, and provide a copy of the Test and Inspection Report.

(4) No Person shall remove a Preventor Test Tag or the seal affixing the Preventor Test Tag except an Authorized Person as part of: replacing the Backflow Prevention Device to which it pertains; or replacing a damaged Preventor Test Tag; or when testing a Backflow Prevention Device.

(5) Every Person removing a Preventor Test Tag in accordance with subsection 12(4) shall, immediately upon completion of the task described in subsection 12(4), ensure the Preventor Test Tag is reinstalled and sealed in accordance with this By-law.

(6) No Person shall alter or cause or permit any Person to alter an entry on a Preventor Test Tag or a Test and Inspection Report once completed by an Authorized Person.

Maintenance of Backflow Prevention Device

13.-(1) The Owner of a Property on which one or more Backflow Devices have been installed, shall:

- (a) protect each Backflow Prevention Device from freezing and damage at all times; and
- (b) cause the Backflow Prevention Device to be maintained at all times in proper working order and in accordance with CSA Standard by an Authorized Person.

(2) The Owner of a Building or Structure or Property on which a Backflow Prevention Device is installed shall immediately cause the Backflow Prevention Device to be repaired or replaced by an Authorized Person so that there is a properly functioning Backflow Prevention Device to prevent Contamination in the event that:

- (a) Owner is advised by an Authorized Person or it is otherwise brought to the attention of the Owner that a Backflow Prevention Device is malfunctioning or otherwise not in proper working order; or
- (b) a Cross Connection Survey identifies a Severe Hazard on the Property.

(3) Every Authorized Person repairing or maintaining a Backflow Prevention Device shall do so in accordance with the CSA Standard.

Removal of Backflow Prevention Device

14.-(1) No Person shall remove and no Owner shall cause or permit a Backflow Prevention Device required under this By-law to be removed except:

- (a) to facilitate the repair of the device and provided the device is replaced immediately after the repair is carried out;
- (b) to replace the device with another Backflow Prevention Device that meets or exceeds the provisions of this By-law and provided such device is installed immediately after the removal;

- (c) to facilitate the disconnection of an Auxiliary Water Supply from the Municipal Drinking Water System in accordance with the written approval of the General Manager;
- (d) for any combination of any two or more of the events described in paragraphs (b), (c) and (d); or
- (e) any other reason approved in writing by the General Manager.

(2) No Person other than an Authorized Person shall remove a Backflow Prevention Device and no Person shall direct, authorize or permit anyone other than an Authorized Person to remove the device.

(3) Every Owner of a Property on which a Backflow Prevention Device has been installed shall:

- (a) immediately notify the General Manager in writing, signed by the Owner, in the event that a Backflow Prevention Device on the Owner's Property has:
 - (i) been permanently removed, providing the reason for the removal; or
 - (ii) been replaced by a different type of Backflow Prevention Device, installed in accordance with this By-law; and
- (b) thereafter provide such additional information or documentation as the General Manager may require.

(4) Where the General Manager has established a form for notice in subsection 14(3), the established form shall be used.

Part 3 – Cross Connection Reports / Compliance Programs

Cross Connection Survey Report

15. The General Manager may establish the form of a Cross Connection Survey Report to be completed by an Authorized Person. Without limiting the generality of the foregoing, the form of the Cross Connection Survey Report shall be designed to:

- (a) identify every existing Backflow Prevention Device and the location of same;
- (b) identify every Cross Connection and the location of same;
- (c) identify any recommended actions to prevent Contamination of the Municipal Drinking Water System;
- (e) set out any additional recommendations to protect the Municipal Drinking Water System from Backflow; and

- (f) set out any other information the General Manager may require to assess the hazard to the Municipal Drinking Water System.

Cross Connection Survey - Owner's Duties

16.-(1) Every Owner of a Property, Building or Structure described in subsection 5(2) shall, at the Owner's expense, cause an Authorized Person to conduct a Cross Connection survey of the Plumbing system in every Building or Structure on the Property and to complete and file the Cross Connection Survey Report with the General Manager on each of the following events:

- (a) for a Property, Building or Structure which is used in whole or in part on the date of passage of this By-law for a use which is a:
 - (i) Severe Hazard, immediately upon the passage of this By-law;
 - (ii) Moderate Hazard, within 1 year of the passage of this By-law; or
 - (iii) Minor Hazard, within 2 years of the passage of this By-law;
- (b) within 5 years after the date of the first and each subsequent filing of a Cross Connection Survey Report or in the case of new construction of a Building or Structure, within 5 years after the date occupation was permitted, and 5 years after the date of the first and each subsequent filing; and
- (c) within thirty (30) days of the date on which the hazard level of a Building or Structure on the Property has changed from that established in the most recent Cross Connection Survey Report filed with the City, or if there is no prior Cross Connection Survey Report file, within 30 days of the date on which the hazard level of the Building or Structure on the Property has changed; and
- (d) within thirty (30) days of the date on which the ownership of the Property has changed;
- (e) within thirty (30) days of the date on which the activity on the Property or the equipment used for an activity has changed and such change either alters or has the potential to alter the information contained in the most recent Cross Connection Survey Report filed with the City, or where no Cross Connection Survey Report has yet been filed, has the potential to change the information which would be revealed in a Cross Connection Survey Report; and
- (f) upon written request by the General Manager and within the time frame specified in the request.

(2) For the purposes of paragraph 16(1)(a), representative examples of uses which result in Severe Hazard, Moderate Hazard and Minor Hazards are set out in Schedule "B" to this By-law.

Cross Connection Survey - Authorized Person - Duties

17.-(1) Every Authorized Person who conducts a Cross Connection survey of a Property shall:

- (a) complete a Cross Connection Survey Report pertaining to the Property and Buildings and Structures thereon;
- (b) sign the completed Cross Connection Survey Report certifying the accuracy of the information in the said form;
- (c) file the completed and signed Cross Connection Survey Report with the General Manager within 14 days of the date the survey is conducted;
- (d) pay to the City, the applicable filing fees, determined in accordance with the Rates By-law, upon filing the Cross Connection Survey Report; and
- (e) provide a copy of the completed and signed Cross Connection Survey Report to the Owner within 14 days of the date the survey is conducted.

(2) In the event that the Authorized Person conducting a Cross Connection survey determines that a Severe Hazard is present on the Property, that Authorized Person shall, despite 17(1)(c), notify the Owner and the General Manager in writing, of the Severe Hazard within 24 hours of having conducted the Cross Connection survey.

Compliance with Recommendations of Cross Connection Survey Report

18. Upon receipt of the Cross Connection Survey Report, the Owner of the Property shall forthwith comply with any recommendations in the Cross Connection Survey Report, unless, in the case of recommendations for Zone Isolation, the Owner has entered into and is in good standing under a Compliance Program under section 19.

Compliance Program – Zone Isolation

19.-(1) In the event that an Authorized Person has recommended in a Cross Connection Survey Report that one or more Backflow Prevention Devices be installed to create Zone Isolation, the Owner of the affected Property may apply to the General Manager to enter a Compliance Program to achieve Zone Isolation.

(2) An applicant for a Compliance Program shall:

- (a) apply in writing using the form established by the General Manager, and signed by the applicant;
- (b) provide the particulars of the proposed Compliance Program and such other information and documentation as the General Manager may require to assess the application; and

(c) pay any applicable fee, determined in accordance with the Rates By-law.

(3) The General Manager may, in his discretion, approve or refuse an application for a Compliance Program for Zone Isolation. Any approval may be subject to such terms and conditions, including date for achieving Zone Isolation as may be established by the General Manager.

(4) It shall be a condition of the approval of the Compliance Program and whether or not such is specified in the Compliance Program that:

- (a) the Owner of the Property for which a Compliance Program has been approved, indemnify and save harmless the City, its elected and non-elected officers, its employees and agents from any and all claims, demands, causes or actions, costs or damages howsoever caused that the City may suffer, incur or be liable for resulting from the approval of a Compliance Program under this By-law or arising from or related to the lack of Zone Isolation or from the performance or non-performance of any terms or conditions of the Compliance Program, whether or not such performance or non-performance arises with or without negligence on the part of the Owner, its employees, directors or agents. The Owner's agreement to indemnify as provided in this paragraph shall be deemed by the Owner submitting an application for a Compliance Program; and
- (b) the Compliance Program will expire, without notice by the City, upon the sale, transfer, or other change in title to the Property to which it pertains. Nothing herein prevents a successive Owner from applying for a new Compliance Program.

(5) While a Compliance Program for a Property is in good standing, any dates for compliance set out in the Compliance Program will prevail over the time lines for compliance otherwise provided for in this By-law.

(6) The General Manager may, at any time, terminate a Compliance Program by notice in writing, for default, or where the General Manager determines that it is in the best interests of the City to terminate the Compliance Program, and thereafter, this By-law shall prevail.

(7) Every Owner of a Property for which a Compliance Program is in effect shall comply with the provisions of the Compliance Program and the conditions in subsection 19(4).

(8) In the event that the General Manager refuses an application for a Compliance Program, he or she shall advise the applicant in writing at the address provided in the application.

Part 4 – Authorized Person

Persons Permitted to Carry out Work

20.-(1) No Person shall carry out any Authorized Function or hold himself out to be qualified to carry out an Authorized Function other than an Authorized Person.

(2) Every Authorized Person must:

- (a) hold the qualifications indicated in Schedule “A” as required to complete such Authorized Functions; and
- (b) at the time of carrying out the Authorized Function, be registered with the City in accordance with this section 20 and in good standing.

(3) The General Manager shall maintain and make accessible to the public, a register identifying every Authorized Person who is then registered with the City to perform Authorized Functions and identifying the Authorized Functions that person may undertake.

(4) Every applicant for registration or for renewal of registration as an Authorized Person to carry out an Authorized Function shall file with the General Manager:

- (a) an application in the form established by the General Manager from time to time, bearing the signature of the applicant, certifying the accuracy of the information provided. Where the applicant is a corporation or a partnership, the application shall be signed by a person who has authority to bind the applicant corporation or partnership;
- (b) all documentation and information requested by the General Manager to assist him or her to assess the application; and
- (c) the applicable fee determined in accordance with the Rates By-law

(5) The General Manager shall review each such application, and where the General Manager determines that the applicant is appropriately qualified, shall

- (a) in the case of a new application, assign a unique registration number to the applicant; and
- (b) enter the applicant in the register of Authorized Persons authorized to perform Authorized Functions for the current year, in accordance with this By-law; and
- (c) notify the applicant of the registration and registration number.

(6) The General Manager shall notify each unsuccessful applicant that the applicant will not be entered on the registry as an Authorized Person for that year, and the reason for the refusal.

(7) No application fee paid under subsection 20(4) shall be refunded in whole or in part.

(8) The General Manager is authorized to manage the registry.

Expiry / Revocation

21.-(1) Every registration as an Authorized Person for each Authorized Function, shall expire on December 31st of the year in which it was approved, unless it is earlier renewed in accordance with the process in subsection 20(4) or has been previously abandoned or revoked.

(2) Every registration as an Authorized Person to perform an Authorized Function shall automatically expire, without notice by the City, in the event that a Person registered as an Authorized Person ceases, for any reason, to hold the qualifications necessary to perform the Authorized Function and the General Manager may remove that Person's name from the registry.

(3) Every Person who ceases to be qualified as an Authorized Person for any Authorized Function shall notify the General Manager within 5 business days of ceasing to be qualified, in order that the General Manager may remove that Person's name from the Registry.

(4) The General Manager may revoke the registration of any Person as an Authorized Person with respect to any one or more Authorized Function where, in the opinion of the General Manager, it is in the public interest to do so. In any such case, the General Manager shall give notice in writing to the Person whose registration is revoked, advising of the effective date of the revocation and may remove the name of the Person from the registry.

Produce Registration

22. An Authorized Person shall produce evidence of qualifications and registration to perform the Authorized Function:

- (a) upon demand by a Municipal Law Enforcement Officer; and
- (b) upon request by an Owner for whom the Authorized Function is to be performed.

Part 5 – Enforcement

Enforcement - No Obstruction Etc.

23.-(1) This By-law may be enforced by any Municipal By-law Enforcement Officer.

(2) No person shall hinder or obstruct, or attempt to hinder or obstruct, any Person exercising a power or performing a duty under this By-law.

Offence

24-(1) Every Person who contravenes any of the provisions of this By-law and any director or officer of a corporation who knowingly concurs in such contravention is guilty of an offence and on conviction is liable to a fine as provided for in the *Provincial Offences Act*.

(2) For the purposes of subsection 24(1), each day on which a person contravenes any of the provisions of this By-law shall be deemed to constitute a separate offence under this By-law.

(3) A Person who is convicted of an offence under this by-law is liable, for each day or part of a day that the offence continues, to a minimum fine of \$500.00 and a maximum fine of \$10,000.00 and the total of all daily fines for the offence is not limited to \$100,000.00 as provided for in subsection 429(3)2 of the *Municipal Act, 2001*.

(4) The levying and payment of any fine as provided for under the *Provincial Offences Act* shall not relieve a person from the necessity of compliance with the obligations under this By-law.

(5) It is an offence for any Person to:

- (a) make a false, inaccurate or intentionally misleading statement or representation in any document or request for permission provided for by this By-law; or
- (b) file a document or request provided for in this By-law where such Person knows or believes it contains a false, inaccurate or intentionally misleading statement or representation, whether or not such statement or representation was made by the Person filing the document or application.

Right of Entry - Inspection

25.-(1) A Municipal By-Law Enforcement Officer may enter onto any Property, Building or Structure at any reasonable time or times to inspect for compliance with:

- (a) the provisions of this By-law; or
- (b) a direction or order or notice given under this By-law; or
- (c) any Order made under section 431 of the *Municipal Act, 2001*, S.O. 2001, c. 25 as amended or replaced, in respect of a contravention under this By-law.

(2) When carrying out an inspection pursuant to subsection 25(1), a Municipal By-law 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 in writing or otherwise as required by the Municipal By-law Enforcement Officer 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 purpose of the inspection.

Order to Discontinue

26.-(1) Where the General Manager or Municipal By-law Enforcement Officer is satisfied that a contravention of this By-law has occurred, the General Manager or Municipal By-law Enforcement Officer may make an order requiring the Person who contravened this By-law or who caused or permitted the contravention of the By-law or the Owner or occupier of the Property on which the contravention occurred, to discontinue the contravening activity.

(2) Any order under subsection 26(1) shall set out:

- (a) reasonable particulars of the contravention,
- (b) the location of the Property on which the contravention occurred or is occurring; and
- (c) the date by which there must be compliance. Nothing prevents the General Manager or the Municipal By-law Enforcement Officer making the order to make the order effective immediately upon issuance, should the circumstances warrant, in the opinion of the Person making the order.

Order to Comply

27.-(1) Where the General Manager or Municipal By-law Enforcement Officer is satisfied that a contravention of this By-law has occurred, an order may be made requiring the Person who contravened this By-law or who caused or permitted the contravention or the Owner or occupier of the Property on which the contravention occurred to correct the contravention. The order shall set out:

- (a) reasonable particulars of the contravention;
- (b) particulars of the location and Property where the contravention occurred;
- (c) any work to be done or steps to be taken to comply with this By-law;

- (d) the date by which the work must be done or steps taken, which date may be the same as the date of the Order, where, in the opinion of the Municipal By-law Enforcement Officer it is appropriate to do so; and
- (e) provide that if any work specified is not completed by the date specified to the satisfaction of the General Manager, that the General Manager may cause the work to be done at the expense of the Owner of the Property or may cause the supply of water to be discontinued or both.

(2) Pursuant to subsection 445(3) of the *Municipal Act, 2001*, S.O. 2001, c. 25 as amended or replaced, an order pursuant to subsection 27(1) may require the work to be done even though the facts which constitute the contravention of the By-law were present before this By-law making them a contravention came into force.

Service of Orders

28.-(1) Service of an order under subsection 26(1) or subsection 27(1) shall be given to the Owner or occupier of the Property where the contravention occurred, by one of the following methods:

- (a) delivering personally to the Owner or occupier;
- (b) mailing to the Owner or occupier by registered mail at the address recorded for the Owner in the assessment roll for the Property; or
- (c) placing a placard containing the Order in a conspicuous place on the Property where the contravention occurred.

(2) Service by registered mail shall be deemed to be effective on the fifth day after mailing, and service by posting a placard shall be deemed to be effective on the second day after posting, whether or not notice is actually received.

(3) No Person shall remove an order, notice, direction or placard posted on a Property which indicates it was posted pursuant to this By-law, except a Municipal Law Enforcement Officer.

Comply with Order

29. Every Person who is served with an Order under this By-law shall comply with the requirements of the Order within the time period specified in the Order.

Remediation by City

30.-(1) Where a Person served with an Order fails to comply with the requirements of the Order within the time period specified in the Order, the General Manager, may cause such work to be done or such steps to be taken as are necessary to meet the requirements of the Order, and the cost thereof including interest thereon at the rate established under the City's Miscellaneous User By-law from time to time, as the interest rate payable on overdue accounts, from the date the costs were incurred until payment in full, may be recovered from the Owner of the Property on which the contravention occurred, by action or by adding same to the property tax rolls for the Property and collecting them in the same manner as property taxes.

(2) The General Manager is authorized to cause such work to be done or steps to be taken pursuant to subsection 30(1) where the costs to do so do are estimated to not exceed \$10,000, and where the costs are estimated to exceed \$10,000, as authorized by City Council.

Shut Off Water

31. Without limiting the generality of any other right or remedy of the City under this By-law, where the General Manager has determined, in his or her sole discretion, that an immediate threat of Contamination in the Municipal Drinking Water System exists that can endanger public health and safety, the General Manager may shut off the water supply to the Property or any Building or Structure thereon, until the threat of Contamination has been eliminated.

Prohibition Order

32. When a person has been convicted of an offence under this By-law, the Ontario Court (Provincial Division), or any court of competent jurisdiction thereafter may, in addition to any other penalty imposed on the person convicted, issue an order prohibiting the continuation of the offence or doing of any act or thing by the person convicted directed towards the continuation of the offence.

Confidential Information

33.-(1) All information submitted to and collected by the City, will, except as otherwise provided in this section, be available for disclosure to the public in accordance with the *Municipal Freedom of Information and Protection of Privacy Act*, R.S.O. 1990, c. M.56 (MFIPPA).

(2) In the event that any Person in submitting information to the City or to the General Manager in any form, as required under this By-law, where such information is confidential or proprietary or otherwise may be exempt from disclosure under the MFIPPA, the Person

submitting the information shall so identify that information upon its submission to the City or the General Manager and shall provide sufficient details as to the reason for its purported exemption from disclosure.

Short Title

34. This By-law may be referred to as the "Drinking Water Backflow By-law."

Schedules

35. The following schedules are incorporated into and form a part of this By-law
- (a) Schedule "A" – Authorized Functions and Authorized Persons; and
 - (b) Schedule "B" – Representative Examples of Activities or Uses which may Cause Severe Hazard, Moderate Hazard or Minor Hazard.

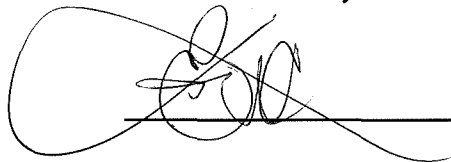
Effective

36. This By-law shall come into full force and effect upon passage.

Read and Passed in Open Council this 12th day of December, 2017



Mayor



Clerk

Schedule "A"
to By-law 2017-217 of the City of Greater Sudbury

Page 1 of 1

Qualifications for Authorized Persons for Authorized Functions

A Person holding the qualifications identified in Column A of the chart below may apply to the City to be registered as an Authorized Person for the purpose of performing the Authorized Functions Identified in Columns B-1 to B-4 on the corresponding line, as indicated by an "X" and subject to the notes below

Column A Qualifications for an Authorized Person	Column B -1 Authorized Function: Carry out Cross Connection Survey	Column B-2 Authorized Function: Install, relocate or replace Backflow Preventive Device	Column B-3 Authorized Function: Repair or Backflow Prevention Device	Column B-4 Authorized Function: Test Backflow Prevention Device
Professional Engineer with Tester's Certificate	X		X	X
Certified Engineering Technologist ¹ with Tester's Certificate	X		X	X
Licensed Master Plumber with Tester's Certificate	X	X	X	X
Journeyman Plumber ² with Tester's Certificate	X	X	X	X
Apprentice Plumber ³ with Tester's Certificate		X	X	X

Note 1: Tester's Certificate means an AWWA Backflow Prevention Certificate or approved equivalent

Note 2: Where there is a number beside the Authorized Persons in Column A above, the ability of the person to perform the Authorized Function is subject to the following limitations:

1. required to be under the direction of a Professional Engineer
2. Required to be employed by a Licensed Plumbing Contractor
3. Required to be employed by a Licensed Plumbing Contractor and under the direct supervision of a Master Plumber or Journeyman Plumber

Schedule "B"
to By-law 2017-217 of the City of Greater Sudbury

Page 1 of 4

**Representative Examples of Uses or Activities which may result in
Severe Hazard, Moderate Hazard or Minor Hazard**

Type of Cross Connection	Degree of Hazard	Type of Cross Connection	Degree of Hazard
Agricultural chemicals (sprayer)	Severe	Clothes washer (residential)	Moderate
Air Compressor Oil Cooler	Moderate	Coffee Machine	Minor
Animal Watering	Moderate	Condensate Tank (top feed)	Moderate
Aspirator (toxic)	Severe	Condensate Tank	Severe
Aspirator (non-toxic)	Moderate	Cooking Kettle (food only)	Minor
Autoclave	Severe	Cooling Condensor (solenoid upstream)	Minor
Autopsy and mortuary equipment	Severe	Cooling Condensor (solenoid downstream)	Severe
Auxiliary Water Supply	Severe	Cooling Tower	Severe
Baptistery	Moderate	Cuspidor	Severe
Basin	Moderate	De-aerator (bottom feed)	Severe
Bathtub	Moderate	De-aerator (top feed)	Moderate
Bedpan Washer	Severe	Degreasing Equipment	Severe
Beverage Dispensing Equipment (no carbonator)	Minor	Deionized Water	Severe
Beverage Dispensing Equipment (with carbonator)	Moderate	Dental Vacuum Pump	Severe
Bidet	Moderate to Severe	Dental Cuspidor (with internal air gap)	Minor
Bottle Washer	Moderate to Severe	Dental Cuspidor (with no air gap)	Severe
Bread Making Equipment	Minor to Moderate	Dental Delivery System	Minor
Canopy Washer	Severe	Detergent Dispenser	Severe
Chemical Feed Tank	Severe	Dipper Well in Restaurant	Moderate
Chiller Tank (no chemical)	Moderate to Severe	Dish Rinse with Flex Hose	Moderate
Chiller Tank (with chemical)	Severe	Dishwasher (commercial)	Moderate

Schedule "B"
to By-law 2017-217 of the City of Greater Sudbury

Page 2 of 4

**Representative Examples of Uses or Activities which may result in
Severe Hazard, Moderate Hazard or Minor Hazard**

Chlorinator	Severe	Dishwasher (residential)	Moderate
Clothes washer (residential)	Moderate	Distiller	Minor
Chlorinator	Severe	Dockside Marina Facility	Severe
Fire Hydrant	Moderate	Industrial Fluid System	Severe
Flexible Shower Head with Hose	Minor to Severe	Hydrotherapy bath	Moderate
Floor Drain with Flushing Rim	Severe	Ice Machine for Commercial Restaurant	Moderate to Severe
Flush Tank	Moderate	Ice making Equipment for Sports Arena	Severe
Flushing equipment Device	Severe	Irrigation System (chemical injected)	Severe
Flushometer	Severe	Irrigation System (no chemicals added)	Moderate
Fountain, ornamental	Moderate to Severe	Lab bench Equipment (toxic)	Severe
Fountain, ornamental (chemical added)	Severe	Lab bench Equipment (non toxic)	Minor
Fume Hood	Severe	Laboratory	Severe
Garbage Can Washer	Severe	Laboratory Faucet	Moderate
Garbage Disposal Unit	Severe	Laundry, Commercial Coin Operated	Moderate
Heat Exchanger	Minor to Severe	Laundry Machine, Commercial	Moderate
Heating System (copper/plastic; no chemicals)	Minor	Laundry Machine, Residential	Minor
Heating System (no chemicals added)	Moderate	Laundry Tub Faucet with Hose Bib Connection	Moderate
Heating System (chemicals added)	Severe	Lavatory	Moderate
Heating System (single family residence)	Moderate	Lethal Substance	Severe
Hose Bib, sediment faucet	Minor	Livestock Equipment	Severe

Schedule "B"
to By-law 2017-217 of the City of Greater Sudbury

Page 3 of 4

**Representative Examples of Uses or Activities which may result in
Severe Hazard, Moderate Hazard or Minor Hazard**

Hose Bib, sediment faucet, connected to high hazard	Severe	Mixing Tee with steam & water	Moderate
Hose Bib, sediment faucet (residential)	Minor	Mop Sink Faucet with Hose Bib connection	Moderate
Hospital (active treatment area)	Severe	Mortuary or Morgue	Severe
Hospital (non-treatment area)	Moderate	Non-potable Water	Severe
Hot Tub or Spa	Moderate	Optician or Ophthalmology Equipment	Minor to Moderate
Hot Water Systems (direct heating of water supply)	Minor	Pedicure Chair	Moderate
Humidifier	Moderate	Photo Lab Sink	Severe
Humidifier with sump	Severe	Pipette Washer	Severe
Piping to Chemical Dispenser	Minor to Severe	Plating Tank	Severe
Potato Peeler	Moderate	Swimming Pool (commercial)	Moderate
Poultry Barn	Severe	Swimming Pool (direct connection)	Moderate
Pressure Washer (no aspirator)	Minor	Swimming Pool Makeup Tank	Moderate
Pressure Washer (with aspirator)	Severe	Teeth Cleaning Equipment (veterinary)	Moderate
Private Fire Hydrant	Moderate	Trap Primer	Severe
Private Water Source	Severe	Vending Machine (no carbonates)	Minor
Pump Primer Line (toxic)	Severe	Wash Rack	Severe
Pump Primer Line (non toxic)	Moderate	Wash Tank	Moderate
Radiator Flushing Equipment	Severe	Wash Tank (toxic)	Severe
Restricted Area	Severe	Water Closet (tank type before 1996)	Moderate
Reverse Osmosis	Minor	Water Closet (flushometer)	Moderate

Schedule "B"
to By-law 2017-217 of the City of Greater Sudbury

Page 4 of 4

**Representative Examples of Uses or Activities which may result in
Severe Hazard, Moderate Hazard or Minor Hazard**

Reverse Osmosis with Backwashing	Moderate	Wash Rack	Severe
Reverse Osmosis with Chemical Cleaning	Severe	Wash Tank	Moderate
Serrated Faucet	Severe	Wash Tank (toxic)	Severe
Sewage Ejector	Severe	Water Closet (tank type before 1996)	Moderate
Sewage Pump	Severe	Water Closet (flushometer)	Moderate
Shampoo Sink	Moderate	Water Hauling Equipment (toxic)	Severe
Sizing Vat	Severe	Water Softener (residential)	Minor
Solar Hot Water System (residential no chemicals)	Minor to Moderate	Water Softener Drain (residential)	Moderate
Solar Hot Water System (with chemicals)	Severe	Wok Table (submersible inlet)	Moderate
Solution Tank	Severe	X-Ray Equipment	Severe
Spa or Hot Tub	Moderate		
Specimen Tank	Severe		
Steam Table	Minor to Moderate		
Steam Generator	Moderate		
Sterilize (condensate cooling only)	Moderate		
Still	Minor		
Swimming Pool (residential)	Minor		