

CITY OF HAMILTON
By-law No. 10-103

**A By-law Respecting the Prevention of Backflow
into the Water Distribution System of the City of Hamilton**

WHEREAS the Council of the City of Hamilton desires to prevent the flow of water, other liquids, chemicals or substances back into the drinking water system for which the City of Hamilton is responsible;

AND WHEREAS sections 8, 9, and 10 of the *Municipal Act, 2001*, S.O. 2001, c. 25, (the "Municipal Act, 2001"), authorize the City of Hamilton 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 section 425 of the Municipal Act, 2001 authorizes the City of Hamilton to pass by-laws providing that a person who contravenes a by-law of the City of Hamilton passed under that Act is guilty of an offence;

AND WHEREAS the Municipal Act, 2001 further authorizes the City of Hamilton, amongst other things, to delegate its authority, to impose fees and charges on persons for services or activities provided or done by or on behalf of it, 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 Hamilton enacts as follows:

1.0 DEFINITIONS

In this By-law:

"ASSE" means American Society of Sanitary Engineers;

"Authorized Functions List" means the list of functions and the persons authorized to carry out such functions as set out in Schedule A;

"Auxiliary Water Supply" means any water source or system, other than the Potable Water supplied by the City's Water Distribution System, that may be available in a Building or Structure, or on any Property;

"AWWA" means American Water Works Association;

"Backflow" means a flowing back or reversal of the normal direction of flow;

"Backflow Prevention" means the prevention of the flow of water, other liquids, chemicals or substances back into the water being supplied by the City's Water Distribution System;

"Backflow Prevention Device" means a device that prevents Backflow into the City's Water Distribution System and includes all valves and test ports approved by the CSA Standard;

"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 geographical area of the City of Hamilton or the municipal corporation as the context requires;

"Cross Connection" means any actual or potential connection between a Potable Water system and any source of pollution or contamination;

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

"Cross Connection Survey Form" means the document to be completed by a person listed on the Authorized Functions List, in the form prescribed by the General Manager from time to time;

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

"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 of Public Works for the City or the persons the General Manager may designate from time to time to act in his or her stead for purposes of this By-law, or successor;

"High or Severe Hazard" means any Cross Connection involving any substance 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 Backflow Prevention is deemed required by the General Manager;

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

"MOE" means the Ontario Ministry of the Environment;

"Municipal Service" means the portion of the water service pipe located on City-owned Property;

"Municipal Law Enforcement Officer" means any person appointed by the City's Council or by the General Manager to administer or enforce this By-law and includes a person employed by the City whose duties are to enforce this By-law, and also includes, for the purposes of exercising any power of entry under this By-law, a police officer;

"Owner" means the registered owner or owners of a Property or their authorized agent(s), but does not include a mortgagee unless the mortgagee is in possession of the Property;

"Potable Water" means water that is fit for human consumption;

"Premise Isolation" means the prevention of Backflow into the City's Water Distribution System from an Owner's Building, Structure or Property by the installation of a suitable Backflow Prevention Device at the entrance of such Building, Structure or Property;

"Private Service" means the portion of the water service pipe located on private Property, including the service valve;

"Property" includes both public and private lands, including but not limited to facilities where a boat or mobile home can connect to a Private Service or Municipal Service, and which are located within the geographic area of the City;

"Self Assessed Cross Connection Survey Form" means the document to be completed by the Owner of the Property, in the form prescribed by the General Manager from time to time;

"Small Private Service" means a Private Service that is 38 mm in diameter or smaller;

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

"Test Report" means the document to be completed by a person listed on the Authorized Functions List, in the form prescribed by the General Manager from time to time;

"Water Meter" means a device or mechanism which is owned by the City for the purpose of measuring the flow or quantity, or both, of water;

"Water Distribution 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 Potable Water by the City, and includes lands occupied for such purposes and uses.

2.0 APPLICATION AND INTERPRETATION OF BY-LAW

- 2.1 This By-law applies to all industrial, commercial, institutional and multi-residential Buildings and Structures, whether existing or proposed, except Buildings with residential occupancies within the scope of Part 9 of the Building Code, located on a Property.
- 2.2 Despite subsection 2.1, this By-law also applies where the General Manager determines that a condition exists in any Building or Structure which may be hazardous or detrimental to the City's Water Distribution System.
- 2.3 In the event of a conflict between the provisions of this By-law and the provisions of any other statute, regulation or by-law, the provisions that are the most restrictive prevail.
- 2.4 The necessary grammatical changes required to make the provisions of this By-law applicable to corporations, partnerships, trusts and individuals, male or female, and to include the singular or plural meaning where the context so requires, shall in all cases be assumed as though fully expressed.
- 2.5 The following Schedules are attached to and form part of this By-Law:

Schedule A – Authorized Functions List

Schedule B – City Registration Requirements for Persons on Authorized Functions List

- 2.6 The insertion of headings and the division of this By-law into sections and subsections are for convenience of reference only and shall not affect the interpretation thereof.
- 2.7 Any reference in this By-law to any statutes, regulations or by-laws shall be deemed to be a reference to such statutes, regulations or by-laws, as amended, restated or replaced from time to time.
- 2.8 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 in force unless the court makes an order to the contrary.

3.0 BACKFLOW PREVENTION

- 3.1 No person shall connect, permit to be connected, or allow to remain connected to the City's Water Distribution System, any piping, fixture, fitting, container, appliance, vehicle, machine or the like in a manner which may under any circumstance allow water, waste water or any other liquid, chemical or substance to enter such Water Distribution System, except in compliance with the provisions of this By-law.
- 3.2 Every Owner of a Property to which this By-law applies, shall ensure that a Backflow Prevention Device is installed in respect of Premise Isolation in every Building or Structure supplied by the City's Water Distribution System, and in accordance with the timetable set out in section 14.0.
- 3.3. Every Owner of a Property to which this By-law applies and on which an Irrigation System is located, shall ensure that such Irrigation System is protected against Backflow in accordance with the CSA Standard.
- 3.4 Where there is a Fire Protection System within a Building or Structure, the Owner of the Property shall ensure that such Building or Structure is protected against Backflow in accordance with the CSA Standard, and in doing so the Backflow Prevention Device shall be either a double check detector assembly or a reduced pressure detector assembly with a detector meter which is capable of measurements in cubic meters.
- 3.5 Despite subsections 3.2, 3.3 and 3.4, the Owner of a Property to which this By-law applies is not required to comply with the provisions of those subsections where:
 - 3.5.1 the Property has a Small Private Service;
 - 3.5.2 the Owner has completed and submitted to the City a Self Assessed Cross Connection Survey Form in accordance with this By-law; and
 - 3.5.3 the degree of hazard on the Property is not a High or Severe Hazard.

- 3.6 No person shall connect, permit to be connected, or allow to remain connected to the City's Water Distribution System any Auxiliary Water Supply unless adequate Backflow Prevention Devices are installed and the prior written approval of the General Manager is provided.

4.0 PERSONS PERMITTED TO CARRY OUT WORK

- 4.1 No person, other than those persons described on the Authorized Functions List, may carry out any of the authorized functions set out on the Authorized Functions List.

- 4.2 No person listed on the Authorized Functions List shall carry out any of the corresponding authorized functions unless the person has registered with the City, provided all requested documentation to the City, paid the applicable fee and received a City registration number, all in accordance with the Table set out in Schedule B.

- 4.3 The registration with the City referred to in subsection 4.2 is an annual requirement.

- 4.4 No person shall submit any documentation to the City as part of the registration process that contains inaccurate or false information.

5.0 APPLICATION OF CSA STANDARD

- 5.1 Except as otherwise set out in this By-law, the installation, maintenance and testing of Backflow Prevention Devices shall be in accordance with the CSA Standard.

- 5.2 In the event of a conflict between the provisions of this By-law and the CSA Standard, the provisions of this By-law shall prevail.

6.0 ADMINISTRATION, ENFORCEMENT AND PENALTIES

Administration and Enforcement

- 6.1 The General Manager is responsible for the administration of this By-law, including prescribing the content of any forms or other documents required under this By-law from time to time.
- 6.2 All Municipal Law Enforcement Officers are authorized to enforce this By-law.

- 6.3 The General Manager is authorized to delegate the responsibility for the administration of this By-law to any employee or agent of the Environment & Sustainable Infrastructure Division of the Public Works Department of the City.
- 6.4 Fees under this By-law shall be as set out in the City's Water and Wastewater Fees and Charges By-law.
- 6.5 A Municipal Law Enforcement Officer may enter on land at any reasonable time for the purpose of carrying out an inspection to determine whether or not the following are being complied with:
- 6.5.1 this By-law;
 - 6.5.2 any direction, requirement or order of the City made under this By-law; or
 - 6.5.3 an order made under section 431 of the Municipal Act, 2001 in respect of a contravention of this By-law.
- 6.6 For the purposes of an inspection under subsection 6.5, a Municipal Law Enforcement Officer may,
- 6.6.1 require the production for inspection of documents or things relevant to the inspection;
 - 6.6.2 inspect and remove documents or things relevant to the inspection for the purpose of making copies or extracts;
 - 6.6.3 require information in writing or otherwise as required by the Municipal Law Enforcement Officer from any person concerning a matter related to the inspection; and
 - 6.6.4 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.
- 6.7 A Municipal Law Enforcement Officer may undertake an inspection pursuant to an order issued by a provincial judge or justice of the peace under section 438 of the Municipal Act, 2001 where he or she has been prevented or is likely to be prevented from carrying out an inspection under subsections 6.5 and 6.6.
- 6.8 If a Municipal Law Enforcement Officer is satisfied that a contravention of this By-law has occurred, he or she may make an order requiring the person who contravened this By-law or who caused or permitted the contravention, or the Owner or occupier of the Property on which the contravention occurred to discontinue the contravening activity.

6.9 An order under subsection 6.8 shall set out:

6.9.1 reasonable particulars of the contravention adequate to identify the contravention and the location of the Property on which the contravention occurred; and

6.9.2 the date and time by which there must be compliance with the order, which may be of immediate effect should the Municipal Law Enforcement Officer determine that the circumstances warrant.

6.10 If a Municipal Law Enforcement Officer is satisfied that a contravention of this By-law has occurred, he or she may make an order requiring the person who contravened this By-law or who caused or permitted the contravention or the Owner or occupier of the Property on which the contravention occurred to do the work to correct the contravention.

6.11 An order under subsection 6.10 shall set out:

6.11.1 reasonable particulars of the contravention adequate to identify the contravention and the location of the Property on which the contravention occurred; and

6.11.2 the work to be completed which may include but is not limited to requiring that:

(a) prior to performing any work, all necessary permits or other approvals be applied for and obtained;

(b) a Cross Connection Survey Form be completed;

(c) a Backflow Prevention Device be installed;

(d) a Backflow Prevention Device be tested;

(e) a Backflow Prevention Device be repaired;

(f) a Backflow Prevention Device be replaced;

(g) a legible Test Report be submitted to the City for approval;

(h) a test tag be applied to a Backflow Prevention Device;

(i) arrangements be made for the shutting off of the supply of water from the City's Water Distribution System until the work ordered to be done is completed; and

6.11.3 the date and time by which the work must be completed, which may be of immediate effect should the Municipal Law Enforcement Officer determine that the circumstances warrant.

6.12 An order to discontinue a contravening activity made under subsection 6.9 or an order to do work made under subsection 6.11 may be served personally or by registered mail to the last known address of:

6.12.1 the Owner or occupier of the Property where the contravention occurred; and

6.12.2 such other persons affected by the order as the Municipal Law Enforcement Officer making the order determines.

Service by registered mail shall be deemed to have taken place five business days after the date of mailing.

6.13 In addition to service given in accordance with subsection 6.12, an order to discontinue a contravening activity made under subsection 6.9 or an order to do work made under subsection 6.11 may be served by a Municipal Law Enforcement Officer placing a placard containing the order in a conspicuous place on the Property where the contravention occurred.

6.14 Where service cannot be given in accordance with subsection 6.12, sufficient service is deemed to have taken place when given in accordance with subsection 6.13.

6.15 No person shall remove an order, notice, direction or placard posted on a Property indicating that it was posted under this By-law, except a Municipal Law Enforcement Officer.

6.16 Where a time frame is set out in an order for carrying out any action, the Municipal Law Enforcement Officer may extend the time for compliance beyond the established time frame provided such extension is required and is acceptable to the Municipal Law Enforcement Officer.

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

6.18 The City may recover the costs of doing a matter or thing under subsection 6.17 by action or by adding the costs to the tax roll and collecting them in the same manner as property taxes and such costs shall include an interest rate of 15 percent commencing on the day the City incurs the costs and ending on the day the costs, including the interest, are paid in full.

- 6.19 The General Manager is authorized to give immediate effect to any direction, or requirement where the costs of carrying out the direction or requirement do not exceed \$10,000 and, where the costs do exceed \$10,000, as the City's Council may authorize.
- 6.20 The amount of the City's costs including interest to the date payment is made in full, constitutes a lien upon the land, upon the registration of a notice of lien upon the land.
- 6.21 Without limiting the generality of subsections 6.5 to 6.20, where the General Manager has determined, in his or her sole discretion, that an immediate threat of contamination in the City's Water Distribution 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.

Penalties

- 6.22 Every person who contravenes any provision of this By-law is, upon conviction, guilty of an offence and is liable:
- 6.22.1 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
- 6.22.2 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.
- 6.23 Despite subsection 6.22, where the person convicted is a corporation,
- 6.23.1 the maximum fine in paragraph 6.22.1 is \$50,000; and
- 6.23.2 the maximum fine in paragraph 6.22.2 is \$100,000.
- 6.24 Any person who contravenes an 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 6.22 and 6.23, the total of all the daily fines imposed for an offence is not limited by the fine amounts listed in those subsections.
- 6.25 Where a person has been convicted of an offence, the court in which the conviction has been entered and any court of competent jurisdiction thereafter may, in addition to any other remedy and to any penalty imposed by this By-law, make an order prohibiting the continuation or repetition of the offence by the person convicted.

7.0 PROPERTY SURVEYS

- 7.1** Subject to subsection 7.3, every Owner of a Property to which this By-law applies shall, within six months of the date that this By-law comes into force, and within every five years thereafter:
- 7.1.1.** cause to be carried out a survey of the Owner's Property and of each of the Owner's Buildings and Structures on the Property with respect to all Cross Connections and all existing and required Backflow Prevention Devices;
 - 7.1.2** ensure that such survey is carried out on a Cross Connection Survey Form by a person permitted to do so pursuant to the Authorized Functions List; and
 - 7.1.3.** ensure that the completed Cross Connection Survey Form and the applicable fee are received by the City within 14 days of the survey being completed.
- 7.2** In addition to the obligations set out in subsection 7.1, each time that one or more of the following events occur, the Owner of a Property to which this By-law applies shall also comply with the requirements of paragraphs 7.1.1, 7.1.2 and 7.1.3 within 30 days of the date on which such event occurred:
- 7.2.1** the hazard level of a Building or Structure on the Property has changed;
 - 7.2.2.** the ownership of the Property has changed;
 - 7.2.3** the circumstances at the Property or the equipment has changed and such change either alters or has the potential to alter the information contained in the most recent Cross Connection Survey Form provided to the City.
- 7.3** Every Owner of a Property to which this By-law applies and which Property has a Small Private Service shall, within six months of the date that this By-law comes into force, and within every five years thereafter:
- 7.3.1.** carry out a survey of the Owner's Property and of each of the Owner's Buildings and Structures on the Property with respect to all Cross Connections and potential hazards;
 - 7.3.2** ensure that such survey is carried out on a Self Assessed Cross Connection Survey Form by the Owner; and

7.3.3. ensure that the completed Self Assessed Cross Connection Survey Form is received by the City within 14 days of the survey being completed.

7.4 In addition to the obligations set out in subsection 7.3, each time that one or more of the following events occur, the Owner of a Property to which this By-law applies and which Property has a Small Private Service shall also comply with the requirements of paragraphs 7.3.1, 7.3.2 and 7.3.3 within 30 days of the date on which such event occurred:

7.4.1 the hazard level of a Building or Structure on the Property has changed;

7.4.2. the ownership of the Property has changed;

7.4.3 the circumstances at the Property or the equipment has changed and such change either alters or has the potential to alter the information contained in the most recent Cross Connection Survey Form provided to the City.

7.5 No person shall submit a Cross Connection Survey Form or a Self Assessed Cross Connection Survey Form to the City that contains inaccurate or false information.

8.0 SELECTION OF BACKFLOW PREVENTION DEVICES

8.1. Every Owner of a Building or Structure located on a Property to which this By-law applies, shall ensure that every Backflow Prevention Device for Premise Isolation on his or her Property:

8.1.1 is selected in accordance with the CSA Standard;

8.1.2 is a testable device; and

8.1.3 is installed in accordance with the provisions of the Cross Connection Control Manual and the CSA Standard.

8.2 In the event of a conflict between the Cross Connection Control Manual and the CSA Standard, the provisions of the CSA Standard shall prevail.

8.3 Despite subsection 8.1, the General Manager may require that a particular Backflow Prevention Device be used in respect of any Cross Connection.

9.0 INSTALLATION ETC. OF BACKFLOW PREVENTION DEVICES

- 9.1** Every person who installs, replaces, relocates or repairs a Backflow Prevention Device required under this By-law shall ensure that:
- 9.1.1** such device is installed in accordance with acceptable engineering practices, the requirements of the CSA Standard and the manufacturer's specifications;
 - 9.1.2** such device is installed in a Building, Structure or underground vault and is protected from freezing;
 - 9.1.3** where such device is installed in a Building or Structure, the device is installed in accordance with the conditions of a building permit required to be obtained from the City for such device in accordance with the Building Code, including the payment of all associated fees and charges;
 - 9.1.4** where such device is installed in an underground vault, the device is installed in accordance with the conditions of a backflow prevention device installation permit required to be obtained from the City under this By-law, including the payment of all associated fees and charges;
 - 9.1.5** such device is located in such a manner so that in the event of Backflow the device prevents contamination of the Water Distribution System;
 - 9.1.6** where such device is installed for Premise Isolation, such device is located no more than 3.0 metres downstream of the Water Meter, or in the case of a Fire Protection System, such device is installed where the Fire Protection System enters the Building or Structure and in a location acceptable to the General Manager; and
 - 9.1.7** all piping between the Water Meter and such device is clearly labeled "no connection permitted" with labelling which is a minimum of 25mm in height, green in color and which is affixed to the piping no more than 300mm apart, at every bend and at every change of direction.
- 9.2** The Owner of a Building or Structure located on a Property to which this By-law applies shall protect each Backflow Prevention Device from freezing at all times.
- 9.3** The Owner shall, at all times, maintain a Backflow Prevention Device required under this By-law in proper working order and otherwise in accordance with this By-law.

10.0 TESTING OF DEVICES

- 10.1** Every person who tests a Backflow Prevention Device required under this By-law shall carry out such testing in accordance with this By-law and the CSA Standard.
- 10.2** In addition to the testing methods set out in the CSA Standard, test procedures established by the ASSE or AWWA for testing Backflow Prevention Devices may be employed. However, in the event of a conflict between the testing methods set out in the CSA Standard and the testing procedures established by the ASSE or AWWA, the testing methods set out in the CSA Standard shall prevail.
- 10.3** Despite any provision in the CSA Standard to the contrary, every person who tests a Backflow Prevention Device required under this By-law shall enter the results of such test on a Test Report.
- 10.4** Every person who tests a Backflow Prevention Device required under this By-law shall:
- 10.4.1** within 14 days of completing such test:
 - (a) provide a legible Test Report to the City in respect of such test; and
 - (b) pay the applicable fee to the City;
 - 10.4.2** upon completing such test, affix a completed test tag in the form approved by the General Manager, to the device or immediately adjacent to the device on the piping connected thereto; and
 - 10.4.3** upon finding that such device is malfunctioning or otherwise not in proper working order, immediately notify the Owner of the Property and the City of such condition.
- 10.5** Every Owner who has a Backflow Prevention Device required under this By-law which is located on his or her Property shall ensure that:
- 10.5.1** such device is tested by the appropriate person on the Authorized Functions List when it is first installed and annually thereafter, or when requested by the City, and also each time when the device is replaced, relocated or repaired;
 - 10.5.2** within 14 days of completing a test of such device in accordance with paragraph 10.5.1:
 - (a) a legible Test Report is provided to the City in respect of such test; and

(b) the applicable fee is paid to the City; and

10.5.3 in the event that such device is malfunctioning or otherwise not in proper working order, the device is immediately repaired or replaced.

10.6 No person shall submit a Test Report to the City that contains inaccurate or false information.

11.0 REMOVAL OF BACKFLOW PREVENTION DEVICE

11.1 No person shall remove a Backflow Prevention Device required under this By-law, or any part thereof, after it has been installed, and no Owner of a Property where such a Backflow Prevention Device is installed shall cause or permit the removal of such a device, unless such removal is:

11.1.1. to facilitate the repair of the device, with the device replaced immediately after the repair is carried out;

11.1.2. to replace the device with another one that meets or exceeds the provisions of this By-law; or

11.1.3. to facilitate the disconnection of the Private Service from the Water Distribution System in accordance with the written approval of the General Manager,

or any combination of the foregoing.

11.2 Whenever a Backflow Prevention Device required under this By-law has been permanently removed or the type of device has been changed, the Owner of the Property must notify the General Manager in writing immediately of such change.

12.0 AUTHORITY OF THE GENERAL MANAGER

12.1 The General Manager has the authority to:

12.1.1 require an Owner of a Property to which this By-law applies to conduct additional tests, provide additional reports and undertake any other measures required for the prevention of Backflow or protection of a Cross Connection; and

12.1.2 permit exceptions to provisions of this By-law where the General Manager is satisfied that such an exception does not create an unreasonable risk of Backflow.

13.0 SHORT TITLE

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

14.0 EFFECTIVE DATE

14.1 This By-law shall come into force on the date it is passed.

14.2 Despite subsection 14.1, the Owner of a Building or Structure located on a Property to which this By-law applies and which existed prior to the date referred to in subsection 14.1 shall comply with the provisions of subsections 3.2, 3.3 and 3.4 prior to the date set out below in accordance with the corresponding degree of hazard on the Property:

***Degree of Hazard for
Building or Structure Located
on Property***

Compliance Date

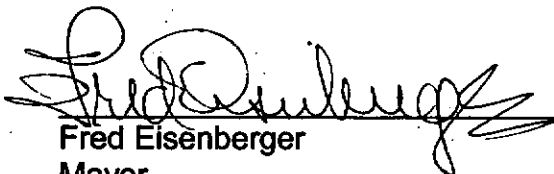
High or Severe Hazard

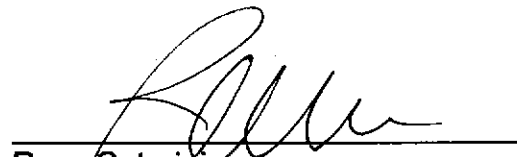
18 months after the date this By-law comes into force

All other hazards

24 months after the date this By-law comes into force, except for a Property which has a Small Private Service, in which case compliance with subsections 3.2, 3.3 and 3.4 is not required.

PASSED this 12th day of May, 2010.


Fred Eisenberger
Mayor


Rose Caterini
City Clerk

SCHEDULE A AUTHORIZED FUNCTIONS LIST

Item	Authorized function	Professional engineer with tester's certificate	Certified engineering technologist with tester's certificate*	Licensed master plumber with tester's certificate	Journeyman plumber with tester's certificate**	Apprentice plumber with tester's certificate***	Licensed master sprinkler and fire protection installer with a tester's certificate	Journeyman sprinkler and fire protection installer with a tester's certificate**	Apprentice sprinkler and fire protection installer with a tester's certificate ****
1	Carry out Cross Connection control survey required under this By-law	YES	YES	YES	YES	YES	NO	NO	NO
2	Install, relocate, or replace Backflow Prevention Device required under this By-law	NO	NO	YES	YES	YES	YES In regards to a Fire Protection System only	YES In regards to a Fire Protection System only	YES In regards to a Fire Protection System only
3	Repair Backflow Prevention Device required under this By-law	NO	NO	YES	YES	YES	NO	NO	NO
4	Test Backflow Prevention Device required under this By-law	YES	YES	YES	YES	YES	YES	YES	YES

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

**Required to be under the direction of a licensed master except if working in-house

***Required to be under the direct supervision of a journeyman plumber (in-house) or a licensed master plumber.

****Required to be under the direct supervision of a sprinkler and fire protection installer journeyman (In-house) or a licensed master sprinkler and fire protection installer.

For the purposes of Schedule A:

"tester's certificate" means an OWWA Cross Connection Control Specialist Certificate or an ASSE Cross Connection Control/Backflow Certificate or equivalent acceptable to the General Manager

This Authorized Functions List does not include the completion of the Self Assessed Cross Connection Survey Form.

SCHEDULE B
CITY REGISTRATION REQUIREMENTS FOR PERSONS ON AUTHORIZED FUNCTIONS LIST

Person Described on Authorized Functions List	Required to Register with the City?	Required to provide requested documentation to the City?	Required to pay the applicable registration fee?	Receives a Registration Number?
Professional Engineer with tester's certificate	Yes. Required to register self and all certified engineering technologists with a tester's certificate who are under his/her direction.	Yes, for both self and all certified engineering technologists with a tester's certificate who are under his/her direction.	Yes, pay one fee for all persons registered.	Yes, one registration number for all persons registered.
Licensed master plumber with tester's certificate	Yes. Required to register self as well as all journeyman plumbers with a tester's certificate and all apprentice plumbers with a tester's certificate who are under his/her direction or direct supervision.	Yes, for self as well as all journeyman plumbers with a tester's certificate and all apprentice plumbers with a tester's certificate who are under his/her direction or direct supervision.	Yes, pay one fee for all persons registered.	Yes, one registration number for all persons registered.
Licensed master sprinkler and fire protection installer with a tester's certificate	Yes. Required to register self as well as all journeyman sprinkler and fire protection installers with a tester's certificate and all apprentice sprinkler and fire protection installers with a tester's certificate who are under his/her direction or direct supervision.	Yes, for self as well as all journeyman sprinkler and fire protection installers with a tester's certificate and all apprentice sprinkler and fire protection installers with a tester's certificate who are under his/her direction or direct supervision.	Yes, pay one fee for all persons registered.	Yes, one registration number for all persons registered.

**Schedule B Continued
City Registration Requirements for Persons on Authorized Functions List**

<p>Persons in-house engaged in or occupied in any one of the trades governed by this By-law as a journeyman or apprentice carrying out in-house work for a single institution, business or other organization.</p>	<p>Yes.</p> <p>Journeyman plumber with tester's certificate is required to register self as well as all apprentice plumbers with a tester's certificate who are under his/her direct supervision.</p> <p>Journeyman sprinkler and fire protection installer with a tester's certificate is required to register self as well as all apprentice sprinkler and fire protection installers with a tester's certificate who are under his/her direct supervision.</p>	<p>Yes.</p> <p>For journeyman plumber with a tester's certificate and for all apprentice plumbers with a tester's certificate who are under his/her direct supervision.</p> <p>For journeyman sprinkler and fire protection installer with a tester's certificate and for all apprentice sprinkler and fire protection installers with a tester's certificate who are under his/her direct supervision.</p>	<p>Yes, pay one fee for all persons registered.</p>	<p>Yes, one registration number for all persons registered.</p>
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