

THE REGIONAL MUNICIPALITY OF HALTON

BY-LAW NO. 61-11

A BY-LAW TO REPEAL AND REPLACE BY-LAW NO. 157-05, AS AMENDED, BEING A BY-LAW RESPECTING THE PREVENTION OF BACKFLOW INTO THE WATER SYSTEM OF THE REGIONAL MUNICIPALITY OF HALTON.

WHEREAS pursuant to the *Municipal Act 2001*, S.O. 2001, c. 25, Section 11(2) as amended (hereinafter referred to as the *Municipal Act, 2001*), the Regional Municipality of Halton (hereinafter referred to as the "Region") has the exclusive responsibility for the supply and distribution of water in the Regional Area, including the establishment, construction, maintenance, operation, improvement and the extension of Waterworks Systems, and the financing thereof and all the provisions of any general Act relating to such supply and distribution of water and the financing thereof by a Regional Municipality or a local board thereof;

AND WHEREAS pursuant to the *Safe Drinking Water Act*, S.O. 2002, c. 32, Section 20(1) as amended, it is an offence to cause or permit anything to enter a drinking-water system if it could result in, a drinking-water health hazard, a contravention of a prescribed standard or the interference with the normal operation of the system;

AND WHEREAS The Regional Municipality of Halton is desirous to pass a By-law to put mechanisms in place so as not to permit the discharging of a prohibited substance into the drinking-water system for which the Region is responsible.

NOW THEREFORE THE COUNCIL OF THE REGIONAL MUNICIPALITY OF HALTON HEREBY ENACTS AS FOLLOWS:

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SECTION I

DEFINITIONS

1. THAT in this By-law, the following words or phrases are defined as:
- a) “Authorized Functions List” means the list of functions and the persons authorized to carry out such functions as set out in Appendix A;
 - b) “Authorized Tester” means a person authorized to carry out such functions as set out in the Authorized Functions List;
 - c) “ASSE” means the American Society of Sanitary Engineering;
 - d) “Auxiliary Water Supply” means any water supply on or available to the premises other than the Owner’s primary potable water supply;
 - e) “Backflow” means a flowing back of water or reversal of the normal direction of flow;
 - f) “Backflow Prevention Device” means a device in a water supply pipe which:
 - (i) incorporates two or more check Valves to prohibit the reverse flow of the water, irrespective of the pressure differentials, where the maximum working pressure is not exceeded;
 - (ii) contains integral safeguards to make failsafe the event of a malfunction of one or more of the check Valves.
 - g) “Backflow Prevention Device Tester” means a person who has completed and passed a Cross Connection Control course in Backflow Prevention Device Testing at an accredited school or college and shall be in accordance with CSA B.64.10.1-01 Subsection 4. Device Testers and School Accreditation;
 - h) “Back Pressure” means a pressure that is greater than the water system supply pressure;

- i) “Back Siphonage” means a form of Backflow caused by a negative or sub-atmospheric pressure within a water system;
- j) “Building Code” means the *Ontario Building Code (2006)*, O.Reg. 350/06, as amended;
- k) “Building Code Act” means the *Building Code Act*, S.O.1992, C.23, as amended;
- l) “Commercial” means lands, buildings or structures that are deemed by the Commissioner to be used for the sale or provision of goods and services to the general public which does not include Industrial and not excluding additional Residential usage
- m) “Commissioner” means the Commissioner of Public Works for the Region or his/her authorized representative;
- n) “Cross Connection” means an actual or potential connection between a potable water system and any source of pollution affecting any temporary, permanent, or potential water connections that may allow Backflow to occur;
- o) “Cross Connection Control” means the enforcement of any ordinance or other legal statement regulating Cross Connections;
- p) “Cross Connection Control Program” means a program initiated by the Region to administer and regulate the selection, installation, testing, and maintenance of Backflow Prevention Devices;
- q) “Cross Connection Survey” means the form set out in Appendix B;
- r) “CSA” means the Canadian Standards Association;
- s) “CSA B64” means CSA Standard Series B64.10 – Selection and Installation of Backflow Preventers/ Maintenance and Field Testing of Backflow Preventers Standard, as amended;

- t) “Enclosure” means an above-ground structure, certified to “ASSE Standard #1060 for Outdoor Enclosures for Backflow Prevention Assemblies” designed to accommodate a Backflow Prevention Device, that incorporates positive drainage to prevent submergence of the Backflow Prevention Device, provide security, increase accessibility for testing and repair, and provide freeze protection;
- u) “Fixture Isolation / Individual Protection” means installation of an approved Backflow Prevention Device at the source of the potential contamination;
- v) “High or Severe Hazard (HH)” means any type of Cross Connection or potential Cross Connection involving substances that, under any concentration, may be considered dangerous to health;
- w) “Industrial” means lands, buildings or structures that are deemed by the Commissioner to be used for assembling, fabricating, manufacturing, production, processing, repairing, supplying, storing or selling of Industrial goods and materials to the general public which does not include Commercial and not excluding additional Residential usage;
- x) “Institutional” means property usage for places of worship, schools, senior’s residences, hospitals, recreation centers, libraries or municipal/provincial/federal offices, etc.;
- y) “Irrigation Systems” means artificially supplying land with water for agriculture or landscaping, usually by artificial means such as pipes and sprinklers;
- z) “Medical Officer of Health” means the Medical Officer of Health for the Region;
- aa) “Meter Chamber” means an accessible in-ground structure remote from a building, containing and protecting the water meter control valve and Backflow Prevention Device and is maintained by the Owner;

- bb) “Minor Hazard (MH)” means any type of Cross Connection or potential Cross Connection that involves a substance considered to be a nuisance with no possibility of any health hazard;
- cc) “Moderate Hazard (MoH)” means any minor hazard (MH) connection that has a low probability of becoming a Severe Hazard (HH);
- dd) “MOE” means the Ontario Ministry of the Environment;
- ee) “Multi-Residential” means all dwelling units designed or intended for use as a residence or a household, this includes townhouse units or other such units as determined by the Commissioner. This excludes high rise buildings five (5) stories or higher;
- ff) “Municipal Fire Hydrant” means a fire hydrant owned and maintained by the Region and located on a public right-of-way or on lands where there is a registered easement in favour of the Region;
- gg) “Municipal Service” means the portion of the Water Service pipe located on a public right-of-way;
- hh) “New Construction” means a process that consists of the building or assembling of infrastructure, Residential, Multi-Residential, Commercial, Institutional or Industrial buildings which conforms to all applicable zoning and Building Code requirements;
- ii) “Owner” means the owner or owners of freehold property, a condominium corporation or their authorized agent(s), but does not include a mortgagee unless the mortgagee is in possession of the Property;
- jj) “OWWA” means Ontario Water Works Association;
- kk) “Premises Isolation” means the prevention of Backflow into a public waterworks system from a user’s premises by the installation of a suitable Backflow Prevention Device at the entrance of the building or property;

- ll) “Private Fire Hydrant” means a fire hydrant owned and maintained by a private Owner and located on private property;
- mm) “Private Service” means the portion of the Water Service pipe that is located on private Property;
- nn) “Property” means public and private lands, buildings, structures, boats, vehicles, railway cars, or mobile homes which are located within the Regional Area and may be entitled to a Service connection;
- oo) “Region” means The Regional Municipality of Halton;
- pp) “Regional Area” means the geographic area of the Region including the geographic areas of the City of Burlington, the Town of Oakville, the Town of Milton and the Town of Halton Hills;
- qq) “Regional Council” means the council for the Region;
- rr) “Regional Standards” means approved drawings standards and specifications relating to the construction and engineering of Water Services, including any municipal standards and specifications, levels of Service criteria and any policies and any procedures which are approved by the Commissioner, amended from time to time;
- ss) “Residential” means lands, buildings or structures that are deemed by the Commissioner to be used for a residence or a household of one or more individuals and includes but is not limited to; single family dwellings, semi-detached dwellings, single tenant townhouses, but does not include structures three stories or higher, Commercial or Industrial;
- tt) “Safe Drinking Water Act” means the *Safe Drinking Water Act*, .S.O. 2002, c. 32, as amended;
- uu) “Service” means the pipe which is connected to a Water Main distribution system and which is designed to carry potable water within the municipal right-of-way;

- vv) “Services Permit” means written permission that is granted to an Applicant by the Commissioner for the construction of Water Services on public Property;
- ww) “Service Valve” means a device consisting of a Valve and box located at the boundary for controlling the flow of water to a Private Service;
- xx) “Temporary Connections” means a connection made between the Water Main and a Private Service; includes connections made to Municipal Fire Hydrants and Private Fire Hydrants during New Construction;
- yy) “Testing and Inspection Report” means a report in the form set out as Appendix C;
- zz) “Test Tag” means a tag in the form set out as Appendix D;
- aaa) “Trunk Water Main” means a water pipe 400 mm diameter in size or larger that is owned and operated by the Region for the sole purpose of transmission of water from the source to another area;
- bbb) “Valve” means a device for controlling the flow of water through a pipe;
- ccc) “Water Main” means a primary pipe in any one area used for the supply of potable water; a water pipe 150 mm to 350 mm diameter in size for the purpose of water distribution within an area;
- ddd) “Water Service(s)” means all of the physical and mechanical equipment and devices, to fully and completely Service a Property with water;
- eee) “Water Meter” means a device or mechanism which unless specified by the Commissioner, is owned by the Region and used for the purpose of measuring the flow and quantity of water consumed;
- fff) “Waterworks System” includes any and all buildings, structures, plants, equipment, appurtenances, devices, conduits, intakes, outlets, underground pipelines and installations, and other works designed for the

production, treatment, transmission, distribution and storage of water, and includes lands and easements that are owned and operated by the Region for such purposes and uses; and

ggg) “Zone/Area Protection” means protection provided for sections of a piping building or facility with no domestic or potable water connections downstream of a Backflow Prevention Device.

SECTION II

BACKFLOW PREVENTION

- A. RESPONSIBILITIES OF THE COMMISSIONER
2. THAT except as otherwise expressly provided in this By-law, the Commissioner is responsible for:
 - (a) the administration and enforcement of all the provisions of this By-law; and
 - (b) the construction, maintenance, operation, improvement, and extension of the Municipal Waterworks System of the Region, as authorized by the Regional Council.
3. THAT the Commissioner may, in the course of performing his duties enter, pass upon, through, over and under any Property located within the Regional Area.
4. THAT except in the case of an emergency, the Commissioner shall give reasonable notice before entering any Property in the Regional Area.
5. THAT the construction, installation, maintenance and operation of the Waterworks System shall comply with current Regional Standards.
6. THAT the Commissioner may, upon reasonable notice, shut off water for any necessary construction, repair or maintenance, or following repeated or uncorrected contraventions of this By-law, shut off water for any necessary construction, repair or maintenance, and the Region shall not be liable for any damages whatsoever caused by the shutting off of water or for the breaking of any Service or attachment.

7. THAT the Commissioner shall ensure that the design of Water Services required, the size of any pipe, the material required to be used for such purpose, and the position in the street in which such pipe shall be laid are in compliance with the applicable Regional Standards and MOE regulatory requirements, and/or guidelines.

B. CONTAMINATION AND CROSS CONNECTION CONTROL

8. THAT no Owner or other person shall connect, cause to be connected, or allow to remain connected to the Waterworks System any piping, fixture, fitting, container or appliance, in a manner which under any circumstance, may permit Backflow into the aforementioned system.

C. INSPECTION FOR CROSS CONNECTIONS – ACCESS

9. THAT the Commissioner shall be allowed access, with reasonable notice, to any premises connected to the Waterworks System for the purpose of performing inspections to locate potential Cross Connections. The Commissioner may request a routine Cross Connection inspection of the premises (at the Owner's expense), to be performed by an approved company or person as described in the Authorized Functions List.
10. THAT the Commissioner shall be allowed access, with reasonable notice, to any premises connected to the Waterworks System for the purpose of performing inspections to verify compliance with this By-law.
11. THAT where the access requirements of Section II -"C" are not fulfilled, a written notice may be issued by the Commissioner allowing fourteen (14) days to provide access to the property in question. If the access is not provided within this timeframe, the Commissioner or approved authority may, at their discretion, shut off the water supply to the premises until access is provided.
12. THAT if a condition is found to exist which is contrary to Section II - B of the By-law, the Commissioner shall immediately carry out an inspection and shall issue such order or orders to the Owner or other person, as may be required to obtain compliance with this By-law.

D. NOTICE TO CORRECT CROSS CONNECTION

13. THAT if the Owner or other person to whom the Commissioner or approved authority has issued an order fails to comply with that order, the Commissioner, at his discretion, may;
 - (a) Give further notice to the Owner or other person to correct the fault, at his expense, within a specified time period and, if the notice is not

complied with, the Commissioner may then shut off the Water Service or Services; or

- (b) Without prior notice, shut off Water Services where he has identified an immediate threat of contamination to the Waterworks System that may endanger public health and safety.

E. PREMISES ISOLATION

- 14. THAT where, in the opinion of the Commissioner, a risk of possible contamination of the Waterworks System exists, the Owner, on notice from the Commissioner, may be required to install on his Water Service a Backflow Prevention Device for Premises Isolation in addition to any Backflow Prevention Devices installed in the Owner's water system at the source of potential contamination.
- 15. THAT Premises Isolation Backflow Prevention Devices shall be installed:
 - (a) in buildings of High or Severe Hazard in accordance with the Premises Isolation requirements outlined in the Building Code Act and CSA B64; or
 - (b) in buildings of Moderate or Medium Hazard in accordance with the Premises Isolation requirements outlined in the Building Code Act and CSA B64; or
 - (c) in all Industrial, Commercial, Institutional and Multi-Residential bulk metered high-rise or townhouse buildings in accordance with the Premises Isolation requirements outlined in the Building Code Act and CSA B64; or
 - (d) as specified by the Commissioner.
- 16. THAT the Commissioner, at his discretion, may also require the Owner to install Zone/Area Protection as required by the Building Code Act and CSA B64 within the Owner's plumbing system.
- 17. THAT for all New Construction, the Commissioner shall provide evaluation, review and/or inspection of plans of all Services Permits and shall determine, when necessary, the type of Backflow Prevention Device, if any, to be required as a condition of the issuing of a Services Permit. All New Construction must adhere to all zoning and Building Code requirements.
- 18. THAT for all new re-zoning applications from Residential to Industrial, Commercial, Institutional and Multi-Residential, the Commissioner shall provide evaluation, review and/or inspection of plans to determine the type of Backflow Prevention Devices, if any, are required for the facility.

19. THAT all Backflow Prevention Devices shall be tested in conformance with CSA B64 by a certified and registered tester and a copy of the Testing and Inspection Report shall be filed with the Region by the Owner before activating a Water Service.
20. THAT when a Services Permit is issued, the appropriate Backflow Prevention Device for Premises Isolation shall be installed on all New Construction except on buildings of Residential occupancy in accordance with the Building Code Act and CSA B64. Buildings within the aforementioned scope are not required to be isolated unless they have access to an Auxiliary Water Supply.
21. THAT all Temporary Connections to fire hydrants must have the appropriate Backflow Prevention Device be in accordance with the Building Code Act and CSA B64, tested and passed by Regional staff, except for fire fighting purposes.

SECTION III

SURVEYS

F. REQUIRED SURVEYS

22. THAT a Cross Connection Survey of the plumbing system of all existing Industrial, Commercial, Institutional, and Multi-Residential buildings and structures, except buildings of Residential occupancies in accordance with the Building Code Act shall be completed, at the Owner's expense, by the approved personnel specified in Authorized Functions List.
23. THAT the Cross Connection Survey shall be completed along with a report and sent to the Commissioner within 60 days of the date of the request by the Commissioner. The Cross Connection Survey report shall include existing Backflow Prevention Devices and Cross Connections, corrective measures, recommendations, and a schedule of work to be completed.
24. THAT a Cross Connection Survey, shall be completed every five years from the date of the first requested survey, subsequent any tenant or ownership change, re-zoning of property or as required by the Commissioner.

SECTION IV

INSTALLATIONS

G. SELECTION AND INSTALLATION OF BACKFLOW PREVENTION DEVICES

25. THAT the method of Cross Connection Control or selection and installation of Backflow Prevention Devices shall be in accordance with the Building Code Act and CSA B64.
26. THAT the installation, maintenance and operation of Backflow Prevention Devices shall comply with the Regional Standards. The foregoing requirements shall be in addition to and concurrent with any other requirements that may be prescribed by the Safe Drinking Water Act and the Building Code Act.
27. THAT the Owner shall install the correct Backflow Prevention Device within 120 days of notification and any new piping and appurtenances at his complete and sole expense, in accordance with the current Regional Standards.
28. THAT the size and type of any Backflow Prevention Devices, the materials for the construction thereof and the location of a Backflow Prevention Device within a Structure or Building shall be as specified in the current Regional Standards, the Building Code Act and CSA B64. The Commissioner may at times consider alternate, non-standard locations for Backflow Prevention Devices, subject to his discretion.
29. THAT unless previously authorized by the Commissioner, no work shall be undertaken or performed by any employee, servant, agent or contractor of the Region, and no material shall be placed upon private Property in connection with the supply of Water Services except the placing of a Water Meter, Residential Control Valve and remote reader.
30. THAT at no time shall a Backflow Prevention Device located on private Property be used for the supply of water to more than that one Property.
31. THAT at no time shall a Backflow Prevention Device be by-passed unless previously authorized by the Commissioner or subject to a requirement of provincial or federal legislation.
32. THAT the Region shall not be liable for any damages which may arise as a consequence of the thawing of frozen Water Services, the defective condition of the piping or Backflow Prevention Device(s).
33. THAT all bulk metered townhouse units, including stacked townhouse units, shall be equipped with approved Backflow Prevention Devices installed on each individual service.
34. THAT when the location of a Backflow Prevention Device cannot be provided by an Owner to the satisfaction of the Commissioner, or conditions or circumstances change with respect to a Backflow Prevention Device installation within a building, the Owner shall, at his complete and sole

expense, have an above ground enclosure constructed and installed according to the current Regional Standards.

35. THAT if the Municipal Service and Backflow Prevention Device is not in accordance with this By-law, it shall be the responsibility of the Owner to upgrade such Service and Backflow Prevention Device to comply with the current Regional Standards, and the Building Code Act and CSA B64 at the complete and sole cost of the Owner.
36. THAT all Irrigation Systems require the installation of a Backflow Prevention Device.
37. THAT all Backflow Prevention Devices shall be owned and maintained by the Owner.

H. MAINTENANCE AND FIELD TESTING OF BACKFLOW PREVENTION DEVICES

38. THAT all Backflow Prevention Devices, when required by the Commissioner or by the Building Code Act and CSA B64, shall be inspected and tested, at Owner's expense, to demonstrate that the device(s) are in proper working condition.
39. THAT only the persons listed in the Authorized Functions List shall carry out the corresponding functions set out in the Authorized Functions List.
40. THAT all Backflow Prevention Devices shall be inspected and tested, at the expense of the Owner, upon installation, and thereafter annually, or more often if required by the Commissioner, to be performed by an Authorized Tester.
41. THAT the Owner shall have the Backflow Prevention Device tested within 30 days of the test notification letter and submit a Testing and Inspection Report on any or all tests performed on a Backflow Prevention Device within 28 days of a test.
42. THAT a Test Tag shall be displayed on or adjacent to the Backflow Prevention Devices on which the Authorized Tester shall record the address of the premises, the location, type, manufacturer, serial number and size of the device, the test date, the Authorized Tester's initials, the Authorized Tester's name (if self employed) or the name of his employer and the Authorized Tester's license number.
43. THAT when the results of a test referred to in Section IV - H of this By-law show that a Backflow Prevention Device is not in proper working condition,

the Owner shall notify the Commissioner and shall make all necessary repairs or replace the device within ninety-six (96) hours, at the Owner's complete and sole expense.

44. THAT if the Owner does not make the appropriate repairs or replace the defective Backflow Prevention Device within ninety-six (96) hours, the Commissioner may issue a notice as described in Section II - D or may shut off the Water Service(s).
45. THAT if an Owner fails to have a Backflow Prevention Device re-tested, the Commissioner may notify the Owner that the Backflow Prevention Device must be tested within ninety-six (96) hours of Commissioner issuing the notice.
46. THAT if an Owner fails to have a Backflow Prevention Device re-tested within ninety-six (96) hours when requested by the Commissioner, the Commissioner may shut off the Water Service(s) until the Backflow Prevention Device has been tested and approved as required by Section IV - H of this By-law.
47. THAT where an Owner fails to maintain the Backflow Prevention Device according to the current Regional Standards, the Region may discontinue the supply of water to the Property and may shut off the Service Valve at the street line, until such time as any maintenance or repairs are undertaken or completed to the satisfaction of the Commissioner.
48. THAT failure to comply with Section IV -H of this By-law, may result in penalties as described in Section VII - M .
49. THAT during the installation or the removal of a Backflow Prevention Device, where piping is damaged as a consequence of the defective condition of the piping, the Owner shall install new piping at his complete and sole expense, in accordance with the current Regional Standards.
50. THAT the Owner shall take all precautions necessary to prevent:
 - (a) damage by frost, hot water, blows, injury or damage from any cause to the Backflow Prevention Device and any appurtenances thereto; and
 - (b) the loss of the Backflow Prevention Device, where the same is removed from its premises without the consent of the Region, whether by theft or otherwise.

51. THAT the Owner shall have the Backflow Prevention Device tested at the time of installation and thereafter on an annual basis. The Testing and Inspection Report shall be completed and sent to the attention of the Commissioner within 28 days of the test.

I. REMOVAL OR REPLACEMENT OF EXISTING BACKFLOW PREVENTION DEVICES

52. THAT no person shall remove a Backflow Prevention Device or any part thereof after it has been installed, and no Owner of a building or structure in which a Backflow Prevention Device is installed shall cause or permit the removal of such a device, unless such removal is:

- (a) to facilitate the repair of the device, with the device replaced immediately after repair is carried out; or
- (b) to replace the device with another device that meets or exceeds the provisions of this By-law.

53. THAT all Backflow Prevention Devices installed as a requirement of provincial legislation shall not be removed if the applicable provincial regulation is rescinded without the permission of the Commissioner.

54. THAT at the request of an Owner and where a municipal demolition permit is received by the Region, a minimum of seventy-two (72) hours notice is required for the turning off of the water supply at the Property line of the Municipal Service, the removal of the Water Meter(s), and the Backflow Prevention Device.

55. THAT in the case where an Owner makes a request to continue to use the existing Municipal Service notwithstanding the demolition of a building, the removal of the Backflow Prevention Device shall be the sole responsibility of the Owner. The Owner shall, at his complete and sole expense, arrange for this removal to enable the Region to ensure the protection of the Municipal Service in accordance with current Regional Standards.

SECTION V

FIRE SYSTEMS & TEMPORARY CONNECTIONS

J. FIRE SYSTEMS

56. THAT any Industrial, Institutional, Commercial or Residential private fire system which uses chemicals must incorporate the appropriate Backflow Prevention Device in accordance with the Building Code Act and CSA B64.

57. THAT all fire lines for Industrial, Institutional, Commercial or Residential buildings shall have a Backflow Prevention Device and shall be installed and operated as separate from any potable Water Services, or as required by federal or provincial legislation.
58. THAT all Temporary Connections to Fire Hydrants require Backflow Prevention Devices be installed and tested in accordance with this By-law and in conformity with CSA B64.

SECTION VI

AUTHORIZED FUNCTIONS AND TEST EQUIPMENT

K. BACKFLOW TEST EQUIPMENT MAINTENANCE

59. THAT where required by the Building Code Act and CSA B64, all equipment used to test Backflow Prevention Devices shall be verified or calibrated for accuracy.

L. AUTHORIZED FUNCTIONS

60. THAT all Authorized Testers shall obtain certification through an accredited school or college, in accordance with CSA B64 and meet the criteria as set out in the Authorized Functions List. Authorized Testers shall maintain current certification with the appropriate certification association.
61. THAT annual registration with the Regional Corporation is required for all Authorized Testers.
62. THAT only those persons listed in the Authorized Functions List shall carry out the functions set out in the Authorized Functions List.
63. THAT the Commissioner may suspend or revoke the Authorized Tester registration with the Region's Cross Connection Control Program, if the Authorized Tester:
- (a) fails to renew, submit or maintain the annual registration and the required annual documentation with the Regional Corporation;
 - (b) submits a Testing and Inspection Report that was falsified; or
 - (c) repeatedly submits incorrect reports or installations of Backflow Prevention Devices.

64. THAT the Commissioner may upon suspension, as outlined in Subsection 63 (b) and (c), request the Tester successfully complete a testers refresher course as approved by the Commissioner, prior to any re-instatement to the Halton Cross Connection Control Program as an Authorized Tester.
65. THAT the Commissioner may, at his sole discretion forward all non-compliant Cross Connection Control Program registrations to the OWWA.
66. THAT the Commissioner grants the Region's Public Works staff and approved Regional contractors that support operational activities, the ability to install and test Backflow Prevention Devices installed on Region owned Property and all Backflow Prevention Devices required on New Construction sites according to the Authorized Functions List.

SECTION VII

GENERAL PROVISIONS AND PROHIBITIONS

M. PENALTIES

67. THAT no person or persons shall:
 - (a) Wilfully hinder or interrupt, or cause or permit to be hindered or interrupted, the Region or any of its authorized officers, contractors, agents, servants or workmen in the exercise of any of the powers conferred by this By-law;
 - (b) Wilfully alter, remove or bypass any Backflow Prevention Device placed upon any Service pipe or connected therewith.
68. Every person who contravenes any provision of this By-law shall be guilty of an offence and on summary conviction shall be liable to a fine of not more than five thousand dollars (\$5,000.00).
69. THAT each day that a person contravenes any provision of this By-law constitutes a separate offense.

N. FEES

70. THAT all fees shall be in conformance with the Region's Fee Structure as indicated in By-Law No. 19-11, as amended, or on such other basis as the Region may at any time decide, at such time as the Commissioner may, from time to time, determine.

O. APPENDICES

71. THAT Appendices A through D as amended and the current Regional Standards, along with the Building Code Act and CSA B64, the Ontario Provincial Standards Drawings, the Ontario Provincial Standard Specifications and the Safe Drinking Water Act shall form part of this By-law.

P. REPEAL, SHORT TITLE AND EFFECTIVE DATE

72. THAT By-law No. 157-05, as amended, is hereby repealed.
73. THAT the short title of this By-law is the "Cross Connection Control By-Law".

READ and PASSED this 11th day of May, 2011.



REGIONAL CHAIR



REGIONAL CLERK

Report No. PW-14-11

CERTIFIED A TRUE COPY
REGIONAL MUNICIPALITY OF HALTON



SUSAN LATHAN
Regional Clerk

Appendix "A"

Authorized Functions List

The Regional Municipality of Halton By-law No. 61-11

Item	Function	Professional Engineer with Tester's License	Certified Engineering Technologist with Tester's License ¹	Licensed Master Plumber with Contractor's and Tester's License	Journeyman Plumber or Pipe-Fitter with Tester's License ²	Apprentice Plumber or Pipe Fitter with Tester's License ³	Licensed Halton Staff with Tester's License ⁴	Fire System Sprinkler Fitter with Tester's License	Lawn Irrigation System Installer with Tester's License
A	Perform Cross-Connection Survey	X	X	X	X				
B	Install relocate or replace a backflow prevention device			X	X	X			
C	Repair of backflow prevention device ⁴	X	X	X	X	X			
D	Test backflow prevention device ⁵	X	X	X	X	X	X	X	X
E	Items A, B, C and D above in relation to fire protection systems	X	X	X	X	X		X	
F	Items B, C and D above in relation to lawn sprinkler systems	X	X	X	X	X			X

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 direct supervision of a journeyman plumber or a master plumber.
4. Water Distribution Operator or In-house maintenance staff is permitted to perform repairs, if they have a tester's licence.
5. Anyone with a tester's licence as per CAN/CSA-B64-10, as amended, is permitted.

The Regional Municipality of Halton By-law No. 61-11



CROSS CONNECTION SURVEY
PREMISES ISOLATION ONLY

Premise Isolation: **EXISTING or REQUIRED** Building Hazard: **SEVERE or MODERATE**

# of Services	Individual or Bulk Metered Service?		# of Units		Fire System		Irrigation	
	Property Occupant	Property Address	Unit	Town	Postal Code	Phase #	Report Given to:	Date of Survey
Location of Cross Connection & Existence of Premise Isolation (PI)	Existing Backflow Prevention Device Type	Serial # of existing Backflow Prevention Device	Date of Last Test (mm/dd/yyyy)	Hazard Level (Moderate / Severe)	Premise Isolation (PI) or Zone, Area, Future Isolation	Location (Room)	Please identify the type of backflow prevention required	
Domestic Cold Water Service #1								
Bypass Around Domestic Cold Water Service #1								
Fire Suppression System Class : 1 2 3 4 5 6 Chemical:								
Lawn Irrigation Metered or Not Metered ?								
Auxiliary Water Source?								
Process Water?								
Domestic Cold Water Service #2								
Bypass Around Domestic Cold Water Service #2								
Water Meter Serial #								
Trap Seal Primers	Yes / No	Upstream or Downstream of Backflow Device?	Yes / No	Pressure Reducing Valve	Yes / No	Upstream or Downstream of Backflow Device?		
Hose Bibb with Threads?	Yes / No	Upstream or Downstream of Backflow Device?	Yes / No	Pressure Reducing Valve	Yes / No	Upstream or Downstream of Backflow Device?		
DCVA Double Check Valve Assembly Type	BCVB	Pressure Type Vacuum Breaker	DCAP	DCV	DCV	DCV	LACV	Listed Alarm Check Valve
RP Reduced Pressure Principle Type	RTB	Pressure Type Vacuum Breaker	DCAP	DCV	DCV	DCV	ESCV	Resilient Seated Check Valve

I confirm that the Authorized Tester has explained any and all cross connections that have been found at the above stated location during this cross connection survey and have been advised of the steps necessary to eliminate the above listed cross connections. I understand it is the Owner's responsibility to eliminate any cross connections inside the property and the requirement to obtain a Building Permit prior to any backflow prevention device installations. I understand that the Cross Connection Control Coordinator will be in contact with me to verify the mandatory backflow prevention device installations as per By-Law No 61-11. I understand it is the Owner's responsibility to forward the \$100.00 -HST Survey Fee along with the Survey Report, within 30 days of the survey date, to Halton Region, Cross Connection Control Program, 1151 Bronte Road, Oakville, Ontario L6M 3L1.

Signature: _____ Print Owner Name: _____ Date: _____
Please note: surveys will not be accepted without a signature and Printed Name of Owner/Occupant (mm/dd/yyyy)

Property Owner Address: _____ Town: _____ Postal Code: _____ Phone #: _____ Email: _____

Authorized Tester Name: _____ I confirm that I explained the above noted cross connections during my cross-connection survey and have advised the Owner of the necessary steps in eliminating the above listed and any other cross connections found inside the property. I advised the Owner that Building Permits must be obtained prior to installations. Phone #: _____
White Copy: Aggoc of Halton Yellow Copy: Owner or Occupant Pink Copy: Certified Tester

Appendix "C"

The Regional Municipality of Halton By-law No. 61-11



Regional Municipality of Halton
1151 Bronte Road, Oakville, Ontario L6M 3L1
Telephone (905)825-6000 ext 7458 Toll Free: 1-866-442-5866 ext 7458

Testing & Inspection Report
Backflow Prevention Assembly

Property Address		Postal Code
Occupant Name	Party Connected	Telephone
Owner		Telephone
Address of Owner		Postal Code
Name of Authorized Tester	Tester Certification Number	Telephone
Business Name	Business Address	Postal Code
Make of TEST KIT	Model Number	Serial Number
		Date of Last Calibration

Backflow Prevention Device Information: Provide a Picture of Installed Backflow Prevention Device

Type of ASSEMBLY	<input type="checkbox"/> RP <input type="checkbox"/> DCVA	Model Number	Serial Number	Size
INSTALL DATE	YY MM DD	Location of backflow prevention device (e.g. building, room #, installed on what system)		Shut Off # 2 <input type="checkbox"/> Leaked <input type="checkbox"/> Closed Tight
TYPE OF TEST		TEST DATE	YY MM DD	*Fee Required*
<input type="checkbox"/> Installation Test <input type="checkbox"/> Replacement <input type="checkbox"/> Permit Required	<input type="checkbox"/> Annual			
<input type="checkbox"/> Premise Isolation*		<input type="checkbox"/> Fixture Isolation		
<input type="checkbox"/> Bypass*		<input type="checkbox"/> Zone Isolation		
<input type="checkbox"/> Fire System*		<input type="checkbox"/> Area Isolation		
<input type="checkbox"/> Irrigation Metered*		<input type="checkbox"/> Irrigation Not Metered		

Backflow Prevention Device Test Results

TEST	Differential Pressure Relief Valve	Check Valve No. 1	Check Valve No. 2	TEST RESULTS
	<input type="checkbox"/> Opened at _____ Psi _____ kPa <input type="checkbox"/> Failed to Open	<input type="checkbox"/> Leaked <input type="checkbox"/> Closed Tight _____ Psi _____ kPa	<input type="checkbox"/> Leaked <input type="checkbox"/> Closed Tight _____ Psi _____ kPa	<input type="checkbox"/> Passed <input type="checkbox"/> Failed
Pressure Differential Across First Check Valve (no flow) _____ Psi _____ kPa		Line Pressure at Time of Test _____ Psi _____ kPa		
Minus the Opening Point of Relief Valve _____ Psi _____ kPa		Halton Test Tag # _____		
BUFFER (3 psi or greater) _____ Psi _____ kPa		Permit # _____		

Please Note: Signed off Local Municipality Permit MUST accompany this test report.

Backflow Prevention Device Re-Test Results

RE-TEST	Differential Pressure Relief Valve	Check Valve No. 1	Check Valve No. 2	RE-TEST RESULTS
	<input type="checkbox"/> Opened at _____ Psi _____ kPa <input type="checkbox"/> Failed to Open	<input type="checkbox"/> Leaked <input type="checkbox"/> Closed Tight _____ Psi _____ kPa	<input type="checkbox"/> Leaked <input type="checkbox"/> Closed Tight _____ Psi _____ kPa	<input type="checkbox"/> Passed <input type="checkbox"/> Failed
Pressure Differential Across First Check Valve (no flow) _____ Psi _____ kPa		Line Pressure at Time of _____ Psi _____ kPa		
Minus the Opening Point of Relief Valve _____ Psi _____ kPa		Halton Test Tag # _____		
BUFFER (3 psi or greater) _____ Psi _____ kPa				
Remarks:				

Signature of Authorized Tester _____ Date: YY / MM / DD _____
This report and required fees (\$50.00+HST) are to be submitted to the Halton Region, Cross Connection Control Program, 1151 Bronte Road, Oakville, Ontario L6M 3L1 no later than 28 days from the date of test, as per By-law No. 61-11. Required repairs or replacements must be completed within 96 hours from the date of test and a re-test is to be completed and submitted within 28 days of the date of re-test, as per By-law No. 61-11. It is the Owners responsibility to forward the fee and test report to Halton Region.

Original: Halton Region Copy: Local Building Department Copy: Owner or Occupant Copy: Certified Tester

Appendix "D"

The Regional Municipality of Halton By-law No. 61-11

Backflow Test Tag

Front View

WARNING

Do Not Remove. Tampering with a backflow prevention device is a direct violation of Halton Region's By-law No. 61-11, as amended. This backflow prevention device remains the sole property and responsibility of the Owner. The Owner is responsible for damage to the backflow prevention device caused by frost, hot water, blows, injury or damage from any cause to the device.

In case of a backflow incident (back pressure/ back siphonage), you must call this department at 905-825-6000 or 1-866-442-5866 immediately.

Regional Municipality of Halton
Public Works, Water Services

Back View

Regional Municipality of Halton
Cross-Connection Control
By-Law No. 61-11

Address	
Location	
Serial #	
Make	
Model #	
Size	
DO NOT REMOVE	
Test Dates	Certification #
1.	
2.	
3.	
4.	
5.	

