

Authority: Public Works and Infrastructure Committee Item PW20.6, as adopted by City of Toronto Council on April 26, 27 and 28, 2017

CITY OF TORONTO

BY-LAW 461-2017

To amend City of Toronto Municipal Code Chapter 851 Water Supply.

Whereas Council has the authority to pass this By-law pursuant to subsections 8(1), (2) and (3) and section 259 of the *City of Toronto Act, 2006*, S.O. 2006, Chapter 11, Schedule A (the "City of Toronto Act, 2006");

The Council of the City of Toronto enacts:

1. Chapter 851 of The City of Toronto Municipal Code is amended as follows:
 - A. By adding the following definition to § 851-1:

BUILDING AREA - Building area as defined in the *Building Code Act, 1992*, S.O. 1992, c. 23, as amended.
 - B. By deleting the definition of "PRIVATE WATER SERVICE PIPE" in § 851-1 in its entirety and replacing it with the following:

PRIVATE WATER SERVICE PIPE - The pipe, fittings and appurtenances which convey water from the water service connection to a water meter, or to the point where the pipe and fittings connected to the water service connection enters a building or structure if there is no water meter for the purpose of domestic consumption.
 - C. By deleting § 851-4F(1) in its entirety and replacing it with the following:
 - (1) No person shall install or cause the installation of, and no owner shall permit the installation of, a private water service connection to a municipal water service connection that services more than one building on a property unless otherwise permitted under the Building Code and the *Safe Drinking Water Act, 2002*, as applicable, and this section.
 - D. By deleting § 851-4F(3)(a) in its entirety and replacing it with the following:
 - (a) Such servicing complies with the Building Code and the *Safe Drinking Water Act, 2002*, as applicable; and
 - E. By deleting § 851-4G in its entirety and replacing it with the following:
 - G. Replacement of existing water service connection.
 - (1) If a new water service connection replaces an existing water service connection, the existing water service connection shall be disconnected from the City watermain and the shut-off valve shall

be removed, all at the same time as the new water service connection is installed.

(2) An owner shall apply to the City for a new municipal water service connection and, where there is an existing municipal water service connection, for the disconnection of the existing municipal water service connection(s) where there is:

(a) A subdivision or severance of a lot or parcel of land or change in location of any building or structure on a lot serviced by the existing water service connection; or

(b) A construction of a new or reconstructed building or structure that will be directly or indirectly supplied by the municipal water service connection.

(3) The owner shall pay to the City all costs related to:

(a) The installation of a new municipal water service connection; and

(b) Where required by this chapter, disconnection of existing municipal water service connection(s).

Costs shall be payable on an actual cost basis, subject to a minimum charge equal to the applicable flat rate for such works, as determined by the City from time to time.

(4) Notwithstanding § 851-4G(1) or (2), an owner may apply to the General Manager for the reuse of a municipal water service connection, up to and including 25 mm in diameter, for the purposes of servicing a residential dwelling if the municipal water service connection meets, as determined by the General Manager, all of the following criteria:

(a) The municipal water service connection must meet current City standards and specifications;

(b) The municipal water service connection must not be a double connection or otherwise supply more than one property; and

(c) The municipal water service connection must have properly functioning curb stops and valves and no record of low pressure.

- (5) The owner, upon making an application under § 851-4G(2) or § 851-4G(4), shall pay to the City any fees, charges and costs as may be prescribed or determined by the City from time to time.

F. By deleting § 851-5D in its entirety and replacing it with the following:

D. Size of water meter.

- (1) The General Manager shall determine the size of the water meters to be supplied to a property having regard to the consumption and flow rates required by the owner, based on the information supplied by the owner in its application as required by § 851-4D(2) or § 851-5D(2), and the standards and specifications.
- (2) An owner may submit an application on the prescribed City form to the General Manager in respect of an existing water service, for a change in the size of the water meter at the property.
 - (a) In the owner's application, the owner shall provide the General Manager with anticipated consumption and flow rates, type of business, if any, and number of employees working at the property, if any.
 - (b) The owner shall sign the application, and the owner shall be responsible for the completeness and accuracy of the information furnished on that application including any plans or other documentation accompanying that application.
- (3) The General Manager may conduct flow monitoring tests on the private water service pipe or private water system of a property and analysis of water use at that property and such other information relevant to the water use or water meter as the General Manager determines appropriate to determine the appropriate size and type of water meter to be or that should be installed at the property.
- (4) An owner of a property shall, at reasonable times, provide the General Manager with clear and unobstructed access to the owner's private water service pipe and private water system:
 - (a) For the purpose of installing a non-intrusive flow monitoring device on the private water service pipe or private water system near the water meter; and
 - (b) For the purpose of conducting any flow monitoring tests under § 851-5D(3) to determine if the existing water meter is the appropriate size for the property.
- (5) In the event that the result of the flow monitoring tests and analysis of water use at a property under § 851-5D(3) indicate that the capacity of the water meter is not appropriately sized for the property, the owner shall, at the owner's sole expense, change the

water meter and adjacent piping to comply with the standards and specifications, if directed by the General Manager.

- (6) The charge payable by an owner for a water meter shall be based on the size of the water meter as determined by the General Manager in accordance with § 851-5D(1) or § 851-5D(3).
- (7) For flow monitoring tests required under § 851-5D, the owner shall be responsible to protect the flow monitoring device installed at the owner's property against loss or damage.

G. By adding the following as § 851-5N(4)(c):

- (c) The owner or applicant shall have a copy of the current report of the test performed, as required under § 851-8D(8) and (9), for the backflow prevention device installed with the temporary water meter, on site for inspection by the General Manager and the owner shall comply with § 851-8D(8), (9) and (10).

H. By adding word "potable" in § 851-8C before the words "quality of the water supply." so that it reads:

C. Contamination prevention.

No person shall directly or indirectly connect, permit or cause to be connected, allow to remain connected to the waterworks or construct, install or maintain any piping, fixture, fitting, container, appliance, equipment or any other connection which may or could enable non-potable water, wastewater, or any other liquid, chemical or substance to enter the waterworks that may affect the potable quality of the water supply.

I. By deleting § 851-8D(4) in its entirety and replacing it with the following:

- (4) Unless otherwise required by § 851-8C or § 851-8D, every owner of a new or existing industrial, commercial, institutional, or residential property identified in Schedule 5 of this chapter or of any other new or existing building, structure or property that contains a hazard resulting in a risk of contamination of the waterworks shall install, at the owner's expense, backflow prevention device(s) in accordance with the standards and specifications identified in Schedule 5.

J. By adding the following as § 851-8D(5), § 851-8D(6) and § 851-8D(7)

- (5) Buildings of residential occupancy within the scope of Part 9 of the Building Code are exempt from the premise isolation requirement in § 851-8D, unless the building has a connection to an auxiliary water supply or is otherwise required to have premise isolation in accordance with the Building Code, *Environmental Protection Act*, or *Safe Drinking*

Water Act, 2002. No person, including an owner, shall connect, cause or permit to be connected, or allow to remain connected any auxiliary water supply to the City's water supply, without the written approval of the General Manager.

(6) No variance from the requirements under § 851-8D(1) to § 851-8D(4) or alternate solutions shall be permitted unless approved in writing by the General Manager.

(7) (a) Where a property's hazard classification changes, which results in a different type of backflow prevention device being required, the owner of the property or applicant shall notify the General Manager in writing and shall include the following:

[1] The reason for the change in the property's hazard classification.

[2] The steps being taken to replace the backflow prevention device with the appropriate device as determined under § 851-8D(7)(b) or (c).

(b) The replacement of the backflow prevention device under § 851-8D(7)(a)[2] shall be completed in accordance with § 851-8D(12) and submission of the performance test report, as required under § 851-8D(8) and (9), to the General Manager and the owner shall comply with § 851-8D(8), (9) and (10).

K. By deleting § 851-8D(10) in its entirety and replacing it with the following:

(10) The owner shall cause to be displayed a legibly marked record card or contractor's test tag on the backflow prevention device that indicates the address of the property, the location, type and date of installation of the device, manufacturer, serial number and size of the device, the test date, the tester's initials, the tester's printed name, the printed name of the tester's employer and the tester's certificate number.

L. By deleting § 851-8D(14) in its entirety and replacing it with the following:

(14) An owner, required to submit a backflow prevention device survey under this chapter, shall update the then current survey upon the occurrence of any of the following:

(a) any change, alteration or replacement of the backflow prevention device;

(b) any change in the level of hazard as defined under CSA-B64 Series Standards;

- (c) where a change in the risk of contamination to the waterworks has occurred or may occur;
 - (d) upon notification by the General Manager where the General Manager determines a change in the risk of contamination to the waterworks has occurred or may occur.
- M. By deleting § 851-8D(15) in its entirety and replacing it with the following:
 - (15) (a) All backflow prevention device surveys shall be completed as per the form prescribed by the General Manager.
 - (b) The survey shall be prepared and signed by a person authorized under § 851-8G to perform that work.
- N. By deleting § 851-8D(20) in its entirety and replacing it with the following:
 - (20) (a) A property owner may apply in writing on the form prescribed by the General Manager for approval to submit and implement a proposed compliance program setting out remedial compliance activities to be undertaken by the owner.
- O. By deleting § 851-8F(1) in its entirety and replacing it with the following:
 - (1) The person holds a valid and current Certificate of Achievement in Cross Connection Control endorsed by the Ontario Water Works Association, ASSE International, or other recognized certification organizations approved by the General Manager.
- P. By adding the word "; or" at the end of § 851-11B(6).
- Q. By adding the following as § 851-11B(7):
 - (7) The General Manager requires the water to be shut off to effect the installation, repair, maintenance or replacement of new or existing Toronto Water infrastructure, appurtenances and/or equipment and may keep the supply of water to a property shut off until such the time as the work is completed. The General Manager shall provide, in the event of emergency work, such notice to the affected property owner(s) as may be practical in the circumstances and, in the case of planned work, at least 48 hours' prior notice.
- R. By adding the following as § 851-13B(2)(c):
 - (c) The owner or applicant shall have a copy of the current report of the test performed, as required under §851-8D(8) and (9), for the backflow prevention device installed with the temporary water meter, on site for

inspection by the General Manager and the owner shall comply with § 851-8D(8), (9) and (10).

S. By re-numbering the following subsections in § 851-8D as follows:

§ 851-8D(5) to § 851-8D(8)
§ 851-8D(6) to § 851-8D(9)
§ 851-8D(7) to § 851-8D(10)
§ 851-8D(8) to § 851-8D(11)
§ 851-8D(9) to § 851-8D(12)
§ 851-8D(10) to § 851-8D(13)
§ 851-8D(11) to § 851-8D(14)
§ 851-8D(12) to § 851-8D(15)
§ 851-8D(13) to § 851-8D(16)
§ 851-8D(14) to § 851-8D(17)
§ 851-8D(15) to § 851-8D(18)
§ 851-8D(16) to § 851-8D(19)
§ 851-8D(17) to § 851-8D(20)
§ 851-8D(18) to § 851-8D(21)
§ 851-8D(19) to § 851-8D(22)
§ 851-8D(20) to § 851-8D(23)

And updating any references made to these subsections in the chapter accordingly.

T. By deleting Schedule 3 in its entirety and replacing it with the following:

SCHEDULE 3

§ 851-5N(3)
§ 851-5N(4)
§ 851-8B(1)
§ 851-8B(2)(b)
§ 851-8B(2)(c)
§ 851-8B(2)(d)
§ 851-8C
§ 851-8D(2)
§ 851-8D(3)
§ 851-8D(4)
§ 851-8D(5)
§ 851-8D(6)
§ 851-8D(7)
§ 851-8D(8)
§ 851-8D(9)
§ 851-8D(10)
§ 851-8D(11)
§ 851-8D(12)
§ 851-8D(13)

§ 851-8D(14)
§ 851-8D(15)
§ 851-8D(16)
§ 851-8D(17)
§ 851-8D(18)
§ 851-8D(19)
§ 851-8D(20)
§ 851-8D(21)
§ 851-8E(1)
§ 851-8E(2)
§ 851-18B(2)(d)
§ 851-19A(1)
§ 851-19B
§ 851-19C
§ 851-23
§ 851-5A(1)

- U. By replacing the words "premise isolation backflow prevention device" in each instance in § 851-8 with the words "backflow prevention device".
- V. By deleting Schedule 5 in its entirety and replacing it with the following:

SCHEDULE 5
BACKFLOW PREVENTION DEVICE FOR PREMISE ISOLATION BASED ON INDUSTRY
SECTOR

Industry Sector	Hazard Level
Agricultural/Landscaping Applications	Severe
Aircraft Manufacturing	Severe
Airports	Moderate
All Printing Industry (excluding dry digital printing)	Severe
Allied Services to Manufacturing	Severe
Analytical Laboratories	Severe
Animal Shelter	Moderate
Asphalt Paving Mixture and Block Manufacturing	Severe
Auto Dealership	Moderate
Autobody Refinishing	Severe
Automobile Manufacturing	Severe
Automotive Repairs and Maintenance	Severe
Beverage Manufacturing	Severe
Breweries	Severe
Blood Clinic	Severe
Campsite	Moderate
Car Washes	Severe
Carpet Cleaners	Severe
Chemical Manufacturing	Severe
Clinical Laboratories	Severe

Industry Sector	Hazard Level
Commercial Coin Operated Laundry	Moderate
Commercial Laundry (without dry cleaning)	Severe
Commercial Buildings of less than 4 stories or less than 600 square metres	Low to Moderate
Commercial Buildings of 4 stories or more or exceeding 600 square metres	Moderate
Concrete Plants	Severe
Cosmetic Product Manufacturing	Severe
Death Care Services	Severe
Dental Office (Non-surgical)	Moderate
Dental Surgery Facility	Severe
Distilleries	Severe
Dock and Marine Facility	Severe
Dry Cleaners	Severe
Dye and Pigment Manufacturing	Severe
Electroplating, Plating, Polishing, Anodizing and Colouring	Severe
Exhibition Grounds	Severe
Fire Protection Systems with antifreeze, foam injection, and/or other chemical additives	Severe
Fire Protection Systems with auxiliary water supply	Severe
Fire Stations	Moderate to Severe
Food Processing	Severe
Fuel Dispensing Facility (Gas Bar)	Moderate
Funeral Homes/Cemetery	Moderate to Severe
Gas Stations with Automotive Repairs	Severe
Golf Courses	Moderate to Severe
Greenhouses	Severe
Grocery Store	Moderate
Hair Salon	Moderate
Hospitals	Severe
Hotel and Motel	Moderate
Industrial and Institutional Premises	Moderate to Severe
Industrial Laundries	Severe
Irrigation Systems (with chemical addition)	Severe
Irrigation System (without chemical addition)	Moderate
Kennel	Moderate
Lubricating Oil and Grease Manufacturing	Severe
Machine Tool Manufacturing	Severe
Machine Tool Operations	Severe
Marina and Yacht Club (pleasure-boat)	Moderate
Meat Processing and Packaging	Severe

Industry Sector	Hazard Level
Medical Clinic (non-surgical)	Moderate
Medical Clinic (surgical)	Severe
Medical Laboratories	Severe
Metal Can Manufacturing	Severe
Metal Coating, Engraving	Severe
Metal Fabrication	Moderate to Severe
Metal Window and Door Manufacturing	Severe
Milk/Dairy Product Processing	Severe
Mobile Home Park	Moderate
Mortuary or Morgue	Severe
Motorcycle Repairs and Maintenance	Severe
Nonferrous Metal Manufacturing	Severe
Nursing Home	Moderate
Other Metal Container Manufacturing	Severe
Paint and Coating Manufacturing	Severe
Paper and Pulp Processing Plants	Severe
Penitentiary	Moderate
Personal Care Products Manufacturing	Severe
Petrochemical Manufacturing	Severe
Petroleum Bulk Storage Facilities	Severe
Petroleum Refining	Severe
Pharmaceutical Manufacturing	Severe
Photo Finishing	Severe
Photographic Film Manufacturing	Severe
Photographic Plate/Paper Manufacturing	Severe
Plant Using Radioactive Materials	Severe
Plastic Manufacturing	Severe
Plastic Material and Resin Manufacturing	Severe
Power Generating Facility	Severe
Premises Where Access Is Prohibited	Severe
Printed Circuit Board Manufacturing	Severe
Radiator Shop	Severe
Recycling Facility	Severe
Rendering Facility	Severe
Research Buildings and Laboratories	Severe
Residential Buildings of 4 stories or more or exceeding 600 square metres (excluding individual single-family dwellings serviced with an individual water service and water meter)	Moderate
Restaurant (including bar, coffee shop, food courts, lounge, etc.)	Moderate
Rubber Manufacturing	Severe
Sauna and Massage Centre	Moderate
Schools (elementary, junior high, senior high)	Moderate
Single Residential Dwelling with auxiliary water supply	Severe

Industry Sector	Hazard Level
Slaughter House	Severe
Soap and Detergent Manufacturing	Severe
Swimming Pools (private with direct connection)	Moderate
Swimming Pools (public)	Moderate
Technical Institutes	Moderate
Textile Manufacturing/ Processing	Severe
Universities and Colleges	Moderate
Veterinary Clinic	Moderate
Veterinary Hospital	Severe
Waste/Garbage Transfer Station and Disposal Plant	Severe
Wastewater Pumping Stations	Severe
Wastewater Treatment Plants and Facilities	Severe
Water Filling Station	Severe
Water Park	Moderate
Water Pumping Stations	Severe
Water Treatment Plants	Severe
Wineries	Severe
Zoo	Severe

T. By deleting Schedule 6 in its entirety and replacing it with the following:

**SCHEDULE 6
AUTHORIZED FUNCTIONS LIST**

Item	Function	Professional Engineer with CCCS Certification	Certified Engineering Technologist with CCCS Certification*	Licensed Master Plumber with a City of Toronto plumbing contractor's license and CCCS Certification	Journeyman Plumber with CCCS Certification†	Apprentice plumber with CCCS Certification‡	Fire system sprinkler fitter with CCCS Certification	Industrial Millwright with CCCS Certification
1	Carry out cross-connection / backflow prevention device survey	√	√	√	√			
2	Install, relocate, or replace backflow prevention device			√	√	√		
3	Repair backflow prevention device			√	√	√		
4	Test backflow prevention device	√	√	√	√	√	√	√
5	Carry out cross-connection / backflow prevention device survey in relation to fire protection systems	√	√	√	√		√	
6	Install, relocate, or replace backflow prevention device in relation to fire protection systems			√	√	√	√	
7	Repair backflow prevention device in relation to fire protection systems			√	√	√	√	

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Item	Function	Professional Engineer with CCCS Certification	Certified Engineering Technologist with CCCS Certification*	Licensed Master Plumber with a City of Toronto plumbing contractor's license and CCCS Certification	Journeyman Plumber with CCCS Certification†	Apprentice plumber with CCCS Certification‡	Fire system sprinkler fitter with CCCS Certification	Industrial Millwright with CCCS Certification
8	Test backflow prevention device in relation to fire protection systems	√	√	√	√	√	√	√

√	<i>Authorized to perform function</i>
*	<i>Required to be under the direction of a Professional Engineer</i>
†	<i>Required to be employed by a City of Toronto licensed plumbing contractor</i>
‡	<i>Required to be employed by a licensed plumbing contractor and under the direct supervision of a journeyman with CCCS Certification or master plumber with CCCS Certification</i>
Note:	<i>If a plumber or an Industrial Millwright is employed by an organization or institution for whom the work is performed, then a City of Toronto plumbing contractor licence is not required.</i>
CCCS	Cross Connection Control Specialist Note: Please refer to § 851-8F for the criteria for acceptable CCCS

Enacted and passed on April 28, 2017.

Frances Nunziata,
Speaker

Ulli S. Watkiss,
City Clerk

(Seal of the City)