



STAFF REPORT ACTION REQUIRED

Amendment to the Municipal Code Chapter 851 – Water Supply

Date:	October 29, 2008
To:	Public Works and Infrastructure Committee
From:	General Manager, Toronto Water
Wards:	All
Reference Number:	P:\2008\Cluster B\TW\pw08025

SUMMARY

The purpose of this report is to amend various sections of Toronto Municipal Code Chapter 851 (Water Supply By-law) to amend certain clauses related to the backflow prevention program and fire systems, add new industry sectors requiring premise isolation backflow prevention devices, add millwrights to persons authorized to conduct backflow prevention device tests and amend other clauses relating to various items including definitions and administration, hydrant flow testing, water meter chambers, connections for industrial buildings, references to the Chief Building Official, and construction water.

RECOMMENDATIONS

The General Manager of Toronto Water recommends that:

1. Municipal Code Chapter 851 – Water Supply be amended in accordance with the draft amending By-law attached as “Appendix – A” to this Report.

2. The appropriate City officials and staff be authorized and directed to take the necessary action to give effect to these recommendations and that staff be authorized to introduce the necessary bills to Council to implement the above recommendations.

Financial Impact

There are no financial implications to the City as a result of this report.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

At its meeting held on October 22 and 23, 2007, City Council approved a new Toronto Water Supply By-law (the “By-law”). Below are the links to the relevant Council Decision and the corresponding staff report, including appendices:

<http://www.toronto.ca/legdocs/mmis/2007/cc/decisions/2007-10-22-cc13-dd.pdf>

<http://www.toronto.ca/legdocs/mmis/2007/pw/bgrd/backgroundfile-7196.pdf>

<http://www.toronto.ca/legdocs/mmis/2007/pw/bgrd/backgroundfile-7197.pdf>

ISSUE BACKGROUND

Municipal Code Chapter 851 – Water Supply was enacted January 1, 2008 to harmonize existing By-laws from the former municipalities. It refined existing roles and responsibilities and established new guidelines to help better protect the drinking water system, including a new premise isolation backflow prevention program.

Since the time of enactment, staff have identified certain enhancements, amendments or clarifications which would improve the implementation and effectiveness of the By-law. The following items have been identified as requiring modification under the existing By-law:

- Add a definition for Fire Protection System and introduce backflow prevention clauses on fire systems for enhanced protection of the waterworks
- Post new sectors requiring premise isolation backflow prevention
- Modify list of authorized persons that may work on backflow prevention devices
- Correct charges for Hydrant Flow Testing
- Clarify Water Meter Chamber clause
- Modify Single Connections clause
- Clarify General Manager authority vs. Chief Building Official
- Changes to Construction Water requirements

COMMENTS

Appendix A to this report sets out the proposed amendments to the Water Supply By-law. The reasoning for the proposed amendments is as follows:

Amendment to Backflow Prevention Program and Fire Systems:

Fire Protection Systems represent a hazard to the waterworks in that they may cause backflow due to pressure of the systems. In some cases chemicals are added to the systems for fire suppression or to keep the water from freezing, elevating the risk of contamination. The current By-law does not address these systems, therefore, staff have proposed the new clauses to address this risk, including definition of the system in accordance with the Canadian Standards Association, and identification of appropriate backflow prevention devices.

Amendment to Schedule 5 and deadlines:

The Canadian Standards Association (CSA) updated the standard CSA B-64 for Backflow Prevention devices in late 2007. The update includes the hazard identification for Premise Isolation for new industry sectors. Accordingly, Schedule 5 has been amended in Appendix A to reflect this change. Businesses with severe hazard rating will have six months to comply with the requirements of the chapter. Other new sectors are for moderate hazards, and will be provided a one year compliance window.

There is acute shortage of qualified and licensed persons to install and test the backflow prevention devices. Only Mohawk College in Hamilton has been actively offering the Backflow Prevention Specialist course for the last two years. George Brown College has just started the training program this year. Affected businesses may find it difficult to find the necessary specialized contractors to meet the current deadlines. In addition, for certain businesses there may be numerous service connections requiring backflow prevention, such as with the Toronto School Board, and there is a significant cost involved. Costs for the required Backflow Prevention Devices under this type of scenario may not have been budgeted for, potentially causing funding problems. Accordingly, Toronto Water is seeking to introduce a Compliance Program similar to that adopted and exercised under Municipal Code Chapter 681 – Sewers, as outlined in Appendix A, new Section § 8D(19).

Amendment to Schedule 6 and deadline clause:

Schedule 6 is being amended to remove ‘pipe fitters’ reference from the list of authorized persons to work on backflow prevention devices. Pipe fitters were part of the recommended authorized persons list in CSA B-64 until it was recently removed as it is no longer a recognized trade. Staff seek to maintain the authorized persons list with trade qualifications recognized by industry and the Ontario Ministry of Training & Education. Accordingly, with Industrial Millwrights as a recognized trade, they will be authorized only to test the backflow prevention devices providing they have undergone the appropriate training and certification, as outlined in Schedule 6 of Appendix A.

Hydrant Flow Testing:

The existing Section§ 12 A (1) (a) correctly states that an application is required for hydrant flow testing used for insurance purposes, but incorrectly states that the person submitting an application must pay the permit fee required under Section§ 13 (Fire hydrant permits). The only applicable fee for hydrant flow testing is identified in Section§ 12 A (2) (a), which is a fee for the flow test itself. The new Section§ 12 A (1) (a) has been corrected to delete the reference to a permit and permit fee.

Water Meter Chambers:

Section§ 5 I (1) has been clarified to make it clearer that if it is determined that due to distance, a water meter cannot be housed inside the building based on standards applicable to all owners, then a water meter chamber **shall** be required.

Authority of General Manager and Chief Building Official (CBO):

The By-law currently makes reference to the CBO in clauses dealing with backflow prevention, inspection of private water systems, water meter re-location and other clauses as the CBO has jurisdiction in respect of private water systems. Given that the CBO's jurisdiction and authority in these areas is also addressed in the *Building Code Act*, the reference to the CBO within this By-law is not necessary and may lead to confusion between the complementary jurisdictions of the CBO under the *Building Code Act* and General Manager of Toronto Water under the By-law. To clarify the jurisdiction of the General Manager of Toronto Water under the By-law, the unnecessary references to the CBO in certain clauses in the By-law have been removed.

Connections for Industrial Buildings:

Section§ 4 F (2) currently states that “where a property contains or is altered to contain two or more dwelling units or non-residential units, each dwelling unit or non-residential unit that is in contact with the ground and possesses a footprint on the surface of the ground shall have:

- (a) a separate water service connection;
- (b) a private water service pipe;
- (c) a water meter;
- (d) a conduit for a remote readout unit wire; and
- (e) a wire for the remote readout unit,

except ground floor units of a building where the building contains units that do not have a footprint on the surface of the ground, or condominium properties meeting the exception set out in Section§ 851-5 S (1) or second suites and second dwelling units permitted by City of Toronto By-law 493-2000 or its successor.”

Toronto Water staff have had on-going consultation with the Building Division staff since enactment of the By-law concerning the effect of the above provision. Toronto Water staff consider it appropriate to take the same approach as in the *Building Code Act* in respect to ‘non-residential units’, which is to consider a commercial building, regardless of the number of units, as a single building or structure, requiring a single service. The current By-law requirement, above, requires backflow prevention devices be

installed on each connection to these 'non-residential units', placing additional costs on the developer and necessitating a high level of support that Toronto Water backflow prevention program staff cannot necessarily support at this time. Accordingly, Section§ 4 F (2) has been revised in accordance with the draft provision set out in Appendix A to apply to only dwelling units, for which a single service does not require backflow prevention.

Construction Water:

Improvements to the wasting of water in the construction industry were made with the enactment of the new By-law. However, given that some developers apply for site services many months in advance of the water being supplied to the property, the existing Section§ 9 requirement to provide a three month deposit for water usage at the time of application and potential further deposits thereafter can result in significant financial outlays for water which will not be used for some time. One result may be that developers will delay applying for site services until closer to the desired date for water supply, thereby potentially affecting synergies the City can achieve through combining site servicing work with scheduled City road resurfacing projects. Relevant provisions under Section§ 9 have accordingly been revised to provide that the deposit be made at least 30 days prior to the supply of the water to address this situation,

Legal Services has been consulted in the preparation of this Report.

CONTACT

Vijay Ratnaparkhe
Supervisor
Environmental Monitoring & Protection
Toronto Water
416-394-8455

Sandra Ormonde
Project Manager
Operational Support
Toronto Water
416-397-9635

SIGNATURE

Lou Di Gironimo
General Manager
Toronto Water

ATTACHMENTS

Appendix A – List of Proposed Municipal Code Chapter 851 amendments
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