# **DA** TORONTO

# STAFF REPORT ACTION REQUIRED

# Enactment of New Harmonized City Water Supply By-law 851

Date:	September 19, 2007
То:	Public Works and Infrastructure Committee
From:	General Manager of Toronto Water
Wards:	All
Reference Number:	P:\2007\Cluster B\TW\pw07036 (AFS #4630)

## SUMMARY

The purpose of this report is to recommend the enactment of a new harmonized City of Toronto Water Supply By-law to become effective as of January 1, 2008. The new Bylaw amalgamates the existing six By-laws and includes additional provisions designed to better protect the health and safety of potable water users by strengthening the integrity of the water supply system.

The new Water Supply By-law harmonizes, across the City, the various services provided and standardizes practices, procedures, and fees allowing for full cost recovery where warranted, without imposing any new service fees. The new By-law more clearly defines the roles and responsibilities of property owners and the City.

In addition, a new specific measure requires the installation and maintenance of a backflow prevention device at specific industrial, commercial, institutional, and mixed-use multi-residential properties to prevent the possible migration of contaminants from private property into the public water distribution system.

Other measures include requiring the installation of water meters at all properties to promote water conservation and providing the General Manager of Toronto Water with the authority to issue water restriction orders to maintain sufficient water levels and pressures within the distribution system during extreme peak demand periods or in the event of significant disruption to the water supply infrastructure.

Furthermore, if the provisions of the new Water Supply By-law (Municipal Code Chapter 851) are enacted, it will be necessary to update and revise Municipal Code Chapter 441, Fees and Charges and to amend Municipal Code Chapter 849 Water and Sewage Services which contains the By-laws of the former municipalities.

# RECOMMENDATIONS

The General Manager, Toronto Water recommends that:

- 1. The proposed Municipal Code, Chapter 851 WATER SUPPLY, be approved and enacted substantially in accordance with the draft By-law attached as Appendix 1 to this report with an effective date of January 1, 2008, to consolidate and harmonize the existing water supply By-laws of the former municipalities;
- 2. Authority be granted to the City Solicitor to submit any Bills required to enact the new Municipal Code Chapter 851 WATER SUPPLY, substantially in accordance with Appendix 1 of this report, subject to any necessary refinements, including stylistic, format and organization, as may be identified by the City Solicitor and General Manager of Toronto Water;
- 3. Municipal Code, Chapter 849 WATER AND SEWAGE SERVICES, be amended in accordance with the draft By-law attached as Appendix 2 to this report to update Chapter 849, and as may be necessary, to effect changes necessitated by the enactment of Chapter 851 and the consequential repeal of water supply By-laws of the former municipalities;
- 4. Appendix A, Schedule 3 of Municipal Code, Chapter 441 FEES AND CHARGES, be amended in accordance with the draft By-law attached as Appendix 3 to this report to update Chapter 441, and as may be necessary, to effect changes necessitated by the enactment of Chapter 851;
- 5. The City Solicitor be given the authority to amend any City By-laws or Code Chapters, or sections therein, which may contain references to any By-law or Code Chapter, or section therein, which is superseded by the proposed Chapter 851 and the proposed amendments to Chapters 441 and 849 to eliminate and, where appropriate, correct such references; and
- 6. The appropriate City officials and staff be authorized and directed to take the necessary action to give effect to these recommendations.

#### **Financial Impact and Impact Statement**

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.

#### **ISSUE BACKGROUND**

On February 20, 2007, the General Manager of Toronto Water provided a briefing note to Council regarding the proposed new harmonized Water Supply By-law. A draft of the

By-law was posted for review by Council and all City staff at the following link: http://insideto.toronto.ca/wes/wws/news/water-supply\_by-law/pdf/draft-by-law.pdf.

A draft of the new proposed Water Supply By-law was also circulated to the public, including industrial, commercial and institutional (ICI) customers, and to the Region of York for review and comment.

#### COMMENTS

The proposed new Water Supply By-law was developed in consultation with other divisions including Toronto Building, Technical Services, Revenue Services, Financial Services, City Planning, Economic Development, Culture & Tourism, and Legal Services. Toronto Water staff also completed a number of detailed activities as follows:

- reviewed all existing water supply By-laws, fees and charges for all former municipalities;
- reviewed current operational practices and procedures;
- evaluated practices and procedures adopted by other municipalities;
- hosted public meetings with residents and the ICI sector to discuss the proposed draft Water Supply By-law; and
- prepared a Water Supply By-law implementation plan.

The proposed new Water Supply By-law harmonizes practices and procedures, and standardizes fees providing the same or better level of service to all customers across the City. The new By-law better defines the roles and responsibilities of both property owners and the City requiring specific measures that will provide reliable metering data, improve operational efficiencies and protect the integrity of the water supply system. It provides a better enforcement mechanism to deal with issues related to a property owner's failure to fulfil their obligations under the By-law generally associated with maintaining the safety of the water supply system and for non-payment of water delivered. It also allows Toronto Water to achieve cost recovery, when warranted, for those activities beyond the normal level of service.

A key component of the proposed new By-law is a requirement for certain property owners to provide for the isolation of a premise's water system from the City's water distribution system. The By-law requires the installation and maintenance of a backflow prevention device at specific industrial, commercial, institutional, and mixed-use multiresidential properties to prevent the possible migration of contaminants from private property into the public water distribution system.

This new protection measure is consistent with the City's responsibilities under the *Safe Drinking Water Act, 2002*, and is in keeping with the approach used by other municipalities throughout North America. While the *Building Code Act, 1992*, does already require backflow prevention devices for certain buildings, the Building Code only applies to hazards rated as high and to new installations, with the intent to protect water quality in the non-hazardous portion of a particular building. This By-law provides a greater degree of protection to the public by addressing both new and existing buildings,

and by better isolating the contaminants that may exist within a specific building from the public water distribution system.

The proposed By-law requires all properties within the City to be metered to promote water conservation. It also strengthens the current measures available to control the use of potable water during periods of drought or other emergency situations by providing the General Manager of Toronto Water with the authority to issue water restriction orders during these extreme conditions to maintain levels and pressures within the distribution system to meet the basic needs of the public including fire fighting requirements.

#### **Public Consultation Process**

The proposed new Water Supply By-law was developed following extensive consultation that included mail-outs, public meetings and posting of the By-law for comment on the City's internet site. The target audience included the general public, industrial, commercial, and institutional water customers as well as various professional associations. Comments received during this process were incorporated into the By-law.

A draft of the By-law was posted on the City's intranet site for comments by internal staff and Council on February 22, 2007, and a By-law summary and full-text link was subsequently circulated to approximately 40,000 ICI customers and professional associations for consultation and comment. The public consultation process included two open meetings with ICI customers held on March 26 and March 29, 2007, and an additional two open meetings with the general public on April 10 and April 11, 2007. As well, customers and interested stakeholders were provided contact information for registering comments by telephone or in writing.

During the public consultation phase, there were only a few issues raised by the ICI sector and no significant issues raised by the general public. The ICI sector noted that the draft By-law required that periodic surveys be undertaken of private water system by a Professional Engineer. The intent of the survey was to identify potential hazards that may exist on private property that could impact the public water distribution system and to ensure that the appropriate backflow prevention device was installed to prevent any possible cross contamination.

The concern expressed by the ICI sector was that a full survey of some complex private water systems such as in hospitals and major manufacturing processes (containing numerous existing zone isolations with cross-connection control devices) would be prohibitively expensive. These concerns have been addressed in the proposed new By-law by requiring:

- 1. surveys only when warranted (i.e. in cases when the assessment of a potential hazard posed by a water user is not easily identified);
- 2. only appropriate professional persons undertake private water surveys as defined by the Canadian Standards Association (CSA) B64 Series standard; and
- 3. moderate and high hazard premises (also as defined by the same CSA standards) install premises isolation devices only, and dropping the original requirement for private water zone isolation.

The costs associated with achieving premises isolation are relatively minor and represent only a small portion of the customer's water supply costs. It is a reasonable expense for affected property owners to bear as the benefits achieved by the installation of the devices greatly reduces the potential for a contamination event in the public water distribution system and better protects public health.

#### CONCLUSION

The proposed new Water Supply By-law represents the final step in the Toronto Water program to harmonize water services under the new City of Toronto.

The new By-law, in addition to harmonizing the scope and quality of the water services as well as the related fees and charges across the City, improves the integrity and safety of the city water supply system, and hence increases the protection of the public health.

This goal is achieved without an increase of the water supply cost to the residential customers obeying the By-law and with a marginal increase of the cost to some ICI customers resulting from the new requirement to isolate their private water systems from the City system in order to eliminate any possibility of contamination of potable water. Where not captured under the old municipalities' by-laws, cost recovery of services that are not part of the water supply rate will be achieved under the new By-law.

A draft of the new Water Supply By-law was presented to both the general public and the ICI customers during the public consultation process. While some changes were recommended and have been implemented into the final version of the document enclosed with this report, the new Water Supply By-law had the support of the majority of the public consultation participants.

#### CONTACT

Alex Marich Director, Operational Support Toronto Water 416-397-7296 Vitek Wilewski, P. Eng. Manager, Technical Coordination Toronto Water 416-392-8232

## SIGNATURE

Lou Di Gironimo General Manager Toronto Water

#### ATTACHMENTS

Appendix A – Harmonized Water Supply By-law including all Schedules Appendix B – Appendix A, Schedule 3 of Chapter 441 of the Municipal Code Appendix C – Chapter 849 amendment of the Municipal Code