



**STAFF REPORT
INFORMATION ONLY**

Options for Financing the Replacement of Private Lead Water Service Connections

Date:	November 15, 2007
To:	Public Works and Infrastructure Committee
From:	Joseph P. Pennachetti, Deputy City Manager and Chief Financial Officer Lou Di Gironimo, General Manager, Toronto Water
Wards:	All Wards
Reference Number:	P:\2007\Cluster B\TW\pw07046 (AFS# 5681)

SUMMARY

In July 2007, Council approved a new a Lead Water Service Replacement Program to accelerate the replacement of the City-owned portion of the estimated 65,000 lead water service connections within the public road allowance, which extends from the watermain to the water shut-off valve at property line.

The repair or replacement of the privately owned section of the water service connection from the shut-off extending into the home, being private property, is the responsibility of the homeowner. This report considers the policy and financial impacts to the City of providing zero-interest loans to private homeowners interested in replacing the private side of the lead water service connection, from the water shut-off at the property line to the interior of the dwelling. For a number of practical, administrative and policy reasons as outlined in this report, providing a loan for private-property infrastructure changes is not recommended.

Financial Impact

There are no financial implications arising from this report. If Council were to adopt a no-interest loan program to provide a \$1,500.00 loan repayable within three years, the interest cost alone to the City for all 65,000 remaining lead service accounts is estimated to be \$7.7 million, assuming the loan option was taken up by all eligible property owners. Additional costs associated with the administration of such a program would also be incurred.

DECISION HISTORY

City Council, at its meeting of July 16, 17, 18 and 19, 2007, in considering the recommendations from the Public Works and Infrastructure Committee concerning a report from the General Manager of Toronto Water titled “Lead Water Service Connection Replacement Program”, requested the General Manager of Toronto Water to report back to the Public Works and Infrastructure Committee on the policy and financial impacts of providing zero-interest loans to private homeowners interested in replacing their private-side lead service connections. The noted staff report can be viewed at:

<http://www.toronto.ca/legdocs/mmis/2007/pw/bgrd/backgroundfile-5459.pdf> and the Council

Decision Document associated with this report can be viewed at:

<http://www.toronto.ca/legdocs/mmis/2007/pw/reports/2007-06-27-pw07-cr.pdf>

The decision of the Public Works and Infrastructure Committee at their meeting of June 27, 2007 included requesting the General Manager, Toronto Water, in consultation with the Medical Officer of Health and the Deputy City Manager and Chief Financial Officer, to report back to the September 6, 2007 meeting of the Public Works and Infrastructure Committee on: “potential options for financing private lead service replacement costs that are payable by homeowners, over time, on their water bills”.

ISSUE BACKGROUND

Earlier this year, the Drinking Water Advisory Council, the Chief Medical Officer of Health and Chief Drinking Water Inspector made recommendations to expand water safety protections and reduce potential levels of lead intake especially for pregnant women and children six years of age and under. On May 23, 2007, Ontario’s Chief Drinking Water Inspector issued orders to the municipalities, including Toronto, requiring them to conduct immediate drinking water tests for lead in older homes.

While lead is typically not detected in routine sampling of potable water supplied by the City’s four water treatment plants and within the City’s distribution system, at times, lead is detected in potable water collected from fixtures within older buildings. This is typically attributed to the corrosion of lead from the lead water service connection servicing the building (consisting of a public portion from the watermain to the shut-off valve at property line, and the private side from the shut-off valve to the building interior), from the lead solder plumbing connections within the building, and from the lead content in brass fixtures.

In 2007, in accordance with the Chief Drinking Water Inspector’s order, Toronto Water conducted water quality tests of 20 potable water samples collected from private residences by May 30 and found that 10 % of these samples exceeded the standard for lead in drinking water (10 ppb).

In response to the concerns raised, the above-noted staff report recommended an accelerated replacement program of the City portion of the estimated 65,000 remaining lead water service connections, within a nine year period, at a cost estimated at \$205.2 million. This has been incorporated in Toronto Water’s 2008-2017 Capital Budget submission. These services will be

replaced through a number of different programs: on-demand, where the lead service is replaced automatically if water quality testing of tap water shows lead levels exceeding the Provincial standard; through Toronto Water's watermain infrastructure renewal program (watermain replacement and relining projects); and through Transportation Services road reconstruction program. On average, an estimated 7,200 services per year are expected to be replaced throughout the program implementation, beginning in 2008.

COMMENTS

The water and sewer service connections on the privately-owned side of a homeowner's property are the responsibility of the homeowner and any work required to be performed on private property is usually arranged by and paid for by the property owner. The City does not deal directly with any contractors for payments or dispute resolutions related to private transactions between the property owner and the contractor. As directed by Council, this report explores the policy and financial impact of providing a zero-interest loan to residential property owners to support the replacement of the private-side lead water service connections to the home.

The cost of replacement of a private-side water service connection varies depending on the building configuration, ease of access inside the building to the water service connection, and landscaping features. On average, staff estimate the cost of replacing the private side of a residential lead water service connection is about \$1,500.

As part of the City's program to replace the City-owned portion of the lead water service connection, affected property owners are notified of work to be undertaken on the City-owned portion and encouraged to replace the private side of the lead water service connection to derive maximum benefit through reduced lead exposure and higher flow rates. While private property owners are required to make their own arrangements with a contractor of their choice to perform such work, to assist homeowners, typical contractor unit rates are provided to the homeowner. Often, the homeowner will enter into a contractual arrangement directly with the contractor to replace the private side of the service at the time the City portion is being replaced.

When replacing the private side of the service connection, the homeowner and contractor are expected to comply with all relevant requirements and seek the necessary approvals related to the work. Typically, when connecting to plumbing within the building a Plumbing Permit, issued by the City Building Division, is required. If the homeowner does not replace the private side of the water service at the time the City is replacing the City portion, the homeowner can always hire a contractor at a later time to complete the replacement, again, after obtaining the necessary permit.

Options for Providing a Loan for Private-Side Lead Service Replacement

Council, if it deems it in the interest of the City, can provide a loan to homeowners for private-side lead service replacement. Council can also adopt a policy to make such loans on a zero-interest basis.

There are number of practical, administrative and policy reasons for not providing a loan for private-property infrastructure changes. For one, as a matter of financial control, the City could only provide a loan for such a purpose after the homeowner has already completed and paid for the work, and submitted the necessary documentation and proof of payment for review by the City. The loan would be after the fact. Secondly, in many instances, a tenant may be directly responsible for paying the water bill, and applying the loan repayment to the water bill in such an instance would result in the tenant paying for the property improvement. Legislation does not allow the loan to be transferred to the property owner's tax account. Thirdly, from a policy perspective, the question arises as to why stop at the service connection, as internal plumbing with lead solder connections and brass fixtures also contribute to lead in drinking water. In other words, providing such a loan may set a precedent for financial assistance requests for additional private property improvements, the cost of which could substantially exceed the \$1,500.00 estimated cost of just the private-side service connection.

In any event, it is expected that the homeowner would, in the first instance, pay the contractor directly for the full cost of the work and then apply to the City for any financial assistance available to eligible applicants. Should Council wish to proceed with a loan program, eligibility criteria would need to be determined by Council and the administrative implementation details established by staff. At a minimum though, it is expected that all completed applications would require the submission of any necessary documentation including proof that the work was completed by a licensed contractor, the contractor's invoice and evidence of payment and a copy of the Plumbing Permit issued to undertake the work. Again, such work is undertaken directly between the property owner and contractor, and the City does not get involved in any arrangements, payments or dispute resolutions related to private transactions.

Chart 1 below illustrates the financial incentive to a homeowner, and corresponding cost to the City of providing a program of no-interest loans for private-side lead service replacement. It shows, for example, if the City made available an interest free loan up to \$1,500, repayable over a three year period (nine tri-annual instalments), the interest avoided and hence financial benefit to the homeowner would be \$118.75. For this homeowner, \$166.67 would be added to each tri-annual water bill. The interest cost to City for all 65,000 remaining lead service accounts is estimated to be \$7.7 million, assuming the loan option was taken up by all eligible property owners. Other terms, and a more general per \$100 loan cost is presented in Chart 1.

**Chart 1 - Private-Side Lead Service Replacement No-Interest Loan
Assuming tri-annual repayment**

Term	Benefit to Homeowner (interest cost avoided)		Cost to City - 65,000 Accounts (cost of interest)	
	\$1,500 loan	per \$100 loan	\$1,500 loan	per \$100 loan
1 year loan	\$43.75	\$2.92	\$2,843,750	\$189,583
2 year loan	\$81.25	\$5.42	\$5,281,250	\$352,083
3 year loan	\$118.75	\$7.92	\$7,718,750	\$514,583

Should Council support the idea of providing an interest-free loan for the replacement of private water service connections the following conditions should be considered for any such program:

- the loan be provided to single family residential property and duplex and triplex owners for the replacement of the private-side lead water connection, as verified by City staff;
- the amount of the loan to be the total actual cost, inclusive of GST, of the private side lead water connection to a maximum amount not to exceed \$1,500.00;
- the property owner's water and property tax accounts must not be in arrears at the time the application is made; and
- the loan to the owner be provided on an interest-free basis, and be repayable through the owner's water bill in equal instalments over the designated repayment period from the time the application is approved.

There will also be additional staff resources required to administer the program. The costs to administer and to fund this type of program have not been included in Toronto Water's 2008-2012 Capital and Operating Budget Submission.

This report has been prepared in consultation with the Medical Officer of Health.

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