



STAFF REPORT INFORMATION ONLY

Options for Financing the Replacement of Private Lead Water Service Connections

Date:	December 14, 2009
To:	Public Works and Infrastructure Committee
From:	Treasurer General Manager, Toronto Water
Wards:	All Wards
Reference Number:	P:\2009\Internal Services\Cf\Pw09035cf (AFS #9846)

SUMMARY

This report considers the policy and financial impacts to the City of providing a loan 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. There are an estimated 65,000 lead water service connections within the public road allowance. Toronto Water and Toronto Public Health support the goal of reducing lead exposure by encouraging replacement of lead service. However, for a number of practical, financial, administrative and policy reasons as outlined in this report, providing a loan for private-property infrastructure changes to achieve this end is not recommended.

Financial Impact

There are no financial implications arising from this report.

If Council were to adopt a loan program repayable at the City's capital market interest rate, there would be no financial impact to the City, except for the cost to administer such a program, and any outstanding amounts would be carried as an account receivable on the City's balance sheet.

However, if Council were instead to adopt a no-interest loan program to provide a \$1,500.00 loan and which was taken up by the 65,000 remaining lead service accounts, the City could be funding as much as \$97.5 million in loans, and the loss in investment

income on such amount would be approximately \$4 million annually. Additional costs associated with the administration of such a program would also be incurred.

DECISION HISTORY

In July 2007, Council approved 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 the property line.

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. This report and the Council Decision in this regard 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>

On November 28, 2007 staff reported back to Public Works and Infrastructure Committee on potential Options for Financing the Replacement of Private Lead Water Service Connections. That report recommended against such a loan program and was received for the information of Committee. This report can be viewed at:

<http://www.toronto.ca/legdocs/mmis/2007/pw/bgrd/backgroundfile-8875.pdf>

On April 8, 2009, Public Works and Infrastructure Committee considered a report by the General Manager, Toronto Water, and the Medical Officer of Health, Toronto Public Health, headed “Establishment of a Toronto Water Lead Content Mitigation Rebate Program”. This report can be viewed at:

<http://www.toronto.ca/legdocs/mmis/2009/pw/bgrd/backgroundfile-20066.pdf>

In adopting this report, Council created a program to provide homeowners a rebate of \$50 to \$100 to offset the cost of approved faucet filters for residents of the ‘at risk’ group to remove lead until the City-side service connection is replaced. This report again recommended the City Treasurer, in consultation with the General Manager of Toronto Water, investigate options for a voluntary-based loan program to assist homeowners in the replacement of the private side lead service connection and report to the Executive Committee in November 2009.

ISSUE BACKGROUND

Lead can affect how the brain and nervous system grows and has the most impact on the fetus, infants and children under six years old. Infants who are fed formula made with tap water from lead pipes could be getting the highest amount of lead from drinking water because this is their main source of food. If a young child has too much lead in their body, it can make it harder for them to learn new things, sit still and get along with other kids. Adults and children over six years old are not likely to be affected by the amount of lead in drinking water. While the health effects of lead are subtle, Toronto Public Health advocates minimizing lead exposure where possible.

Responding to potential concerns about lead in drinking water at the time the Ministry of the Environment (MOE), in May 2007, ordered 36 Ontario municipalities, including the City of Toronto, to conduct lead testing of the water supply system and submit the results for assessment. Based on those results, the MOE has now implemented a Regulated Lead Testing Program. Under this Program, Toronto Water must collect samples in areas where the plumbing is connected to or is suspected of being connected to lead service pipes, analyse these samples and submit results to the MOE. Samples must be collected from 100 residential water service connections, 20 connections from within the distribution system and 10 non-residential water service connections. Samples are gathered each year in two separate testing periods, June to October and December to April. Toronto Water has been in full compliance with the MOE's Regulated Lead Testing Program. Test results are also posted on Toronto Water's website.

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.

The City's public-side lead replacement program will see the replacement of the estimated 65,000 remaining lead water service connections within a nine year period, commencing in 2008, at a cost estimated at \$205.2 million. 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 on the City own portion throughout the program implementation.

A number of measures are in place to mitigate the amount of lead in drinking water to which people are exposed. Toronto Water, in consultation with Toronto Public Health,

recommends homeowners run their potable water until it is very cold and then letting it run for at least 1 minute if taps haven't been used for several hours. This action should alleviate most concerns with lead. Toronto Water also offers lead testing to all residential customers free of charge, upon request under a non-regulated program. Residents can call the City of Toronto to request a test and then find the nearest City location to pick up the test kit. As part of the test, it is also required that potable water run for 5 minutes to ensure a representative sample is taken.

Additionally, communication efforts from both Toronto Water and Toronto Public Health have stressed the importance of replacing both sides of the water service connection in order to fully realize the benefit. Through various public education/outreach tools (e.g. fact sheets, postcards delivered door-to-door in areas of the City suspected of having lead water service connections, public education presentations and displays, as well as a comprehensive and regularly updated public website) residents are encouraged to undertake the replacement of the private side. Starting in 2010, the notification process for addresses scheduled under the City's Lead Water Service Replacement Program will be improved to include a six-month advance letter and a two-to-four-week reminder notice which will also allow residents to plan for the potential expenses related to private-side water service replacement, and to contact contractors to obtain competitive quotes.

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. While the replacement of lead service is helpful in reducing lead exposure from drinking water, the mechanisms available to the City to achieve this are limited and of unproven effectiveness. As directed by Council, this report explores the policy and financial impact of providing a 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.

There are number of practical, financial, 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, and would require significant resources to administer and monitor. As an alternative, several of the large home renovation companies, such as Home Depot, RONA, and Lowes, provide contractor services directly to homeowners and periodically offer financial incentives such as no interest for a period of time for utilizing their service.

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 a tenant of a property, knowingly or unknowingly, paying for the owner's property improvement.

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. There are numerous homes that have knob-tube-wiring, asbestos or urea formaldehyde foam insulation, or imported sulphur-containing drywall, which all present unique hazards to persons living in the home. 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 water service connection replacement.

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.

Should Council support a program of providing a loan for the replacement of private water service connections staff should be directed to report back on the criteria for such loans.

Hamilton Example

The City of Hamilton has had a Lead Water Service Replacement Loan program since October, 2007. Subject to funding availability determined by Council, residential property owners might be eligible for a loan up to \$2,000 for the replacement of the owner's private service (from the water meter to the property line). The loan amount plus interest is transferred to the owner's tax roll, as a special charge, up to a ten year period. The yearly loan amount plus applicable interest is repayable on the final tax instalment due dates, and calculated in a like manner as Local Improvement Charges are calculated. The loan if approved is only paid to the owner upon receipt of invoices for completed work, and inspection of the completed work by City staff.

The interest rate on the loan is equal to the 10 year borrowing cost for the City of Hamilton which for 2009 was 4.44%. The interest rate is posted January of each year and applied to the ten year term of each loan approved the same year.

The estimated number of residential properties with lead pipes in Hamilton was about 25,000-30,000 at the beginning of the program in 2007. So far there have been about 410 approved applications for loans. The impact of this loan program is unknown. No assessment has been done to show what proportion of the 410 approved applications would have taken place in the absence of the loan program.

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

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