

TORONTO STAFF REPORT

August 21, 2003

To: Works Committee

From: Barry H. Gutteridge
Commissioner of Works and Emergency Services

Subject: New and Emerging Technologies, Policies and Practices
Environmental Assessment Timeframe and Workplan

Purpose:

This report addresses City Council's request to the Commissioner of Works and Emergency Services to submit a report to the Works Committee by September 30, 2003 on the proposed content and requirements of a request for qualifications ("RFQL") for new and emerging solid waste management technologies and the workplan and timeframe for an individual environmental assessment ("EA") regarding the proposed implementation of new and emerging solid waste management technologies.

A companion report also listed on the Works Committee agenda of September 4, 2003, addresses an additional request to the Commissioner of Works and Emergency Services to submit a report regarding the results of the City of Toronto's Request for Expressions of Interest No. 9155-03-7283 ("REOI") for New and Emerging Technologies.

Financial Implications and Impact Statement:

With respect to Recommendations 1, 3 and 4 of this report there are no direct financial implications arising as a result of this report.

With respect to Recommendation No. 2, the hiring of a consultant to assist staff to carry out the recommended individual EA (Recommendation No. 1), a budget ceiling of \$225,000 has been identified with an expenditure of up to \$25,000 in 2003 and \$200,000 in 2004. In addition, it is expected that an amount of \$75,000 will be expended in 2004 on activities of the New and Emerging Technologies, Policies and Practices Advisory Group, primarily for per diem costs for

expert members and travel and research related costs on the part of both citizen and expert members.

Funds are available in the approved 2003 Solid Waste Management capital budget, Account No. CSW004-16 (New and Emerging Technologies) to meet the anticipated expenditure in 2003. Pre-budget approval in the amount of \$275,000 for the 2004 Solid Waste Management Services Capital Works program has been requested for Account No. CSW004-16 to provide for uninterrupted service provision on the part of the successful consultant during the transition from the 2003 to 2004 capital budget, and to maintain and support the work of the Advisory Group.

Any options or issues arising from the EA process will be included in the 2005 and future year budget requests as appropriate.

The Chief Financial Officer and Treasurer has reviewed this report and concurs with the financial impact statement.

Recommendations:

It is recommended that:

1. the City of Toronto, under the direction of the Commissioner of Works and Emergency Services, undertake an individual environmental assessment as set out under the requirements of the Ontario Environmental Assessment Act for the management of the City of Toronto's residual solid waste, which addresses all phases of planning and decision-making, including: (i) need; (ii) the choice of policies and practices and technology(ies); and (iii) the siting of facilities;
2. the Commissioner of Works and Emergency Services be authorized to hire a consultant through a Request for Proposals process based on a budget ceiling of \$225,000 net of GST rebate to provide consulting services to assist staff to carry out the individual environmental assessment cited in Recommendation No. 1 and associated request for qualifications and request for proposals procurement processes;
3. the Commissioner of Works and Emergency Services be authorized to issue a Request for Qualifications in 2003 for one or more new and emerging technology small-scale research facilities and report to the Works Committee no later than January 2004 on the outcome of the Request for Qualifications; and
4. the appropriate City officials be authorized and directed to take the necessary action to give effect thereto.

Background:

The report from the Commissioner of Works and Emergency Services, dated December 18, 2002, contains a comprehensive summary of the planning process since the issuance of the Task Force 2010 Report, including the Task Force 2010 implementation report, public consultation regarding the potential engagement of new and emerging technologies, establishment of the New and Emerging Technologies, Policies and Practices Citizen and Expert Advisory Group (the "Advisory Group") and associated Council authorities.

On April 14, 15 and 16, 2003, City Council had before it Clause 2 of Report No. 3 of the Works Committee that, based on the conclusions of the New and Emerging Technologies, Policies and Practices Working Group (the "Working Group"), recommended the Commissioner of Works and Emergency Services be directed to:

1. "issue in May 2003 a "Request for Expressions of Interest" to the marketplace for new and emerging solid waste management technologies;
2. issue a subsequent Request for Qualifications to new and emerging solid waste management technology proponents in 2003; and,
3. submit a report to the Works Committee no later than January 2004 on the outcome of the Request for Qualifications cited above in Recommendation No. 2, and submit at that time recommendations for the potential issuance of a Request for Proposals for new and emerging technology proposals".

City Council adopted the Works Committee Report with the following amendments:

1. "the Commissioner of Works and Emergency Services be requested to submit a report to the Works Committee by September 30, 2003, on the results of the Request for Expressions of Interest, the proposed content and requirements of the Request for Qualifications, and the workplan and timeframe for the environmental assessment process; and
2. Councillor Laura Jones be appointed as a Member of the New and Emerging Technologies, Policies and Practices Working Group."

The above-cited REOI No. 9155-03-7283 was issued on June 2, 2003 and closed July 14, 2003. A companion report submitted by the Commissioner of Works and Emergency Services and the Chief Financial Officer to Works Committee for consideration at its meeting on September 4, 2003, provides a summary and analysis of the received Expressions of Interest (the "EOIs").

Comments:

On June 25, 2003 the Advisory Group held a meeting dedicated to the matter of EA planning. Numerous public deputations were made and all were supportive of the initiation of formal EA-level planning under the Provincial EA Act at the earliest possible stage in the planning process.

Staff also advised the Advisory Group at that time that staff of the Ministry of Environment's EA and Approvals Branch continued to strongly advise on the necessity of the City of Toronto to proceed with EA-level planning related to the potential implementation of new and emerging solid waste management technologies.

Following the staff update and public deputations the Advisory Group considered several procedural routes and arrived at the following motions that were adopted unanimously.

“Preamble

The City of Toronto (the “City”) has established a goal of 100 percent diversion from landfill by the year 2010. Current recycling and composting programs, including the Green Bin program to process household organics and other Task Force initiatives, will increase the City's diversion rate from landfill to approximately 43 percent by 2005. As a means to achieve its diversion objectives of 60 percent diversion from landfill by 2006 and the 100 percent objective by 2010, the City is reviewing the potential adoption of new and emerging technologies, policies and practices.

Recommendation No. 1

There be an individual EA, as set out under the requirements of the Ontario EA Act, for the management of Toronto's residual solid waste.

Recommendation No. 2

The City be the proponent of the EA.

Recommendation No. 3

The EA should address all phases of planning and decision-making, including: (i) need; (ii) the choice of policies and practices and technology(ies) (i.e. “alternatives to”); and (iii) the siting of facilities (i.e. “alternative methods”). The City should begin the development of Terms of Reference for the EA as required by the EA Act as soon as possible.”

Reflecting the input from the Ministry of the Environment and the Advisory Group and in consultation with the Working Group, this report has recommended that the City initiate EA planning for new and emerging solid waste management technologies. It has also recommended that the City hire an EA consultant to assist staff in the preparation and submission of an EA to

the Minister of the Environment and assist with associated RFQL and Request for Proposals (“RFP”) processes for the establishment of new and emerging technologies to manage up to 400,000 tonnes per year of residual solid waste.

Proposed Issuance of Request for Qualifications for Small-Scale Research Facilities

As noted in the “Background” section of this report, City Council has requested the Commissioner to submit a report on the proposed content and requirements of a RFQL for new and emerging solid waste management technologies in 2003. However, due to the recommended initiation of EA planning it is pre-mature to proceed with the issuance of a RFQL for long-term treatment capacity until the appropriate stage in the EA process is reached.

Prior to that point, the EA planning process can benefit from the experience and technical knowledge gained through one or more new and emerging solid waste management small-scale research facilities. The EA Act provides for the ability to undertake a feasibility study and conduct research in order to comply with the EA Act before approval of the Minister is given to proceed with an undertaking.

We have therefore recommended through this report that the City proceed with the issuance of a RFQL for one or more small-scale research facilities.

Review by Advisory Group

The Advisory Group considered the staff proposal to proceed with the issuance of an RFQL to vendors interested in proposing small-scale research facilities at its meetings of August 13 and August 20, 2003. Following debate of the proposal and receipt of several public deputations the Advisory Group unanimously passed three resolutions to communicate their advice. Both pro and con positions were taken through the deputations on the question of whether or not to proceed with a RFQL.

The first Advisory Group resolution reiterates their position taken on June 25, 2003 that the City should proceed with an individual EA and adds a statement calling on the City to provide the necessary financial resources to conduct the proposed individual EA. The second resolution expresses the Advisory Group’s opposition to proceeding with an RFQL until, at a minimum, the analysis of the Expressions of Interest has been completed. The third resolution addresses the Council vote at its meeting in July 2003 that defeated the Works Committee recommendation to proceed with additional public consultation regarding the proposed introduction of a Pay-As-You-Throw program for the City’s residential sector.

The Advisory Group has requested that these resolutions be included in this staff report as the timing of the Works Committee meeting in September 2003 does not provide sufficient time for the Advisory Group to formally submit its resolutions to the Working Group (comprised of Councillors Duguid, Balkissoon, Jones, Di Giorgio and Pitfield) and engage in a formal review with the Working Group prior to the aforementioned meeting of Works Committee.

The Advisory Group has also requested that the resolution regarding the negative Council vote on the recommended Pay-As-You-Throw consultation program be included in this report as it is the first opportunity for the Advisory Group to express its viewpoint and communicate that to the Working Group and Works Committee.

The three resolutions adopted by the Advisory Group on August 20, 2003 are as follows:

“Resolution No. 1

The Advisory Group reiterates the importance of the City beginning immediately an individual EA for the management of Toronto’s residual solid waste as adopted at the June 25, 2003 Advisory Group meeting.

Resolution No. 2

The Advisory Group recommends that the timing, scale and need for a demonstration, pilot or research facility be considered as part of the current City and Advisory Group EOI evaluation. The Advisory Group does not support proceeding with a RFQL for a pilot research or demonstration scale facility before the EOI evaluations are finalized.

Resolution No. 3

In light of City Council’s recent vote not to support the “pay-as-you-throw” program, the Advisory Group shall assume that the City will not meet its 2006 diversion target of 60%. The Advisory Group requests that City Staff re-evaluate the projected diversion impact of all currently approved programs to more accurately project 2006 diversion rates. In the interim, based upon current recycling and composting programs, including the Green Bin program to process household organics, the Advisory Group shall assume that the 2006 diversion rate will be significantly below 60%.”

Advantages of Proceeding with a RFQL

Although the Advisory Group has expressed a negative viewpoint regarding the proposed issuance of a RFQL for one or more small-scale research facilities, we maintain that there are advantages to proceeding at this time, which are discussed below.

The development of the RFQL would be undertaken with input from the Advisory Group and the Ministry of the Environment to ensure compliance with the EA Act and associated regulations in order to successfully acquire a provisional certificate(s) of approval.

The RFQL would be broad-based in its scope, providing the opportunity for proponents marketing technologies in the biological, chemical, physical and thermal classes.

The advantages of proceeding with one or more small-scale research facilities are as follows:

- it demonstrates to U.S. stakeholders (State of Michigan and U.S. Federal Government) and municipalities in south-west Ontario along the Highway 401 corridor our continuing commitment to pursue the City's diversion objectives and therefore reduce the amount of waste required to be transported and landfilled;
- it reinforces our signal to the marketplace, initiated through the issuance of the REOI, our intention to proceed with a RFQL and RFP for long-term treatment capacity;
- it demonstrates action under the provisions of the EA Act, while recognizing that the EA timeline may be longer than expected due to the negative decision of the Ontario Divisional Court regarding the Richmond Landfill Expansion EA. The Richmond Landfill is located near Napanee, Ontario. It is owned and operated by Canadian Waste Services. The Court found that Ontario's Environment Minister incorrectly applied the EA Act when he approved the "Terms of Reference" for the Richmond Landfill Expansion EA. Although the Court decision is under leave to appeal, it does signal the need to comprehensively address the rigorous requirements of the EA Act, which are reflected in this report's recommendations;
- it provides the opportunity for technical assessment of a given technology on a production scale processing Toronto's own unique residual solid waste stream, which is becoming increasingly reduced in its organics component due to the Green Bin, grass cycling, back yard composting and leaf and yard waste composting programs. The "technical assessment" would include energy production potential; measurement and analysis of process residuals; cost per tonne calculations; and ability to comply with required regulatory provisions such as air quality regulatory requirements;
- it mitigates the risk associated with the implementation of a full-scale plant by working at a smaller-scale in order to gain operational knowledge and acquire the technical assessment factors noted-above;
- it provides the opportunity to gauge the ability of the proponents in the new and emerging technologies field to successfully address qualifications criteria such as financial means; and
- it provides the ability to demonstrate to local stakeholders in the EA process an operating plant, complete with operations data and processing track-record.

The specific content and requirements of a RFQL for one or more small-scale research facilities would be developed in conjunction with input from the Advisory Group, the Ministry of the Environment, the City's Purchasing & Materials Management Division and our project consultant.

Potential for GTA Collaboration

At this time we anticipate that the small-scale research facilities would manage only residual solid waste from the City of Toronto. However, an opportunity may arise for a collaborative effort with one or more Regional governments from the Greater Toronto Area (“GTA”). If this collaborative effort does arise we will report the identification of the opportunity for collaborative research to Works Committee and seek direction at that time.

A companion report, also listed on the September 4, 2003 agenda of Works Committee provides additional information on the development of several collaborative processes with neighbouring GTA Regional Governments.

EA Workplan and Timelines

A time chart showing the respective scheduled timelines for the small-scale research facilities, EA, and long-term procurement (i.e. RFQL and RFP process) is attached as Appendix A, for reference purposes.

At this time we anticipate the EA will take place over six years (2003-2008) and include choices of policies and practices and technologies, siting of facilities and a RFQL and RFP followed by the requisite approvals process for an individual EA.

The timeline for the proposed small-scale research facilities is scheduled to take place over five years (2003-2007). The planning component (including RFQL and RFP) would take place from September 2003 through to the end of the second quarter of 2004. The construction component would follow from the third quarter of 2004 through the first quarter of 2005, and the operations component would occur from the second quarter of 2005 through to the second quarter of 2007.

Conclusions:

This report has addressed City Council’s request to the Commissioner of Works and Emergency Services to address the issuance of a RFQL to new and emerging solid waste management technology vendors and the workplan and timeframe for an EA process.

In response, recommendations have been presented in this report to proceed with a RFQL for one or more small-scale research facilities and for the City to proceed with an individual EA for the long term management of Toronto’s residual solid waste. To assist with these steps this report

also carries a recommendation for the hiring of a consultant with a budget ceiling of \$225,000 for the 2003-2004 timeline.

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EA Workplan Components and Timelines

