

TORONTO STAFF REPORT

June 19, 2000

To: Special Joint Meeting of Works Committee and Policy and Finance Committee

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

Subject: Toronto Integrated Solid Waste Resource Management (“TIRM”) Process
Category 2, Proven Disposal Capacity
Residual Solid Waste Disposal Capacity Options

Purpose:

The purpose of this report is to present to the Joint Committee the three principal marketplace options identified through the Toronto Integrated Solid Waste Resource Management (TIRM) Process to address the City's residual solid waste disposal needs. The report also provides an analysis of the potential to continue the use of Keele Valley at greatly reduced volumes until the end of 2006, in combination with these marketplace options.

Financial Implications and Impact Statement:

All disposal options arising from the TIRM Process will have significant budgetary impacts. Toronto's Keele Valley Landfill Site currently provides the City with a low cost disposal site that, as a result of City ownership and a strategic market location, also provides the City with a substantial annual source of revenue. The closure of the Keele Valley Landfill Site, the simultaneous loss of private sector revenues and the cost of an alternative disposal solution would result in a net increase in cost to the City of approximately \$53 million per year. The recommendation to extend the life of Keele Valley Landfill until the end of 2006 is based on financial analysis which indicates that the cumulative savings between this and the next lowest cost option is estimated to be between \$62 million and \$65 million over 20 years. Subsequent reports will present options for the long-term financing of solid waste disposal needs.

Recommendations:

It is recommended that:

- 1) the Commissioner of Works and Emergency Services be authorized to proceed to conduct final contract negotiations with the following 3 TIRM Respondents to address the City's

residual solid waste disposal needs: Green Lane Environmental Group Ltd. for up to 125,000 tonnes per year; Essex-Windsor Solid Waste Authority for up to 100,000 tonnes per year and Onyx Arbor Hills Landfill, Inc. for up to 454,000 tonnes per year, subject to satisfactory resolution of additional contractual matters and exceptions as identified by the Commissioner of Works and Emergency Services to be detailed in a report to be submitted In Camera to the Joint Committee.

And, subject to approval of Recommendation No. 1, it is recommended that:

- 2) the commencement date of contracts referred to in Recommendation No. 1 be January 1, 2001 to allow the City of Toronto to commence disposal operations with the Respondents on that date in order to extend the service life of the Keele Valley Landfill to December 31, 2006;
- 3) the Commissioner of Works and Emergency Services be requested to report to the Works Committee and Policy and Finance Committee on the outcome of the final contract negotiations, referred to in Recommendation No. 1 by September, 2000;
- 4) effective January 1, 2001 the amount of solid waste disposed at the Keele Valley Landfill be limited to approximately 700,000 tonnes annually made up of municipal solid waste from the City of Toronto, the Region of York and the Region of Durham (subject to confirmation that these Regions choose to dispose of their waste at the Keele Valley Landfill as set out in Recommendation No. 6) and only that private sector waste which cannot be disposed of via transfer stations to alternative disposal facilities;
- 5) should the Regions of York and Durham choose to dispose of their municipal solid waste at the Keele Valley Landfill the City of Toronto charge York Region on the basis of its current agreement with the City of Toronto for disposal and charge Durham Region a disposal fee reflective of the market price as determined through the TIRM Process;
- 6) City Council request the Regional Councils of Durham and York to formally confirm by September 1, 2000, their agreement to continue using Keele Valley for disposal of their municipal solid waste;
- 7) City Council request the Region of Peel by formal by-law of Council to confirm by September 1, 2000 its participation in contracts for the disposal of municipal solid waste commencing January 1, 2001;
- 8) the Keele Valley Landfill close to solid waste disposal operations no later than December 31, 2006;
- 9) the Commissioner of Works and Emergency Services be authorized to submit a report to the Works Committee regarding a tendering process, separate from the TIRM Process, for the disposal of solid waste received from the private sector;

- 10) effective January 1, 2001, the Commissioner of Works and Emergency Services be authorized to adjust the solid waste management disposal fee at Toronto's transfer stations by up to 15 percent by giving two weeks public notice; and
- 11) the Commissioner of Works and Emergency Services be authorized to share under confidentiality agreements with the Regional Commissioners of Works for Durham, Peel and York the detailed contract terms of the proposed contracts with the appropriate Respondents in order for them to finalise their due diligence processes and to develop recommendations to their respective Regional Councils.

Executive Summary

The City of Toronto has undertaken a process to find a solution for its waste disposal needs upon the scheduled closure of Keele Valley, the landfill which it currently owns and operates. Keele Valley also serves the Regions of York and Durham. There has thus been an interest in pursuing options, which can meet the needs of the City of Toronto as well as of the GTA Regions.

A solution is required to meet a combined initial need of over 1.8 Million tonnes per year in disposal capacity. This annual need will reduce significantly as diversion goals are achieved. In addition, this need will be impacted by the volume of private sector waste the City receives at its transfer stations requiring disposal.

City Council's direction was to engage the marketplace in finding solutions, in the following policy context of:

- achieving a diversion rate of 50% by 2006 or sooner;
- considering potential export of waste to the U.S.A.; and
- considering energy from waste alternatives.

The resulting T.I.R.M. (Toronto Integrated Solid Waste Resource Management) Process has involved a series of steps from Requests for Expressions of Interest, through to Requests for Proposals, environmental, technical, financial and operational due diligence reviews, analysis of proposals and development of recommended options. This process has involved a number of public meetings, decisions by Works Committee and Council and opportunities for Respondents to present information and to express their viewpoints.

Staff has now concluded a series of negotiations with the following final group of top-qualified Respondents:

- Onyx Arbor Hills Landfill, Inc.
- Essex-Windsor Solid Waste Authority;
- Green Lane Environmental Group Ltd.;
- Rail Cycle North (RCN); and
- Republic Services of Canada Inc.

Following consideration of final prices and contract terms, due diligence by project consultants retained by the City and a business case review, the following three principal contracting options have been identified to meet the disposal needs of the City and potentially of the GTA Regions should they wish to participate:

- (1) Adams Mine Landfill, Kirkland Lake - Rail Cycle North;
- (2) Carleton Farms Landfill, Michigan, U.S.A.- Republic Services of Canada; and
- (3) Three/Four Landfill Sites – Essex-Windsor, Green Lane, Onyx and/or Republic.

This report summarises the features of the three options and identifies the issues and benefits associated with each option. For each option, the Toronto Only solution is reviewed first and then the potential impacts of the Toronto and GTA solution are examined.

In order to evaluate the options over the current 20 year planning period, the following assumptions were made:

- (1) There will be sufficient landfill capacity in Ontario and Michigan over the planning period to receive the solid wastes produced by the GTA Region since there does not appear to be any significant growth in the amount of waste available to those landfills. In addition, it appears that several Ontario landfill operators have made applications for expansion of landfill capacity and service area.
- (2) There is sufficient landfill capacity and enough competition in the landfill marketplace that landfill disposal fees will remain relatively constant other than inflationary increases which have been estimated to be 75 percent of the Consumer Price Index annually. It is estimated that the competition will not only be amongst landfills but will result from new/emerging technologies and diversion reducing the volumes of waste available for disposal.

In parallel with the TIRM Process, staff have reviewed the feasibility of further extending the service life of Keele Valley through significantly reducing volumes while staying within the current Certificate of Approval. Approximately one third of Toronto's municipal solid waste and private sector waste is already disposed of elsewhere under contract. The option of increasing this proportion was considered in order to determine the feasibility of phasing the major fiscal impact of the closure of Keele Valley to Toronto and York and Durham over a longer time frame.

Staff have determined that the Keele Valley extension provides the best financial/operational option for the City of Toronto. Should City Council wish to choose another alternative staff have determined that the RCN base bid is the next best financial/operational option for the City of Toronto. Both options can be considered as solutions for Toronto only or for the GTA.

This report is to be considered in conjunction with two accompanying reports which provide a summary of diversion and disposal tonnage projections and a summary of the technical due diligence review. The results of the financial analysis will be presented in a separate "In-Camera" report to the Joint Committee.

Background:

The City of Toronto’s remaining public landfill, the Keele Valley Landfill Site, is scheduled to close in 2002, under current operating conditions. At the present time the City manages over 2 million tonnes of solid waste per year, which is comprised of the following components:

Management Method	1999 Tonnage (approximation)
Recycling and Composting of Municipal Solid Waste (“MSW”)	256,000 tonnes per year
Toronto Residential MSW Currently Disposed	783,000 tonnes per year
Solid Waste from City of Toronto Agencies, Boards, Commissions and Departments Currently Disposed	116,000 tonnes per year
Private Sector Waste (Industrial, Commercial and Institutional – “IC&I”) Solid Waste Currently Disposed	613,000 tonnes per year
Solid Waste from York and Durham Regions Currently Disposed	308,000 tonnes per year
Summary	Total Diversion: 256,000 tonnes Total Disposal: 1.82 million tonnes

The City’s disposal needs and those of the Regional Municipalities of York and Durham are currently met through disposal at the Keele Valley Landfill Site at the rate of 1.37 million tonnes of solid waste per year, and at the Arbor Hills Landfill Site in Michigan under contract with Browning-Ferris Industries Limited (now owned by Canadian Waste Services Inc.) for transport and with Superior Arbor Hills Landfill Inc. (subsidiary of Onyx) for disposal of 450,000 tonnes of solid waste per year, for a total of 1.82 million tonnes. The City’s contract with respect to transport and disposal at the Arbor Hills Landfill expires on January 1, 2003. This contract was entered into as a means of reducing the annual volume of waste into Keele Valley to prolong its service life.

Through a Memorandum of Understanding with the Regional Municipalities of Peel, York, and Durham, (the Regions) the City is in a position to enter into a “partnership” with one or more of the three Regions to manage residual solid waste disposal needs.

Since 1986, various levels of government have undertaken searches for replacement disposal capacity. These processes have included the Solid Waste Environmental Assessment Plan (SWEAP), the Solid Waste Interim Steering Committee (SWISC), the Interim Waste Authority (IWA), the Adams Mine Site Assessment Process (AMSAP), a request for proposals leading to the current contract with Onyx Arbor Hills Landfill, Inc. (formerly BFI), and the current TIRM Process, that builds on a planning process initiated by the former Metro Toronto.

On October 2, 1998 City Council provided the following direction to the Commissioner of Works and Emergency Services, which provided the policy context for the TIRM Process:

“...immediately proceed to engage the marketplace to secure solid waste management options including waste diversion and disposal capacity to meet the City’s long-term requirements through a Request for Expressions of Interest and Request for Proposals process based on the work undertaken in the planning process to date, but without proceeding to the submission of an environmental assessment.” (Clause No. 2 of Report No. 8 of the Works and Utilities Committee).

In addition, City Council provided direction on a comprehensive range of policy and operational matters, which are summarized below:

- the establishment of a 50 percent diversion rate by the year 2006 or sooner;
- inclusion of potential export to the United States;
- inclusion of energy from waste technology as a marketplace option;
- engagement of Regional governments in the Greater Toronto Area as potential partners with Toronto for future disposal capacity contracts;
- active consideration of potential partnership proposals with Toronto that may contain a range of options including transfer of ownership or leasing arrangements; and
- a planning process to engage the marketplace that includes public and industry consultation and development of multi-faceted evaluation criteria.

At its meeting of February 29, and March 1, and 2, 2000, City Council adopted a recommendation to authorize the Commissioner of Works and Emergency Services to proceed to conduct the necessary due diligence reviews of the disposal sites identified in the proposals of the top-qualified Respondents (TIRM Category 2, Proven Disposal Capacity) and to conduct negotiations with the top-qualified Respondents (Works Report No. 5, Clause No. 1), which had successfully responded to the TIRM Request for Expressions of Interest and Request for Proposals. The table provided in the “Comments” section of this report lists the top-qualified Respondents.

This report provides a summary of the three principal contracting options that staff have identified, stemming from the contract negotiations phase. Two accompanying reports are also listed on the agenda of the Special Joint meeting, which provide a summary of the due diligence review (June 7, 2000) and disposal and diversion tonnage projections (June 6, 2000).

Comments:

Contract negotiations were conducted with the following final group of top-qualified Respondents.

Respondent	Proposed Disposal Facility Location / Maximum Annual Tonnage
Onyx Arbor Hills Landfill, Inc. (Onyx)	Arbor Hills Landfill, Salem Township, Michigan, USA 454,000 tonnes
Essex-Windsor Solid Waste Authority (Essex-Windsor)	Essex-Windsor Regional Landfill Site, Town of Essex, Ontario 100,000 tonnes
Green Lane Environmental Group Ltd. (Green Lane)	Green Lane Landfill Site, Elgin County, Ontario 125,000 tonnes
Rail Cycle North Ltd. (RCN)	Adams Mine Landfill, Kirkland Lake, Ontario 1,300,000 tonnes
Republic Services of Canada Inc. (Republic)	Carleton Farms Landfill, Wayne County, Michigan, USA 1,900,000 tonnes

Of the five Respondents, only Republic and RCN have the annual capacity to fully meet either Toronto's or the GTA's projected disposal needs over the next five to ten years. Onyx, Essex-Windsor and Green Lane each must be considered in conjunction with other tonnage capacities. All Respondents except RCN have the ability to contract for disposal services before 2002, should they be required.

During the course of negotiations the Respondents, in addition to clarifications regarding service provision, made adjustments to their prices and the terms associated with a contract award. Following consideration of final prices and contract terms, due diligence by our project consultants, and a business case review, staff have identified three principal options to meet the City of Toronto's requirements:

- (1) Adams Mine Site, Kirkland Lake - Rail Cycle North (RCN);**
- (2) Carleton Farms Landfill, Michigan - Republic Services of Canada (Republic); and**
- (3) Three/Four Landfill Sites - Essex-Windsor, Green Lane, Onyx and/or Republic.**

All three options are expandable to also provide a solution for one to three of the GTA Regions, depending on their willingness to participate. The three options, with identification of sub-components, are described below. For each option, the Toronto Only solution is reviewed first and then the potential impacts of the Toronto and GTA solution are examined.

- (1) Adams Mine Landfill, Kirkland Lake -Rail Cycle North**

The Rail Cycle North (RCN) consortium comprises the following companies: Rail Cycle North Ltd., Canadian Waste Services Inc., Miller Waste Systems, Canadian National Railways, Ontario Northland Transportation Commission, and Notre Development Corporation. The RCN consortium has offered two proposals: (a) Base Bid; and (b) Optional Proposal. The Base Bid allows Toronto to meet its needs alone or to combine with the GTA Regions to achieve the necessary combined tonnage. The Optional Proposal requires participation of the Regions.

(1) (a) Base Bid

The base bid is a “no-put-or-pay” 20-year contract proposal. It would require Toronto to provide to Rail Cycle North all of its waste destined for disposal (municipal and private sector solid waste received at our transfer stations), including residuals from recycling facilities. In return, Toronto would be able to reduce its disposal quantities handled under the contract through diversion activities, including engagement of new and emerging technologies.

Under the Base Bid, Toronto would be required to provide all of its waste requiring disposal, or an initial quantity of 1.3 million tonnes per year if our disposal volumes were above 1.3 million tonnes at the initiation of the contract. Should a second contract with an alternative disposal capacity supplier be required for tonnages above 1.3 million tonnes, then the quantities of solid waste provided to the second contractor would have to be reduced to zero (or the contract expires), before any of the quantity provided to RCN could be reduced. Starting in year 6 of the contract, the minimum quantity of waste that must be provided (if it is available) is reduced to 1.1 million tonnes per year. The same tonnage commitments apply in the event that waste from one or more of the Regions are included in the contract.

The advantage of the Base Bid is that it provides Toronto with the opportunity to pursue diversion without having to commit to a minimum tonnage over the 20-year contract period. It should be noted, however, that this advantage is clearly qualified by the ability of Toronto to manage the quantity of waste over 1.3 million tonnes in a way such that Toronto is not otherwise penalized under any other contracts managing that quantity, as waste is diverted from disposal.

A major disadvantage is that the City would be required to commit the current volumes of private sector solid waste it receives (i.e., all such waste going through the City’s transfer stations), unless the Regions participate. This commitment would disadvantage the City by affecting the revenues it would otherwise receive in the event that more favourable disposal rates are available for the private sector waste volumes received by the City. In fact, because the City does not control private sector waste, in the event of declining disposal rates in the GTA, it can be expected that private sector waste would move away from the City’s transfer stations; with the City thus losing revenues and effectively being forced out of being able to provide disposal services for private sector waste.

(1) (b) Optional Proposal

The second Rail Cycle North proposal is a “put-or-pay” 20-year contract that requires the participation of York and Durham Regions. Under this proposal, Toronto would be required to provide a minimum tonnage volume of 700,000 tonnes per year for years 1 to 10 of the contract. The 700,000 tonnes would have to consist of a minimum volume of 555,000 tonnes of municipal solid waste, with the balance consisting of either municipal solid waste or private sector waste. In years 11 to 20 of the contract the minimum required volume reduces to 600,000 tonnes, with a minimum composition of 500,000 tonnes of municipal solid waste.

The put-or-pay option provides the City with the ability to meet its current diversion objectives. However, it places the City in the position of being required to provide a substantial volume of solid waste for 20 years, whereas York and Durham would be given a no-put-or-pay provision, as long as they supplied all of their waste requiring disposal. As a result of this provision, the City would not be able to avail itself of any new and emerging technologies for the management of solid waste that could be economically and environmentally more preferable than landfilling. For these reasons, as well as the fact that the costs for disposal are essentially identical to the Base Bid, this option is not recommended for further consideration.

(a) **Issues With RCN Proposal**

Proposed Partnership

Rail Cycle North has offered the City an equity position in Notre Development Corporation - the owner of the landfill. However, in addition to the question of the City’s legal ability to take a limited equity in the company, other reasons exist to forego such an offer:

1. Any equity position would increase the perception of the City’s potential liability should any problem arise with the site;
2. Under the proposal, the City would be given the right to appoint a director to the Board of Notre Development. The director would be subject to a personal liability to exercise all reasonable care under the Environmental Protection Act to prevent an unlawful discharge of a contaminant and could be named personally under a clean-up order. While Canadian Waste Services under the proposal has agreed to indemnify the City against environmental liabilities, there would still be the issue of liability to conviction; and
3. The business benefits of taking equity are not apparent given that (i) the cost of the equity is the forgiveness of the monies otherwise payable to the City by Notre (Notre’s estimate being \$3.5 million, staff’s position being \$4.2 million), (ii) any flow of money through equity is subject to prior recovery of the investment of the other owners, and (iii) it has an estimated value equivalent to \$2 per tonne which has been offered in lieu of the equity.

The City has been offered the option of receiving the \$3.5 to \$4.2 million owing as a lump sum up front. However, as noted above, this would result in the loss of the \$2 per tonne price reduction or the equity position.

Contract Duration

Unlike the other four Respondents, RCN is only offering a twenty-year term of contract. Should other disposal options become available, should market prices either remain flat or decline, or should other alternatives come available with lower transportation costs, the City would be locked into a long term escalating price contract.

New Site

RCN is providing the only new site among the five Respondents. As such it was not possible to see the site and all its technical features in actual operation as part of the due diligence process. Should the site not be constructed on time, the need to use the contingency sites would be triggered.

Haulage Requirements

The RCN optional proposal does not allow for the potential for the City to re-direct its own in-house truck haulage staff and resources upon the closure of the Keele Valley Landfill Site.

(b) Benefits of RCN Proposal

No Put or Pay

Under the Base Bid, Toronto would be able to reduce its residual disposal of waste to the absolute minimum required and would be allowed to reduce its private sector tonnage volumes provided for disposal should the City lose its share of the market as a result of not being able to compete with the pricing in the marketplace.

Rail Haulage

The RCN proposal eliminates the need for trucking waste over long distances on the highway system. This has both a transportation and an environmental benefit.

Ontario Solution

The RCN service proposal does not require waste to be shipped across the border, unless the contingency situation is triggered. The contingency sites are in Michigan, U.S.A.

(c) Impact of a Toronto and GTA Solution

If the RCN Base Bid were to form the Toronto and GTA solution, the following issues would have to be resolved:

- 1) Depending on the number of Regions which decide to participate, Toronto would be able to enter into some form of short term contract to deal with the up to 400,000 tonnes of waste per year which could not be accommodated under this proposal. This would, however, relieve Toronto from the need to commit its projected volumes of private sector waste until the combined tonnage falls into the RCN contract threshold.

- 2) **Since the pricing structure provides a \$2 per tonne reduction in lieu of repayment of the \$3.5 to \$4.2 million otherwise owing to Toronto, some means of adjustment would be required to the pricing charged to the Regions.**

(2) **Carleton Farms Landfill , Michigan - Republic Services of Canada**

Republic has offered the City disposal services at its Carleton Farms Landfill in Michigan. The site is owned by the parent company, Republic Services Inc. Republic has offered to manage a range of tonnage volumes over varying contract timeframes. This Respondent has provided the City with the greatest range of options of pricing, volumes, and contract duration. Republic has also provided the City with the option of transporting waste by truck or by rail, through the engagement of Wilson Logistics (truck haul) and Canadian Pacific Railways.

Under this proposal, the City could meet and exceed its diversion objectives if a contract was styled to provide a base quantity with flexibility to reduce tonnages above that amount. Alternatively tonnage amounts could be reduced at the time of each contract renewal. The penalty for this flexibility might involve the purchase of surplus trailers or payment of a residual (the difference between the market value of the trailers at the time of sale and the specified residual value in the contract). Toronto would also be able to pursue and exceed its diversion objectives by non-renewal of contracts for disposal and substitution of municipal solid waste with private sector waste.

(a) **Issues with Republic Proposal**

Inability to Achieve Rail Haulage Threshold

If diversion targets are achieved, Toronto's projected volumes of residual waste will fall below the 875,000 tonnes per year required to support a rail haulage option.

Cross Border Shipment of Waste

The Carleton Farms Landfill is located in Michigan just across the border from Windsor. This raises the concerns about border closures to the shipment of waste and potential changes in legislative and taxation frameworks. These issues must be dealt with as part of the contracting arrangements.

(b) **Benefits of Republic Proposal**

Volume Flexibility

Republic has offered to deal with a wide range of volumes from 100,000 tonnes up to 1.9 Million tonnes, with price reductions above specified thresholds. This provides the most flexible potential services arrangements among the five Respondents.

Flexibility in Contract Duration

Republic has offered a range of contract duration and renewal options. This provides the City with the flexibility to adjust its contractual arrangements at the renewal points of the contracts.

Potential Rail Haulage

Republic has offered the potential for use of rail haulage above a volume threshold of 875,000 tonnes per year. This would allow achievement of the transportation and environmental benefits of reducing road traffic.

(c) Impact of a Toronto and GTA Solution

If the Regions wish to participate, there are potential price benefits of contracting for higher volumes. Depending on the extent of participation, it might also be feasible to meet the threshold necessary for a rail haulage solution.

(3) Three/Four Landfill Sites

A third option is for the City to engage in contracts with the two southern Ontario-based Respondents (Green Lane and Essex-Windsor) and one or both of the two Michigan-based Respondents (Onyx and Republic), to produce a multiple site option. Under this option, The City would execute contracts with: the low-tonnage proposals from Green Lane and Essex-Windsor; the mid-range tonnage proposal from Onyx; and/or a disposal capacity volume with Republic that would be adjusted to meet the balance of tonnage requirements.

(a) Issues With Multiple Sites

Inability to Achieve Rail Haulage

The transporting of waste to four different sites would mean that the necessary annual threshold of 875,000 tonnes to pursue a rail option could not be realised in a Toronto only solution.

(b) Benefits of Multiple Sites

Contract Flexibility

With the exception of Essex-Windsor, all of the Respondents have provided Toronto with optional contract extensions at Toronto's sole discretion. Essex-Windsor has offered contract extensions on a mutually agreeable basis. Having a mix of contracts optimises the ability to potentially adjust both quantities and duration, in order to achieve the most flexible blend of service arrangements to meet changing disposal needs.

Onyx has also offered the possibility of re-negotiating the current contract to change the terms and conditions for 2001 and 2002 resulting in a more favourable financial position for Toronto. Green Lane has the potential for site expansion.

Flexibility to Meet Contingencies

This option provides the City with the security of multiple disposal sites in the event that one site is closed due to an event such as a labour disruption or severe weather event.

Increased Ontario Solution

This option provides for up to 225,000 tonnes per year of residual waste to be handled in Ontario. This option provides the potential for the City to re-direct its own in-house trucking staff and resources upon the closure of KeeleValley.

(c) Impact of Toronto and GTA Solution

To be expandable from a Toronto Only solution, this option requires the Republic tonnage component to be increased to meet the needs of the Regions.

(4) Potential Extension of Keele Valley

By reducing the volume of waste disposed at the Keele Valley Landfill Site to 700,000 tonnes annually, beginning on January 1, 2001, the service life expectancy of the site can be extended to the end of 2006. The annual tonnage received at the site would consist of approximately 300,000 tonnes of waste from York and Durham and approximately 400,000 tonnes of municipal waste from Toronto plus any private sector waste that cannot be disposed of via a transfer stations to an alternative disposal facility. The remainder of Toronto's municipal waste, as well as potentially some waste from Peel, would be sent to Essex-Windsor, Green Lane, and Onyx under separate contracts. Toronto's private waste would be disposed of on the spot market on short-term contracts with different disposal sites in order to get the most favourable disposal fee. The Certificate of Approval (C of A) governing the Keele Valley Landfill Site allows for this proposed reduction of waste disposal at the site with no amendments required to the C of A.

This option provides Toronto with the most flexibility in waste management options in the short term, thereby making available significant volumes of waste that can be removed from disposal and managed through diversion and new and emerging technologies. It provides Toronto with the most favourable financial impact of the four options considered and allows flexibility for Toronto forces to provide the waste haulage operations. Once the Keele Valley Landfill Site is closed at the end of 2006, the City of Toronto waste the site was receiving will be managed by means of diversion, emerging technologies and/or a short-term disposal contract.

Toronto is presently bound into an agreement with York Region which requires the City to provide York with solid waste disposal capacity for the life of the Keele Valley Landfill or mid-2004 whichever occurs later. In 1999, York Region paid a net disposal fee of approximately \$26.00 a tonne to the City of Toronto for the use of the Keele Valley site. Durham Region presently disposes of their waste at the Keele Valley Landfill based on a Council authority provided by the former Metro Council and which expires on December 1, 2001.

The disposal fee Durham presently pays the City of Toronto is \$45.00 a tonne for the use of the Keele Valley site. Under this option York and Durham would be invited to continue disposing of their waste at the Keele Valley site at a disposal fee for York that is based on its current agreement with the City of Toronto and charge Durham Region a disposal fee which is reflective of today's market price.

(a) Issues with Keele Valley Landfill Site Service Life Extension

Accelerates Financial Impact to Toronto

In order to realise this option the various disposal contracts with different suppliers would need to be put in place by January 1, 2001, resulting in a financial impact to Toronto in 2001 of approximately \$16 to \$18 million.

Public Sensitivities in Vaughan

The City of Vaughan is expecting the Keele Valley Landfill Site to close in 2002. By extending the service life of the site to the end of 2006, Toronto will impact Vaughan's rehabilitation plans for the areas around the landfill and result in negative local public opinion.

(b) Benefits of Keele Valley Landfill Site Service Life Extension

York and Vaughan Benefits

As a result of extending the service life of the Keele Valley Landfill Site, York and Vaughan would continue to receive annual royalties.

Fixed Closure Date

By this report, staff is recommending that Toronto would make a firm commitment for the closure of the Keele Valley Landfill site by December 31, 2006.

Waste Haulage Flexibility

The extension of the Keele Valley Landfill Site operations would allow Toronto the flexibility of using Toronto forces to provide the haulage operations.

Most Favourable Financial Impact for Toronto

This option provides the most favourable financial impact to Toronto of any of the other options. Based on the assumption that landfill prices over the next 20 years will stay flat other than inflationary increases the cumulative savings of this option versus the next lowest cost option is estimated to be between \$62 million and \$65 million over those 20 years. The monies saved through the cost avoidance of paying higher fees could be placed in a waste reserve to be used to finance the implementation of diversion and new and emerging technologies strategies to make Toronto (and York with the monies it saves) less reliant on disposal options in the future.

Limited Truck Traffic

With the banning of private sector waste (with the exception of that waste which cannot be disposed of at transfer stations) and the limited volume of municipal waste being disposed of at the landfill the truck traffic at the site should be reduced by approximately 60 per cent.

TIRM Respondents Part of Option

This option employs 3 of the 5 TIRM Respondents as part of the disposal solution for the GTA and provides in the short term for at least 50 percent of the waste requiring disposal to remain in Ontario. It is proposed that the City of Toronto would revise its current contract with Onyx based on negotiations during the TIRM Process to extend until the end of 2007, subject to two further renewals of five years each and enter into five year contracts with Green Lane and Essex-Windsor. Green Lane has offered three 5-year extension options at Toronto's sole discretion. Essex-Windsor has offered three 5-year extensions under mutual agreement.

(a) Impact of a Toronto and GTA Solution

This option provides for a GTA solution. Should the Regions choose not to participate, Toronto could replace the GTA tonnage with its private sector volumes or lessen the volumes of waste being sent to Onyx.

Conclusions:

Following Council approval, staff of Solid Waste Management Services entered into contract negotiations with the five top-qualified Respondents, under the TIRM Process (Category 2, Proven Disposal Capacity). At the conclusion of the negotiation process and completion of our consultants due diligence review, staff have identified three potential options to meet the City's residual disposal needs: Rail Cycle North; Republic, and a combination option comprised of Green Lane, Essex-Windsor, Onyx, and/or Republic.

In parallel with the TIRM Process staff have investigated the feasibility of extending the service life of the Keele Valley Landfill by reducing the waste being disposed of at the site and entering into contracts with three TIRM respondents beginning on January 1, 2001. Staff have determined that the Keele Valley extension provides the best financial /operational option for the City of Toronto. Should Council wish to choose another alternative, staff have determined that the RCN base bid is the next best financial /operational option for the City of Toronto.

Both options can be considered as solutions for Toronto only or for the GTA. Toronto's Finance Department, in conjunction with staff of Solid Waste Management Services, has conducted a financial analysis of the four options described in this report. The results of the financial analysis will be presented in a separate "In Camera" report to the Joint Committee.

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