

Biosolids Management Contingency Issues Update

Date:	June 27, 2007
To:	Public Works and Infrastructure Committee
From:	Lou Di Gironimo, General Manager of Toronto Water
Wards:	All
Reference Number:	P:\2007\Cluster B\TW\pw07033

SUMMARY

The purpose of this report is to report back to City Council, as previously directed, on the outcome of steps taken by staff pursuant to the confidential instructions to staff and the authority given by Council, at its meeting on June 27, 28 and 29, 2006, by the adoption of Motion J (32) in relation to the disposal of the City's biosolids generated at the Ashbridges Bay Treatment Plant (the "ABTP").

The confidential instructions, which Council directed were to remain confidential in their entirety, as they contain information related to the security of the property of the municipality, arose as a direct result of the emergency situation created by the Republic Services' companies when they announced on May 31, 2006, their intention to stop accepting the City's biosolids for disposal at the Carleton Farms landfill in Michigan effective August 1, 2006.

City staff has, and continues to, aggressively pursue alternate biosolids management and disposal arrangements. To date, various contracts to manage and dispose of the biosolids generated at the ABTP have been secured. In contrast to the previous heavy reliance on a single disposal site (i.e., Carleton Farms), these contracts provide the City with access to a variety of beneficial uses and/or disposal sites in multiple jurisdictions. These contracts diversify the City's biosolids program through a wide range of management options such as alkaline stabilization, co-composting, landfill, land application and degraded site reclamation.

FINANCIAL IMPACT

This report has no financial impact beyond what has already been approved in the current 2007 Toronto Water Operating and Capital budgets.

DECISION HISTORY

At its April 25, 26 and 27, 2006, meeting, City Council adopted Clause 17 in Works Committee Report 2, as amended, authorizing staff to issue a Request for Expressions of Interest to identify potential management options to achieve its target of 100 percent Beneficial Use of biosolids processed at the ABTP.

At its May 23, 24, and 25, 2006 meeting, City Council adopted Notice of Motion J (22) authorizing staff to issue a procurement call for contingency disposal capacity to be utilized in the event of a closure of the U.S. - Canada border or conditions that adversely impact the City's ability to dispose of solid waste, water and wastewater treatment plant by-products and street sweepings in the U.S.

At its June 27, 28 and 29, 2006 meeting, City Council adopted Notice of Motion J (32) authorizing staff to act in accordance with confidential instructions to staff and directing a report back on the outcome of the steps subsequently taken by staff.

ISSUE BACKGROUND

Without prior notice to the City, on May 31, 2006, Republic Services wrote to Terratec Environmental Ltd. ("Terratec"), the City's biosolids hauler contractor, advising that Republic Services would no longer accept biosolids at Carleton Farms Landfill in Michigan as of August 1, 2006 (the "Notice"). The City responded to this letter on June 6, 2006, informing Republic Services that the City would consider its refusal to accept the biosolids as a breach of contract. In turn, Republic Services denied the existence of a contract between the parties governing biosolids.

It remains the City's position, which is disputed by Republic Services, that the disposal of biosolids generated at the ABTP is governed by the Waste Transport and Disposal Agreement dated February 28, 2006, entered into between the City and various Republic Services' companies (the "Agreement"). The disposal of biosolids was first introduced in the original Waste Transport and Disposal Agreement entered into by the City, the Republic Services' companies and Wilson Logistics Inc. on October 25, 2000, pursuant to which the City retained Wilson and the Republic Services' companies to haul and dispose, respectively, residual solid waste from the City (the "Original Agreement"). At that time, biosolids was a category specifically included in the definition of Waste in the Original Agreement as it was recognized that there was a need to have a contingency biosolids disposal option to landfill in Michigan notwithstanding the City's efforts to move towards an intended 100 percent biosolids beneficial use program.

For various reasons, all previously reported to City Council, the Original Agreement was amended over the years resulting, most recently, in the execution of the current Agreement. Notwithstanding all the previous amendments to the Original Agreement, biosolids have always been included in the contract's definition of Waste. Also, pursuant to the contracts, the disposal site for biosolids had always been and remained until August 1, 2006, Carleton Farms Landfill in Wayne County, Michigan.

In view of the Notice and the subsequent position being advanced by Republic Services, the City was faced with the pending cessation of biosolids disposal in Michigan effective August 1, 2006. With the City's biosolids disposal capacity in grave jeopardy, immediate action had to be taken by staff in order to protect the City's interest, avoid any adverse environmental impacts and to make operational an emergency contingency disposal plan.

COMMENTS

To address the loss of the City's biosolids disposal option at Carleton Farms, staff immediately began investigating various short term and interim strategies in an effort to identify potential solutions. In order to give effect to those strategies and to properly address the emergency service impact that would result from a cessation of biosolids disposal services by Republic Services, staff sought and obtained from City Council the confidential instructions to staff and necessary authorities. This report details to date the steps subsequently taken by staff.

(1) Sole Source Procurement of Professional Consultants and Identified Goods or Services

After receipt of the Notice, the services of several firms were retained to assist staff in finding biosolids management alternatives. A summary of the firms retained, their roles and the particulars of their retainers are as follows:

- **Marketing Resource Group Inc.** (Lansing, Michigan) – provided information on political and regulatory issues related to landfill operations in the State of Michigan. The cost of Marketing Resource Group's services totaled approximately \$5,000 not including GST.
- **MacViro Consultants** – provided environmental engineering services to complete due diligence audits of a number of other landfill sites in the United States. The cost of MacViro's services to complete these audits totaled \$23,418 not including GST.
- **Gartner Lee Consultants** – also provided environmental engineering services to complete due diligence audits of a number of United States based landfill sites and one alkaline stabilization facility. Gartner Lee also prepared an affidavit in support of the City's injunction application against Republic Services which was filed with the Court. The cost of Gartner Lee's services totaled \$124,223.50 not including GST.

- **KMK/Black & Veatch Consultants** – provided engineering expertise in assessing the current condition of various biosolids treatment and processing equipment in the City’s wastewater treatment plants. In addition, based on the experience gained while preparing the City’s draft Biosolids Master Plan, they advised the City on potential short term biosolids management options. The cost of KMK/Black & Veatch’s services totaled \$68,100 not including GST.
- **Terratec Environmental Ltd.**– provided services to source and mix pulp and paper sludge with biosolids from ABTP. The company also assisted in transporting a number of truck loads of biosolids to various disposal sites in Quebec, New York, Ohio and Michigan on a trial basis during due diligence reviews and negotiations with various potential service providers. The cost of Terratec’s services totaled \$26,189 not including GST.

(2) Sole Source Procurement of Disposal Services in Canada and the United States

Significant efforts were expended by staff to secure emergency disposal and/or processing services for the biosolids generated at the ABTP. Over 25 different private sector proponents were contacted to assess interest in providing biosolids management or disposal services to the City on an immediate needs basis.

In accordance with Council authority, the City has entered into new agreements with various companies to provide disposal services. Prior to entering into certain of these contracts, the necessary due diligence reviews were undertaken and the results assessed. The details of the new contracts and the due diligence reviews are summarized as follows:

GSI Environment Inc. (“GSI”): has entered into an agreement with the City that commenced on August 1, 2006, having an initial term of three years. The term may be extended by mutual agreement of the parties for two additional one-year periods. In addition, should GSI develop and make available to the City an Ontario-based biosolids management site, GSI will have the right to extend the agreement for a further two years.

GSI is contracted to manage 50,000 wet tonnes of biosolids in the first contract year, then dropping to 35,000 wet tonnes in subsequent years. The parties can mutually agree to increase the volume managed throughout the term of the agreement should GSI be able to secure additional biosolids management sites and the City is in need of additional capacity. During the first contract year, the City can also access, on a contingency basis, an additional 15,000 wet tones, if required.

The biosolids are managed by co-composting (with other organic waste streams), mine degradation and rehabilitation at sites in Quebec, application of biosolids to agricultural lands in Ontario and by landfilling at sites in New York & Michigan States. GSI has made arrangements for the transport and hauling of biosolids to the various sites under contract with them.

Summary – Terms of GSI Contract	
Duration of Contract:	3 years
Extension Provisions:	2 - one year mutual consent options (plus 1-two year GSI option if an Ontario-based site is used for biosolids management)
Volume Managed:	Year 1: 50,000 tonnes with emergency capacity of additional 15,000 tonnes Year 2: 35,000 tonnes Year 3: 35,000 tonnes
Management Option(s):	Co-composting in Quebec Landfill in New York State Degraded site rehabilitation in Quebec
Cost:	Co-Composting: \$116.00/wt (with haulage) Degraded Site rehabilitation: \$116.00/wt (with haulage) Landfill in New York State: \$116.00/wt (with haulage) Emergency capacity: \$150.00/wt (with haulage)
Adjustments:	The unit rates will be adjusted annually to reflect the total of 50% of the percentage change in Statistic Canada’s socio-economic database (“CANISM”) for the operation of automotive vehicles and 50% of the percentage change in the Consumer Price Index (“CPI”) for Toronto.

Ferti-Val Inc. (“Ferti-Val”): entered into an agreement with the City that commenced on August 1, 2006, having an initial term of one year with a City option for one additional year. However, due to financial difficulties, Ferti-Val went into receivership and no biosolids haulage occurred beyond April 24, 2007.

Ferti-Val was contracted to manage 20,000 wet tonnes of biosolids per contract year. The biosolids were managed by co-composting (with other organic waste streams) in Quebec. The service was only for processing of biosolids as the City had made arrangements with Terratec for hauling the biosolids to Ferti-Val.

Summary – Terms of Ferti-Val Contract	
Duration of Contract:	1 year
Extension Provisions:	1 year City option
Volume Managed:	20,000 tonnes per year
Management Option(s):	Co-composting in Quebec
Cost:	Co-Composting: \$55.00/wt (without haulage) Haulage (by Terratec): \$63.50/wt Total Cost: \$118.50/wt
Adjustments:	Should the one year extension option be exercised by the City, the processing fee shall be adjusted to reflect the change in the CPI for Toronto, “All Items” as published by Statistics Canada.

Integrated Municipal Services Inc. (“IMS”): has entered into an agreement with the City that commenced October 23, 2006, having a term of three years.

IMS is contracted to manage 10,000 wet tonnes of biosolids per contract year. The parties can mutually agree to increase the volume managed throughout the term of the agreement should IMS be able to secure additional biosolids management sites and the City is in need of additional capacity.

The biosolids are managed by further processing using the N-Viro alkaline stabilization process at a site in New York State. The services provided by IMS include transport and haulage to the site.

Summary – Terms of IMS Contract	
Duration of Contract:	3 years
Extension Provisions:	2 - one year options with mutual consent
Volume Managed:	10,000 tonnes per year
Management Option(s):	N-Viro Alkaline Stabilization Technology in New York State
Cost:	\$156.50/wt (with haulage)
Adjustments:	The unit rate will be adjusted annually to reflect 65% of the change in the CPI for Toronto, “All Items”.

Modern Landfill, Inc. (“Modern Landfill”): has entered into an agreement with the City that commenced on August 16, 2006, having a term of 16 months.

Modern Landfill is contracted to landfill approximately 9,687 wet tonnes of biosolids during 2006 and an additional 45,350 wet tonnes from January 1, 2007 to December 31, 2007. The parties can mutually agree to increase the volume managed throughout the term of the agreement should Modern be able to secure additional disposal capacity at the site and the City is in need of additional capacity.

The biosolids are managed by landfill disposal in New York State. The service is for only landfilling of biosolids as the City has made arrangements with Terratec for hauling biosolids to Modern.

Summary – Terms of Modern Contract	
Duration of Contract:	16 months
Extension Provisions:	none
Volume Managed:	August 16 - December 31, 2006: 9,687 wet tonnes January 1 - December 31, 2007: 45,350 wet tonnes
Management Option(s):	Landfill in New York State
Cost:	2006 landfill tipping fee: US\$40.81/wt 2007 landfill tipping fee: US\$49.88/wt Haulage to New York State by Terratec Environmental: \$45.50/wt

Ongoing Contract Negotiations:

Terratec Environmental Ltd. (“Terratec”): Terratec’s four year agreement with the City expired on March 15, 2007. The City and Terratec have executed an Amendment Agreement which, among other things, extends the terms of the expired services agreement to allow for continued and uninterrupted service while the parties complete their negotiations regarding a new three year agreement which includes transport, handling and application of biosolids to agricultural lands in Southern Ontario (when land is available) and hauling to disposal or processing sites in Quebec, Ontario and New York State.

While negotiations continue between the parties, the following table reflects the current state of the negotiations on certain key terms:

Summary - Terms of Terratec Contract Extension	
Duration of Contract:	3 years – Original contract expired on March 14, 2007
Extension Provisions:	Under negotiation
Volume Managed:	Land Application Program – best efforts Haulage Services – as required by the City
Management Option(s):	Agricultural Land Application
Cost:	Transport and Ontario Land Application: \$47.00/wt Transport to Quebec: \$63.50/wt Transport to New York State: \$45.50/wt Transport to Ontario landfill site: \$23/wt
Adjustments:	The proposed unit rates will be adjusted annually to reflect 75% of the change in the CPI for Toronto, “All Items” and 25% of the Canadian Industry Price Index for Ontario, Diesel Fuel.

Due Diligence Review:

The due diligence investigations of various sites included a review of the following:

- Physical/geologic setting
- Compliance history
- Facility design
- Spill/release/incident history
- Operational concerns
- Financial status
- Waste acceptance procedures

The consulting firms of Gartner Lee and MacViro assessed a total of 13 landfill sites and 1 alkaline stabilization facility throughout Michigan, Ohio, Pennsylvania and New York States. All landfill sites that are being used for the disposal of biosolids had a due diligence audit report prepared by the consultants.

(3) Legal Matters

In order to protect the City's legal interests and position, various steps have been taken including injunctive proceedings.

During the course of its dealings with Republic Services following receipt of the Notice, in an attempt to deal with the emergency situation and to mitigate its damages, the City was aggressively pursuing alternative disposal arrangements for the biosolids. By mid-July 2006, however, despite the ongoing efforts of staff to secure new biosolids disposal or management service contracts, no such agreements had been executed. The deadline of August 1, 2006, as unilaterally imposed by Republic Services, was fast approaching and there was significant concern that the City would not be able to secure the necessary alternate arrangements in time. In fact, as the August 1st deadline drew near, the City had only been able to secure contingent disposal arrangements for just under half of its biosolids from the ABTP. Consequently, a decision was taken to commence injunctive proceedings on July 19, 2006, in an attempt to compel Republic Services to accept the City's biosolids at the Alternate Disposal Site designated in the Agreement between the parties.

On August 2, 2006, the City's external legal counsel argued the Injunction Motion seeking an interlocutory injunction compelling Republic Services to receive the City's biosolids at its Brent Run landfill site in Michigan for a period of 90 days, without prejudice to the City's right to seek an extension or Republic Services' right to seek variation or termination within the 90 day period. The Court released its decision on August 4, 2006, and dismissed the City's Injunction Motion as the judge ruled this not to be an appropriate case in which to order the extraordinary mandatory relief sought for a number of reasons cited in the decision. First, the judge found that the City did not show it had a strong *prima facie* case. Second, the judge indicated that the Court was not in a position to craft an order for the disposal to ensure proper engineering practices are followed and Michigan laws are observed at Brent Run. Third, the judge believed that there was the potential that Republic Services could be placed in a position that would violate Michigan law by complying with an Ontario court order or a finding of contempt if they did not follow the order. Finally, the judge noted that a mandatory order would require ongoing supervision by the Court in order to decide disputes which might arise between the parties during the term of the order.

It is noteworthy that the judge was only able to rely on the argument of counsel and the conflicting affidavits of the parties to reach her decision. There were no cross-examinations on the affidavits or oral evidence at the Injunction Motion. In view of the urgent circumstances and conflicting evidence, the judge chose Republic Services' version of the evidence and interpretation of the Agreement.

On the issue of whether or not the Agreement governs biosolids, the judge clearly stated in her decision that it was the task of Arbitrators to determine whether there was a breach

by Republic Services of the Agreement by their refusal to accept the City's biosolids for disposal at either Carleton Farms or Brent Run.

Legal Services has been consulted in the preparation of this report.

CONTACT

Frank Quarisa
Director
Wastewater Treatment
Telephone: 416-392-8230
Email: fquaris@toronto.ca

SIGNATURE

Lou Di Gironimo
General Manager
Toronto Water