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RESIDUAL WASTE AND SOURCE SEPARATED ORGANICS CONTINGENCY COVANTA NIAGARA L.P.

The Solid Waste Management Committee recommends the adoption of the recommendations contained in the following report, February 6, 2008, from the Commissioner of Environmental Services:

1. RECOMMENDATIONS

It is recommended that:

1. Covanta Niagara L.P.'s proposal for the transportation and thermal treatment of Residual Waste and surplus Source Separated Organic waste be accepted on the basis of its cost competitive pricing and the lack of other facilities able to provide the required processing service.
2. The Region enter into a contract with Covanta Niagara L.P. to provide transportation and thermal treatment of Residual Waste and surplus Source Separated Organic waste at a cost of \$65 per tonne as outlined in this report pursuant to the sole source provisions of the Purchasing By-law.
3. The Commissioner be authorized to extend the contract for two additional one-year renewal periods.
4. The Regional Chair and Regional Clerk be authorized to sign the necessary agreement, subject to review by Legal Services.

2. PURPOSE

This report provides an update on the current processing issues for Source Separated Organics materials and recommends an interim solution in the event of a contract failure or processing problem.

3. BACKGROUND

On April 21, 2005 Regional Council adopted Clause 4 of Report No. 3 of the Solid Waste Management Committee to enter into an agreement with GSI Environnement Inc. to provide transportation and Source Separated Organic treatment at their facility in St. Henri Quebec, with a put or pay minimum of 8700 tonnes for a 6 month trial period at a cost of \$135 per tonne. This agreement expired on January 4, 2006.

On September 22, 2005, Regional Council adopted Minute 152 “Results of Source Separated Organics RFP P-05-33” authorizing the Commissioner of Transportation and Works to negotiate an agreement with Orgaworld to provide transportation and Source Separated Organic treatment at their facility in London Ontario of \$122.44 per tonne. The negotiated agreement provided a maximum of 30,000 tonnes per year, a put or pay minimum of 21,000 tonnes and an additional contingency of 30,000 tonnes at \$114.43 per tonne for 10 years, expiring on June 29, 2017.

On September 22, 2005, Regional Council adopted Minute 152 “Results of Source Separated Organics RFP P-05-33” to extend the agreement with GSI Environnement Inc., for a maximum of 3 years, to provide transportation and Source Separated Organic treatment at their facility in St. Henri Quebec. The negotiated agreement provided a put or pay minimum of 10,000 tonnes per year at a cost of \$135.00 per tonne. This agreement allows a maximum of 30,000 tonnes per year and expires on February 28, 2009.

On November 15, 2007, Regional Council adopted Clause 4 of Report No. 10 of the Solid Waste Management Committee to enter into an agreement with Conporec Inc. to provide transportation and Source Separated Organic treatment at their facilities in Champlain and Béconcour Quebec, with a put or pay minimum of 20,000 tonnes per year at a cost of \$128.00 per tonne. This agreement allows a maximum of 39,000 tonnes per year and expires on June 30, 2010.

York Region projections for 2008 indicate production of 75,000 tonnes/year or an average of 6,250 tonnes per month of Source Separated Organics. An extrapolation of January shipping records indicates that shipping may exceed 80,000 tonnes in 2008.

Table 1 shows a breakdown of annual and average monthly shipments to the existing operators. Prices reflect the current contract price adjusted for CPI and fuel surcharge to 90¢/litre and \$1.00/litre.

Table 1
Source Separated Organics Processing Operations

	Tonnes/Year target	Current Tonnes/Week*	Annual Cost (90¢/litre)	Annual Cost (\$1.00/litre)
Orgaworld	30,000	640	\$3,459,800	\$3,477,700
Conporec	39,000	425 [†]	\$4,992,000	\$5,077,000
GSI	<u>11,000[‡]</u>	<u>530</u>	<u>\$1,534,700</u>	<u>\$1,561,900</u>
Total	80,000	1595	\$9,987,500	\$10,116,600

* based on shipping records for January 7 to January 18, 2008

† Conporec expected to receive at this rate until commissioning of Béconcour facility in April 2008

‡ GSI contract has highest rate and receives put or pay minimum plus any required balance

In late 2006 and into 2007, GSI experienced significant operational and permit issues with all of their operations in Quebec. York Region staff visited the GSI facility at St. Henri in June, 2007 and expressed concerns about the long-term sustainability of that operation. On September 13, 2007, the Quebec Ministry of the Environment issued a stop order on a temporary GSI operation at Chicoutimi, Quebec considerably reducing GSI's available capacity. GSI responded by establishing a composting pilot for York's material, at the Cove Landfill in Bad Axe, Michigan. The Cove Landfill operation has not proved itself as a sustainable alternative and has experienced difficulty securing required permits. Staff believes that GSI cannot continue to deliver reliable service in the long term.

If GSI fails, there will be 500 tonnes per week of uncommitted Source Separated Organic materials left to process. Available processing capacity within 1,000 kilometres of York Region is already committed to servicing GTA green bin programs or is unable to process green bin waste in plastic bags. Two new major projects within 250 kilometres of York Region have received approvals and anticipate operational start-up by the end of 2008. Until that time, landfilling or thermal treatment remain the only options for the uncommitted Source Separated Organic material.

4. ANALYSIS AND OPTIONS

A potential loss of the GSI processing capability or processing capacity with another of the Region's Source Separate Organics processors has serious impacts and will require the Region to find alternatives that continue to divert Source Separated Organics from landfill in the short term. York Region has aggressively promoted Source Separated Organics diversion as a cornerstone of the diversion strategy and reverting to landfill,

even for a short time, would result in a loss in credibility. The inability to maintain Source Separated Organics programs would significantly reduce diversion rates and potentially jeopardize the Region's ability to meet its target of 65% waste diversion from landfill by 2010.

4.1 York Dufferin SSO Processing Request for Proposal

In October 2007, Dufferin County and York Region released a joint Request for Proposal for construction of a Source Separated Organics facility on a 50 hectare parcel of land in Dufferin County. If successful, staff expects the facility to commence operations in 2009 with an estimated available capacity of 40,000 tonnes per year available to York Region. This project will not provide a solution to the uncommitted material problem in the near future.

4.2 York Contract with Conporec

In January 2008, York signed a 30-month contract with Conporec (as authorized by Council on November 15, 2007) for processing of up to 750 tonnes per week or 39,000 tonnes per year of Source Separated Organic material. Conporec operates a temporary facility at Champlain, Quebec and expects to open operations at Béconcour, Quebec in April or May 2008. Until commissioning of the Béconcour facility, Conporec will continue to receive waste at about 400 to 500 tonnes per week when it will ramp up to 750 tonnes per week. The facility will not have extra capacity beyond the 39,000 tonnes per year commitment for at least two years.

4.3 Orgaworld Expansion Expected for Late 2008

Orgaworld, operating in London, Ontario currently accepts 30,000 tonnes per year of material from York. They have obtained building permits to proceed with expansions to the facility anticipated to result in planned operating site capacity of 130,000 tonnes per year. Toronto has commitments for 70,000 tonnes of this capacity and York has an option for an additional 30,000 tonnes per year. OrgaWorld anticipates that they can offer this capacity by December 2008 under the terms of York's existing agreement.

4.4 Covanta Niagara L.P. EFW Facility has Available Capacity

Covanta Niagara L.P. operates an energy-from-waste facility in Niagara Falls, New York. Representatives from Covanta Niagara L.P. visited the York Region facilities and inspected the Source Separated Organic material and agreed to accept a minimum of 400 tonnes per week of Source Separated Organics or Residual Waste material under a short term extendable agreement. This agreement offers the dual advantages of diversion of waste from landfill and diversion of wastes from Michigan. The U.S. EPA and the Province of Ontario regard energy from waste as a renewable energy source and preferable to landfill.

Given the lack of other composting options, staff believes that diverting SSO to EFW is preferable to landfilling. As such, it is proposed that a contingency agreement be executed with Covanta to ensure that we can continue to divert SSO from landfill in the

event that GSI or other operators experience production shortfalls. Staff propose an agreement with Covanta on the following terms:

- Initial term extending from signing to July 31, 2008 with options for two one-year renewals.
- Minimum tonnage of 400 tonnes per week of Source Separated Organic material or Residual Waste.
- Insurance and Indemnification acceptable to York Region.
- Contractor responsible for transport, processing and disposal of residual materials.
- Cost per tonne \$65 (CAD) with a fuel surcharge agreement based on 90¢/litre and annual price escalation based on CPI.
- Commitment that 100 % of materials will be diverted from landfill.
- Put or pay tonnage commitment of 400 tonnes per week.

Staff propose that Council allow the Commissioner to negotiate the contract extensions within the scope of these terms.

5. FINANCIAL IMPLICATIONS

Covanta Niagara L.P. has offered rates competitive with landfill disposal options at Green Lane and Veolia landfill in Northfield Michigan. They propose a rate of \$65.00 per tonne based on an Ontario fuel price of 90¢ per litre. This price includes all transportation, current border tariffs, incineration and disposal of ash. Covanta Niagara L.P. will retain any profits from sale of energy and resale of any recovered materials. They require a minimum rate of 400 tonnes per week that can include Source Separated Organic material and residual waste. Table 2 compares the cost implications of the Covanta Niagara L.P. option for the first half of 2008 based on two projections for the generation of Source Separated Organic material in the event that GSI is unable to continue to operate or processing problems develop with another of the Region's Source Separate Organics service provider.

Table 2
Cost of SSO and Residual Waste Disposal

Cost of SSO and Residual Waste Disposal – Initial 6 Months of Agreement				
	Scenario 1 80,000 tonnes/yr SSO		Scenario 2 75,000 tonnes/yr SSO	
	Tonnes	Cost	Tonnes	\$1.00/litre
Orgaworld - SSO	15,000	\$1,738,854	15,900	\$1,843,185
GSI - SSO	4,500*	\$638,940	4,500	\$638,940
Conporec - SSO	13,700 [†]	\$1,783,459	13,700	\$1,783,459
Veolia - waste	50,000	\$3,315,383	50,000	\$3,315,383
Green Lane - waste	17,000 [‡]	\$1,100,615	13,600	\$880,492
Covanta**	<u>6,800</u>	<u>\$456,821</u>	<u>6,800</u>	<u>\$456,821</u>
Total	40000 SSO 67000 Waste	\$9,034,071	37500 SSO 67000 Waste	\$8,918,279
Savings[§]		\$508,700		\$254,300

* GSI will receive waste for 9 weeks at 500 tonnes/week
[†] Conporec will receive 400 tonnes/wk for the first quarter and 750 tonnes/wk for May and June
[‡] Green Lane receives the balance of waste not sent to Veolia and Covanta
[§] Savings are relative to current price structure that includes GSI
 **Covanta receives 500 tonnes/week SSO in option 1 and 250 tonnes/week SSO and 250 tonnes/week residual waste in option 2

With the conservative estimate of 75,000 tonnes of Source Separated Organic material generation in 2008, we would ship 200 tonnes of SSO and 200 tonnes of Residual Waste to Covanta each week, realizing a saving of \$254,000 in the first 6 months of the agreement. Records from the York Region transfer stations indicate a trend to 80,000 tonnes or more SSO generation in 2008. At this level, we would realize a saving of \$508,700 in the first 6 months of operations. Covanta, at \$65.00 per tonne, offers rates competitive with the cost of landfilling in Michigan and about half of the rate for SSO processing formerly offered by GSI.

6. LOCAL MUNICIPAL IMPACT

Source Separated Organic material diversion from landfill will continue under the Covanta Niagara L.P. option but will reduce the reported diversion rates for local municipalities by about 4% for 2008. The Region and local municipalities' commitment to achieve a minimum 65% diversion rate from landfill will continue to be realized because the materials are processed using thermal treatment generating power in place of what might otherwise be sourced from fossil fuel-fired plants. Both York's and the local municipalities' long term goals remains sustainable diversion through organic processing methods. Short term diversion of organics to Energy from Waste options may generate public criticism of the organics diversion program.

7. CONCLUSION

The Region requires an immediate alternative arrangement to deal with the potential Source Separated Organics processing shortfall until other options come on-line in late 2008. Covanta Niagara L.P.'s Energy from Waste alternative offers an acceptable short term resolution that continues to divert these materials from landfill. Staff recommend a sole source contract with Covanta Niagara L.P. to ensure the continued operation of the Source Separated Organic waste program and to provide additional short term options that divert other wastes from landfill consistent with York's waste management goals.

For more information on this report contact Alec Scott, Program Manager, Waste Disposal and Quality Control of the Solid Waste and Administration Branch at extension 5712 in the Environmental Services Department.

The Senior Management Group has reviewed this report.