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SOURCE SEPARATED ORGANICS PROCESSING – CONPOREC

The Solid Waste Management Committee recommends the adoption of the recommendations contained in the following report, October 24, 2007, from the Director, Solid Waste and Administration:

1. RECOMMENDATIONS

It is recommended that:

1. Conporec's proposal for the transportation and processing of Source Separated Organic waste be accepted on the basis of its cost competitive pricing and the lack of other facilities able to provide the processing service.

2. The Region enter into a contract with Conporec to provide Source Separated Organic waste transportation and processing services at a cost of $128 per tonne as outlined in this report pursuant to the sole source provisions of the Purchasing By-law.

3. 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 to York Region's current processing needs.

3. BACKGROUND

Since September 17, 2007, all local municipalities in York Region are participating in the Region's Source Separated Organics program producing an estimated 6,100 tonne per month ranging from 1,400 tonne to 1,550 tonne per week. York Region's material includes pet waste, diapers and plastic bags and requires significant pre-processing before treatment. York Region competes in a very limited market in Ontario and Quebec for processing capability with other municipalities whose source separated organics material does not contain these contaminants.

York Region has contracts with Orgaworld in London and GSI, who operate facilities at St. Henri near Quebec City and a second facility under sub-contract near Chicoutimi, Quebec for the processing of source separated organics. York Region planned to send approximately equal quantities of source separated organics material to both of these processors.

Orgaworld started processing York Region's source separated organics materials at a new facility in London in June, 2006. The plant has not reached stable capacity and will continue process optimization until January, 2008 and, until then, they can receive only 600 tonne per week. Longer term process improvements may increase their capacity to 700 tonne per week by January, 2008.

The balance of the source separated organics is processed by GSI. Staff visited the GSI facility at St. Henri in June, 2007 and had concerns about the long-term sustainability of that operation. On September 13, 2007, the Quebec Ministry of the Environment issued a stop order on GSI's Chicoutimi operation. The shutdown at Chicoutimi reduced GSI's available capacity and as a consequence, GSI cannot deliver service at the expected rate.

4. ANALYSIS AND OPTIONS

Loss of the GSI processing capability in Quebec has serious impacts and may require the Region to begin landfilling source separated organics without resolution of the unanticipated source separated organics processing short-fall. 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. 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 Options to Replace GSI Processing Capacity

Staff surveyed all available source separated organics processors in Ontario and Quebec in the spring and summer of this year to establish a contingency plan in the event of processing interruption or failure by one of the Region's two processors. There is limited surplus processing capacity available especially for the York Region material as ours includes plastic bags and diapers. Process upsets have also reduced capacity at most municipal and private sector operations and as more Source Separated Organics programs come on line, demand far exceeds processing capacity.

York Region and Orgaworld conducted residual waste audits of the source separated organics stream at the Orgaworld facility in October, 2007. These audits revealed that residual waste comprised approximately 20% of the incoming waste stream. Residual materials included contaminants such as blue box recyclables and garbage and uncompostable materials allowed in the program such as plastic film.

Other composting options may be available if the source separated organics was debagged with the contaminants removed. Debagging and screening of the incoming materials could reduce the need for final processing capacity by improving the quality of material sent to the processor. Savings from reduced source separated organic tonnages may result in a relatively short term pay-back of program capital costs to install debagging equipment at our transfer stations. Staff will investigate the feasibility of a pilot study at the Garfield Wright Waste Management Centre in December, 2007 or January, 2008.

4.2 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. Staff expect the facility to commence operations in 2009 with an estimated available capacity of 40,000 tonne/year available to York Region. Until successful completion of this project, York Region needs to secure processing capacity for 40,000 tonne/year to 50,000 tonne/year of source separated organics material.

4.3 Short-Term Processing Option with Conporec

Staff surveyed all available source separated organics processors in Ontario, Quebec, New York and Michigan State and only Conporec had sufficient capacity to replace that lost by GSI being shut down. Conporec, as a contingency processor, is capable of handling 39,000 tonne of material annually. Conporec has a facility under construction at Bécancour and in Tracy, Quebec. The Tracy facility near Trois Rivières can provide contingency treatment until commissioning of the Bécancour facility.

Conporec can accept 750 tonne/week or 39,000 tonne/year of source separated organics, starting on November 1, 2007 providing that York Region enter into a 30-month contract with two one-year optional renewal periods. On September 19, 2007, the Chief Administrative Officer issued an emergency purchase requisition authorizing transport to their facility of source separated organics materials ramping up to 750 tonne/week by November 1, 2007 to replace the lost GSI capacity. This purchase requisition expires in December, 2007.

No other firm in Ontario or Quebec is currently able to accept the volume of material that York has to process as a result of the loss of the GSI capacity. As such, staff propose that Conporec is contracted with, on a sole source basis, on the following terms:

- 30-month term ending May 31, 2009 with options for two one-year renewals.
- Minimum weekly tonnage of 500 tonne on a put-or-pay basis.
- Contractor required to provide treatment capacity for 39,000 tonne annually with a minimum commitment of 26,000 tonne annually from the Region.
- Performance guarantees on quality of material, guaranteed end use of Unrestricted Use Product.
- Contractor responsible for transport, processing and disposal of residual materials.
- Cost per tonne $128 with a fuel surcharge agreement based on 90¢/litre and annual price escalation based on CPI.

5. FINANCIAL IMPLICATIONS

York Region expects to produce 72,000 tonne of source separated organics in 2008. Processing costs include transportation and on-site composting and curing costs. Transportation prices fluctuate significantly relative to fuel prices and for comparison purposes, pricing comparison assumes 90¢/litre. Contractors typically receive fuel surcharge payments for documented fuel purchases above the 90¢ base rate.

Orgaworld processes 30,000 tonne of source separated organics at a 2007 rate of $115.06 per tonne, approximately $3.45 million annually. Their contract extends to 2016 with renewal options. GSI currently handles the remaining 42,000 tonne at a 2007 rate of $141.87 per tonne, approximately $5.96 million annually. Their contract expires on February 28, 2009.

The Region has a minimum commitment to GSI for 10,000 tonne/year or $1.42 million annually. Conporec can process the remaining 32,000 tonne at a rate of $128 per tonne or $4.1 million annually. As shown in Table 1, this option would save $444,000 annually over using GSI.

Table 1
Cost Implications SSO Processing Alternatives

	Current Contracts with Orgaworld and GSI		**Proposed Contracts with Orgaworld, GSI and Conporec**	
	Tonne/Year	**Annual Cost**	**Tonne/Year**	**Annual Cost**
Orgaworld	30,000	$3,451,800	30,000	$3,451,800
GSI	42,000	$5,958,540	10,000	$1,418,700
Conporec	0	$0	32,000	$4,096,000
	72,000	$9,410,340	72,000	$8,966,500

6. LOCAL MUNICIPAL IMPACT

Reduction in source separated organics material diversion will result in a reduction in the diversion rate of the local municipalities. This impact on diversion rate potentially jeopardizes the Region and local municipalities' commitment to achieve a minimum 65% diversion rate from landfill. Reduced diversion will compromise the credibility of Source Separated Organics programs operated by local municipalities and the Region and may generate public criticism for landfilling source separated organics.

7. CONCLUSION

The Region requires an immediate alternative arrangement to deal with the shutdown of GSI's Chicoutimi plant for processing of source separated organics materials. Conporec has capacity to replace the lost processing capacity. Staff recommend a sole source contract with Conporec to ensure the continued operation of the Source Separated Organic waste program in York Region.

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 Transportation and Works Department.

The Senior Management Group has reviewed this report.