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MIXED BROKEN GLASS PROCESSING CONTRACT

The Solid Waste Management Committee recommends the adoption of the recommendations contained in the following report, January 13, 2006, from the Commissioner of Transportation and Works:

1. RECOMMENDATIONS

It is recommended that:

1. The Region endorse the request for proposal process for mixed broken glass processing undertaken by Stewardship Ontario in conjunction with the Cities of Guelph, Toronto and Hamilton and the Regions of York, Peel and Durham.

2. The Region enter into a contract with Unical-Gaudreau Group for the processing of mixed broken glass at an initial net cost of $13.23 per tonne (including GST) for a period of seven years plus three one-year extensions as per the terms outlined in this report.

3. This contract be contingent on Unical successfully entering into contracts with the City of Toronto and The Regional Municipality of Peel.

4. The Regional Chair and Clerk be authorized to sign the necessary agreement, subject to review by Legal Services.

2. PURPOSE

The purpose of this report is to obtain authorization to enter into a contract with Unical-Gaudreau (Unical) to process the mixed broken glass that is produced in the Region’s Material Recovery Facility (MRF).

3. BACKGROUND

Coloured and clear glass containers are collected in the Region’s blue box program. This material is separated in the MRF and sent to processing plants to be recycled into new glass products. Prior to the Region starting its single stream blue box system in 2005, glass was manually picked off the conveyor system in the MRF as either coloured or clear containers. The Region’s new MRF is a single stream blue box processing plant that allows glass to be sorted manually as before but most of it is broken by the mechanical screens that separate paper and other containers. As a result, the majority of the glass recovered in the MRF is broken with both coloured and clear glass mixed together. This “mixed broken glass” is also highly contaminated with small pieces of plastic, paper and grit. Therefore the mixed broken glass must be further processed to remove the contaminants before it can be recycled in new glass products. Peel Region and the Cities of Toronto and Guelph are also generating large amounts of mixed broken glass as a result of their operation of single stream MRFs.

Stewardship Ontario is responsible for funding blue box programs in Ontario under the Waste Diversion Act and established a Glass Market Development Investment Fund to improve markets for glass recycling. Stewardship Ontario consulted with industry stakeholders and determined that there was interest to construct new glass processing capacity in Ontario to deal with the mixed broken glass in the GTA area and offered to invest $2 million from the Glass Market Development Fund as part of a Request for Proposal (RFP) process.

4. ANALYSIS AND OPTIONS

Stewardship Ontario worked with municipalities in the GTA to develop and administer a joint RFP for mixed broken glass processing. The annual quantities of available material from interested municipalities is listed in Table 1.

Table 1
Estimated Quantity of Mixed Broken Glass

Municipality	Estimated Annual Quantity (tonnes)
York Region	6,000
Peel Region	12,000
Durham Region	5,800
City of Hamilton	3,000
City of Guelph	5,000
City of Toronto	30,000
Total	61,800

Stewardship Ontario issued a RFP on March 8, 2005 with a closing date of June 10, 2005. Proposals were received from:

- Canadian Liquids Processors Ltd. – To upgrade its existing facility located in Hamilton, ON.
- NexCycle Industries Ltd. – To upgrade its existing facility located in Guelph, ON.
- Unical-Gaudreau Group – To construct a new facility in Toronto, ON.

4.1 Request for Proposal Process

The following is a summary of the RFP process undertaken by Stewardship Ontario:

- The RFP was prepared by MacViro Consultants for Stewardship Ontario. The municipalities listed in Table 1 participated in its development.

- The RFP was issued on March 8, 2005 and advertised nationally in trade magazines, on industry association websites and through direct industry contact. The RFP can be accessed at http://www.stewardshipontario.ca/funding/glassinvestment.htm.
  - Proposals were submitted using a two envelope system; a technical proposal and sealed price envelope.
  - An evaluation team with representatives from all of the interested municipalities undertook a three phase review of the submitted proposals:
    - Phase I – Review of the mandatory requirements on a pass/fail basis. Mandatory elements included a bid security, agreement to bond, agreement to provide a letter of credit, agreement to provide insurance, team references and experience and evidence of financial solvency. Proposals that met the mandatory requirements would proceed to Phase II.
    - Phase II – Evaluation of the technical proposals against the criteria set out in the RFP (*see Attachment 1*) by a panel of municipal staff, Stewardship Ontario and Stewardship Ontario's engineering consultants MacViro. Proposals that received a technical score of at least 80 out of 100 would proceed to Phase III.
    - Phase III – Opening of the sealed price proposals. The lowest price proposal would be recommended as the preferred Proponent.
  - Site visits to the reference plants proposed by the respondents in Montreal, Guelph and Hamilton were undertaken on July 25 and July 27, 2005.

NexCycle Industries and Canadian Liquids Processors did not pass the technical requirements of the RFP and their pricing proposals were not opened. Unical passed the technical evaluation and its price proposal was opened at Phase III of the review process.

Staff believe that the RFP process was rigorous, objective, open and transparent. It is proposed that the Region endorse the joint RFP process undertaken by the GTA municipalities and Stewardship Ontario.

4.2 Unical's Proposal

Unical currently operates a glass processing facility in Longueuil, Quebec. This facility uses state-of-the-art optical sorting equipment to recycle mixed broken glass into a high quality fine grind cullet that is used to make fibreglass insulation, glass containers and sand media for sandblasting and filtration. Unical is proposing to construct a new 60,000 square foot processing facility in the Tapscott Road and Passmore Avenue area of Toronto that is capable of processing 80,000 tonnes per year of glass product. The facility will take 13 to 14 months to construct.

Unical's price proposal includes a tipping fee to process mixed broken glass (Table 2) as well as a revenue sharing-agreement if they are successful in selling the glass abrasives and filtration media that they produce. In addition, there is a price reduction to the tipping fee if the quality of the material we send to them improves (Table 3).

Table 2
Tipping Fee
(2005 Dollars) (FOB Unical)

Years	**Base Cost** (Per tonne)	**Stewardship Ontario Discount**	**Net Base Cost**	**GST**	**PST**	**Total (per tonne)**
1, 2, 3	$24.00	($12.50)	$11.50	$0.81	$0.92	$13.23
4, 5	21.50	(12.50)	9.00	0.63	0.72	10.35
6, 7	16.50	(12.50)	4.00	0.28	0.32	4.60
Optional 8, 9, 10	16.50	(12.50)	4.00	0.28	0.32	4.60

Table 3
Quality Incentive Program

Item	**Discount** (per tonne)
1 – if 75% of the glass is greater than 30mm	$2.50
2 – if less than 5% of the glass is smaller than 5mm	$2.50
3 – residue 5% to 7.5% of the inbound tonnage	$2.00
4 – residue 2.5% to 5% of the inbound tonnage	$4.00
5 – residue less than 2.5% of the inbound tonnage	$5.00

Unical has also offered to share 10% of the revenue it receives from the sale of its glass abrasive and filter media based on York's proportion of inbound mixed broken glass material. Unical is offering a further $20 per tonne discount off the retail sale price of the products if the Region purchases any of the glass abrasives or filter media.

Unical has stated that it also needs to enter into contracts with at least Toronto and Peel to have a sufficient quantity of material and revenue stream to make the project economically viable. The City of Toronto Works Committee approved its contract on January 12, 2006 for consideration of City Council on January 31st. Peel Region Council adopted entering into a contract with Unical on December 15, 2005.

4.3 Contract Terms

The following are the key terms and conditions outlined in the RFP and will form the basis of the contract:

- A contract term of seven years starting January 1, 2007 with an option to extend the contract for an additional three one-year terms.

- Tipping fee and rebates as per Tables 2 and 3 of this report. These prices will be adjusted accordingly if any other municipality in Ontario is offered lower tipping fees or higher rebates.
- Mixed broken glass contamination will be audited on a truck-by-truck basis as received on site and averaged for the month for the quality incentive program.
- A put-or-pay of 30,000 tonnes per year of combined inbound tonnage from Peel, York, Durham, Hamilton, Guelph and Toronto.
- This contract is contingent on Unical successfully entering into contracts with the City of Toronto and The Regional Municipality of Peel.
- The mixed broken glass must be recycled into value-added products.
- Unical is responsible for all marketing of its finished products.
- All prices and discounts will be escalated by 65% of the Consumer Price Index on an annual basis starting the date of the first delivery.
- Insurance as required by the Region.
- Performance bonding equal to 75% of the annual contract value with an additional letter of credit in the amount of 25% of the annual contract value .
- Disposal of all contaminants recovered from the mixed broken glass is the responsibility of Unical and is included as part of the tipping fee.

The terms of the contract provide value to the community. It is proposed that authority be given to staff to prepare an agreement consistent with the terms outlined in this report to the satisfaction of the Regional Solicitor and Commissioner of Transportation and Works. In addition, it is recommended that the Regional Chair and Clerk be authorized to execute the agreement.

5. FINANCIAL IMPLICATIONS

Currently, Miller Waste Systems markets the mixed broken glass produced at our MRF and uses NexCycle in Guelph. Neither the Region nor Miller Waste has a contract with NexCycle and NexCycle was not the successful proponent in this RFP process. Nexcycle reduced its processing fee to $17 per tonne, down from $25 per tonne after being informed that they were unsuccessful in this RFP process in September and further reduced it to $11.03 per tonne in December 2005. In December, Nexcycle also submitted an unsolicited bid to hold its price at $11.03 per tonne (plus 65% CPI) for seven years.

Our current costs are $11.03 per tonne for processing and $11.30 per tonne for haulage for a total cost of $22.33 per tonne. Our mixed broken glass processing cost for 2005 is estimated to be $80,000.

The Unical processing costs are outlined in Table 2. In the first year of the contract, the net cost to the Region is $13.23 per tonne plus an estimated $9 per tonne for trucking for a total cost of $22.23 per tonne. This represents an decrease of $0.10 per tonne for an expected decrease of $700 for the first year of the contract. Costs will further decrease in years four and six as the tipping fee is reduced in those years as per Table 2 resulting in a reduction of $9.43 per tonne (assuming a CPI growth of 2% per year) by the end of the contract and resulting in the savings shown in Table 4. Over the seven year term of the contract, it represents a savings of over $214,000 compared to today's pricing with NexCycle. The Region can reduce its costs further by improving the quality of the mixed broken glass sent to Unical by limiting the amount of contamination as noted in Table 3.

Table 4
Estimated Budget Impact

Year	**Fee w/ CPI (per tonne)**	**Estimated Budget Change**	**Total**
1	$22.23	0%	$(700)
2	22.52	0%	(750)
3	22.81	0%	(800)
4	20.11	-15%	(24,000)
5	20.38	-15%	(25,500)
6	14.51	-64%	(79,000)
7	14.70	-64%	(83,500)
		Total	($214,250)

6. LOCAL MUNICIPAL IMPACT

There is no local municipal impact associated with this report.

7. CONCLUSION

The operation of single stream blue box processing facilities in the GTA has changed how glass containers are processed and results in the majority of the glass becoming a broken mix of coloured and clear glass. Stewardship Ontario issued an RFP to find a long-term supplier capable of recycling this mixed broken glass and offered to invest $2 million in the new facility. Staff recommend entering into a contract with Unical who was the successful respondent to the RFP.

The Senior Management Group has reviewed this report.

(The attachment referred to in this clause is attached to this report.)