
DATE: March 21, 2012

REPORT TITLE: **SHORT TERM WASTE DISPOSAL AGREEMENT NEGOTIATIONS
DOCUMENT 2012-225N**

FROM: Dan Labrecque, Commissioner of Public Works

RECOMMENDATION

That staff finalize negotiations of a short term waste disposal agreement with Algonquin Power Energy From Waste Inc. excluding disposal of bottom ash at an estimated total cost of \$57,600,000 (excluding applicable taxes and annual CPI adjustments) for a five year term with renewal options as described in the report from the Commissioner of Public Works, dated March 21, 2012, titled "Short Term Waste Disposal Agreement Negotiations, Document 2012-225N", and otherwise on terms satisfactory to the Commissioner of Public Works in a form satisfactory to the Regional Solicitor;

And further, for clarity, that the Region continue to transport (under contract 2008-738T) and dispose (under contract 2006-294N) of the bottom ash at the Twin Creeks landfill at an estimated cost of \$10,400,000 (excluding applicable taxes, annual CPI and fuel adjustments) for the five year term;

And further, that if negotiations with Algonquin Power Energy From Waste Inc. are not finalized by June 29, 2012, that discussions with Algonquin Power Energy From Waste Inc. be terminated and that staff finalize negotiations of a short term waste disposal agreement with Waste Management of Canada Corporation at an estimated total cost of \$54,832,000 (excluding applicable taxes, annual CPI and fuel adjustments) for a five year term with renewal options as described in the subject report, and otherwise on terms satisfactory to the Commissioner of Public Works in a form satisfactory to the Regional Solicitor;

And further, that annual savings resulting from the short term waste disposal agreement be allocated to a Long Term Waste Disposal reserve to be set up.

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DOCUMENT 2012-225N****REPORT HIGHLIGHTS**

- The Region of Peel requires a short term waste disposal solution for 160,000 tonnes of waste per year.
- At the February 23, 2012 meeting of Regional Council, staff was directed under Resolution 2012-354, to negotiate terms of short term waste disposal agreements with Algonquin Power Energy From Waste Inc. (Algonquin), Covanta Energy Corporation (Covanta) and Waste Management of Canada Corporation (WMCC) and report back by March 29, 2012.
- Staff met with and received offers from all three companies.
- WMCC's offer provides Peel with the lowest cost waste disposal solution at approximately \$54,832,000 (excluding applicable taxes, annual CPI and fuel adjustments) over five years, provides some environmental benefits and local jobs but it includes trucking all of Peel's waste out of Peel and takes Peel out of Energy from Waste (EFW) in the short term.
- Covanta's offer is the second lowest cost option at approximately \$60,000,000 (excluding applicable taxes, annual CPI and fuel adjustments) over five years, offers the benefits of 50 per cent to 65 per cent EFW for the 160,000 tonnes under consideration, provides some local employment but involves trucking all of Peel's waste out of Peel and includes the transport of some of the waste to the United States.
- Algonquin's offer is the most expensive of the three at approximately \$68,000,000 (excluding applicable taxes, CPI and fuel adjustments) over five years, offers 100 per cent EFW for the 160,000 tonnes under consideration, provides the greatest support for the local economy and demonstrates social responsibility by managing more of Peel's waste within its own borders.
- Based on its environmental and social benefits and its incremental cost over the other offers, staff recommends that Peel finalize negotiations for a short term waste disposal agreement with Algonquin.

DISCUSSION**1. Background**

With the expiry of Peel's 20-year waste supply agreement with Algonquin Power, staff is working to develop a new long term waste disposal solution. Development and implementation of the long term solution is expected to take five to seven years so an interim solution is needed to bridge the gap.

At the February 23, 2012 meeting of Regional Council, staff was directed under Resolution 2012-354, to negotiate terms of short term waste disposal agreements for 160,000 tonnes per year of Peel's waste in parallel with Algonquin Power Energy From Waste Inc. (Algonquin), Covanta Energy Corporation (Covanta) and Waste Management of Canada Corporation (WMCC), and report back to Council by March 29, 2012.

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2. Findings

Staff met with representatives of the three companies to convey to them Peel's requirements for short term waste disposal. On March 9, 2012 Peel received offers from all three companies and the key terms of these offers are described below.

a) Waste Management of Canada Corporation

WMCC's offer contained the following key terms:

- Five year term with options for up to five one-year extensions at Peel's discretion;
- Peel to supply 160,000 tonnes of municipal solid waste (MSW) per year;
- WMCC to provide transfer (from its Wentworth Transfer Station), haulage and disposal services at an all-in price of \$68.54 (plus applicable taxes, annual CPI and fuel adjustments) per tonne subject to standard CPI and fuel adjustments;
 - WMCC capped annual CPI adjustments at a maximum of 1 percent on the transfer and disposal portion;
 - WMCC agreed that these 160,000 tonnes would not be factored into any price adjustment calculations in the current disposal agreement;
 - Peel would contract directly with the haulage contractor at the price guaranteed in WMCC's offer;
- WMCC offered to extract recyclable materials at WMCC's transfer station and deliver these materials to Peel's MRF for processing and sale, with proceeds of the sale to be retained by Peel;
- With the added tonnage, WMCC would move the installation of a landfill gas utilization system at its landfill from 2016 to 2014.

b) Covanta Energy Corporation

Covanta's offer contained the following key terms:

- Five year term with the following extension options:
 - mutually agreeable extensions, with Covanta assuming all change-in law risk during the term; or
 - two one-year extensions at Peel's discretion, with Peel assuming all change-in law risk during the term;
- Peel to supply 160,000 tonnes of MSW per year;
- Covanta to provide transfer (from Orenda, Disco or Wentworth transfer stations), haulage and disposal services at an all-in price of \$75 (plus applicable taxes, annual CPI and fuel adjustments) per tonne, subject to standard fuel adjustments, annual Ontario CPI adjustments;
- Covanta to process at least 50 per cent and possibly up to 65 per cent of the waste at their energy-from-waste facility in Niagara Falls, New York, with the remaining tonnes disposed of at Walker Industries' landfill in Thorold, Ontario. If Covanta does not meet this commitment during each year of the contract, it will refund Peel \$3 per tonne for any tonnage greater than 50 per cent sent to landfill and Peel has the option to terminate the contract with a 60-day notice period;
- Covanta would recover metals from the bottom ash and guarantee that the ash would be used as cover material at a landfill near their EFW facility;
- Covanta to provide an annual report which outlines the following: tonnes processed by EFW, tonnes to landfill, ash generated and location of disposal, kilowatt hours per tonne generated using Peel MSW, amount of greenhouse gas

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reduction realized by utilizing the EFW process with Peel MSW and emissions profile.

c) Algonquin Power Energy from Waste

Algonquin's offer contained the following key terms:

- Five year term with options for up to five one-year extensions at the discretion of Peel, subject to Algonquin being able to transfer waste to a new or refurbished facility at the same location;
- Peel to supply a minimum of 160,000 tonnes per year;
- Algonquin to be responsible for all aspects of managing wastes once received at the Algonquin Power Energy-from-Waste (APEFW) facility at an all-in price of \$82 (plus applicable taxes, annual CPI and fuel adjustments) per tonne, subject to standard CPI and adjustments, including, but not limited to:
 - Management of bottom ash, fly ash, air pollution control residue and unacceptable material (UNA);
 - Annual stack testing;
 - Management and funding of the Public Liaison Committee (with Peel staff continuing to be invited to attend);
 - Real property taxes for the APEFW facility.
- Algonquin would recover metals from the bottom ash but would not guarantee the beneficial use of the ash;
- Algonquin to be responsible for the maintenance and repair of the APEFW facility and the completion of all necessary capital improvements.

Algonquin provided an optional price of \$72 (plus applicable taxes and annual CPI adjustments) per tonne subject to standard CPI adjustments, for their services excluding the haulage and disposal of bottom ash. Under this option, Peel would remain responsible for the haulage and disposal of bottom ash which would allow us to use it for beneficial purposes. Peel's current cost for these services is approximately \$13 (plus applicable taxes, annual CPI and fuel adjustments) per tonne of MSW processed bringing Peel's all-in cost of this option to \$85 (plus applicable taxes, annual CPI and fuel adjustments) per tonne.

3. Analysis

Staff has reviewed the offers provided by the three companies and identified the following implications of accepting each offer:

a) Waste Management of Canada Corporation

- The installation of their 7.2MW landfill gas to energy system would be accelerated from 2016 to 2014;
- Recyclables extracted at the transfer station would be counted towards Peel's diversion;
- Peel would lose the beneficial use of ash from the EFW which currently accounts for approximately nine percentage points of diversion;
- New local jobs would be created (four would be created at WMCC's transfer station and nine would be created by their Mississauga-based hauling partner).

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- Trucks would carry payloads of at least 38 tonnes, which is an increase over current payloads and which would reduce the number of trucks used to haul waste and Peel's carbon footprint;
- Use of WMCC's transfer station for this tonnage will most likely result in waste collection operational efficiencies;
- All of Peel's waste would be going to one site for disposal. This would increase the consequences, in the event of a service disruption with WMCC;

b) Covanta Energy Corporation

- Energy (steam and electricity) would be recovered from 50 per cent to 65 per cent of the MSW;
- Recovery of ferrous and non-ferrous metals can be counted towards Peel's diversion;
- Continued accounting of the ash from 50 per cent to 65 per cent of the MSW as diversion;
- New local jobs associated with transfer services would be created and there is the potential for additional local jobs associated with haulage services;
- Peel's waste would be crossing the Canada/U.S. border and would be subject to potential risks associated with crossing the border;
- Provides multiple options for waste disposal in the event of service disruptions.

c) Algonquin Power Energy from Waste

- Energy (steam or electricity) would be recovered from all of the MSW;
- Recovery of ferrous and non-ferrous metals can be counted towards Peel's diversion;
- If Peel selects the option where Peel manages the ash, it will continue to be used for beneficial purposes at the Twin Creeks landfill and counted towards diversion;
- Supports local businesses and employment;
- Provides Peel with a local waste processing solution, which reduces haulage of waste;
- Provides multiple options for waste disposal in the event of service disruptions.

d) Traffic Implications

Currently, an average of approximately 90 curbside collection trucks enter the APEFW facility and 10 transfer trailers containing residue leave the APEFW facility each day.

If Peel ships its waste to WMCC or Covanta, the 90 curbside collection trucks would go to Wentworth, Disco or Orenda Transfer Stations, all of which are located in industrial areas and served by arterial roads. An estimated 15 to 20 transfer trailers per day would leave those transfer stations.

If Algonquin was to source 160,000 tonnes from other sources, it would most likely arrive in approximately 15 to 20 transfer trailers per day. Ten transfer trailers containing ash would continue to leave the site.

Staff in Peel's Transportation Planning division has advised that this addition of vehicles would not have a significant impact on the traffic conditions around the APEFW.

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4. Proposed Direction

The key financial, environmental and social considerations are shown in the following table and summarized below.

	WMCC	Covanta	Algonquin (including ash disposal)	Algonquin (with Peel ash disposal)
Financial Considerations				
All-in Tip Fee (\$/t)*	\$68.54	\$75	\$82	\$85
Annual Cost*	\$10,966,400	\$12,000,000	\$13,120,000	\$13,600,000
Annual Savings vs. \$122/t*	\$8,553,600	\$7,520,000	\$6,400,000	\$5,920,000
Environmental Considerations	<ul style="list-style-type: none"> Landfill gas will be converted to energy beginning in 2014 instead of 2016 Transfer station mining will extract additional recyclables that will be credited towards Peel's diversion All of Peel's waste will be trucked out of Peel 	<ul style="list-style-type: none"> Between 50 per cent to 65 per cent of the MSW has been targeted for conversion to energy and Landfill gas from Walkers Industries' landfill is converted to energy Metals extracted from the ash will be recycled and credited to Peel's diversion All of Peel's waste will be trucked out of Peel Ash will be beneficially used and credited towards Peel's diversion 	<ul style="list-style-type: none"> 100 per cent of the MSW will be converted to energy Metals extracted from the ash will be recycled and credited to Peel's diversion Fewer highway trucks compared to other options Ash may be beneficially used and credited towards Peel's diversion 	<ul style="list-style-type: none"> 100 per cent of the MSW will be converted to energy Metals extracted from the ash will be recycled and credited to Peel's diversion Fewer highway trucks compared to other options Ash will be beneficially used and credited towards Peel's diversion
Social Considerations	<ul style="list-style-type: none"> Local job creation associated with transfer and haulage 	<ul style="list-style-type: none"> Local job creation associated with transfer and possibly haulage Demonstrates ongoing commitment to EFW 	<ul style="list-style-type: none"> Supports local business and jobs Demonstrates ongoing commitment to local EFW Demonstrates social responsibility by managing Peel's waste within Peel Supports local economy 	<ul style="list-style-type: none"> Supports local business and jobs Demonstrates ongoing commitment to local EFW Demonstrates social responsibility by managing Peel's waste within Peel Supports local economy

*Excludes applicable taxes, CPI and fuel adjustments.

WMCC's offer provides Peel with the lowest cost waste disposal solution and provides some environmental benefits and local jobs but it includes trucking all of Peel's waste out of Peel and takes Peel out of EFW in the short term. There is also a price escalation risk due to fuel adjustments associated with trucking Peel's waste.

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Covanta's offer is the second lowest cost option and offers the benefits of 50 per cent to 65 per cent EFW for the 160,000 tonnes under consideration, however they have not guaranteed that they will achieve these EFW targets. It also provides some local employment but involves trucking all of Peel's waste out of Peel and includes the transport of some of the waste to the United States. There is also a price escalation risk due to fuel adjustments associated with trucking Peel's waste.

Algonquin's offer is the most expensive of the three but it offers 100 per cent EFW for the 160,000 tonnes under consideration, provides the greatest support for the local economy and demonstrates social responsibility by managing more of Peel's waste within its own borders.

In terms of the degree to which they provide environmental benefits and local economic benefits and the degree to which they demonstrate social responsibility, the options rank, from best to worst, as follows:

- Algonquin with Peel managing bottom ash
- Algonquin
- Covanta
- WMCC

The cost, from highest to lowest, follows the same order. In order to choose a preferred option, the following questions must therefore be answered:

- Are the added benefits worth the added costs?
- Is there a minimum environmental standard Council is willing to consider?
- Is there a maximum price Council is prepared to pay?

The cost difference between each option (and this has changed considerably since these options were last before Council), is relatively small. Arguably, the relative increase in benefits outweighs the relative increase in cost, which would support adoption of Algonquin with Peel managing the bottom ash as the preferred option.

From a minimum environmental standard perspective, Council has historically supported EFW and in previous meetings where short term disposal was discussed, a number of Councillors expressed an interest in maintaining at least 50 per cent EFW. This principle would support either Covanta or Algonquin. The offers proposed by Covanta and Algonquin also support Council's environmental based goals of increasing diversion, utilizing energy from waste, minimizing the impact of waste and reducing greenhouse gases as established through the 1997 Long Term Waste Management Strategy, the Strategic Plan, the Term of Council Priorities and the Climate Change Strategy.

The final question is whether there is a maximum price that should be paid. It is well known that Council is under significant pressure to control costs. In the next few years this pressure may well increase. All four options reflect considerable savings over the current price of \$122 per tonne, with estimated annual savings of \$5.9 million with Algonquin; \$7.5 million with Covanta; or \$8.6 million with WMCC. The difference between Algonquin and the lowest priced option is \$2.7 million per year. The difference between Algonquin and Covanta is \$1.1 million per year. While \$1.1 million is a not an insignificant sum of money, it is not a significant amount in the context of this decision.

On the basis of the above analysis, should environmental considerations outweigh financial considerations, Algonquin (with Peel managing the ash) is the preferred option. Should

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financial considerations outweigh environmental considerations, then WMCC is the preferred option.

Staff recommends negotiations of a short term waste disposal agreement with Algonquin Power Energy From Waste Inc. excluding disposal of bottom ash. If an agreement is not finalized with Algonquin by June 29, 2012, staff recommends that they be terminated and negotiations begin with WMCC.

FINANCIAL IMPLICATIONS

Sufficient funding is available in cost centre WW50102 to proceed with the recommended option or any of the other alternatives listed in this report.

Estimated annual savings from the offers are as follows: \$5.9 million with Algonquin; \$7.5 million with Covanta; or \$8.6 million with WMCC. Staff recommends that the annual savings resulting from the awarded offer be allocated to a long term waste disposal reserve to be set up.



Dan Labrecque
Commissioner of Public Works

Approved for Submission:



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