
DATE: June 10, 2011

REPORT TITLE: **ALGONQUIN POWER EFW WASTE SUPPLY AGREEMENT**

FROM: Dan Labrecque, Commissioner of Public Works

RECOMMENDATION

That the waste supply agreement between the Region of Peel and Algonquin Power Energy from Waste Inc. be allowed to expire at the end of the initial 20-year term, on April 24, 2012, without renewal;

And further, that the funds in excess of the cost of landfilling, that would have been committed to the Algonquin Power waste supply agreement had it been extended, be directed to a new Waste Management Reserve designated for the development of long term waste disposal option(s);

And further, that staff proceed expeditiously with a competitive procurement process to secure short term disposal capacity for approximately 150,000 to 160,000 tonnes per year of Peel's residual waste for an interim period of five to seven years with an option to extend for an additional one to two years at an existing Ontario based landfill and/or an Ontario based or out-of-province energy-from-waste facility.

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REPORT HIGHLIGHTS

- It will take approximately five to seven years to implement Peel's long term waste disposal option.
- The current waste supply agreement with Algonquin Power will expire on April 24, 2012.
- The Region may purchase the facility at "fair market value", extend the agreement for five years or allow the agreement to expire.
- If the Region chooses to purchase the facility, it must exercise this option prior to the final purchase price being determined. Pursuant to the agreement, the purchase price would be based on the fair market value of the facility as determined by the parties by mutual agreement or through arbitration after the exercise of the option.
- If the Region chooses to extend the agreement, short term environmental benefits will be realized but they will come at a financial premium.
- If the Region chooses to allow the agreement to expire, by default it may send all of its residual waste to the Ontario landfill it currently uses and will realize a savings of approximately \$6 million per year.
- Another Ontario landfill operator and a US based mass burn incinerator operator have both expressed an interest in managing the waste that would have been sent to Algonquin Power at prices competitive with Peel's current landfill price. Algonquin Power has also recently expressed an interest in negotiating a new agreement for a minimum eight year term at a slight reduction in price. This establishes an opportunity to conduct a competitive process to establish the Region's interim disposal solution until the finalization and implementation of the ultimate longer term solution.
- Staff recommends that the agreement with Algonquin Power be allowed to expire, that the resulting disposal savings be put in a waste management reserve designated for the development of Peel's long term waste disposal option and that a competitive procurement process be used to secure interim disposal capacity for the five to seven year period needed to develop a long term disposal solution.

DISCUSSION

1. Background

The Region manages approximately 260,000 tonnes per year of post 3R's residual waste. Approximately 158,900 tonnes per year is processed at the Algonquin Power Energy-from-Waste facility (Algonquin Power). The balance of the Region's residual waste (approximately 100,000 tonnes per year) and the bottom ash from the Algonquin Power Energy from Waste facility (approximately 40,000 tonnes per year) are sent to the Twin Creeks landfill in Warwick, Ontario under a 25 year disposal contract with the site's owner, Waste Management of Canada Corporation.

Staff has been working with Waste Management Committee since 2008 to update the Region's Long Term Waste Management Strategy, which includes enhancing its current 3R's initiatives and determining the preferred long term disposal solution. A council workshop to review the draft strategy is being planned for this fall.

While the amount of post 3R's residual waste will depend on the ultimate choice and timing of 3R's initiatives, staff estimates that even with enhanced 3R's initiatives in place, the Region will still have to manage approximately 200,000 tonnes per year of residual waste.

Preliminary analysis indicates that it will take five to seven years to implement the preferred long term disposal option.

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The Region's 20-year waste supply agreement with Algonquin Power will expire on April 24, 2012. The Region has three choices it can make under the terms of the current agreement:

- a) the Region may purchase the facility at "fair market value" by providing Algonquin Power notice to that effect by July 22, 2011;
- b) the Region may extend the agreement for an additional five years by providing Algonquin Power notice to that effect by July 22, 2011; or
- c) the Region may allow the agreement to expire at the end of the initial 20 year contract term (i.e. on April 24, 2012).

The Region hired HDR Corporation, an engineering firm that specializes in energy-from-waste (EFW), to help analyze the options available under the Algonquin Power agreement and to help develop waste disposal options for the Region's long term needs.

2. Analysis of the Options for the Algonquin Power Waste Supply Agreement

a) Exercise the purchase option with Algonquin Power

If the Region chooses to purchase the facility, it must exercise this option prior to the final purchase price being determined. Pursuant to the agreement, the purchase price would be based on the fair market value of the facility as determined by the parties by mutual agreement or arbitration after the exercise of the option.

Furthermore, exercising the purchase option would only make sense if the Algonquin Power facility was the preferred long term option. The Algonquin Power facility is not as efficient or reliable as a new mass burn EFW facility, so it is unlikely to be the preferred long term solution.

The purchase option is, therefore, not recommended.

b) Exercise the five year renewal option with Algonquin Power

Extending the Algonquin Power agreement for five years would provide Peel with local EFW capacity for the next five years as it develops its long term disposal option.

Extending the current waste supply agreement offers some short term environmental benefits when compared to landfill. For example, GHG emission models show that incinerating a tonne of waste at an EFW facility instead of landfilling it at a landfill with landfill gas recovery can reduce net greenhouse gas emissions by up to approximately ½ tonne eCO₂ (the exact amount of the reduction would depend on the assumptions used in the model, the composition of the waste, the energy recovery efficiency at the landfill and EFW facility, the haulage distances and the mix of power sources in the local energy grid).

There is however, an operational risk associated with the reliability of older parts of the facility that have not been recently replaced. For example, the weigh scales, which were not replaced with the boiler system in 2010, were frequently not operational from February to March 2011.

There is also a cost premium of approximately \$6 million per year over landfilling.

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c) Allow the agreement with Algonquin Power to expire

If the agreement is allowed to expire, approximately \$6 million per year (\$30 million over the five year extension period) will be available to put towards the development of the long term solution. This is an important consideration given the current fiscal outlook.

If the agreement is allowed to expire, the default option (that is, the option that requires no further decisions or investigation) is to send all of Peel's residual waste to the landfill it currently uses.

Staff is, however, aware of three other short term options for managing a portion of Peel's residual waste.

- An alternative landfill operator has expressed an interest in managing the portion of Peel's waste that is currently sent to Algonquin Power at its Ontario landfill at a price that's competitive with Peel's current landfilling cost. The alternative landfill would provide for a shorter haul distance than the current landfill and would allow for a second service provider in case of emergency or dispute.
- An alternative EFW operator has expressed an interest in managing the portion of Peel's waste that is currently sent to Algonquin Power at its out of province EFW facility at a price that's competitive with Peel's current landfilling cost. The alternative EFW facility offers a shorter haul distance than our current landfill and all the benefits of EFW. The EFW operator has indicated that it would team up with an Ontario based waste management company to provide haulage and to provide landfill back-up in case of border issues.
- Algonquin Power has recently expressed an interest in negotiating an agreement with a term of at least eight years at a slightly reduced price from their current price.

If council adopts the recommendation to allow the Algonquin Power agreement to expire, staff would proceed expeditiously with a competitive procurement process to explore all viable interim disposal options.

Given their involvement in the process to-date and their expertise in assessing EFW facilities and waste disposal technologies, HDR would be retained to help staff develop the specifications for the procurement document and to help staff analyze the resulting submissions. This would be done by either extending their existing purchase order or by issuing a new one, depending on the final scope of work.

3. Proposed Direction

In developing its recommendation, staff considered the short-term benefits of extending the agreement for five years and also the long term considerations (i.e. whether an extension would facilitate and support the implementation of the long term solution).

The primary short term benefit that would be derived directly from extending the agreement is a reduction in greenhouse gas emissions up to approximately ½ tonne of eCO₂ per tonne of waste combusted (when compared to Peel's current landfill) for a total reduction of up to approximately 80,000 tonnes of eCO₂ per year. (If Peel's waste is sent to the out of province EFW facility instead of landfill, these benefits would still be realized.) Paying a \$6 million premium to reduce greenhouse gas emissions by 80,000 tonnes works out to about \$75 per

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tonne of eCO₂, which is high in comparison with generally accepted financial proxies for carbon credits. While there is no viable market for carbon credits in Canada, proxies of less than \$10 per tonne are the norm.

Additional short term benefits that could be seen as being derived indirectly from extending the agreement include local jobs and support for the neighboring Norampac facility.

The Algonquin Power facility employs approximately 50 to 60 workers. While extending the agreement would help ensure the short term operation of the Algonquin facility by providing a guaranteed waste stream and a guaranteed revenue stream for five years, it is important to understand that allowing the agreement to expire would not necessarily result in its closure. Algonquin Power could (and presumably, would) secure an alternative waste supply and continue to operate the facility. If, on the other hand, Algonquin Power chose to close the facility (including its gas fired boiler located at the site), up to 60 jobs could be lost. This would be offset somewhat by about 20-30 new transfer and haulage jobs.

Algonquin Power provides heat (in the form of steam) to the neighboring Norampac fibre board plant. Algonquin Power generates the steam at its EFW facility or, when the EFW facility is down, as it was from January to July of last year, from a gas fired boiler located at the same site. If Algonquin Power chooses not to provide steam to Normapac, either from its EFW facility or from its gas fired boiler, Norampac would have to restart its own gas fired boiler.

Concerns have also been raised with respect to the potential loss of property taxes on the existing site. As council will recall, the Region of Peel actually pays the property taxes on this site – which are currently in the range of \$296,000 per annum. About 52 per cent of this value is paid to the province of Ontario through the educational tax component and the balance is basically split between the Region and the City of Brampton. Expiration of the contract would shift this expense to Algonquin. Staff does not consider this element to carry a major weighting in our overall recommendation.

Staff also considered the fact that funding both a short-term extension of the Algonquin Power agreement and the expenditures necessary to develop the long-term solution would put significant pressure on the Region's waste management budget over the five year period.

Staff shared its analysis with a working group consisting of staff from Waste Management, Finance, Legal and Waste Management Committee members and obtained feedback.

Given the current economic uncertainties faced by the taxpayers in Peel Region and given the greater public policy benefits of pursuing a sustainable long-term solution, staff recommends that the current waste supply agreement be allowed to expire in 2012, without renewal.

FINANCIAL IMPLICATIONS

There are two issues that Regional Council is dealing with as part of the long term strategy. One is the decision related to the long term (30+ years) disposal of its waste. Discussions at the Waste Management Committee confirm the value of the existing long term disposal contract at the Twin Creeks landfill site and a commitment to supplement the existing landfill contract with a viable technology. It is anticipated that the short list of potential technologies, that will be

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included in a request for expressions of interest or similar procurement process, will be finalized this fall.

The decision before council at this point is less strategic and is simply to decide the best course of action for the Region to manage the waste that is currently managed through the Algonquin Power EFW contract for the next five to seven years while the long term solution is being developed.

At this point, Regional Council has a number of options available to it.

- The all in cost to process waste at Algonquin Power in 2012 is expected to be approximately \$122 per tonne, with respect to the current contract. As noted earlier, they have recently indicated an interest in providing a reduction in the range of \$5 per tonne, subject to negotiation.
- The all in cost to load, haul and dispose of waste at the landfill Peel currently uses is expected to be approximately \$72 per tonne for the first 120,000 tonnes and approximately \$86 per tonne for any remaining tonnes in 2012.
- Alternative options in the same range as our current landfill contract at other sites are also likely available at Ontario land fill and outside Ontario EFW sites.

The cost difference between the above various options is estimated to be approximately \$6 million per year. All numbers are subject to CPI and fuel adjustments so actual 2012 numbers may vary slightly from the above estimates.

In consideration of all the variables, the staff recommendation favours exploring competitive options for dealing with the tonnage currently processed at the Algonquin Power facility. As such, the recommendation is to not extend the current contract and to identify an interim disposal solution through a competitive process.

Staff is proposing that any savings resulting from this interim solution be set aside in a newly created Waste Management Reserve to be used for the development of Peel's preferred long term waste disposal option(s) and to potentially support the implementation of the Long Term Waste Strategy.

CONCLUSION

The Region's current waste supply agreement with Algonquin Power will expire on April 24, 2012 unless the Region exercises its option under the agreement to (i) purchase the facility at "fair market value" or (ii) extend the agreement for an additional five years.

Allowing the current waste supply agreement with Algonquin Power to expire will result in annual disposal savings of up to approximately \$6 million per year.

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It is proposed that the agreement be allowed to expire on April 24, 2012, and that the resulting disposal savings be directed to a newly created Waste Management Reserve to be used to develop Peel's chosen long term waste disposal option.

It is also proposed that a competitive process be undertaken to evaluate all viable options and select an interim disposal solution for the five to seven year period following the expiration of the Algonquin Power agreement on April 24, 2012.



Dan Labrecque
Commissioner of Public Works

Approved for Submission:



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