

March 23, 2011

# Durham-York Incinerator Project Costs Overview

by Linda Gasser

## **Incinerator Project History – Key Dates**

EA Terms of Ref. approved by Prov.	March 2006.
Incineration Selected as Preferred Alt.	June 2006
Preliminary Business Case	April 2007
Request for Qualifications	July 2007
Clarington 01 Site Selected	January 2008
Detailed Business Case	May 2008
RFP issued	August 2008
Selection of preferred vendor	April 2009
Go –Ahead vote to submit EA	June 2009
“Final” EA submitted to MoE	July 2009
Amended EA submitted to MoE	Nov. 2009
Minister’s EA approval	Nov.19. 2010
Project Agreement executed	Nov. 25.2010
C of A submitted to MoE	March 3.2011

# **EFW Preliminary Business Case Report 2007-J-13 Section 2.0**

*“It is important for decision makers to understand the magnitude of financial impacts and/or risks in carrying out an EFW facility, to ensure an informed decision.”*

# 2007-J-13 Preliminary Business Case Assessment by Deloitte & Touche

- Deloitte estimated EFW “best case” scenario costs for an EFW of 150-250,000 tpy **including** capital, operating and financing costs, at \$115 - \$139 per tonne\*. (pg 7)
- Estimated to be \$35-\$55 per tonne higher if located in York
- Deloitte estimated “Other Ontario landfill” costs to be \$137 per tonne **in 2011** (pg 6)

\*Debt amortization at 5.5%

# **MAY 2008-J-13 –Detailed Business Case**

- For 140,000 tpy project start up
- Durham to own 78.6% of project  
(to provide 100,000 tonnes)
- York 21.4% (commit to 20,000 tonnes)
- Durham and York equally share costs for 20,000 tonnes surplus capacity

In terms of comparing costs on a present value basis, the table below shows that the cost differences between the two options are quite marginal. As at the time of the writing of this report, Durham's long-term borrowing rate was 5 percent. At a 5 percent discount rate, the EFW option is slightly (\$1.41 million or less than one percent) more expensive than the Other Ontario Landfill option.

:

- That draft MoU would state that Durham Region would own the land on which facility located (pg 25)
- Provide **state of the art** flue gas treatment /emission control technology that meet or exceed EU monitoring & measurement standards (pg 12, 27)
- Fed Gas Tax from 2009-2010 estimated to be \$16.5 million annually (pg 22)
- Using fed gas tax estimated EFW debt to be paid off in 6 years. (pg 21)

2008-J-13 cont'd

## 2008 Business case estimates

<b>Cost</b> (million)	<b>Durham</b>	<b>York</b>	<b>Total</b> (millions)
<b>Capital</b>	<b>\$155.3</b>	<b>\$42.3</b>	<b>\$197.6</b>
<b>Operating</b>	<b>\$ 13.3</b>	<b>\$ 3.6</b>	<b>\$ 16.9</b>



<b>Cost</b> (million)	<b>Durham</b>	<b>York</b>	<b>Total</b> (millions)
<b>Project</b>	<b>\$214.7</b>	<b>\$57.8*</b>	<b>\$272.5</b>
<b>Operating</b>	<b>\$ 4.341*</b>	<b>?*</b>	<b>\$ 14.7</b>

- **Report 2009-COW-03**
- Did not show York's share (**York #s based on 21.4%**)

\*Durham **total net facility operating cost** - estimated electricity revenue at \$8,590,400 and materials recovery at \$550,970 (pg 15)

- Project Agreement states that Covanta can “buy-down” compliance – which means electricity revenues may not actually be “guaranteed”.  
Sec.6.26 d (iii)

## **2009 COW-03 (June 16, 2009) cont'd:**

Estimated federal gas tax revenues at \$17.3 million annually (pg 2)

Estimated up front financing of \$100 million in Fed gas tax reserve fund (pg 2)

Expected balance (\$214.7 million less reserve & land sale) to be financed and retired over approx. 8 yrs (pg2)

- At the February 16, 2011 Council meeting, Comm. Clapp responded approx. \$49 million now in gas tax reserve. \$18-19 million p.a. anticipated until 2022.
- What other projects could gas tax fund? E.g. transit.

Number of project cost updates provided by  
Durham staff since June 24, 2009?

**Zero**

York Region staff provided two project updates  
including cost information to their council:

- 1) Report 7 September 23, 2010 (next slide)
- 2) Report 1 Dec. 16, 2010 at York Council  
Jan. 27, 2011(**includes HDR memo**)

**Table 2:**  
**Total Project Budget Authority (TPBA)<sup>1</sup>**

	<b>Existing TPBA</b>	<b>Requested TPBA</b>
Capital Construction <sup>2</sup>	\$235,700,000	\$245,900,000
Architectural Enhancements <sup>3</sup>		\$9,000,000
Host Community Agreement Commitments <sup>4</sup>		\$16,000,000
Owner's Engineer	\$5,600,000	\$5,600,000
<b>York Region Subtotal (21.4%)</b>	<b>\$51,600,000</b>	<b>\$59,200,000</b>
Purchase 50% of Site Property	\$2,000,000	\$2,000,000
Contribution to Oversizing to 250,000 tonnes/year <sup>5</sup>		\$5,100,000
Allowance for MOE Conditions		\$2,000,000
<b>York Region Total</b>	<b>\$53,600,000</b>	<b>\$68,300,000</b>

1. Excludes HST

2. Revised TPBA includes estimated escalation from April 19, 2009 to February 1, 2011 and cost to bring utilities to the site boundary

3. Allowance for architectural enhancements as per the RFP

4. Increase from previous estimate of \$10,000,000 due primarily to increased land expropriation costs

5. Excludes contribution included in York's base 21.4% contribution

York's total costs increased from:

<u>June 2009</u>	<u>Sept. 2010</u>
\$53.6 million	\$68.3 million

- Capital construction costs up by \$10.2 million since 2009 (see notes previous slide)
- Estimated by York @ \$245.9 million

# **Durham Report 2011-J-15**

Feb. 3, 2011 Sec. 3 pg 3

## **3. ENVIRONMENTAL ASSESSMENT APPROVAL**

On November 19, 2010, the Regions received notice of approval from the Ministry of the Environment (MOE) (Attachment No. 3). As expected, that approval came with several Conditions of Approval (Conditions) that must be followed under the EA Act. Some of those conditions are directly associated with the facility and will require efforts jointly from the Regions and Covanta. Others are more broadly connected to the Regions' larger integrated waste management systems and will require actions from both Durham and York.

Staff and the project team consultants performed a complete review of the conditions and based on currently available information, determined that none of the conditions affect the overall project capital cost or annual operating fee to be paid to Covanta. The Project Agreement also satisfies the relevant EA Conditions as indicated in Attachment No. 1.

- Report 2011 J-15 – based on “**currently**” available info for Feb. 3. 2011 Joint Committee.
- Comm. Curtis said March 2<sup>nd</sup> , 2011 costs can only be known “with certainty” **AFTER** Certificate of Approvals received.

# Extrapolating from York Report

- (78.6% of 2009 capital cost of \$235.7 million = \$185.3 million)
- Durham's 78.6% share now could be: \$193,277,000
- York has budgeted \$ 2 million for compliance with EA conditions.
- Durham???



- **We don't know:**
- Total of **other** project operating costs in addition to "Operating Fee" paid to Covanta?
- Total project costs including escalation.
- If total costs remain within "envelope" Durham Council approved June 24, 2009 i.e. **\$272.5 million total – Durham's share: \$214.7 million.**

- **EA conditions.** If York staff could provide an allowance for EA conditions **before** conditions known, why can't Durham staff now that EA conditions are known?
- Definition of “pre-screening” waste versus “pre-sorting” of waste. Which is required to meet Condition 21? Estimated cost?
- Would complying with all Conditions of EA Approval - particularly Condition 21 - push costs **beyond** the approved 2009 cost envelope?



## Memorandum

**To:** Mirka Januszkiewicz, Region of Durham  
Laura McDowell, Region of York

**Cc:** Gioseph Anello; Greg Borchuk (Region of Durham)  
Dave Gordon (Region of York)

**From:** Jim McKay, HDR

**Date:** November 23, 2010

**Re:** **EA Conditions of Approval and Requirements to Ensure Compliance**

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## Conclusion

In order to ensure compliance with these conditions, the Regions will need to:

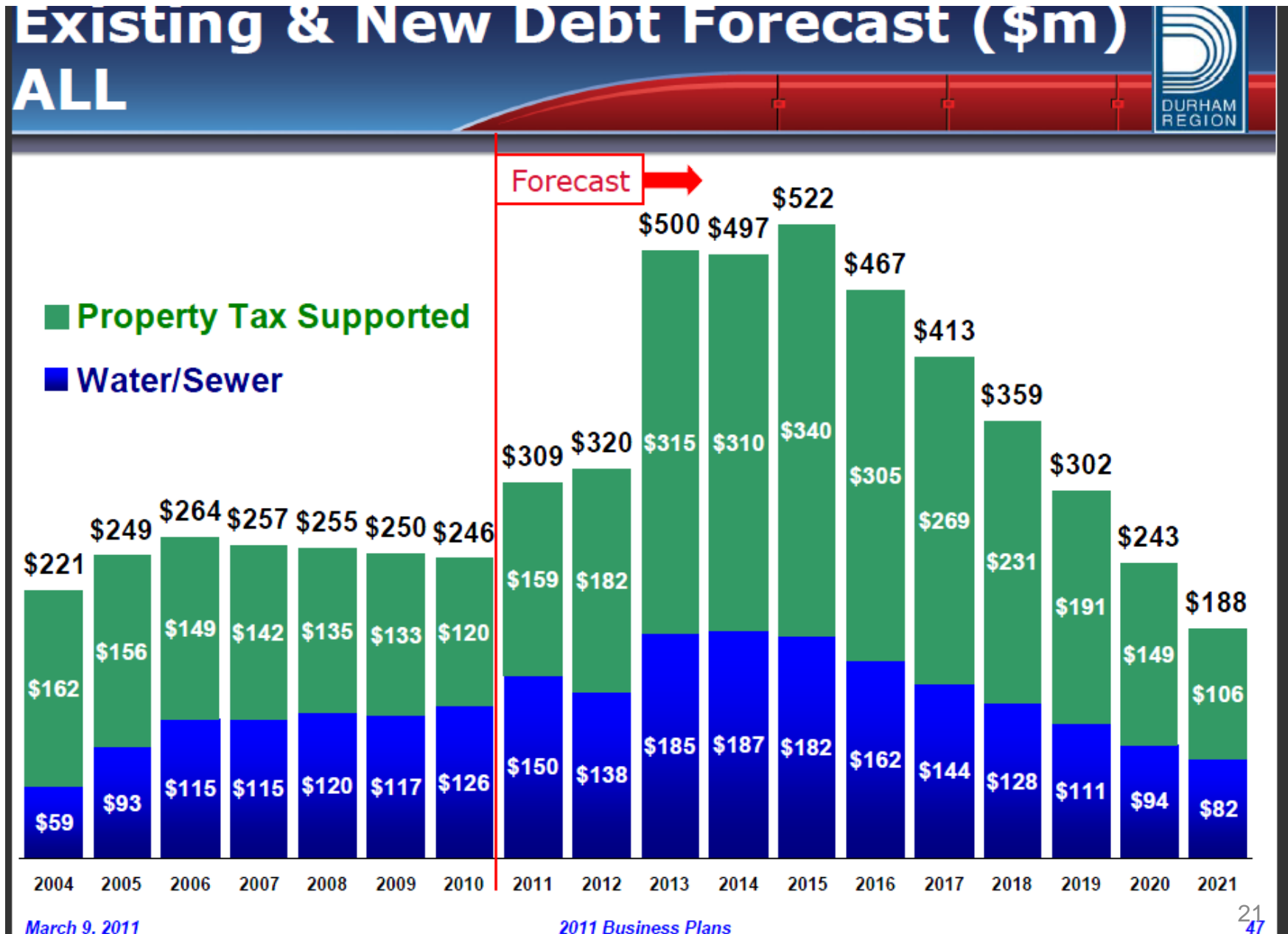
Have some degree of control over all materials being delivered to the facility prior to there being "received" as per the definition in conditions;

Ensure all materials being delivered to the facility comes from sources that have been provided full access to the Regions comprehensive waste diversion programs;

Verify the location from which the waste was generated; and,

Verify the quantity being processed by the facility in accordance with approved processing capacity and contractual guarantees/commitments with Covanta.

**In essence, the Regions will need to take full responsibility for the flow and accounting of all waste materials being delivered to, and processed at, the facility prior to their receipt.**



# Durham's Debt Spike in 2013

- Mr. Clapp confirmed the debt spike includes EFW borrowing.
- Comm. Clapp advised that *“the 2011 debt charges were estimated at \$39 million and debt charges would peak in 2016 at approx. \$79 million”*.
- Estimated financing cost in 2008 was 5%. 2013?

Recall in 2007-J-13 Deloitte estimated EFW “best case” scenario costs - **including** capital, operating and financing costs at \$115 - \$139 per tonne?

Operating **fee** alone works out to \$104.75 per Tonne @ 140,000 tpy. Fee same if less waste processed - Put or Pay

## ARTICLE 27 TERMINATION PAYMENTS

### 27.1 Termination for Convenience Payments

**27.1.1** If this Agreement is terminated by the Owner pursuant to **Article 25** then, subject to **subsection 14.7** and the outcome of any Dispute outstanding at the time of any termination, the Owner will pay to the DBO Contractor an amount equal to the aggregate of:



(a) The value of the Work performed to the date of termination for which Payments have not been received determined with reference to the Milestone Payment Schedule;

(b) The reasonable cost of cancellation of contracts and agreements (including, relevant employment severance costs), as well as any unrefunded bonding and insurance premiums relating to periods after the termination of this Agreement that were funded by the DBO Contractor with its own funds and not with funds provided by the Owner

- c) Demobilization costs actually incurred by the DBO Contractor up to an amount equal to **five percent (5%)** of the unpaid Lump Sum Price, it being acknowledged that amounts paid under subparagraph (a) shall reduce the amount of the unpaid Lump Sum Price for the purposes of determining the demobilization costs; ....

- Lump sum price: **\$235,759,000**
- 5% of lump sum price: **\$11,787,950**
- **Project cancellation costs may be Total of Article 27 a) b) and c)???**
- Requires legal opinion

- FYI in 2007-J-13 Deloitte identified Durham-owned Brock Township landfill as a **possible** short-term option – at that time estimated capacity to 2021. Report noted “current political issues” (pg 6)
- (Diversion rate in 2006 was 42 or 44%)
- Deloitte estimated 2011 Brock costs at \$76 per tonne.
- Durham currently sends residuals to Modern Landfill in New York @ \$100 Tonne-competes in Ontario market.
- (Note- Durham may be sending additional waste to Brock landfill – see Report 2011-WR-2)

Ministry of Environment approval of the Township of Brock Landfill RAP subsequent to the issuance of Tender T-267-2010B has significantly altered waste transfer and haulage requirements and therefore a re-evaluation of residential non-hazardous waste and green bin organics transfer and haulage options is required.

The re-shaping of the Brock Landfill slope will require increases to the amount of waste currently disposed of at the site by up to 60,000 additional tonnes over the next three years to create the necessary height and slope angles. The final sloping plan and tonnage requirements will be negotiated with the MOE before commencement of the work, but will significantly impact waste transfer and haulage specifications noted in the outstanding Tender T-267-2010B. The Region will need to divert waste to Brock Township landfill that would otherwise have been hauled to the Modern's Landfill site in New York for disposal.

In 2008, diverting Blue Box materials cost Durham Region \$97.55 net per tonne. This was considerably lower than the provincial average (\$181 net per tonne), the average for large urban municipalities (nearly \$159 net per tonne) and the average for urban regional municipalities (\$129 net per tonne).

*MoE memo dated May 11, 2010*

- Reality check. It's NOT landfill **OR** incineration. Incineration means to both “*burn and bury*”.
- Incineration requires landfill for fixed tonnage of ash residues **and** for “unacceptable” waste\* over its operating life. \*Partial list C of A, App.D-3.
- Over the medium term, until Ont. completes WDA review and enacts EPR/other reduction strategies, landfill will be a component of every waste strategy in Ontario **including incineration**.



Recall Durham staff report 2007-J-13:

*“It is important for decision makers to understand the magnitude of financial impacts and/or risks in carrying out an EFW facility, to ensure an informed decision.”*

Durham **has** options: contingency disposal, \$ incentives and the opportunity to evaluate less costly, less risky, safer and more flexible waste management options.

# CONCLUSION

- PLEASE do NOT move forward with project and 2011-J-15 until results of following known:
- Updated EFW business case that fairly compares all viable options & includes all project costs
- A review of draft C of A to ensure all council direction and EA commitments & Conditions incl.
- An **independent** legal review of Project Agreement to determine it captures all council direction and commitments, EA conditions - breakup fees info.