

Incinerator would cost \$198 million

Professor questions sorting procedures

Sat May 17, 2008

By Reka Szekely

DURHAM -- Although it would cost more up front, incinerating Durham's garbage is the best available long-term option, says the Region's business case for the project.

The business case, released Friday, compares energy-from-waste (EFW) to using a landfill site outside the region, somewhere in Ontario. The EFW project comes out ahead, according to the financial analysis by Deloitte and Touche, because it removes the risk and uncertainty surrounding fuel costs and the shortage of landfill capacity in the province.

"What it will do is bring a solution to the waste disposal situation on a long-term basis," said Jim Clapp, the Region's commissioner of finance.

And a UOIT professor said the report was acceptable though he had a few questions.

The facility, which would be located in Clarington near Courtice Road and Hwy. 401, would cost \$198 million to construct with Durham Region picking up \$155 million of the tab and York Region paying the rest. The facility, accepting 140,000 tonnes of waste per year, would be state-of-the-art, meeting or exceeding both Ontario's guidelines and European Union emission standards.

The annual operating and maintenance cost of the facility would be \$17 million with Durham paying \$13 million of that. Among the operation costs is just less than \$1 million in property taxes; two-thirds of which would go to the Municipality of Clarington, Mr. Clapp said.

If federal gas tax funds are used to pay a portion of the up-front costs, the Region's debt related to the facility would be paid off in six years. That means by 2017 on, the cost of incineration would be lower than using landfill somewhere else, the report said. If the gas tax is not used and the facility is fully funded through debt financing, it would take until after 2031 for the cost of incineration to be lower than landfill.

Previously, the Region has used gas tax dollars to fund its material recovery facility. Durham will bank \$47 million in gas tax dollars from 2008 through to 2010, which could be used as an up-front payment on the EFW facility, Mr. Clapp said. Beyond that, the Region would budget \$16.5 million per year for the incinerator.

"The gas tax can only be used in certain areas, waste is one of them," Mr. Clapp said, and added regional municipalities cannot use it for roads.

Overall, the finance commissioner said EFW would be a much more predictable option during the next 25 years. He compared it to buying versus leasing.



The map shows the proposed location of an incinerator in Courtice, south of Hwy. 401.

"In this case we're buying and providing ourselves with a solution instead of relying on a third party."

The business case didn't include potential revenue from district heating, however, the capability would be built into the plant. It also didn't include savings to the Region if the EFW plant heated the nearby Courtice Water Pollution Control Plant or detail any benefits should a carbon trading system be implemented by the federal government.

The business case screened three other options: continuing to ship waste to Michigan, using the Brock Township landfill, and stabilized landfill. Michigan is set to close its border to Ontario garbage in 2010, the Brock Township landfill does not have enough capacity to meet the Region's long-term needs, and building a stabilized landfill would take too long as it would involve selecting and purchasing a site and going through a full environmental assessment.

Ibrahim Dincer, a UOIT professor and engineer specializing in sustainable energy systems, said the report looked fine overall.

However, while the emissions limits in the report are acceptable, Dr. Dincer would have liked to have seen what specific emission controlling technologies would be used.

"There are certain technologies, quite costly, in terms of emission control that are very effective," he said. As well, he would have liked to have seen a life-cycle assessment for the EFW facility to see projected costs over the plant's whole life compared to landfill.

As well, Dr. Dincer raised concerns about sorting out hazardous materials, such as batteries, which could affect emissions from the plant, He said currently many people put such material in the garbage and it needs to be sorted out before it gets to the plant.

"At the final point, sorting out is very difficult and very costly," he said.

The Region considers the approval of the business case a milestone for the EFW project. It goes to committee next Wednesday and to council May 28.

"If it's not approved, we have to stop and reconsider what we're going to do," Regional Chairman Roger Anderson has said, adding there are still four or five points in the process where the process could be stopped by council.

Another major milestone, Mr. Anderson has said, will be the site-specific health risk assessment.

If the business case is approved, the Region would issue a request for proposal to the five vendors pre-qualified to build the incinerator.