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Sault Ste Marie signs MOU with EnQuest

On Monday, August 18, Sault Ste Marie signed a Memorandum of Understanding with EnQuest Power Corp. to facilitate the building of a demonstration plant in the Sault. The MOU between the city and EnQuest will net the company $3.4 million in funding from Sustainability Development Technology Canada to build the facility in Sault Ste. Marie. A city capital contribution is not required. Further, EnQuest has said it will provide the city with a royalty or payback of $200,000 per plant up to $5 million if the demonstration plant nets the company contracts in other cities around the world. Currently, EnQuest is working with 12 other cities that have shown a significant interest in the technology.

Council met with Enquest president Jayson Zwierschke behind closed doors earlier this summer to hear his proposal and determine whether a deal could be struck.

If the project moves forward past the first pilot project stage, a demonstration plant will be built somewhere in the city and use city waste as feedstock for the process that will turn waste into energy.

A site has yet to be identified but a search will be conducted with the assistance of the Economic Development Corp., said John Febbraro, director of industrial marketing.

A demonstration plant will, with environment ministry approval, process up to 75 tonnes of waste a day. Under the terms of the agreement, the demonstration plant must be built within five years of approval.

The city will have an annual expenditure of about $1.5 million in tipping fees to Enquest, which is currently not included in the budget. The city could benefit by not having to find or borrow more than $100 million to establish a new landfill site.

Enquest has been operating its pilot project at the city's Fifth Line landfill for about six months under a lease arrangement with the city. The technology uses a steam reformation process that turns curbside waste into energy.

Curbside waste is processed through equipment that separates out magnetic material and shreds the waste to a manageable size. Other equipment breaks the waste down further and compacts it. Once the oxygen is extracted, the waste is pushed into a kiln with a small amount of water and tumbled until heated to about 1,000 degrees C. The steam reformation process includes putting the material through scrubbers and filters to remove acid gases and mercury. It turns the material to a syngas. During testing, the gas is flared off to meet ministry requirements.