

## **COMMITTEE OF THE WHOLE SEPTEMBER 19, 2005**

### **CERTIFICATE OF APPROVAL – DONGARA PELLET FACTORY INC.**

#### **Recommendation**

The Commissioner of Engineering and Public Works recommends that:

1. The Ministry of Environment be advised that the City does not object to the proposal submitted by Dongara Pellet Factory Inc. to process up to 800 tonnes per day of solid waste at the proposed location in the City of Vaughan; and,
2. Copies of this report be sent to the Ministry of Environment, Environmental Assessment and Approvals Branch, Floor 12A, 2 St. Clair Avenue, Toronto Ontario, M4V 1L5, to the attention of Mr. Timothy Edwards, Senior Review Engineer.

#### **Economic Impact**

There is no economic impact on the Public Works Department's budget as a result of this report.

#### **Purpose**

To advise Council of the proposal to build a waste pellet plant in the City of Vaughan that will handle up to 800 metric tonnes per day of municipal solid waste.

#### **Background - Analysis and Options**

Dongara Pellet Factory Inc. has requested the Ministry of Environment to approve a Provisional Certificate of Approval to operate a waste disposal site at a property described as Part of Lot 2, Concession 8, being Part 2 on Reference Plan 64R-5232, City of Vaughan, Ontario. It is proposed to be located at the northeast corner of Highway 407 and Highway 27.

The plant is designed to handle 800 tonnes of municipal solid waste per day, and will include front-end sorting features to capture all recyclable materials that may remain in the waste stream, as well as any household hazardous materials that have been improperly disposed of in the household waste stream.

In their submission to the Ministry, Dongara indicates that the process is designed to convert 200,000 tonnes per year of municipal solid waste into 190,000 tonnes of fuel pellets. The concept of the plant is to process household waste into pellets that will be used as fuel in cement kilns to replace coal. The process is as follows:

- Household waste is unloaded on the tipping floor.
- Any recyclable materials remaining in the waste stream are positively selected (pulled out), and captured
- Moisture is removed from the garbage and this liquid is reused and/or filtered and enters the sewage system
- Non-recyclable materials such as fabric, leather, non-recyclable plastic are pulled out, shredded and mixed with high calorific products (such as carpet wastes, clean wood, acceptable plastic film etc.).
- This mix is compressed into a pellet for sale as fuel to industries outside Ontario.
- Whatever material is remaining, such as batteries, PVC's, etc., are sent to appropriate disposal sites.

Bag breakers will be used to release the contents of the bags and allow for easier processing. The materials will then pass through 2 screens. Separation activities will result in 6 potential

streams, other than the materials used for the pellet process. These are ferrous materials, aluminium, type 1 and 2 plastics, glass, aggregates and residues.

The final product (pellet) has been tested, and the results indicate that it contains far less nitrogen, sulphur, vanadium, mercury, lead, chromium, cadmium and barium than coal. The pellets could replace coal use in certain functions, and reduce the amount of waste landfilled in the U.S. and Ontario. No burning of the pellets will take place on-site or in Ontario.

The site would be large enough to fully enclose the pellet factory so there would be no open or outside storage of waste or pellets. The building itself would be approximately 9,950 square meters in area and contain all the necessary offices and processing operations. The tipping floor would be approx. 2200 square meters in area and be equipped with an overhead crane system to move the materials to the in-floor hoppers. The plant design shows an in-house laboratory to analyze the pellets and other materials to ensure consistency of the fuel product. A project specific plan will be prepared that deals with fires, floods, power failures and spills. They have indicated that the plan would be developed with municipal involvement and agreement to put those plans in place.

The Dongara pellet plant is one means by which the Region of York is looking at reducing its dependency on landfill for disposal of waste. Vaughan's municipally collected waste forms part of the material York Region is currently hauling to landfills inside and outside Ontario. The Dongara plant has the capacity to handle all of Vaughan's municipally collected solid waste.

#### **Relationship to Vaughan Vision 2007**

The reduction of the Region's dependency on landfill will benefit the City, and fits with Vaughan Vision A-3 "Safeguard Our Environment",

#### **Conclusion**

Staff have reviewed the request for a Provisional Certificate of Approval by Dongara Factory Inc., and find no technical reason in their submission to object to this application. As such, it is appropriate to advise the Ministry of this.

#### **Attachments**

Location Map

#### **Report prepared by:**

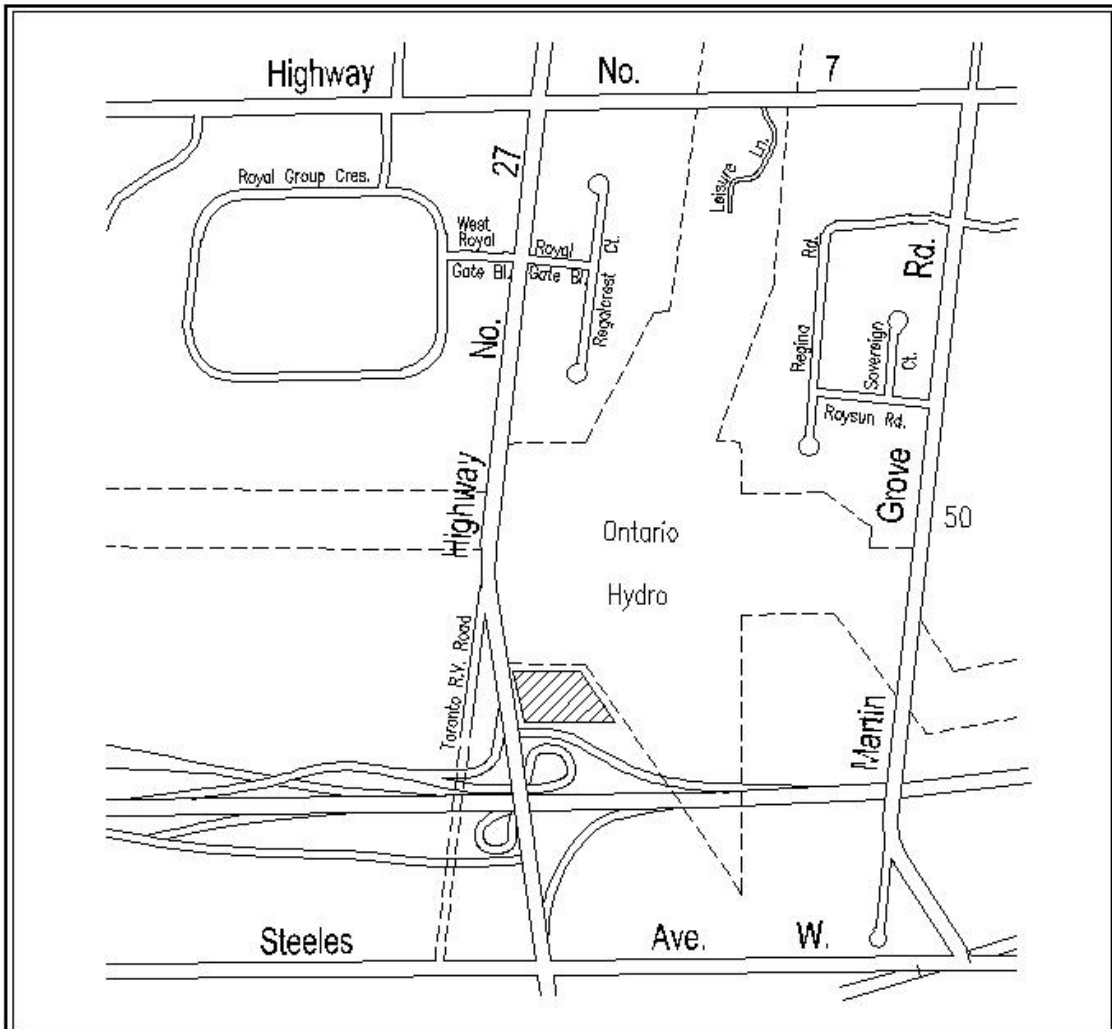
Brian T. Anthony, CRS-S, C. Tech.

Respectfully submitted,

Bill Robinson, P. Eng.  
Commissioner of Engineering and Public Works

Brian T. Anthony  
Director of Public Works

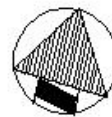
# LOCATION MAP



## PROPOSED DONGARA PELLET FACTORY SITE

### LEGEND

 SUBJECT LANDS



NOT TO SCALE