



Ravensview Environmental Centre Secondary Treatment and Capacity Upgrades

Information Newsletter June 2008



PROJECT OVERVIEW

Utilities Kingston is pleased to let our project neighbours, residents and friends know the status of the project to date. We will provide updates via newsletters and information on the City and Utilities Kingston websites.

A Comparison of the aerial photo above and the artist's rendering on page 2 shows the site has been transformed and now closely resembles the rendering which was completed in 2006.

For a bird's eye view of the construction site check out the project website at:

<http://www.utilitieskingston.com>

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LEGEND

- 1 Upgraded Screening
- 2 Upgraded Grit Removal
- 3 Upgraded Primary Clarifiers (1 to 7)
- 4 New Low Lift Pumping Station to transfer Primary Effluent to Biological Aerated Filters
- 5 New Biological Aerated Filters (BAF)
- 6 Secondary By-Pass and Secondary Effluent Channel to Chlorine Contact Tank
- 7 Existing Chlorine Contact Chamber
- 8a Existing Primary Anaerobic Digesters
- 8b Existing Secondary Anaerobic Digester
- 8c New Anaerobic Digester with Thermophilic Capabilities
- 9 New Digester Complex
- 10 New Sludge Dewatering Facility with two High-Capacity Centrifuges and Sludge Cake Pumping System
- 11 New Indoor Biosolids Storage Facility Divided in Three Separate Bunkers Maintained under Negative Pressure and Exhausting through an Activated Carbon Odour Treatment System
- 12 New Flare
- 13 New Power Building*
- 14 Existing Building Retrofitted to a Maintenance Shop
- 15 Renovated Administration Building, including New Control Room for Upgraded Plant

*NOTE: Previously referred to as the "Cogeneration Facility, this building houses two 575 kW Natural Gas Back-up Generators and the 375 kW Biogas/Natural Gas Combined Heat and Power Generator.



BAF Facility: This secondary treatment facility will remove more nutrients and dissolved contaminants from the sewage resulting in cleaner effluent to the lake. In the photo, some of the cells are being leak tested to ensure they are water



Biosolids Storage Facility: The pre-cast Concrete roof has been installed on this building. The biosolids will be stored in this facility until it can be applied to farm fields. The building will be fully enclosed with an odour control system to minimize odours, one previous concern of everyone.



BAF Facility: The Neuros Blower shown above is a new high efficiency unit that will provide aeration of the BAF cells about 40% more efficiently than other available technologies..



The new 44kV high voltage service and transformers are operational. While some power will be generated on site, there is still a need to purchase power and to upgrade the existing service.



Power Building: This building houses the Cogeneration Unit and back-up generators.

In the foreground of the photo below is the Cogeneration Unit that will consume a combination of digester (methane) biogas and natural gas to produce heat and electricity. In the background are the two natural gas fired back-up generators. During a power failure these units will produce enough electricity to keep the treatment process operational.



IMPORTANT CONTACTS

For concerns or inquiries related to the project, please contact Utilities Kingston's Project Manager **Allen Lucas** at **613-546-1181 x 2250** or ravensview-upgrade@utilitieskingston.com. In his absence, there will be an alternate contact number provided.

If you see an environmental emergency or other concern on the site after hours, please call **Utilities Kingston Staff Pager** at **613-530-4495** or **Dispatch Office** at **613-546-1181 x 2151**.

Information is also available on the Utilities Kingston website through the project link on the left at <http://www.utilitieskingston.com/>.



This mason preparing for brick placing at the BAF reminds us that people working together make the Ravensview Upgrades project happen.