June 11, 2008

Ms. Doris Dumais
Director, Approvals Program
Environmental Assessment and Approvals Branch
Ministry of the Environment
Floor 12A
2 St. Clair Avenue West
Toronto, ON M4V 1L5

Dear Ms. Dumais:

Re: Summary of Meeting Outcomes
Air Emissions and Environmental Footprint
Durham York Energy from Waste Project

Thank you for a very useful and productive meeting on Friday May 30. During our meeting it was clear that the Regions of Durham and York and the Ministry of the Environment have a mutual commitment to protecting the environment and public health in the development of a solution to the Regions' long range residual waste management issues.

The following is a summary of the agreements reached at this meeting.

We agreed that the values put forward by the Regions for "Stack Emission Limits" would provide the basis for the regulatory limits for assessing compliance for the proposed EFW Facility. These limits will be based on twenty-four hour averages for parameters measured through continuous emission monitoring, and a three test rolling average of stack test results for the remaining parameters. The Regions will require Vendors submitting proposals to provide a table of guaranteed annual average performance levels for the proposed EFW Facility for all continuously monitored emissions. The Regions and MOE have agreed to jointly review the performance level submission from the preferred vendor. The Regions and MOE have agreed that if the performance level submission is acceptable, it will be used to establish Annual Operational Objectives to form a benchmark for a continuous operational optimization and improvement program. The attached Table 1 summarizes the proposed regulatory Stack Emission Limits mentioned above.

Air emission limits represent only one part of the overall environmental footprint of the proposed Energy from Waste facility. We also discussed program elements relating to compliance monitoring, dissemination of public information, ash and process waste management, protection of ground and surface water, ambient air monitoring, facility noise and odour control, waste diversion and source waste quality control.

Durham and York agree that provision of accurate and timely information on emission levels to the public through a web-based system will provide transparency on the system performance and serve in the long term to allay public concerns about the impact of Energy from Waste Facilities. The Regions additionally propose to provide a continuously updated display sign at the facility showing emission levels and other relevant information relating to facility operation. The Regions agree to assume the cost for a MOE Environmental Officer located within the facility to provide independent oversight of process compliance and to facilitate communications between MOE, the Design-Build-Operate contractor, and the Regions.

As we discussed, the process should produce bottom ash equivalent to about 23 % of the initial garbage weight, but only 10 % of the incoming residual waste volume. This material, considered non-leachate toxic, will go to landfill for use as daily cover. The Regions are intending to conduct research into using the material as a component of asphalt aggregate and or as a component in concrete. Fly ash and air pollution control equipment residue, unless processed or treated on-site, is expected to be classified as hazardous waste. Fly ash is approximately 4 % of the initial garbage weight. This material, largely lime contaminated with heavy metals, normally requires processing in hazardous waste facilities or disposal in hazardous waste landfills unless it is processed or treated. Some hazardous waste facilities can beneficially use the material to neutralize acidic wastes. Some vendors offer processes for stabilization of fly ash on site that allow its use in the same manner as bottom ash. It is anticipated that the Request for Proposal process will give additional consideration to options for ash materials other than disposal in landfill. The business case for operation of the facility conservatively priced disposal of bottom ash at $100 per tonne and fly ash and air pollution control equipment residue at $300 per tonne.

The Regions anticipate that the Energy from Waste facility design will provide for zero discharge of process water under normal operating conditions and will provide measures for capture, testing and treatment of any water resulting from process. Domestic sewage from the EFW Facility will be discharged into the sanitary sewer to receive treatment at the Courtice Water Pollution Control Centre to the south of the site. The site will incorporate an appropriately sized stormwater retention pond to remove water borne sediments prior to discharge.

The Regions will investigate the establishment of an ambient air-monitoring network to measure air quality and to calibrate the air dispersion modeling for the facility. Further discussion on the scope and criteria for this network will take place between the Regions' air monitoring consultants and the MOE in the next few months.

The Facility design will require negative pressure loading bays to minimize the escape of fugitive odours from waste delivery and handling. The boiler units will draw process air from the loading bay area creating a continuous inward draft. Unloading and handling of waste vehicles will take place indoors to minimize noise. Any equipment that incorporates fans will optimize noise attenuation measures at source.

As you know, the most effective manner of controlling the quality of emissions comes from the elimination of materials of concern from the incoming waste stream. Both Durham and

York have implemented blue box recycling; source separated organics; leaf and yard waste; household hazardous waste; and, quality control programs on waste collection that focus on diversion and elimination of materials of concern from the residual waste stream. ICI waste specifications will demand removal of divertable materials and materials of concern, including PVC and drywall. Both Regions have committed to further improvements in diversion prior to plant commissioning.

The Regions look forward to continued progress on this project. We have implemented an aggressive time line for completion of the proposed EFW Facility that will end our reliance on transborder shipments and will provide a local solution to our waste obligations. We ask that the MOE confirm the acceptability of the Stack Emission Limits and other Environmental Footprint considerations so that we can proceed with the release of the Request for Proposals later this month. We thank the MOE for their leadership in working with the Regions to identify these important parameters and suitable values to include in the Stack Emissions Limits to include in the next steps of the EA process.

Yours truly,

Erin Mahoney, M. Eng.
Commissioner Environmental Services
Regional Municipality of York

Cliff Curtis, P. Eng., MBA
Commissioner of Works
Regional Municipality of Durham

cc: George Rocoski
Director, Central Region

Table 1 - Durham York EFW Stack Emission Limits

Pollutant	Units Φ	YD EFW Proposed Limits	Emission Monitoring Technique	
Sulphur Dioxide (SO_2)	mg/Rm^3	35	Continuous Emission Monitoring 24 hour **geometric** average	Continuous Emission Monitoring
Hydrogen Chloride (HCl)	mg/Rm^3	9	Continuous Emission Monitoring 24 hour **arithmetic** average	
Hydrogen Flouride (HF)	mg/Rm^3	0.92	Continuous Emission Monitoring 24 hour **arithmetic** average	
Nitrogen Oxides (NOx)	mg/Rm^3	180	Continuous Emission Monitoring 24 hour **arithmetic** average	
Carbon Monoxide (CO)	mg/Rm3	45	Continuous Emission Monitoring 24 hour **arithmetic** average	
Mercury (Hg)	µg/Rm3	15	Arithmetic average of 3 stack tests conducted in accordance with standard methods	Stack Test Parameters
Cadmium (Cd)	µg/Rm3	7	Arithmetic average of 3 stack tests conducted in accordance with standard methods	
Cadmium + Thallium (Cd + Th)	µg/Rm3	46	Arithmetic average of 3 stack tests conducted in accordance with standard methods	
Lead (Pb)	µg/Rm3	50	Arithmetic average of 3 stack tests conducted in accordance with standard methods	
Sum of (As, Ni, Co, Pb, Cr, Cu, V, Mn, Sb)	µg/Rm3	460	Arithmetic average of 3 stack tests conducted in accordance with standard methods	
Dioxins	pg/Rm3	60	Arithmetic average of 3 stack tests conducted in accordance with standard methods	
Total Particulate Matter	mg/Rm^3	9	Arithmetic average of 3 stack tests conducted in accordance with standard methods	
Organic Matter (as methane)	mg/Rm3	49	Arithmetic average of 3 stack tests conducted in accordance with standard methods	

NOTES:

① **Units and Reference Conditions**

mg/Rm^3 = Milligrams (1×10^{-3} grams) per Reference Cubic Metre (25°C, 101.1 kPa)

µg/Rm3 = Micrograms (1×10^{-6} grams) per Reference Cubic Metre (25ºC, 101.1 kPa)

pg/Rm^3 = Picograms (1×10^{-12} grams) per Reference Cubic Metre (25°C, 101.1 kPa)

R -Reference flue gas conditions defined as follows:

Temperature	25 °C
Pressure	101.3 kPa
Oxygen content	11 %
Water content	nil (dry conditions)

② **Excludes startup, shutdown and malfunction periods.**