

AMENDMENT #2 DURHAM YORK ENERGY CENTRE

Design and Operations Report in Support of Environmental Protection Act Section 27 Certificate of Approval (Waste) Application

Submitted to:

Ontario Ministry of Environment Conservation and Parks Director Section 27 Environmental Assessment and Approvals Branch 2 St. Clair Avenue West, Floor 12A Toronto, Ontario M4V 1L5



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Introduction

The Regional Municipality of Durham and The Regional Municipality of York (Regions) along with Reworld Durham York Limited Partnership (Reworld) are proposing an amendment to the existing Environmental Compliance Approval (ECA) to increase the annual waste processing capacity from 140,000 tonnes per year to 160,000 tonnes per year of municipal solid waste at the Durham York Energy Centre (DYEC) located at 1835 Energy Drive, in Courtice, Ontario.

The amendment seeks to update the current ECA to reflect the proposed increase in the annual tonnage limit. This initiative will optimize DYEC operations by allowing for full use of the existing equipment, maximizing the use of the investment without requiring any additional construction or building modifications. The proposed increase in DYEC's waste capacity to 160,000 tonnes per year involves no modifications to the waste treatment process and incurs no capital cost. This initiative will realize financial savings from minimizing bypass waste, resulting in overall reduced greenhouse gas emissions due to a shorter distance in transportation and avoided landfilling in conjunction with increased revenue from additional power generation and materials recovery.

The following are additions and clarifications to the Golder Associates Ltd. (Golder) Design and Operations Report (March 2011) and Amendment #1 (May 2011).

Pre-consultation meetings were held with the Ministry of Environment, Conservation and Parks on June 12 and June 15, 2025, to review the application requirements, changes to the current Design and Operations Report and supporting documents status.

1. Section - Introduction

Amend section to note that Covanta Energy has been rebranded to Reworld.

Section 1.0, Para 2:

After paragraph 2, the following shall be added:



"The Regional Municipalities of Durham and York, the owners of the Durham York Energy Centre (DYEC), have completed an Environmental Screening Process in accordance with the Waste Management Projects Regulation (Ontario Regulation 101/07) of the Environmental Assessment Act to support the amendment of the Environmental Compliance Approval for the DYEC. The Notice of Commencement was made July 3, 2019, and the Screening Process was completed with the issuance of the Notice of Completion on December 21, 2021.

The Ministry of Environment, Conservation and Parks (MECP) denied seven elevation requests for this proposed change and the MECP provided their rationale via letter to the requestors. The Ministry's response letter was provided to the Region's on April 22, 2024, and posted to the project website."

2. Section - Specifications Summary

Replace the 9th line with:

Annual Maximum Waste Thermally Treated: 160,000 tonnes.

3. Section 1 - Function of Site

Section 1.1, Para 2:

Replace the 1st sentence with:

The Facility will include two mass-burn thermal treatment units; each with a nominal nameplate capacity of 218 tonnes/day (Maximum Continuous Rating (MCR)) designed to annually process up to a combined 160,000 tonnes of waste with an average higher heating value (HHV) of 13.0 MJ/kg.

Section 1.1, Function of Site, Para 3:

Replace the 2nd sentence with:

The expansion of the Facility beyond the approved capacity of 160,000 tonnes per year would be subject to environmental screening requirement under Ontario Regulation 101/07, as amended, or the applicable piece of legislation at the time of expansion. The Facility will include two mass-burn thermal treatment units; each with a nominal nameplate capacity of 218 tonnes/day (Maximum Continuous Rating (MCR)) designed to annually process up to a combined 160,000 tonnes of waste with an average higher heating value (HHV) of 13.0 MJ/kg.



4. Appendix E - Site Storage Design Calculations

Appendix E:

Replace the 1st line with:

Maximum annual intake of MSW Waste = 160,000 Tonnes

5. Section 2.0 – Site Location and Land Use

Section 2.0, Para 1:

Replace the Osbourne with Osborne

Section 2.0, Para 1:

Replace the 3rd sentence with:

The closest commercial property is East Penn Canada, north of the site. Manheims auto is no longer in this location and the former building was demolished.

6. Section 3.0 – Site Layout

Section 3.2, Para 2:

Remove sentence 2-4 and replace with:

There is one (1) dedicated route for refuse trucks. Refuse trucks utilize Highway 401, followed by the dedicated service road off Courtice Road to access the Site.

7. Section 4.0 – Facility Buildings and Areas

No changes required.

8. Section 5.0 – Waste Handling and Receiving

Section 5.2, Material Storage Para 5:



Proceeding Para 5, include:

ECA Condition 2(6) prohibits waste from being stored outdoors. However, Ontario Regulation 213/07 of the Ontario Fire Code 5.6.1.2.(2)(C), prohibits the storage of propane cylinders indoors. Propane cylinders, identified as unacceptable waste, which have been delivered to the site among municipal waste and removed from the tipping floor will be stored outdoors in a secure outdoor storage cage. Correspondence was provided to the Durham District Office on July 13, 2018, after a routine fire inspection report.

ECA Condition 4(3)(iv) requires the removal of unacceptable waste within four (4) days of receipt or as acceptable by the District Manager. Correspondence dated January 9, 2015, from the Durham District Manager granted permission to allow up to ninety (90) days for unacceptable waste (propane and helium tanks) to be removed from the site as the tanks are received at the site in limited quantities and can be safely stored in a secure storage container outdoors.

5.3 Truck traffic

Section 5.3, Truck Traffic Para 2:

Remove sentences 2-4 and replace with:

There is one (1) dedicated route for refuse trucks. Refuse trucks utilize Highway 401, followed by the dedicated service road off Courtice Road to access the Site.

9. Section 6.0 – Thermal Treatment Process

No changes required.

10. Section 7.0 – Air Pollution Control System

No changes required.

11. Section 8.0 – Ash Handling and Associated System

No changes required.



12. Section 9.0 – Power Generation

No changes required.

13. Section 10.0 – Potable, Process and Wastewater

No changes required.

14. Section 11.0 – Stormwater Management

Section 11.0, Para 1:

Remove sentence 2 and replace with:

The surrounding land use consists of agricultural land to the west, Ontario Power Generation to the East, East Penn Canada to the north, and the Courtice Water Pollution Control Plant to the south.

15. Section 12.0 – Environmental, Emergency and Contingency Plan No changes required.

16. Section 13.0 – Nuisance Control

No changes required.

17. Section 14.0 – Facility Maintenance, Inspection and Monitoring No changes required.

18. Section 15.0 – Staff Training, Reporting and Record Keeping No changes required.

19. Section 16.0 - Site Closure Plan

No changes required.