

Inquiries – April 2018

#	Date Received	Method Received	Comment Details / Description	Response / Remedial Action	Date Responded	Staff Initials
1	April 4, 2018	Project web email	<p>Good morning</p> <p>I just saw the impressive information on your website. If I may ask what is the combustion technology used? Is it Plasma? Did Covanta provide this plant design?</p> <p>I would appreciate any information if possible.</p> <p>Thanks</p>	<p>Good Morning,</p> <p>This email is in response to your email dated April 4, 2018 requesting additional information about the Durham York Energy Centre (DYEC).</p> <p>The DYEC is owned by the Regional Municipality of Durham and York and designed, built, operated and maintained by Covanta. The DYEC uses mass burn technology to combust waste at extremely high temperatures (greater than 1,000 °C). The resulting thermal energy (heat) produces steam, which turns a turbine generator to produce electricity. The DYEC has a processing capacity of 140,000 tonnes of residential garbage/year.</p> <p>To better understand how residential garbage is processed at the DYEC, we invite you to view our online tours by visiting www.durhamyorkwaste.ca. A detailed virtual tour and a process overview can be found at the bottom of our homepage.</p> <p>Please let us know if you require any additional information.</p> <p>Regards,</p> <p>DYEC Project Team</p>	April 4, 2018	DL/AH
	April 5, 2018		<p>Thanks very much for the information. Would you be able to indicate as to how much it cost to build this facility?</p>	<p>Good Morning.</p> <p>As requested, please see the table below which outlines the Durham York Energy Centre capital costs.</p>	April 5, 2018	DL

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	April 12, 2018		<p>I have a question if you don't mind. Is the combustion of fuel using Plasma pyrolysis technology?</p> <p>Thanks very much</p>	<table border="1"> <thead> <tr> <th>COST</th> <th>TOTAL</th> </tr> </thead> <tbody> <tr> <td>Capital Construction Payment</td> <td>\$243,990,000</td> </tr> <tr> <td>Architectural Enhancements</td> <td>\$9,000,000</td> </tr> <tr> <td>subtotal</td> <td>\$252,990,000</td> </tr> <tr> <td>Site Servicing, Utilities, Consulting and HCA</td> <td>\$42,190,000</td> </tr> <tr> <td>TOTAL COST</td> <td>\$295,180,000</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Durham Region's Contribution – 78.6% • York Region's Contribution – 21.4% <p>*HCA – Host Community Agreement</p> <p>Regards, DYEC Project Team</p> <p>Good Morning, The plant does not use Plasma pyrolysis technology. The Durham York Energy Centre uses mass-burn technology.</p> <p>Regards, Project Team</p>	COST	TOTAL	Capital Construction Payment	\$243,990,000	Architectural Enhancements	\$9,000,000	subtotal	\$252,990,000	Site Servicing, Utilities, Consulting and HCA	\$42,190,000	TOTAL COST	\$295,180,000	April 12, 2018	DL
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2	April 10, 2018	Project web email	<p>Hi,</p> <p>I am a mechanical engineering student at Queen's University passionate about sustainable resources and waste to energy processes. After hearing about Sweden's recycling revolution and waste to energy management, I was curious how we could incorporate the same processes here in Canada and found your site. I am curious about the conditions of your site and the efficiency of the processes. Also, if there is any consideration for expansion to use your waste to energy processes in other districts and about the roadblocks you faced with laws and regulations when opening the plant.</p> <p>I am very passionate about improving the future state of energy and creating a more sustainable infrastructure within Canada. My questions are for general interest and to find out what I can personally do to improve processes within Canada and promote waste to energy for sustainability.</p>	<p>Good Morning,</p> <p>This email is in response to your inquiry dated April 10, 2018 regarding the Durham York Energy Centre (DYEC).</p> <p>Conditions of your site</p> <p>DYEC must comply with stringent environmental standards, monitoring and mitigation plans set out by the facility's Environmental Compliance Approval (ECA) granted by the Ontario Ministry of the Environment and Climate Change. You can access our ECA through our project website (www.durhamyorkwaste.ca) under the Documents and Publications tab, under Approvals and Agreements.</p> <p>Efficiency of the processes</p>	April 13, 2018	DL/AH/CS												

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			Thank you for your consideration and I look forward to hearing from you	<p>The gases generated in the Energy-from- Waste (EFW) process are sampled continuously using state-of-the-art technology; this is referred to as continuous emissions monitoring or CEM. Monitoring emissions ensures that the DYEC continues to comply with stringent environmental standards, monitoring and mitigation plans set out by the facility's Environmental Compliance Approval (ECA) granted by the Ontario Ministry of the Environment and Climate Change.</p> <p>The DYEC generates approximately 14 MW of net electrical energy on a continuous basis, which is enough to power about 10,000 homes. The electricity is sold to the provincial grid as base load energy at the guaranteed price of \$0.08 per kWh inflation indexed for a 20-year term. In the future, steam from the DYEC may be used for district heating in the Clarington Energy Park located adjacent to the facility. The steam produced could heat the equivalent of 2,200 homes.</p> <p>The EFW process reduces the volume of residential garbage by approximately 85 to 90 per cent. After garbage is processed the majority of material remaining is bottom ash and once treated is an inert, non-toxic substance, which resembles crushed rock and is currently reused as daily landfill cover material. The smaller portion is fly ash and lime residue which is captured in the air pollution control equipment. Fly ash is also tested and treated to ensure it is inert and non-toxic and it is disposed of in a similar manner to bottom ash.</p> <p>Consideration for expansion to use your waste to energy processes in other districts</p> <p>The Region has awarded the contract to Design, Build and Operate and Maintain (DBOM) the EFW facility to Covanta Energy Corporation following a</p>		

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				<p>public procurement process. Covanta operates 42 Energy-from-Waste facilities globally and continues to grow their fleet with their newest operation opening in Dublin. Covanta's U.S. operations process approximately 65 percent of the nation's EFW volume. While EFW is not new to Canada, the Durham York Energy Centre is the first greenfield EFW in North America in over 25 years.</p> <p>The approved Environmental Assessment (EA) and Environmental Compliance Approval (ECA) for the DYEC specifically directs that only residential garbage from Durham and York Regions, collected by our contracted vendors, can be received and processed at this facility. Therefore, the DYEC will not accept garbage from other municipalities, industrial, commercial or institutional sectors or private haulers.</p> <p>Roadblocks you faced with laws and regulations when opening the plant</p> <p>As the Durham York Energy Centre is the first greenfield EFW in North America in over 25 years, it took significant effort to site, permit, build and operate the facility. Some challenges faced through the early stages to operations are included below.</p> <p>Early Stage Challenges:</p> <ul style="list-style-type: none"> • Changing priorities of the Provincial, Regional and Municipal governments. • Negotiating a Host Community Agreement. • Developing public trust built on an “open-and-transparent” process. • Financial Strategy – Business Case, Budget, Procurement Process. • Ensuring that only highly qualified experts contribute to the process. • Grid Connection and Power Purchase Agreement. 		

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				<ul style="list-style-type: none"> • Location – critical to grid connection and community involvement. • Capacity – how big do you build? • Technology – long established vs emerging. • Contract Negotiations. <p>Project Challenges - Permitting</p> <ul style="list-style-type: none"> • ECA – Transition from Environmental Approval and structure/language/timelines. • Advisory Committees • Website/signboard – real time ‘data’ & public comprehension. • Annual processing cap of 140,000 tonnes per year. • Emission averaging periods – 6 min, 10 min, 1 hour, 2 hour, 4 hour & 24 hour. <p>Project Challenges - Operations</p> <ul style="list-style-type: none"> • ECA limitations • Waste inspections – 1 truck per hour • CO – lowering the limit and averaging period. • O2 – minimum requirement • Commissioning period was not included in the ECA <p>Please let us know if you have additional questions.</p> <p>Regards,</p> <p>DYEC Project Team</p>		
3	April 11, 2018	Project web email	<p>Hello,</p> <p>I am inquiring on behalf of my construction company about the possibility of recycling fiberglass insulation, rockwool insulation and foam board insulation and related. Is your plant equipped to deal with the recycling of these materials or the incineration of these materials? Our construction company is attempting to find a more eco-friendly solution for the waste that we deal with in this regard (during construction and especially when handling renovation projects). Since we market ourselves as a more environmentally conscious company, we'd like to be able to add insulation recycling to our list of positive</p>	<p>Good Afternoon,</p> <p>This email is in response to your inquiry sent on April 11, 2018 regarding the recycling or incineration of insulation from your construction company.</p> <p>The Region of Durham’s mandate for waste services is focused on residential waste. The Region does not accept waste materials from industrial, institutional or commercial operations which falls outside our mandate for either our recycling or final disposal</p>	April 11, 2018	DL

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			<p>steps that we've been able to make towards a more sustainable future. Thank you for your time Hello,</p> <p>Would you have any reports or data you could share detailing the annual amount of waste accepted at your EFW facility, and/or the annual energy produced?</p> <p>Thank you</p>	<p>options.</p> <p>The Durham York Energy Centre is Durham Region's primary long-term disposal option for waste and only processes the household waste remaining after Durham and York Regions' aggressive composting, recycling and reuse programs. Our Certificate of Approval does not allow us to accept waste from any additional outside sources.</p> <p>As an alternative, you may consider contacting Emerald Energy From Waste (http://www.emeraldefw.com/overview.php) to request additional information regarding their services.</p> <p>Regards, Project Team</p>		
4	April 26, 2018	Phone	<p>A resident called to ask if hay bales could be processed at the facility. They live in an area where a local farmer is burning hay which the resident feels is impacting the quality of air near in their air shed.</p>	<p>The resident was informed about the material that is acceptable through the sites Certificate of Approval which does not include hay from local farmers. The resident requested and was provided a phone number to speak with a local district officer at the Ministry of the Environment and Climate Change.</p>	April 26, 2018	DL

Total Inquiries – April 2018

Inquiry Type	Total by Inquiry Type
Total Project Team Inquiries received this month by project web email / telephone:	4
Total Covanta Inquiries received this month:	0
Total Durham Region Council / Committee Inquiries received this month:	0
Total Durham Region Call Centre Inquiries received this month:	0
Total Inquiries received from York Region this month:	0
Total Inquiries received from previous months in 2018 to-date:	5
Total Inquiries received in 2018 to-date:	9

Complaints – April 2018

#	Date Received	Method Received	Comment Details / Description	Response / Remedial Action	Date Responded	Staff Initials
1	April 11, 2018	Durham Regional Council Meeting	Delegation to Council regarding Report #2018-INFO-38: Durham York Energy Centre Ambient Air Monitoring Program. The resident gave a presentation on the Region’s Ambient Air Monitoring Program and noted that they felt the Risk Assessment for PM2.5 was flawed and that the response in 2018 INFO-38 Report was inadequate.	No further action required by DYEC staff.	April 11, 2018	Council

Total Complaints – April 2018

Complaint Type	Total by Complaint Type
Total Project Team Complaints received this month by project web email / telephone:	1
Total Covanta Complaints received this month:	0
Total Durham Region Council / Committee Complaints received this month:	0
Total Durham Region Call Centre Complaints received this month:	0
Total Complaints received from York Region this month:	0
Total Complaints received from previous months in 2018 to-date:	2
Total Complaints received in 2018 to-date:	3