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The Regional Municipality of Durham Report

To: Regional Council
From: Commissioner of Works
Report: #2020-WR-1
Date: May 27, 2020

Subject:

Mixed Waste Transfer and Pre-Sort Anaerobic Digestion Facility Siting Report -
Response to Comments from the Municipality of Clarington

Recommendations:

That it be recommended to Regional Council:

- A) That this report be received for information, and
 - B) That a copy of this report be forwarded to the Municipality of Clarington.
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Report:

1. Purpose

- 1.1 On March 6, 2020, Regional Municipality of Durham (Region) report entitled "Mixed Waste Transfer/Pre-Sort and Anaerobic Digestion Organics Processing Facility Siting Report" (the "Siting Report") was issued. The Siting Report outlines the criteria, methodology, and recommends a preferred site for the facility within the Clarington Energy Business Park.
- 1.2 On April 27, 2020, the Municipality of Clarington (Clarington) released a Staff Report (PSD-013-20) which provides comments on the Siting Report. On May 4, 2020, Regional staff made a presentation to Clarington Council, which addressed various comments in Report PSD-013-20 and responded to questions from Members of Clarington Council.
- 1.3 The purpose of this report is to present Regional staff's response to comments in Report PSD-013-20.

- 1.4 Upon review and due consideration of the Clarington staff concerns, Regional staff continue to be of the view that the preferred site within the Clarington Energy Park is best suited for the proposed Anaerobic Digestion (AD) facility.

2. Background

- 2.1 In 2011, Regional Council directed staff to complete a preliminary investigation of AD technologies. The investigation concluded that AD is a proven technology that could be considered once the Region generated sufficient organic waste to support developing its own facility.
- 2.2 In 2014, the first Request for Information (RFI #677-2014) for organics technologies was completed and reported in the 2015 Annual Solid Waste Management Servicing and Financing Study (Report #2015-J-8).
- 2.3 In 2017, RFI-1158-2017 (Report #2018-COW-146) was issued to gather market information related to available types of technology and services. In June 2018, Regional Council approved Report #2018-COW-146, which directed that AD with a mixed-waste transfer and pre-sort facility be approved as the preferred technologies for the Region's long-term organics management strategy intended to process only Durham waste in the facility.
- 2.4 On March 6, 2020, the Region issued the Siting Report. The siting process, although not subject to an individual Environmental Assessment, was modelled following the same approach as the Ministry of the Environment, Conservation and Parks (MECP's) Statement of Environmental Values, which is considered whenever decisions that might significantly affect the environment are made. A comparative analysis was undertaken which examined technical, social, environmental and cultural siting criteria.
- 2.5 On April 27, 2020, Report PSD-013-20 was presented to the Municipality of Clarington to its Joint Committee, which provided information and comments on the Siting Report and the site selection process. The Report was considered at the May 4, 2020 meeting of Clarington Council, where a resolution was passed to declare Clarington to be an unwilling host community for the facility, and that the Region be requested to address the comments in Report PSD-013-20. This report responds to Clarington Council's request.
- 2.6 On May 27, 2020, Report #2020-COW-20 will be provided to Regional Council, which provides further information, makes recommendations with respect to partnership considerations, identifies the preferred siting location in south

Clarington, and recommends the initiation of the Request For Pre-Qualifications (RFPQ) procurement process for the facility on the preferred site.

3. Responses to Clarington Report PSD-013-20

- 3.1 Clarington Report PSD-013-20 provides a summary of the Region's investigation of AD technology, the Siting Report, details of the South Clarington Site, the surrounding land use context, planning policy framework, and current planning initiatives including a potential long term planning vision for a Courtice Waterfront Park, and planning effort for the south Courtice Employment Lands and Transit Hub. Report PSD-013-20 also suggests other alternative sites for consideration.
- 3.2 Although Report PSD-013-20 recognizes that there may be potential capital and transportation cost advantages and synergies offered by siting the facility in proximity to the Durham York Energy Centre (DYEC), it identifies concerns related to matters including land use compatibility; compatibility with Provincial, Regional and local planning policy objectives; economic opportunity; potential limitations to development; and public consultation. These concerns and Regional staff's responses are provided below.

4. Land Use Compatibility

- 4.1 Concerns have been raised regarding land use compatibility of the proposed facility, and that it should take into account future uses envisioned for the Energy Park and the Courtice Waterfront.

5. Regional Response

- 5.1 The subject lands are currently designated "Employment Areas" in the Durham Regional Official Plan. Lands designated Employment Areas are set aside for uses which by their nature require separation from sensitive uses. Clarington is currently undertaking a secondary plan exercise for the Energy Park and is considering introducing residential and other sensitive land uses to the west of the preferred site.
- 5.2 Consistent with Regional staff's May 4, 2020 presentation to Clarington Council, the Region will ensure that as part of the design, procurement, and operational specifications for the facility, the following specifications will be included to ensure that matters of compatibility are effectively addressed:

- a. Air within the facility will be treated through biofilters and cleaned prior to being released. The facility will be fully enclosed and will operate under negative pressure to ensure that no odours escape from the facility.
 - b. Noise from truck traffic will be controlled by managing truck routing and facility operations, subject to the MECP's requirements. Trucks will utilize the haul road south of the facility. Two additional trucks per day is the estimated increase in truck traffic beyond what is currently going to the DYEC site.
 - c. Ambient light will be controlled using zero cut-off lighting, which will ensure that no light pollution occurs off the property.
 - d. Dust suppression and nuisance management practices will be implemented during the construction and through operational controls at the facility to ensure that no adverse effects to humans or the environment are experienced.
 - e. There are no sensitive receptors within 500 metres.
- 5.3 With the appropriate controls and specifications in place including the above, the facility would not represent a compatibility concern.

6. Compatibility with Provincial, Regional and Local Planning Objectives

- 6.1 Municipalities have a responsibility to handle waste in an environmentally responsible manner. The Provincial Policy Statement (PPS) directs municipalities to develop and implement official plan policies and other strategies that support integrated waste management, enhanced waste reduction, composting, recycling, energy from waste, reuse and diversion. The PPS also directs municipalities to support energy conservation and efficiency, improve air quality, and reduce greenhouse gas emissions.
- 6.2 The Regional Official Plan (ROP) includes a policy that states that Regional Council will pursue measures related to reduction, re-use and recycling of waste. The preferred site in the Clarington Energy Business Park is within the "Employment Areas" designation of the ROP. This designation is set aside for uses that by their nature require access to highway, rail and/or shipping facilities, separation from sensitive uses, or benefit from locating close to similar uses.

- 6.3 The preferred site in the Clarington Energy Business Park would be located next to the DYEC, which is an established waste processing facility. By locating the proposed facility on the neighbouring property, transportation emissions would be reduced as waste would be shipped to one location, instead of multiple locations to be processed. The AD facility would increase the efficiency of the adjacent DYEC, as the organic waste would be removed from the DYEC and sent to the AD for decomposition, allowing the DYEC incinerator to operate efficiently. Lastly, by removing the recyclables at the pre-sort facility, the collected waste material would enable energy savings and environmental benefits through reuse.
- 6.4 The Clarington Energy Business Park Secondary Plan includes a goal to distinguish the Business Park as a unique and innovative employment area within the Greater Toronto Area. The AD facility provides an opportunity to support and showcase renewable energy practices and Regional climate change initiatives.
- 6.5 The AD could also advance municipal objectives toward integration through the promotion of linkages and synergies among related businesses.

7. Employment Generation

- 7.1 Report PSD-013-20 identifies a concern that the significance of the recent designation of the area as part of a Provincially Significant Employment Zone (PSEZ) should also be addressed in a fulsome manner. It also indicates that with an estimated contribution of 40 jobs, the preferred site would not align with the minimum employment density target in the Clarington Official Plan of 30 jobs per gross hectare.

8. Regional Response

- 8.1 The Clarington Energy Business Park was included as a PSEZ by the Province, consistent with its designation as an Employment Area in the ROP, and as a Business Park in the Municipality of Clarington Official Plan.
- 8.2 Policy 11.3.2 of the Clarington Official Plan indicates that the minimum Employment Density Target shall be 30 jobs per gross hectare, especially on lands designated Prestige Employment, Business Park, or Light Industrial lands adjacent to the Highway 401 and 418 corridors.
- 8.3 The facility would provide approximately 40 jobs, including skilled jobs and technicians on a five-hectare site. In addition, the northerly 7.9-hectare site, also owned by the Region, has been identified as a “Gateway” within the Clarington

Energy Business Park Secondary Plan. The northerly site would accommodate more employment intensive uses and with its high visibility from Highway 401, will be able to respond to the growing needs of existing and future employers and employees of the Business Park.

- 8.4 The density targets apply across a broad geographical area. While the facility in itself may not be able to achieve the employment density target, the Region-owned site to the north, together with other facilities in the Energy Park, including the new Ontario Power Generation (OPG) Campus (proposed to bring over 2,000 employees), will contribute to the Business Park's ability to provide jobs well in excess of the Clarington's employment density target.

9. Urban Design

- 9.1 Report PSD-013-20 notes that the site and facility design should adhere to Clarington's Streetscape and Sustainable Development Design Guidelines, through the site plan process in a similar manner to the DYEC and other Regional facilities.

10. Regional Response

- 10.1 The Region is committed to adhering to Clarington's Streetscape and Sustainable Development Design Guidelines, to ensure that the new building complements the character of the Business Park.
- 10.2 By using high-quality materials, sympathetic design and through architectural variety and articulation, the facility will make a positive contribution to Energy Drive as a unique and interesting street. There is an opportunity through landscape design to further enhance its image. The Region is also mindful that views of the facility from all sides will be a factor, and through careful siting, landscape design, and by ensuring truck access and servicing functions are appropriately sited to the rear, this future building has the potential to make a positive contribution to the character of the street. The Request For Proposal will specify that Clarington's Design Guidelines are to be met in cooperation and consultation with Clarington staff.

11. Energy Opportunities

- 11.1 Report PSD-013-20 seeks a commitment on the energy opportunities that will be pursued, to demonstrate alignment with the Energy Park objectives and support for the Energy Cluster concept should be clearly articulated and implemented.

12. Regional Response

- 12.1 The facility will produce biogas from the decomposition of organic materials. Once captured, the biogas will be converted to a natural gas equivalent which gas can be injected into the pipeline network and utilized as natural gas. End uses can include electrical generation, home or other heating, or as a transportation fuel in appropriately equipped vehicles.
- 12.2 The facility will allow the Region to reduce the quantity of material sent to the DYEC for disposal thereby deferring the need to expand the DYEC while maximizing the recovery and reuse of the Region's waste materials in the production of renewable natural gas. By clustering the DYEC and AD infrastructure facilities, the Region is seeking to foster synergies and cooperation between multiple facilities, including generating revenue from biogas that is currently being flared at the Courtice Water Pollution Control Plant (WPCP). The Region's facilities currently serve as a support to Ontario Tech University and other institutions through hosting tours, students, as well as working to establish broader research-based projects. These facilities could become a core aspect of the Clarington Energy Park in assisting the development of new opportunities to produce energy, and minimize wastes being sent for disposal by utilizing waste as a resource and participating in the circular economy.
- 12.3 Clarington staff had also identified that the concept of District Energy should be advanced in the Business Park. In this regard, the appropriate equipment is in place at the DYEC. When a positive business case is possible and interested users are identified, the appropriate distribution system could be installed.

13. Economic Opportunity Potential

- 13.1 Report PSD-013-20 notes that consideration and comparison of future development potential of the site for other purposes were not addressed. A more robust assessment of the potential economic value of the site should be taken into consideration.

14. Regional Response

- 14.1 As indicated above, there is an opportunity for the northerly Region-owned site to provide for more employment intensive uses that would provide services to employees within the recently approved East Penn project, OPG's Darlington Energy Complex, the planned OPG Headquarters Corporate Campus and the other existing and future employment uses in the Park. It is anticipated that there

would be strong demand from the private sector for this parcel as the OPG Headquarters project moves forward. For example, opportunities may exist for commercial uses and office development for companies that may wish to locate in proximity to the OPG Headquarters. The development of potential complementary uses on the northerly parcel would also advance Clarington's design objectives for this parcel as a "Gateway", given its visibility from the highway and its proximity to a planned waterfront area to the west.

15. Public Engagement and Consultation

- 15.1 Report PSD-013-20 notes that the siting process and six short-listed sites were introduced to the public at a Public Information Centre (PIC) hosted at Regional Headquarters on February 27, 2020. The Siting Report and results of the comparative analysis were made available for a two-week public comment period on March 6, with comments due on March 20, 2020. Report PSD-013-20 indicates that the tight procurement timeline has not allowed the Region's public consultation process to fully engage with the public, which has been amplified due to the impacts of the COVID-19 pandemic.
- 15.2 Report PSD-013-20 notes that to allow for a more fulsome public consultation process, the Region may wish to consider delaying their decision or separating the procurement aspects from the siting selection decision.
- 15.3 Report PSD-013-20 also indicates that there has been little opportunity for the general public to become familiar with the technology. The Region has an AD at the Courtice WPCP and could provide tours to build community knowledge and support for AD.

16. Regional Response

- 16.1 The Region established siting criteria in keeping with an individual Environmental Assessment (EA) process. The consultation undertaken as part of that process has been reviewed as part of the reporting process and documented as part of the project Record of Consultation. Comments received both during the PIC session, and in the following weeks, have affirmed broad support for the project, and identified individual priorities which will be considered by the Region as the project is developed. While COVID-19 has proven challenging to many sectors, the sharp increase in demand for municipal waste services has highlighted the need within the Region for additional waste management capacity and infrastructure.

- 16.2 Regional consultation and engagement opportunities to date included the following:
- a. Since 2011, the Region has been investigating AD technologies with reports and presentations to various Committees and Council.
 - b. In November 2019, a dedicated webpage, durham.ca/ADProject was created as well as a project email address, ADProject@durham.ca. To date, there have been 16,000 unique views of this project webpage with 23 subscribers for webpage updates, 200 clicks or downloads of the draft siting report and over 30 emails received.
 - c. Between November 1 and December 15, 2019, Regional Waste Management Services staff issued an online survey to gather information on residents' knowledge and opinions of waste management programs. Over 3,000 responses were received from across the Region, and nearly 600 responses were received from Clarington. In terms of waste management, 92 per cent of respondents responded that the Region should manage waste as a resource, and 85 per cent of respondents reported utilizing their Green Bins.
 - d. A Waste Management Services Initiatives session was hosted on February 19, 2020 with Local Area Municipalities, who were asked to provide comments on the short list of potential sites.
 - e. An in-person PIC was hosted on February 27, 2020, from 5 p.m. to 8 p.m. at Regional Headquarters. In total, 48 members of the public were in attendance. This turnout is comparable to the attendance for the recent EA process undertaken for the DYEC.
 - f. The proposed facility will use proven technology that is already used in other parts of the world. The procurement process will ensure that market appropriate technology is provided.
- 16.3 Separating the procurement aspects of this facility from the siting selection decision will introduce a significant level of risk including increased project costs, ability to meet the provincial organics policy framework and associated timelines and will have direct implications to the DYEC including permit expansion and existing capacity constraints.

- 16.4 The Region continues to meet with interested stakeholders and staff continue to receive comments from the public that will be considered throughout the process. All consultation is being included in a Record of Consultation.
- 16.5 At the May 27, 2020 Regional Council meeting, there will be an opportunity for public input. This information will also be included considered throughout the process and included in the Record of Consultation.

17. Site Selection

- 17.1 Report PSD-013-20 notes Clarington staff's opinion that in order to evaluate all sites equitably, alternative sites in close proximity to the DYEC warrant consideration, and comparative evaluation as well.
- 17.2 Report PSD-013-20 indicates that the Region's Envision Durham Growth Management Urban System Discussion Paper (June 2019) identifies privately-owned land area within the Energy Park as "underutilized". The Report notes that this underutilized property in the Energy Park may offer an opportunity for the Facility to achieve many of the same advantages as noted for the site on another property and achieves other economic development goals including employment targets.

18. Regional Response

- 18.1 Regional Council approved siting criteria was used to initially screen, and then ultimately compare alternate sites. The other site being proposed by Clarington staff is required for long-term expansion of wastewater treatment infrastructure to accommodate future growth in Clarington, Oshawa and Whitby. The property next to the Courtice WPCP is therefore not considered available for the project. In addition, that site would require crossings of the Canadian National Railway (CNR) line and would be located next to Lake Ontario, which would have greater visibility when viewed from the waterfront trail and recreational areas in the vicinity.
- 18.2 The "underutilized" site referenced in Report PSD-013-20 is a privately-owned auto compound with extensive outdoor storage, directly to the south of the OPG offices. To be cost effective, the site selection process was confined to Regionally-owned properties. Acquisition of private property for the facility would represent a substantial and unnecessary cost, given an ideal site in the immediate vicinity.

19. Conclusion

- 19.1 Regional staff have reviewed Municipality of Clarington Report PSD-013-20 and have provided comments and information in response to identified concerns. Further information on this project can be found in Report #2020-COW-20.
- 19.2 The preferred site is ideally suited for the proposed use, and unnecessary costs would be incurred by providing the facility on another site further removed from the DYEC. The site builds upon the significant Regional investment already made in the Business Park, improves operational efficiencies and reduces the overall cost of the project. The preferred site offers the potential for operational synergies with the Courtice Water Pollution Control Plant, and the Durham York Energy Centre as a Regional resource recovery system and campus.
- 19.3 This report has been reviewed by the Planning and Economic Development Department.
- 19.4 For additional information, contact: Gioseph Anello, Acting Director of Waste Management Services, at 905-668-7711 extension 3445.

20. Attachments

Attachment #1: [Link to Municipality of Clarington Report #PSD-013-20](https://weblink.clarington.net/WebLink/0/edoc/311146/PSD-013-20)
(<https://weblink.clarington.net/WebLink/0/edoc/311146/PSD-013-20.pdf>)

Respectfully submitted,

Original signed by:

Susan Siopis, P.Eng.
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine Baxter-Trahair
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