

To: Warden and Members of County Council

From: Director of Public Works

Environmental Assessment Changes for Advanced Recycling Facilities, Environmental Registry of Ontario Posting No. 019-4867

RECOMMENDATION

- 1. That Oxford County Council receive Report No. PW 2022-24 entitled “Environmental Assessment Changes for Advanced Recycling Facilities, Environmental Registry of Ontario Posting No. 019-4867” as information.**

REPORT HIGHLIGHTS

- The purpose of this report is to update Oxford County Council on the Ministry of the Environment, Conservation and Parks (MECP) proposed amendment to the Environmental Assessment (EA) process for Advanced Recycling Facilities, as posted on the Environmental Registry of Ontario (ERO) for a 45-day public comment period.
- The proposed amendment will streamline the approval process for advanced recycling facilities that utilize thermal treatment technologies to process waste for reuse of material in product manufacturing and/or alternative fuel/energy generations to offset the reliance on raw materials.
- Of note, the proposed amendments permit EA requirement exemptions for smaller scale/high recovery advanced recycling facilities based on tonnage and recovery rate thresholds to incentivize waste diversion and resource recovery.

Implementation Points

Staff prepared comments in response to ERO posting No. 019-4867, as attached to this report, and submitted the comments to MECP on March 4, 2022, within the prescribed public comment period.

Financial Impact







No financial impacts will result from adopting the recommendation contained in this report.

Communications

Report No. PW 2022-24 will be circulated to Area Municipalities for information.

Following Council’s adoption of the recommendations contained in this report, a copy of the Council resolution will be forwarded to the MECP to support the County’s comments which were previously submitted on March 4, 2022.

Strategic Plan (2020-2022)

					
<i>WORKS WELL TOGETHER</i>	<i>WELL CONNECTED</i>	<i>SHAPES THE FUTURE</i>	<i>INFORMS & ENGAGES</i>	<i>PERFORMS & DELIVERS</i>	<i>POSITIVE IMPACT</i>
		3.i.	4.ii.		

DISCUSSION

Background

On January 14, 2022, the MECP released its proposed amendment for EA requirements under the Environmental Assessment Act (EAA) for Advanced Recycling Facilities (ARFs) and posted it on the ERO for a 45-day public comment period. This posting is proceeding concurrently with the previously proposed Project List for projects (which did not identify ARFs) that would be EA exempt or require an environmental screening process (ESP) and/or comprehensive EA (CEA) under the EAA and subsequent regulatory framework.

In fall 2020, the MECP began consultation on the proposed Project List for projects that would require a CEA and would include projects considered to have the potential for significant environmental impacts taking into account the following criteria:

- the magnitude of the effect
- the geographic extent of the effect
- the duration of the effect
- the frequency of the effect
- the degree of reversibility of the effect
- the possibility of occurrence of the effect

The Project List approach under the EAA is intended to modernize the approval process and better align Ontario with other provincial and federal jurisdictions to determine the types of projects that are exempt from the EA approval process or require a streamlined ESP and/or CEA. Under the Project List proposal, typical waste management projects that currently require a CEA (e.g. new landfill sites) will continue to need one.

The current posting (ERO No. 019-4867) for ARFs is associated with, but proceeding separately from, the Project List approach since new EA requirements, definitions and regulatory thresholds are being proposed for ARFs.

ARFs which utilize thermal treatment technologies (pyrolysis, gasification, plasma arc, incineration) are typically employed to recover energy from waste that can not be managed in other ways. Thermal treatment technologies have advanced considerably over recent decades and have been employed by several public (Durham York Energy Centre, Peel Region, City of Edmonton, Metro Vancouver) and private sectors (Emerald Energy, Walker Environmental, Enkern, Responsible Energy and Green Mantra) as another tool to manage waste and promote landfill diversion.

Thermal treatment technologies generally rely on heat and pressure to breakdown waste materials including, but not limited to:

- contaminated recyclable materials (i.e. residuals in blue box, contaminated mixed paper),
- hard-to-recycle plastics (i.e. plastic toys, black plastic, coffee pods, etc),
- recycling materials that have limited end markets (i.e. film plastic, polystyrene, etc.),
- clean/contaminated food organics,
- fats, oils, grease (FOG),
- paper towels,
- wood biomass,
- sewage biosolids,
- diapers,
- pet waste, and
- sanitary pads.

Thermal processing of this challenging waste stream affords for material conversion/re-use in alternative product manufacturing and/or resource recovery through the generation of alternative fuels and/or energy (Energy-from-Waste).

As part of the 2022 Business Plan and Budget, the County will be undertaking an organics resource recovery technology (ORRT) feasibility study that will consider treatment technologies such as composting, anaerobic digestion and advanced thermal technologies for diversion of organic waste and resource recovery for beneficial use.

Comments

Staff reviewed the MECP's proposed amendment to the EA approval process for ARFs posted on the ERO (No. 019-4867) and participated in an informational webinar hosted by the MECP to inform stakeholders and provide further clarification on the details of the proposed amendment.

The proposed amendments include changes to EA requirements for ARFs based on new tonnage and recovery rate thresholds and will incentivize waste diversion and resource recovery.

Accordingly, smaller scale ARFs that process up to 10 tonnes per day (TPD) are proposed to be exempt from the EA approval process. ARFs processing between 10 to 100 TPD with an 80% minimum recovery rate are proposed to only have to go through the Environmental Screening Process and will be exempt from the EA approval process. Conversely, ARFs that process more than 100 TPD or between 10 and 100 TPD but with a recovery rate less than 80% will continue to be required to undergo an environmental screening process and/or a comprehensive EA. All ARFs will continue to be subject to all other permits and approvals including Environmental Compliance Approvals.

The proposed amendments further reinforce the MECP's commitment to:

- support the use of advanced recycling, thermal treatment and energy recovery technologies;
- ensure valuable resources that can be recovered from hard-to-recycle plastics do not end up in landfill;
- clarify the role that advanced recycling plays in resource recovery from waste; and
- align the approval process for ARFs with that of traditional recycling facilities.

In principle, staff supports the MECP's proposed EA amendments for Advance Recycling Facilities as they support the *Circular Economy Act* as well as Oxford County's Zero Waste Plan to achieve 90% landfill waste diversion through waste resource recovery technologies.

The County's submission comments in response to three specific questions raised by the MECP in ERO Posting No. 019-4867 are included in Attachment No. 1. These comments were submitted to the MECP on March 4, 2022.

Conclusions

Staff supports the proposed changes to the EA approval process for Advanced Recycling Facilities as it will streamline administrative red tape for innovative start-ups, pilot projects, and good performers (i.e. high recovery rates), as well as, better align Ontario's waste management regulatory framework with more modern technological processes and requirements.

SIGNATURES

Report Author:

Original signed by:

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Departmental Approval:

Original signed by:

David Simpson, P. Eng., PMP
Director of Public Works

Approved for submission:

Original signed by:

Michael Duben, B.A., LL.B.
Chief Administrative Officer

ATTACHMENT

Attachment 1: Oxford County Submission - Environmental Assessment Requirements for Advanced Recycling Facilities under the Environmental Assessment Act, ERO Posting No. 019-4867