

Administrative Report

Office of the General Manager Essex-Windsor Solid Waste Authority

To: Warden Gary McNamara and Members of County Council

From: Michelle Bishop, CGA, CPA
General Manager, Essex-Windsor Solid Waste Authority

Date: October 20, 2021

Subject: Essex-Windsor Solid Waste Authority (EWSWA) – Regional Food and Organics Waste Management Project

Purpose

The purpose of this report is as follows:

- 1) To provide an update on EWSWA's Food and Organics Waste Management Project.
- 2) To request consideration from Essex County Council for a Regional approach to the Food and Organics Waste Management Project, as it relates to participation from local municipalities.
- 3) To advise Essex County Council of EWSWA's direction to it's Administration to schedule a presentation at each of the seven (7) County municipalities and the City of Windsor, as soon as possible, outlining the requirements of the Ontario Food and Organics Waste Policy Statement and the decision points that will be required by each municipality surrounding a Regional Organics Waste Management Program.

Background

The primary purpose of the project is to comply with Ontario's Food and Organic Waste Policy Statement pursuant to Section 11 of the 2016 Resource Recovery and Circular Economy Act (collectively "The Organics Provincial Policy Statement" or "OPPS"), which will require some municipalities in Essex-Windsor to achieve specific reduction and recovery target rates by 2025 as follows:

- **City of Windsor** – Provide curbside collection of food and organic waste to single family dwellings in an urban settlement area and to achieve a target rate of reduction of 70%;
- **Amherstburg, LaSalle, Leamington and Tecumseh** – Provide collection (through a public drop-off depot or community composting area or through curbside collection) of food and organic waste to single family dwellings in an urban settlement area and to achieve a target rate of reduction of 50%;
- **Essex, Kingsville and Lakeshore** – Not required to achieve specific rates of reduction for food and organic waste based on their population and population densities.

At its meeting held October 6, 2020, the EWSWA Board approved the development and implementation of a regional food and organic waste management plan and creation of a working group consisting of EWSWA, City of Windsor and County of Essex representation. The City of Windsor was given responsibility for all technical aspects of the plan development.

The project was also to consider the inclusion of biosolids from wastewater treatment to address upgrades anticipated at the Windsor Biosolids Processing Facility and to align with recommendations of the City of Windsor's Integrated Site Energy Master Plan. There may be an opportunity to include biosolids from other Essex County municipalities in the evaluation of alternatives if deemed desirable.

At the November 3, 2020 meeting the EWSWA Board approved the creation of the Food and Organic Waste Working Group and Oversight Committees to be comprised of staff from the City of Windsor, the County of Essex and the EWSWA.

At the December 1, 2020 meeting the EWSWA Board approved the budget and Project Charter for Phase 1 – Consulting and Project Direction. The

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budget included the cost for GHD Limited (GHD), the consultant engaged by the City of Windsor. The scope of Phase 1 of this project was to include:

- Researching what other municipalities are doing to comply with the legislation, including best practices;
- Review responses from City of Windsor expression of interest EOI#114-20;
- Identify and prioritize project goals;
- Evaluate service delivery models;
- Evaluate technology alternatives including site considerations, risks, advantages, disadvantages, constraints, challenges, life cycle, high level capital cost and other relevant considerations;
- Advise on site specific spatial requirements, buffer zones and other environmental and planning restrictions;
- Evaluate, through a cost-benefit analysis, end market revenues and renewable energy options;
- Preliminary schedule development;
- Meet with stakeholders (County of Essex municipalities);
- Prepare a report summarizing the activities and findings of the above, including a recommendation for the preferred solution; and
- Provide technical input into and participate in the evaluation of responses to a request for qualifications.

Between December 2020 and May 2021, the Oversight Committee:

- Provided the EWSWA Board with regular project updates;
- Attended Regional CAO meetings on December 9, 2020 and April 30, 2021 to provide project updates;
- Held meetings with Stakeholders – Essex County municipalities, Toronto, London, Chatham-Kent, Lambton, Sarnia, Association of Municipalities of Ontario and Essex Region Conservation Authority.

At the June 1, 2021 EWSWA Board meeting, the Board was presented with the final report from GHD. Additionally, the Oversight Committee presented a set of proposed recommendations to proceed with the next stages of this project. At that meeting, the Board received the recommendations and passed a motion for EWSWA Administration to retain a third-party independent consultant to conduct a peer review of the evaluation process as detailed in the GHD report. After a competitive bidding process, EWSWA retained the services of Tetra Tech Canada Inc. (Tetra Tech) to conduct the peer review.

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At the September 15 and October 5, 2021 meetings of the EWSWA Board, Tetra Tech provided a summary of findings as a result of the peer review including:

1. The GHD Reports are substantially sound and offer comparative impacts of the various options. Concern was noted in regards to the capital costs presented by GHD, which may be underestimated;
2. Given the compliance deadline of 2025 that applies to Windsor, Tecumseh, Amherstburg, LaSalle and Leamington, and the likelihood of an organics ban at all landfills which would then capture Kingsville, Essex and Lakeshore, Tetra Tech recommends that all 8 communities be part of a regional solution;
3. The Ministry of the Environment, Conservation and Parks ("MECP") will assess innovative technologies for compliance with the Food and Organic Waste Ontario Provincial Policy Statement ("OPPS"). Proponents of innovative technologies must demonstrate compliance with the OPPS, and should be allowed to submit a proposal in response to a Request for Proposal ("RFP");
4. Anaerobic digestion appears to be the best fit for both organics processing and greenhouse gas reduction targets;
5. Tetra Tech recommends an RFP be prepared that requires proponents to meet the following key critical end points:
 - a. That the proponents have the skills, experience and technology that works;
 - b. That any proposal meets all regulatory and policy requirements for EWSWA (including energy policies);
 - c. That a cost proposal (whether upfront capital or all-inclusive tipping fees) be evaluated on a Net Present Value ("NPV") basis.

At the October 5, 2021 meeting of the EWSWA Board, the Oversight Committee provided the Board with revised recommendations, based on the conclusions of the Tetra Tech report. This report is included as Appendix A.

Discussion

At the October 5, 2021 EWSWA meeting, the Board reviewed the recommendations proposed by the Organics Oversight Committee.

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It was identified at the meeting that, to date, the concept of a Regional Food and Organics Plan had only been dealt with at an EWSWA Board level and that a project of this significance should be discussed at a County Council meeting to allow all municipal representatives to be involved in the discussion.

Board members stated that a regional solution would be preferred in order to achieve diversion targets and to ensure consistent service levels throughout the County.

Board members also identified that similar to the Blue Box Program, the program should include regional collection and processing of material to ensure the highest capture of material and resident participation. Curbside collection as opposed to depot collection was identified as the preferred method of collection.

After some deliberations, the following resolution was adopted:

Moved by Marc Bondy

Seconded by Leo Meloche

That the Essex-Windsor Solid Waste Authority RECEIVE the following recommendations of the Food and Organics Waste Management Oversight Committee, as amended and refer to Essex County Council for direction:

- 1) That the Food and Organic Waste Management Oversight Committee BE DIRECTED to proceed with a Procurement Plan for an organic waste management facility that meets the following minimum criteria:
 - a. That, should a new facility be constructed, the facility BE LOCATED:
 - on lands adjacent to the Regional Landfill, or
 - on lands adjacent to the Windsor Biosolids Processing Facility, or
 - at a site supplied by a proponent through the procurement submissions, and;
 - b. That, consistent with the intent of the City of Windsor Community and Corporate Energy Plans and the Essex County Regional Energy Plan, that the RFP BE REQUIRED to utilize a technology that produces renewable energy, in addition to helping municipalities move towards their greenhouse gas

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reduction goals and to meet or exceed waste diversion targets set out in the OPPS, and;

- c. That the RFP BE REQUIRED to accept, at a minimum, source separated organics from Windsor and the County of Essex, and;
 - d. That if the facility is located at the Windsor Biosolids Processing Facility, biosolids from the City of Windsor's wastewater treatment facilities BE INCLUDED in the minimum feedstock, with the costs and revenues related to the processing of the biosolids portion of the feedstock being apportioned to the City of Windsor, and;
 - e. That industry standards BE EXCEEDED regarding odour control measures implemented at the facility and the end product, and;
- 2) That the EWSWA Board APPROVE a sole source for the next phase of consulting services related to the preparation of a Request for Qualifications, followed by an RFP to GHD for additional fees at an upset limit of \$50,000, and that the EWSWA Board approve the terms of reference prior to the publishing of the RFQ and the RFP, and;
 - 3) That the Council of the County of Essex be requested to initiate and lead organics collection and processing on a regional basis, and;
 - 4) That the Food and Organics Waste Oversight Committee BE DIRECTED to report back to the EWSWA Board with a recommended Procurement Plan outlining project delivery model selection, timing and next steps, and;
 - 5) That the Food and Organics Waste Oversight Committee BE DIRECTED to investigate planning and environmental approval requirements for the municipally owned sites adjacent to the regional landfill in the County of Essex and the Windsor Biosolids Processing Facility in the City of Windsor and report findings back to the Board, and;
 - 6) That, prior to any contract award, the General Manager of EWSWA BE DIRECTED to report back to the EWSWA Board with a Regional Food and Organics Waste Management Plan, such plan to include the proposed funding model including sharing of expenses, revenues and environmental credits and responsibilities of all parties related to the facility, including biosolids processing if the Windsor Biosolids Processing Facility is the selected location, and the food and organic waste collection system.

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CARRIED

Following a discussion regarding recommendation #2 and the time and effort required to prepare the Request for Qualifications, it was decided that the preparation of the RFQ should proceed as soon as possible. The following resolution was adopted:

Moved by Jim Morrison
Seconded by Gary Kaschak

That the EWSWA Board APPROVE a sole source for the next phase of consulting services related to the preparation of a Request for Qualifications, followed by an RFP to GHD for additional fees at an upset limit of \$50,000, and that the EWSWA Board approve the terms of reference prior to the publishing of the RFQ and the RFP.

CARRIED

Acknowledging the need to have the local municipalities informed on the requirements of the Ontario Food and Organics Waste Policy Statement and discussions regarding a Regional Food and Organics Waste Management Program, the following resolution was adopted:

Moved by Kieran McKenzie
Seconded by Jim Morrison

Authority Administration be directed to schedule a presentation at each of the seven (7) County municipalities and the City of Windsor as soon as possible outlining the requirements of the Ontario Food and Organics Waste Policy Statement and the decision points that will be required by each municipality surrounding a Regional Organics Waste Management Program.

CARRIED

Additional Information to be Considered

In addition to the above information provided, the following factors are presented:

- The population and population density figures that have identified the level of participation for each municipality are based on the 2016 census, consideration should be given for growth in each municipality.

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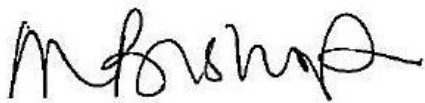
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- Ontario's Environment Plan includes the development of a proposal to ban food waste from landfill.
- Regional landfill expenditures are predominantly fixed, any diversion activities that result in the redirection of waste from the landfill will not generate a savings for the municipalities.
- The diversion of waste from the landfill may increase the tipping fees for municipalities that do not participate in organics diversion.
- A regional solution from the onset would ensure consistent public education for all residents.
- The success of an organics program can be influenced by the structure of traditional garbage collection programs (restrictions on garbage will encourage organics diversion). Consideration should be given to current waste collection contract expiration dates.
- Terms of the project and resulting recommendations combine two sets of requirements: organics legislation and energy plan targets.

Recommendation

- a) **THAT** the Essex County Council consider a Regional approach to the Food and Organics Waste Management Project as it relates to participation from municipalities and report its decision back to the Essex-Windsor Solid Waste Authority no later than December 31, 2021.

Respectfully Submitted



Michelle Bishop, CGA, CPA
General Manager

Attachment: Appendix A

Appendix A

MEMO

Date: September 29, 2021

To: EWSWA Board Members

From: Regional Food and Organics Oversight Committee

Meeting Date: October 5, 2021

Subject: Regional Food and Organics and Biosolids Waste Management Project - Revised Recommendations

1. Purpose

The purpose of this report is to provide the Essex Windsor Solid Waste Authority ("EWSWA") Board with a revised set of recommendations from the Regional Food and Organics Oversight Committee ("Oversight Committee") related to project direction and participation from municipalities.

It is intended that the EWSWA Board provide direction based on these recommendations during the October 5, 2021 board meeting.

2. Background

At the June 1, 2021 EWSWA Board meeting, the Oversight Committee presented a set of proposed recommendations to proceed with the next stages of this project. At the June 1, 2021 EWSWA Board meeting, the Board received the recommendations and passed a motion for EWSWA Administration to retain a third-party independent consultant to conduct a peer review of the evaluation process as detailed in the GHD Limited ("GHD") report. After a competitive bidding process, EWSWA retained the services of Tetra Tech Canada Inc. ("Tetra Tech") to conduct the peer review.

3. Discussion

A summary of the findings identified by Tetra Tech are provided in Section 5.0 of the report entitled *“Essex-Windsor Solid Waste Authority Peer Review of Organics and Biosolids Waste Management & Processing Consulting Report and Analysis of the Impact Organic Diversion from the Regional Landfill”*, Tetra Tech Canada Inc., September 24, 2021 (“Peer Review Report”) and summarized below:

- The GHD Reports are substantially sound and offer comparative impacts of the various options. Concern was noted in regards to the capital costs presented by GHD, which may be underestimated.
- Given the compliance deadline of 2025 that applies to Windsor, Tecumseh, Amherstburg, LaSalle and Leamington, and the likelihood of an organics ban at all landfills which would then capture Kingsville, Essex and Lakeshore, Tetra Tech recommends that all 8 communities be part of a regional solution
- The Ministry of the Environment, Conservation and Parks (“MECP”) will assess innovative technologies for compliance with the Food and Organic Waste Ontario Provincial Policy Statement (“OPPS”). Proponents of innovative technologies must demonstrate compliance with the OPPS, and should be allowed to submit a proposal in response to a Request for Proposal (“RFP”).
- Anaerobic digestion appears to be the best fit for both organics processing and greenhouse gas reduction targets
- Tetra Tech recommends an RFP be prepared that requires proponents to meet the following key critical end points:
 - That the proponents have the skills, experience and technology that works
 - That any proposal meets all regulatory and policy requirements for EWSWA (including energy policies)
 - That a cost proposal (whether upfront capital or all-inclusive tipping fees) be evaluated on a Net Present Value (“NPV”) basis.

4. Revised Recommendations

Based upon the conclusions of the Peer Review Report, the following revised recommendations are proposed for the Board’s consideration:

1. That the Food and Organic Waste Management Oversight Committee **BE DIRECTED** to proceed with a Procurement Plan for an organic waste management facility that meets the following minimum criteria:
 - a. That, should a new facility be constructed, the facility **BE LOCATED:**
 - on lands adjacent to the Regional Landfill, or
 - on lands adjacent to the Windsor Biosolids Processing Facility, or
 - at a site supplied by a proponent through the procurement submissions, and;
 - b. That, consistent with the intent of the City of Windsor Community and Corporate Energy Plans and the Essex County Regional Energy Plan, that the RFP **BE REQUIRED** to utilize a technology that produces renewable energy with concurrent recovery of nutrients, in addition to helping municipalities move towards their greenhouse gas reduction goals and to meet or exceed waste diversion targets set out in the OPPS, and;
 - c. That the RFP **BE REQUIRED** to accept, at a minimum, source separated organics from Windsor and any other of the municipalities choosing to participate at the onset (to be confirmed by December 31st, 2021), and allows for expansion to accommodate source separated organics from municipalities that do not participate at the onset through a curbside collection program, and;
 - d. That if the facility is located at the Windsor Biosolids Processing Facility, biosolids from the City of Windsor's wastewater treatment facilities **BE INCLUDED** in the minimum feedstock, with the costs and revenues related to the processing of the biosolids portion of the feedstock being apportioned to the City of Windsor, and;
 - e. That industry standards **BE EXCEEDED** regarding odour control measures implemented at the facility and the end product, and;

2. That the EWSWA Board **APPROVE** a sole source for the next phase of consulting services related to the preparation of a Request for Qualifications, followed by an RFP to GHD for additional fees at an upset limit of \$50,000, and;
3. That the 7 County municipalities, as applicable, **BE REQUESTED** to report back to the EWSWA Board by December 31, 2021 identifying if they will participate in the Regional Food and Organics Waste Management program at its onset and to what degree, based on the recommendations of the Food and Organic Waste Oversight Committee and endorsed by the EWSWA Board, and;
4. That the Food and Organics Waste Oversight Committee **BE DIRECTED** to report back to the EWSWA Board with a recommended Procurement Plan outlining project delivery model selection, timing and next steps, and;
5. That the Food and Organics Waste Oversight Committee **BE DIRECTED** to pursue planning and environmental approvals for the municipally owned sites adjacent to the regional landfill in the County of Essex and the Windsor Biosolids Processing Facility in the City of Windsor, and;
6. That, prior to any contract award, the General Manager of EWSWA **BE DIRECTED** to report back to the EWSWA Board with a Regional Food and Organics Waste Management Plan, such plan to include the proposed funding model including sharing of expenses, revenues and environmental credits and responsibilities of all parties related to the facility, including biosolids processing if the Windsor Biosolids Processing Facility is the selected location, and the food and organic waste collection system.