

# MEMO

**Date:** January 6, 2022

**To:** EWSWA Board Members

**From:** Regional Food and Organics Oversight Committee

**Meeting Date:** January 12, 2022

**Subject:** Regional Food and Organics and Biosolids Waste Management Project – Facility Ownership and Recommended Next Steps

---

## 1. Purpose

The purpose of this report is to inform the Essex Windsor Solid Waste Authority (“EWSWA”) Board of numerous issues that have been identified as the Regional Food and Organics Oversight Committee (“Oversight Committee”) works towards the preparation of a Request for Qualification (RFQ). The consultant (GHD Limited (GHD)) has prepared a roadmap of recommended steps to assist EWSWA, the City of Windsor and County municipalities (collectively referred to as the “Regional Partners”) to navigate through the various issues and decision points required to achieve the final goal of establishing a long-term organics collection and processing program that meets compliance obligations. The Oversight Committee has presented recommendations to initiate the first phase of an organics program.

It is intended that the EWSWA Board provide direction based on these recommendations during the January 12, 2022 board meeting.

## 2. Background

At the October 5, 2021 EWSWA Board meeting, administration was directed to proceed with the development of a procurement plan for an organic waste management and processing project that would be as unrestrictive as possible to allow the private sector to propose innovative and cost-effective solutions.

During the development of the RFQ, it has become apparent that an RFQ, and subsequent Request for Proposal (RFP) that allows for both municipally-owned and privately-owned models carries significant risks. The absence of information on components of the long term organics management program, such as organics quantity and composition, has also been identified as an infrastructure procurement risk. These risks should be brought to the attention of the Board prior to proceeding with a procurement process for this project.

### 3. Discussion

The development of the RFQ, and subsequent RFP, can in broad terms be broken down into 2 sections: technology and procurement.

In terms of technology, it is relatively common to have an RFQ/RFP remain open to all technologies available. In the case of this project, there is no concern with issuing an RFQ/RFP that is open to any technology that complies with the Ontario Food and Organic Waste Policy Statement.

In terms of procurement, the type of contract (i.e., service contract with a private facility, municipal-owned asset, P3, etc.) is typically specified in the procurement documents. Although there are several different types of contracts, the two main categories of contracts are defined by contracted service delivery by a privately-owned facility and development of a municipally-owned facility. There are a number of issues with undertaking a procurement process for an organic waste management facility without first determining if the facility will be municipally-owned or privately-owned. A procurement process that is neutral on facility ownership will be complex and create an unlevel playing field for potential respondents. The following are issues that will present themselves if the procurement process does not specify facility ownership:

1. Contract and Specifications

A procurement process that considers both municipal and private ownership will require the development of two separate contract and specification documents. The Technical Memorandum prepared by GHD (provided in Attachment A) presents a summary of how various types of contracts are typically structured. Creating two separate contracts and specifications will be both costly and time consuming.

2. Difficult Evaluation Process

It is relatively simple to compare municipally-owned and privately owned facilities on certain important metrics such as Net Present Value (NPV) and GHG emission reduction performance. However, there are other significant aspects of the two ownership models that are not easily compared, such as construction material quality, maintenance plans, etc. A good analogy would be choosing between a custom-built home and a rental apartment. It is difficult to compare quality or value for money because the requirements and expectations are different. A procurement process that considers proposals for both municipal and private ownership will create a situation where projects that do not easily compare must be evaluated and scored using the same metrics, impacting the ability to properly compare and evaluate proposals. Complex evaluation processes or metrics also increase the risk of unsuccessful bidders to challenge the award results.

3. Cost and Effort to Participate

The cost and level of effort required to participate in a procurement process for a municipally-owned facility are significantly greater than that for procuring a processing

service provider where the service provider has an existing facility with sufficient capacity. Costs for proponents to submit a proposal for a municipally-owned facility must include a level of design in order to accurately prepare cost estimates. The cost to go through this process is expected to be up to \$1 million in effort for a facility of this nature. This creates an unlevel playing field among potential participants in the procurement process and will discourage potential participants from participating under a project delivery method for a municipally-owned facility.

#### 4. Risk in Participation

Potential participants in the procurement process will only participate if their perceived chance of winning is great enough. By opening up the procurement process to both municipally- and privately-owned project delivery methods, the perceived chance of winning will be lowered for all parties, but especially for potential participants delivering a municipally-owned facility. The perception in the Ontario market is that the procurement of a municipally-owned organics facility may not be able to compete with merchant capacity processors.

A procurement process that considers both municipal and private ownership will create a situation where interest is very low for potential participants for delivering a municipally-owned facility.

In addition to the procurement risks outlined above, GHD identified several questions, observations and processes that need to be determined prior to the development of a long-term organics solution. A key issue is that the Regional Partners have not yet designed or implemented their organics management programs, including collections and processing, and therefore do not have organics quantity or composition data to help minimize infrastructure procurement risk.

## 4. Mitigation Strategies

GHD has proposed various strategies that can be used to mitigate some of the procurement concerns listed in Section 3 above. These strategies are summarized below:

#### 1. Determine Facility Ownership

In order to receive a greater number of competitive bids, it is advised that the facility ownership model be selected prior to the issue of an RFQ/RFP. This would alleviate all of the issues identified in Section 3 above. However, as discussed in Section 5 below, other considerations in the Windsor-Essex region make this decision difficult at this time.

#### 2. Select a Collaborative Project Delivery Model

For proponents interested in a municipally-owned facility, there is an increased interest and preference by contractors for project delivery models that are more collaborative to reduce the cost to participate and alleviate risks taken on by contractors. A collaborative

approach includes one or more proponents retained prior to the completion of the design. The proponents work with the owner to create the design. At established design stages, the owner may select proponent(s) to proceed to the next phase. When the design is at or near completion, the proponent(s) is required to submit a fixed cost for the remainder of the project. This approach reduces costs to participate and alleviate risks taken on by the proponents, as they are reimbursed for their design efforts and are involved in the design which allows a greater amount of comfort for the proponents.

3. Provide an Honorarium

If the ownership model is not defined in the procurement process, one way to encourage teams completing proposals for a municipally-owned facility is to provide an honorarium. It is anticipated that an honorarium of a sum greater than \$1 million per compliant bid would be required to be effective. This mitigation strategy would address the issue of the imbalance of the cost to participate, but does not address the other risks outlined above.

4. Enter into a Short Term Service Delivery Contract in the Interim

Municipalities commonly begin processing organic waste through service delivery contracts before procuring a municipally owned facility. This would allow time to gain experience with the collection program and knowledge regarding waste quantities and composition. This mitigation strategy provides compliance with provincial requirements and allows additional time to plan and gain invaluable information, however one of the other mitigation strategies will eventually need to be selected in order to proceed with a long-term organics program. It is noted that since a long-term organics program is not expected to be operational by 2025, a service delivery contract will likely be necessary to establish compliance for the municipalities required to meet organics management obligations by 2025.

## 5. GHD's Conclusions and Recommendations

Given the issues identified with an open procurement model, and given the magnitude of this project and timelines, GHD has recommended that one or more of the mitigation strategies be selected, and notes that ultimately a decision on facility ownership should be made. GHD further notes that at this stage of the project, there remains more questions than answers about the program components of a long-term organics solution, and is therefore recommending that the Regional Partners move forward with planning and implementing one or more short-term processing contracts. This would allow more time to develop an organics collection program, and provide data needed to form the basis of a long-term design or procurement. GHD recommends that short-term contract(s) be procured as soon as possible in order to secure capacity, and notes that many other municipalities will be working towards securing capacity in advance of the upcoming compliance deadline.

Furthermore, putting some distance between the pandemic and the large capital project of constructing a municipally-owned organic management facility could potentially save a significant amount of money.

GHD has proposed a Roadmap, provided in Table 5.1 of the attached Technical Memorandum and replicated below, to assist the Regional Partners with a path to navigate the various questions and issues that still need to be determined to support data-driven decision making. The proposed roadmap consists of 11 distinctive steps, where data obtained from previous steps may establish the basis for subsequent steps.

Item #	Steps	Description
1	Program governance	<ul style="list-style-type: none"> <li>– For both processing and collections.</li> <li>– This is currently in progress on the processing side. Which lower-tier municipalities will participate and when? A determination is expected within the next few weeks.</li> <li>– Study if collections continue to be a lower-tier responsibility or are there benefits to shifting this to county level (i.e., EWSWA).</li> </ul>
2	Short-term processing contract(s)	<p>Procure short-term processing contracts to cover the first few years of processing needs to maintain compliance with the provincial requirements and until decisions are made regarding a long-term solution:</p> <ul style="list-style-type: none"> <li>– Start with market sounding to determine current and future available capacity and types of technology.</li> <li>– Roll-out of collections could be phased over this period starting with one of the municipalities that is required to implement a curb-side collection program (e.g., the City of Windsor) and then other municipalities added over time.</li> <li>– Planning and development for this step in the roadmap should begin early as this is a lengthy process</li> <li>– Some work from subsequent steps must be completed prior to establishing a processing contract, including the development of a collection program</li> </ul>
3	Feedstock composition and forecast study	<ul style="list-style-type: none"> <li>– After governance is decided, update composition and tonnage forecasts from previous studies.</li> <li>– This study will define how much processing is needed and when. This study would be attached to the RFP as background information.</li> <li>– Vines: explore options with Ontario Greenhouse Growers Association to divert this material from the landfill. This work should be completed in parallel to understand potential synergies before an opportunity is lost.</li> <li>– Other feedstock: Identify any other feedstocks EWSWA may want to procure and be responsible for collecting and processing. Wastewater sludges should also be considered further as planning for local wastewater infrastructure expansion and upgrades progresses in parallel; including characterizing this feedstock more fully.</li> </ul>
4	Project risk matrix and workshop	<ul style="list-style-type: none"> <li>– Complete a risk identification and quantification exercise to help inform program and project development decisions; including the question of owning or not owning a facility.</li> </ul>
5	Environmental attributes study	<ul style="list-style-type: none"> <li>– Study to determine what should be done with energy/gas and environmental attributes if attributes can be retained through a</li> </ul>

Item #	Steps	Description
		merchant plant arrangement. Consult with Enbridge. Consult with processing plants (maybe as part of market sounding discussed under Short Term Processing Contract(s)).
6	Develop collection program	<p>Complete study and plan for collections program roll-out including:</p> <ul style="list-style-type: none"> <li>– Review how rollouts are achieved in other municipalities (e.g., Guelph, York, Peel).</li> <li>– Consider how EPR will affect collection volumes and programs at the various municipalities.</li> <li>– How will collections be accomplished (e.g., curb-side collection or depot drop-off)</li> <li>– What technologies (e.g., RFID, split collection vehicles, bins, bags, automated collection) should be considered for a new program?</li> <li>– Consider potential collection schedule and routing</li> <li>– Consider timing relative to current collections contracts in the various municipalities</li> <li>– Develop implementation plans based on the above: <ul style="list-style-type: none"> <li>• Public communication plan</li> <li>• Collection routing plan</li> <li>• Fleet management strategy</li> <li>• Implementation timeline</li> </ul> </li> </ul> <p>This will provide a clear picture of how much processing is needed and when. Planning and development for this step in the roadmap should begin early as this is a lengthy process.</p>
7	Essex landfill gas study	<ul style="list-style-type: none"> <li>– Confirm landfill gas forecast and composition.</li> <li>– Confirm landfill gas ownership and determine strategic partners.</li> <li>– Confirm pipeline location with Enbridge.</li> </ul>
8	Building consensus and roadmap with municipalities	<ul style="list-style-type: none"> <li>- To ensure a coordinated and cohesive rollout across the Essex-Windsor region for an organics management program that includes both collection and processing, will require support for local municipal staff from the Technical Working Group and EWSWA</li> <li>- Communication with the municipalities should be done early and throughout the process. Each municipality will have their own financial and other planning considerations to address, which may be a lengthy process.</li> </ul>
9	Other studies: <ul style="list-style-type: none"> <li>– Form of contract</li> <li>– Siting</li> </ul>	<ul style="list-style-type: none"> <li>– Following completion of other studies and roll-out of collections program and short-term processing contracts.</li> <li>– Update of siting and form of contract work done as previous studies. An update will be required as it is anticipated that much will change in the years following the pandemic and as other provincial policies change.</li> </ul>
10	Final report on long-term processing solution	Compile studies into a final report and recommendation to the EWSWA board for long-term processing solutions.
11	Procure long-term processing solution	Issue appropriate RFP for selected long-term processing solution.

Step 1 of the Roadmap, Program Governance, involves making decisions regarding who will be responsible for the implementation and management of each aspect of an organics program, and who will be participating and to what extent. The Oversight Committee, the Technical Working Group and the Regional Partners have been working towards a decision regarding Regional Program Governance and participation. However, collection of organic waste has not yet been evaluated. Additionally, a short-term service contract outlined in Step 2 of the Roadmap has not been initiated.

## 6. Conclusion

The Roadmap outlined above clearly illustrates that a significant amount of effort is still required before a long-term organics program is established. The only mitigating strategy that addresses all the procurement risks identified in Section 3 above is to select either a privately-owned facility or a municipally-owned facility. It is difficult for the Oversight Committee to recommend one or the other without first knowing which municipalities are participating and subsequently what tonnages and energy benefits can be achieved. Presentations made to local municipal councils in November and December 2021 are still being evaluated by local administration. The County of Essex has not yet scheduled the organics project on a meeting agenda and it is anticipated that once all local councils have considered this matter there will be interest to deal with the matter at the County level and the County of Essex will then be in a position to schedule the organics issue on a meeting agenda. Once program governance is established, organic waste collection will need to be evaluated in order to determine if regional or individual collection programs are recommended and identify if potential synergies and cost saving opportunities exist as a result of the implementation of an organics collection program.

Other considerations that may affect various decision points regarding an organics program include the need for the City of Windsor to have a functioning solution in place by 2029 to address the existing biosolids processing plant expected capacity overflow; which may include the construction of an anaerobic digestion facility, the expansion of the existing facility or institution of new technologies to address the capacity overflow. The timing and terms of each municipality's current collection contracts for general refuse need to be taken into consideration, including the allowance for lower tonnages in those contracts as it is expected that refuse amounts will decrease with the implementation of an organics program. The need to expand the landfill gas collection network, and options to manage the collected gas also need to be evaluated. Furthermore, equipment and material sourcing are seeing significant delays, to the point that any future needs should be requested 2 years in advance of that need, even for service contracts. Since Blue Box Extended Producer Responsibility (EPR) will be changing collection contracts in 2 years, it would be prudent to establish collection and processing programs by the 2<sup>nd</sup> quarter of 2022. This would allow proponents sufficient time to obtain collection vehicles, and increase merchant capacity as needed.

The only mitigating strategy that can be completed by the 2<sup>nd</sup> quarter of 2022 is a short term service delivery contract.

## 7. Oversight Committee Recommendations

The Oversight Committee is recommending that Step 2 of the Roadmap– Short Term Processing Contract(s) – be initiated as soon as possible in order to secure processing capacity, establish and maintain compliance with provincial requirements, and gather valuable information regarding organic waste within the region. The Oversight Committee, Technical Working Group and the Regional Partners will continue to work through the various steps required to reach the final step of an established long-term organics program. Therefore, based upon the conclusions and recommendations of the GHD Technical Memorandum, prepared in consultation with the Technical Working Group and the Oversight Committee, the following recommendations are proposed for the Board’s consideration:

1. That the Food and Organic Waste Management Oversight Committee **BE DIRECTED** to continue to work through the various steps outlined in the Roadmap, and report back with progress updates, and;
2. That the Food and Organic Waste Management Oversight Committee **BE DIRECTED** to proceed with a short-term organic waste processing contract(s) RFP that meets the following minimum criteria:
  - a. 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, and allows for changes to quantities of source separated organics, and;
  - b. That industry standards **BE EXCEEDED** regarding odour control measures implemented at the facility and the end product, and;
  - c. That the RFP **BE REQUIRED** to provide service for a 5-year term with options for extensions.