



Essex-Windsor Solid Waste Authority Regular Board Meeting Agenda

Meeting Date: Tuesday, May 2, 2023

Time: In-Camera Session - 4:00 PM
Regular Session Immediately following In-Camera Session

Location: Essex County Civic Centre
Council Chambers, 2nd Floor
360 Fairview Avenue West
Essex, Ontario N8M 1Y6

Meeting will be held in-person for Board Members and staff. Media representatives and interested members of the general public are invited to attend in-person.

LIST OF BUSINESS **PAGE NUMBERS**

1. Closed Meeting

A Closed Meeting is scheduled for 4:00 PM

Recommendation:

Moved by: _____

Seconded by: _____

THAT the Board move into a closed meeting pursuant to Section 239 (2) (i) of the Municipal Act, 2001, as amended for the following reason:
a trade secret or scientific, technical, commercial, financial or labour relations information, supplied in confidence to the municipality or local board, which, if disclosed, could reasonably be expected to prejudice significantly with the contractual or other negotiations of a person, group of persons, or organization.

2. Call to Order

3. Declaration of Pecuniary Interest

4. Approval of the Minutes

A. March 7, 2023 Regular Meeting Minutes 1-7

5. Business Arising from the Minutes

6. Correspondence

There are no items for discussion.

7. Delegations

There are no delegations for May 2, 2023.

8. Waste Diversion

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| A. Blue Box Collection Services Post Transition to Extended Producer Responsibility | 8-17 |
| B. Screening of Organics Tender | 18-20 |
| C. FoodCycler Organics Pilot Program | 21-25 |

9. Waste Disposal

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10. Finance & Administration

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| A. EWSWA 2023 Budget Approval Status | 40-41 |
| B. January – March 2023 Three-Month Operating Financial Review | 42-46 |
| C. 2022 Financial Statements and Auditors' Report | 47-69 |
| D. Staffing Requests – 2023 Budget | 70-72 |
| E. Extension of Agreement for Farmland Rent | 73-74 |
| F. Regional Waste Collection Update | 75-80 |

11. Other Items

12. By-Laws

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| A. By-Law 3-2023 | 81 |
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Being a By-Law to Authorize the Execution of an Agreement between the Essex-Windsor Solid Waste Authority and Frank Dupuis Landscaping & Trucking Ltd. for the Provision of Equipment and Labour for the Screening of Organic Waste at Essex-Windsor Solid Waste Authority Facilities in Essex County

B. By-Law 4-2023 82

Being a By-Law to Authorize the Extension of an Agreement between the Essex-Windsor Solid Waste Authority and Christopher Malott Farming Enterprises, Inc. for the Rental of Farmland in the vicinity of the Regional Landfill.

C. By-Law 5-2023 83

Being a By-Law to Confirm the Proceedings of the Meeting of the Board of the Essex-Windsor Solid Waste Authority for May 2, 2023.

13. Next Meeting Dates

Tuesday, June 6, 2023
Wednesday, July 12, 2023
Tuesday, August 1, 2023 (Cancelled)
Wednesday, September 13, 2023
Thursday, October 5, 2023
Tuesday, November 7, 2023
Tuesday, December 5, 2023

14. Adjournment



Essex-Windsor Solid Waste Authority Regular Board Meeting MINUTES

Meeting Date: Tuesday, March 7, 2023
Time: 4:00 PM
Location: Council Chambers
Essex County Civic & Education Centre
360 Fairview Ave. West
Essex, Ontario

Attendance

Board Members:

Gary McNamara - Chair	County of Essex
Hilda MacDonald	County of Essex (Ex-Officio)
Michael Akpata	County of Essex
Kirk Walstedt	County of Essex
Gary Kaschak – Vice Chair	City of Windsor
Kieran McKenzie	City of Windsor
Jim Morrison	City of Windsor
Mark McKenzie	City of Windsor

EWSWA Staff:

Michelle Bishop	General Manager
Steffan Brisebois	Manager of Finance & Administration
Cathy Copot-Nepszy	Manager of Waste Diversion
Tom Marentette	Manager of Waste Disposal
Teresa Policella	Executive Assistant

City of Windsor Staff:

Anne Marie Albidone	Manager of Environmental Services
Tony Ardovini	Deputy Treasurer Financial Planning
Shawna Boakes	Executive Director of Operations
Mark Spizzirri	Manager of Performance Management and Business Case Development

County of Essex Staff:

Sandra Zwiers	Director of Financial Services/Treasurer
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Absent:

Drew Dilkens	City of Windsor (Ex-Officio)
Hilda MacDonald	County of Essex (Ex-Officio)
Rob Shepley	County of Essex
Mary Birch	Interim CAO and Director of Council & Community Services/Clerk

1. Closed Meeting

Moved by Kieran McKenzie
Seconded by Mark McKenzie

THAT the Board move into a closed meeting pursuant to Section 239 (2) (i) of the Municipal Act, 2001, as amended for the following reason:

- (i) a trade secret or scientific, technical, commercial, financial or labour relations information, supplied in confidence to the municipality or local board, which, if disclosed, could reasonably be expected to prejudice significantly with the contractual or other negotiations of a person, group of persons, or organization.

**12-2023
Carried**

Moved by Gary Kaschak
Seconded by Michael Akpata

THAT the EWSWA Board rise from the Closed Meeting at 4:26 PM.

**15-2023
Carried**

2. Call to Order

Chair McNamara called the Regular meeting to order at 4:26 PM.

3. Declaration of Pecuniary Interest

The Chair called for any declarations of pecuniary interest and none were noted. He further expressed that should a conflict of a pecuniary nature or other arise at any time during the course of the meeting that it would be noted at that time.

4. Approval of the Minutes

Moved by Mark McKenzie
Seconded by Jim Morrison

THAT the minutes from the Essex-Windsor Solid Waste Authority Regular Meeting, dated February 7, 2023, be approved and adopted.

**16-2023
Carried**

5. Business Arising from the Minutes

There were no items raised for discussion.

6. Correspondence

There were no items for discussion.

7. Delegations

There were no delegations for March 7, 2023.

8. Finance & Administration

A. EWSWA 2023 Budget Approval Status

The Manager of Finance and Administration provided an update on the status of the 2023 EWSWA Budget approval process. On February 7, 2023, the Authority Board approved the budget recommendations. On March 1, 2023, Authority Administration attended Essex County Council to present the 2023 budget, address questions and seek approval. At this meeting, Essex County Council resolved to approve the Authority's budget. Authority Administration is scheduled to attend Windsor City Council to present the 2023 budget the week of April 3, 2023.

Moved by Michael Akpata

Seconded by Gary Kaschak

THAT the Board receive the report as information.

**17-2023
Carried**

9. Waste Diversion

A. Blue Box Transition Update Re: EWSWA Material Recovery Facilities

The Manager of Waste Diversion stated that the purpose of the report is to request approval from the Board to proceed with the release of a Request for Proposals (RFP) which includes the lease of one or both facilities, the purchase of processing equipment and the provision of recyclable materials processing services for material collected from non-eligible sources.

As noted in the presentation at the previous Board meeting, Ontario Regulation 391/21 only obligates Producers to collect defined eligible sources such as residential units, specified long term care and retirement homes, schools and public spaces. Producers are not obligated to collect from industrial, commercial and institutional (ICI) businesses, business improvement areas (BIAs), not-for-profit organizations, municipal buildings or facilities, daycares, places of worship, commercial farms, etc. At the July 2022 Board meeting, Administration shared that Circular Materials Ontario (CMO) released procurement documents for post-collection services, such as a receiving facility. At this meeting, it was conveyed that significant risks had been

identified and municipalities have opted not to submit bids in response to Circular Materials Ontario's request for proposals. The Manager of Waste Diversion noted that the Authority did not submit a bid and has been exploring alternative uses for Authority assets.

The Manager of Waste Diversion provided a summary on the status of the Authority's contract for the processing of recycled material and noted that the contract was strategically termed to align with the transition.

The Manager of Waste Diversion stated that Authority Administration engaged with waste industry consultants to identify potential options for consideration. After this process, it was determined that there is a potential opportunity for the Authority to generate revenue by selling existing processing equipment and leasing one or both MRFs. The rationale that supports the direction to lease includes the condition of the MRFs and processing equipment, additional site facilities, southern location of the MRF assets in Ontario and the Authority's existing Environmental Compliance Approval (ECA).

The Manager of Waste Diversion highlighted considerations with the leasing of the MRFs. The Authority may need to deal with stranded assets if the RFP is not awarded. The Authority will also have to effectively manage the Leasee to ensure the site ECA and Authority assets are protected.

With these considerations, the Authority engaged with a consultant to assist in developing an RFP to consider leasing assets like the Fibre MRF and Container MRF, along with selling the processing equipment in both MRFs beyond the transition date. The RFP is to consider the lease of one or both MRFs to a processing contractor that supports Ontario's residential blue box program during and/or post-transition. Included in the RFP is the mandatory purchase of MRF processing equipment. Through this RFP, the Authority is requesting that the Leasee is to receive and process Blue Box materials from non-eligible sources in Essex-Windsor as the Producers will not be obligated to service these sources per OReg 391/21. The term is still being finalized but would start after transition.

The Manager of Waste Diversion explained the RFP process. Proposals will be received electronically through the County of Essex's bidding system. Proposals will be reviewed by an evaluation committee. When the committee has selected a preferred proponent, Administration will provide a report to the Board for approval.

The Manager of Waste Diversion stated that there are no financial implications with the report at this time. She asked if there were any questions.

In regards to the management of the lease arrangement, Mr. Kieran McKenzie asked how will the legislation and regulation that the Authority has to comply

with impact the Leasee. He also asked what authority do we have to direct the Leasee without putting the ECA requirements at risk.

The Manager of Waste Diversion stated that in the RFP document there are many parameters to protect the facility. The proponent would need to provide their operational plan (odour control, for example). The RFP also suggests that the Authority has the right to do inspections. There are also liquidated damages that would be contractual requirements of the Leasee and they would be fined accordingly. The Authority would be monitoring daily that the Leasee is compliant and not violating any part of the ECA.

Mr. Kieran McKenzie stated that he supports the Administration's direction and that there was a lot of thought put into this.

The Chair commented that there was a lot of thought put into this report. He noted that it is a slow transition and no one knows how things will evolve. The liability piece on these facilities and buildings puts us in a vulnerable position and dealing with the regulations. He noted that we are unique and do not have many options. He commented that the report was very well done with a methodical approach and key on how the regulations have been woven into the report. He also commented that the at the end of the day, we are trying to eliminate material going to the landfill.

Mr. Kieran McKenzie stated that he has a lot of confidence that we are moving in the appropriate direction.

Mr. Kaschak noted that the transition period is 16 months and we have to move forward as the recommendation is written and collect from non-eligible sources. He commended Administration on the report.

Moved by Kieran McKenzie
Seconded by Gary Kaschak

THAT the Board receive the report as information and provide Administration with approval to proceed with issuing a Request for Proposals for the Material Recovery Facility which includes the lease of one or both facilities, the purchase of processing equipment and the provision of recyclable materials processing services for material collected from non-eligible sources.

**18-2023
Carried**

10. Other Items

No other items were raised for discussion.

11. By-Laws

A. By-Law 2-2023

Moved by Kirk Walstedt
Seconded by Jim Morrison

THAT By-Law 2-2023, being a By-law to Confirm the Proceedings of the Board of the Essex-Windsor Solid Waste Authority be given three readings and be adopted this 7th day of March, 2023

19-2023
Carried

12. Next Meeting Date

Tuesday, April 4, 2023

13. Adjournment

Moved by Mark McKenzie
Seconded by Michael Akpata

THAT the Board stand adjourned at 4:51 PM.

20-2023
Carried

All of which is respectfully submitted.

Gary McNamara
Chair

Michelle Bishop
General Manager



Essex-Windsor Solid Waste Authority

Administrative Report

April 11, 2023

To: The Chair and Board of the Essex-Windsor Solid Waste Authority

From: Michelle Bishop, General Manager
Catharine Copot-Nepszy, Manager of Waste Diversion

Meeting Date: Tuesday, May 02, 2023

Subject: Blue Box Collection Services Post Transition to Extended Producer Responsibility

Purpose

The purpose of this report is to provide the Board an update regarding Ontario Regulation 391/21 (the Regulation) as the Authority transitions the Blue Box Program to Extended Producer Responsibility (EPR).

Further, that the Board **APPROVE** the recommendation that the the Essex-Windsor Solid Waste Authority opt out as a service provider for Blue Box (BB) Collection services in both the County of Essex and the City of Windsor and does not pursue Circular Materials Ontario's current Interim Collection Offer to perform residence and eligible facility collection of Blue Box materials on Circular Materials Ontario's behalf from August 28, 2024 to December 31, 2025.

Background

On June 3, 2021, the Ministry of the Environment, Conservation and Parks (MECP) released the Blue Box regulation (Ontario Regulation 391/21) that transitions the current Blue Box Program to EPR.

The transition to EPR will occur in two (2) phases:

- The transition phase: August 28, 2024 - December 31, 2025
- The post-transition phase: January 1, 2026 onwards

The transition schedule released by the MECP as an attachment to the Blue Box regulation, indicates that all Ontario municipalities will transition between July 1, 2023 and December 31, 2025. Essex-Windsor will transition to EPR on August 28, 2024. During the transition period (August 28, 2024 to December 31, 2025), Producers of products and/or packaging that is distributed in Ontario will be required to make best efforts to implement or maintain the level of recycling services as established in each municipality (e.g., maintain the collection frequency and collected materials as were in place in the municipality before transition) for eligible sources and public spaces as defined by the regulation.

Circular Materials Ontario (CMO), representing over 66% of Canada's leading food, beverage and consumer products manufacturers, has become the Blue Box system administrator for the Common Collection System (CCS).

As the provincial Blue Box collection system administrator, CMO is managing procurement for the front end of the Blue Box system including curbside collection, depot collection, public space collection, promotion and education, and receiving and consolidating material. Individual PROs or Producers are responsible for processing and marketing Blue Box materials at the back end of the system. CMO is responsible for the majority of Blue Box material in the province and has also initiated their post-collection processing procurements.

On May 11, 2022, CMO released the following documents on their website in order to offer contracts to municipalities to continue providing collection services during the transition period. (<https://www.circularmaterials.ca/onmunicipalities/>):

- Master Services Agreement (MSA)
- Statements of Work (SOW) for:
 - Eligible Community Residence and Facility Collection
 - Eligible Community Depot Collection
 - Eligible Community Public Space Collection
 - Eligible Community Promotion and Education
- Pricing Explanatory Note
- Transition Survey (by June 30, 2022)

Risks with the Interim Collection Offer were identified by Authority Administration and also by external organizations as documented in coordinated responses organized by the Municipal Resource Recovery and Research Collaborative (Association of Municipalities Ontario, Regional Public Works Commissioners of Ontario (RPWCO), Municipal Waste Association, and City of Toronto) on May 26,

2022, and July 26, 2022 and the Ontario Waste Management Association on June 8, 2022. CMO published several revisions to the Interim Collection Offer documents but, in the opinion of administration from municipalities across Ontario, significant issues remained at the time of CMO's Interim Collection Offer response deadline of July 15, 2022.

CMO also issued a municipal payment calculation model to determine how compensation will be provided for municipalities that provide service under contract with CMO. This initial financial offer utilized the 2020 RPRA Datacall to determine funding. The Datacall is the method used by RPRA to determine the current 50% program net cost annual Stewardship Ontario Blue Box funding received by municipalities. Many municipalities raised concerns that the proposed MSA and payment model included requirements which pose significant challenges and risks for municipalities if they choose to contract with CMO during the transition. Those municipalities that had entered in to new contracts since 2020 were particularly concerned as prices had significantly increased. Through a survey issued by CMO on June 27, 2022 the Authority was identified as one of approximately 20 municipalities that had new contracts.

Included in that survey was a requirement to provide an estimate of the current program costs (2022).

On August 15, 2022, the Authority General Manager, Manager of Waste Diversion and the City of Windsor Manager, Environmental Services met virtually with the CMO management team.

The meeting was called by CMO regarding an email sent by the Authority's General Manager to them on July 14, 2022 outlining some of the Authority's concerns. It was explained that Essex-Windsor had entered into a new collection program at the very end of 2020 and therefore, while we were possibly interested in continuing collection for CMO, the Authority could not do so at 2020 rates.

CMO shared that we are one of 20 municipalities in Ontario with new contracts post 2020. They explained that they had received updated costs from all of those municipalities, and given the magnitude of the financial impact, they were bringing the report to the CMO Board outlining possible options, and requesting direction. No follow up information was provided by CMO to Authority staff subsequent to that meeting.

The Authority understands that CMO has issued a competitive RFP for residence and facility collection (discussed below) in a regional catchment including all of Essex-Windsor that lists alternate service commencement dates of August 29, 2024, or January 1, 2026 to afford CMO flexibility around procurement.

Discussion

There is no legislated obligation for the Authority to operate the Blue Box program following the Authority’s transition date of August 28, 2024. CMO is requesting that municipalities continue providing collection services from their transition date to December 31, 2025 to simplify CMO’s responsibilities under the Regulation. CMO’s proposed MSA outlines how they will work with municipalities to provide Blue Box collection services for eligible sources and reimburse municipalities for carrying out this work on their behalf. It is important to note that CMOs payment calculation model currently does not compensate municipalities for 100% of the collection costs for the Blue Box program even though the Regulation assigns 100% of these costs to producers.

There are many factors that Ontario municipalities must consider when deciding whether to opt-in or out.

A total of 376 Eligible Communities transition between July 1, 2023 and December 31, 2025. The following is a summary of data that has been provided by the municipal working group as of April 20, 2023:

Transition Year	No. of Eligible Communities	Opt-In	Opt-Out	Undecided or Not Sharing
2023	67	28 (42%)	37 (55%)	2 (3%)
2024	127	53 (42%)	31 (24%)	43 (34%)
2025	182	30 (16%)	32 (18%)	120 (66%)

Note: Opt-In figures include communities that are negotiating to become service providers but have not entered into formal agreements.

Significant reasons noted by municipalities for opting-in include:

- Existing collection bundled with other waste programs (ex. blue box and organics)
- Municipal staff severance issues (internal collection)
- Existing contract expiration dates don’t align with transition date
- Existing contracts provide financial incentive to opt-in

On December 21, 2022, Authority staff received correspondence from CMO stating that the Interim Collection Offer document would be revised to include the 2022 estimate was provided to CMO in July 2022.

Subsequently, meetings were scheduled with the Technical Staff Committee to review, analyse and discuss the updated financial proposal and CMO Interim Collection Offer. With the completion of the 2022 fiscal year the committee was able to further compare actual costs to the financial proposal provided.

On April 14, 2023, Authority Administration received populated MSA and SOW documents from CMO and requested that the documents be executed and returned to CMO by June 30, 2023.

Significant risks with the terms of the Interim Collection Offer were identified by the Technical Staff Committee, including:

- Financial risks arising from scope of work and service level obligations, change management (including potential for changes in the work and additional work), and risk of unforeseen conditions that may increase the cost of the work.
- Insufficient financial incentive. Compensation is largely based on criteria used for the existing Waste Diversion Act program making full cost recovery problematic due to limitations within the historic method of determining Blue Box funding (the Datacall).
- Even with CMO's revised proposal the Authority would not be reimbursed for the full cost of the residential Blue Box collection program which is not consistent with the Regulation that stipulates the financial obligation of Producers to cover 100% resulting in the Authority being responsible for a portion of the Blue Box Program post transition.
- An aggressive contamination target of 4 percent is identified for residential buildings (compared to the estimated current performance of 8 to 10 percent) without compensation for increased monitoring, promotion, education, and compliance enforcement. It is important to note that when this program becomes standardized for materials across Ontario, it will change locally which may also invite more contamination in until this launch settles and residents are clear on the new allowable materials.
- The Authority may not know the location of the CMO designated receiving facility for the recyclable materials prior to having to sign contracts with CMO. CMO has an RFP out to determine the receiving facility however there is no guarantee when that facility will be determined. If the chosen receiving facility is not the Authority owned Materials Recovery Facility (MRF) where the Essex-Windsor currently sends recyclables collected at the curb, the Authority would be responsible for transportation costs to a further location and rerouting of existing collection routes to accommodate for the additional travel time up to an hour away which could result in a significant increase to

our contract cost per year that would not be compensated to the Authority by CMO.

- In the Authority's case, the contract offered by CMO is for a sixteen-month transition period beginning August 28, 2024. Resources would need to be devoted to implementing and communicating program changes in 2024 and again in 2026.
- Many residents in Essex-Windsor will be participating in a new curbside collected organics program beginning in 2025. Further, a number of County municipalities and the City have expiring garbage collection contracts during this same timeframe. Administration would like to highlight that if all 3 programs (blue box, organics, and garbage) undergo significant changes like new collection contracts during a short period of time there is a strong potential that this could impact service to residents and their engagement in participating in solid waste management programs, especially with the willingness to divert food waste from garbage.
- Additional staff resources would be required to ensure adequate customer service during the transition.

Blue Box Collection RFP Issued by CMO

The Interim Collection Offer covers the transition period up to December 31, 2025 only. For longer-term collection procurement, CMO has issued a second collection procurement in the form of an open RFP. Depending on a municipality's response to the Interim Collection Offer, the RFP would allow service commencement on a municipality's transition date (for those municipalities that did not accept the Interim Collection Offer) or on January 1, 2026 (for those municipalities that accepted the Interim Collection Offer). It is anticipated that the contract term is seven years. The collection RFP is organized into several regional waste catchments. In CMO's RFPs, all Essex County municipalities and the City of Windsor are grouped into a regional catchment. The regional focus and multi-year term go beyond the Authority and City of Windsor current contract timelines and would require additional procurement, investment and assumption of new risks to perform. Additionally, it is anticipated that the RFP will contain similar terms and risks to the receiving RFP including liquidated damages which has been discussed previously.

Essex-Windsor's Blue Box Collection Contracts

Curbside collection of recyclables in the County of Essex is currently contracted to the City of Windsor. The contract began on December 1, 2020, and remains in effect until Transition under mutually agreed upon terms and conditions. The Authority has provisions built into the contract to be able to terminate early or negotiate terminating some items within the contract. The Authority may want to

keep some items within the contract for example, collection from Non-eligible Sources.

Curbside collection of recyclables in the City of Windsor is currently contracted to the GFL Environmental Services. The contract began on February 27, 2017, and remains in effect until August 27, 2024. The City has provisions built into the contract to be able to extend or renew the agreement for up to two subsequent terms of one year, or any period less than one year. The City may want to keep some items within the contract for example, collection from Non-eligible Sources.

Service Level Impacts

Residential Properties

Residential buildings that received Blue Box collection before August 28, 2024 (single and multi-family) will continue to be eligible for Blue Box service and receive the same level of service until December 31, 2025. CMO must maintain collection at least every two weeks but may make changes to increase collection frequency, change the number of streams collected (single vs. dual) and change the containers used to set out Blue Box materials. New residential buildings that come into existence after Transition are expected to be registered with RPRA to begin receiving Blue Box collection from CMO.

Starting January 1, 2026, more items will become eligible for the Blue Box. These include materials not currently accepted in the Authority's program such as flexible plastic wrappers and pouches, polystyrene foam, and single use food service items like plastic utensils, etc. to name a few.

The following service level impacts by establishment type are expected under the Blue Box Regulation and service coordinated by CMO. Details on interpretation of the Blue Box regulation by RPRA are still emerging and the final interpretations may vary from those presented below.

The Authority will look to target communications at sectors that will experience service level changes at appropriate times.

Non-Eligible Sources

As the Board may recall, the transition to EPR does not include non-eligible sources such as municipal buildings, business improvement areas (BIAs), post-secondary institutions and other industrial, commercial and institutional (ICI) facilities, etc. Many of these facilities currently receive collection under the Authority's Recycling program. Effective August 28th, 2024, the Authority will no

longer receive any external funding for this service, and there will no longer be an obligation under the Waste Free Ontario Act to for municipalities to provide this

service. A decision is required from the Board whether or not to continue providing service to non-eligible sources, and if so, by what means.

Should the Board decide not to provide collection services to the non-eligible sources, it is anticipated that much of the recycling material would end up in the landfill. Although a private contractor could service the non-eligible sources, the cost to do so on an individual basis would be prohibitive for many. One way to encourage continued recycling, without providing collection, would be to implement municipal bylaws that require businesses to do so. However, the Board does not have the authority to impose the municipalities to create such a bylaw. Even if municipalities did so on their own accord, the bylaw would certainly be challenging, and costly to administer and enforce.

It is Administration's recommendation that BB Collection services continue to be offered to non-eligible sources. Below are two options available to provide the service. Administration will explore the alternatives and report back to the Authority Board at a future meeting.

Option 1: Contract with the residential service provider. The most cost-effective solution to providing this service would be to contract with the residential service provider. The regulations allow for the co-collection on non-eligible sources with eligible (residential) sources during the transition period (from August 28th, 2024 to December 31st, 2025). This would allow existing fleet and resources to collect the non-eligible sources, in the same way as it occurs today. It is difficult to estimate this cost without a competitive procurement, but it is reasonable to expect it to be some amount less than current recycling costs.

Following transition however, non-eligible sources will need to be collected separately per OReg 301/21. Effective January 1, 2026 this will require the non-eligible sources to have their own dedicated fleet and resources and the cost to provide the service will increase substantially.

Option 2: Contract for non-eligible source collection, separate from residential. This option proposes to establish a collection contract separate from residential effective August 28th, 2024. Although the costs to do so are expected to be higher than Option 1 during the transition period, the costs will likely be lower post transition, since the rate will be based on the 2024 rate plus escalation factors. In Option 1, the contract to do the same service would be based on 2026 rates plus escalation factors. With the volatility of the market in terms of fuel and vehicle purchase price increasing rapidly, it is anticipated that an earlier start to the service would provide a better financial outcome long term.

This option also allows Administration to explore any possible synergies (e.g., bundling of collection services) with the regional waste collection plan currently under review. The Board is reminded that organics collection is expected to commence in 2025, and will be a very large undertaking. From an operational perspective, it will be challenging to develop a non-eligible recycling collection program to start in January 2026 while dealing with the establishment of a new organics program.

Blue Box Transition Plan

For the 2024 interim collection contract, Administration have flagged the short duration (16 months) and preparatory work involved in performing the contract as well as its potential to expose the Authority to costs and risk on behalf of Producers. Staff do not recommend pursuing this option and recommend focusing on supporting other transition needs leading up to Essex-Windsor's established transition date.

Between now and Essex-Windsor's transition date of August 28, 2024, staff will focus on the development and implementation of a Blue Box Transition Plan that prepares stakeholders, staff, assets, municipal partners, customers and operations for the changes occurring at that time.

The transition plan will include the following:

- Communication Plan
- Asset Transition Plan
- Service Transition Plan
- Non-eligible Source Transition Plan
- Staff Transition Plan
- Monitoring and Evaluation Plan
- Customer Service Plan

Transition Plan implementation will continue through to the end of 2026 to encompass the entire transition period and a year under full producer responsibility. The Transition Plan will change and grow with the Authority's needs over its implementation period, as well as the needs of the City of Windsor and Essex County municipalities. The Transition Plan will coordinate with other program changes proceeding such as the Regional Food and Organic Waste Management Plan which also introduces changes to programs and services.

Financial Implications

The Authority is forecasted to generate approximately \$2 – 4.6 million per year in net savings inclusive of operating and capital costs as Producers assume Blue Box collection and processing responsibilities starting in 2024.

As identified in this report a portion of those saving may be required to continue the collection of BB material from Non-Eligible sources.

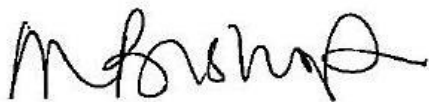
Further, as identified in the Authority’s 2023 Operational Plan and Budget - 15 Year Financial Forecast any savings resulting from the transition of the Blue Box Program would serve to offset a portion of the cost of the Organics Program to ensure Essex-Windsor municipalities are in compliance with Ontario's Food and Organic Waste Policy Statement.

Recommendation

THAT the Board receive this report as information.

THAT the Board direct the General Manager to communicate with Circular Materials Ontario that the Essex-Windsor Solid Waste Authority does not intend to pursue Circular Materials Ontario’s current Interim Collection Offer to perform residence and facility collection of Blue Box materials on Circular Materials Ontario’s behalf from August 28, 2024 to December 31, 2025.

Submitted By



Michelle Bishop, General Manager



Catharine Copot-Nepszy, Manager of Waste Diversion



Essex-Windsor Solid Waste Authority

Administrative Report

April 27, 2023

To: The Chair and Board of the Essex-Windsor Solid Waste Authority

From: Catharine Copot-Nepszy, Manager of Waste Diversion

Meeting Date: Tuesday, May 02, 2023

Subject: Results of the Organic Waste Screening Tender

Purpose

To provide the results of the request for tender (RFT) for the provision of equipment and labour for the screening of organic material at Authority facilities in Essex County and recommend award to Frank Dupuis Landscaping and Trucking Ltd.

Background

Organic material such as leaf and yard waste is collected and/or ground, then delivered to the Regional Composting site at the Essex-Windsor Regional Landfill or to the composting area at Transfer Station No.2. Here it is windrow composted for approximately 9 months until it has matured and is ready to be screened. The screening process removes any large pieces of material or contaminants and provides the Authority with a supply of half-inch or smaller pieces of finished compost. This final product must then pass a "Compost Quality Analysis" in order to comply with the regulatory framework of O. Reg. 347. Once the compost is approved, it is sold as Garden Gold Compost to the public and many local companies such as landscapers. The screening portion of the Authority's compost operation is performed by a private contractor which is awarded through a competitive procurement process. The existing contract, with all the allowable extensions expired March 31, 2023.

Discussion

In April, a new request for tender (RFT) for screening operations was posted in the Windsor Star, ewswa.org, Bids and Tenders, MERX, and Biddingo, as well as, direct emailed to twelve contractors. The contract term is for a three (3) year period from May 8, 2023 – May 8, 2026, where the Authority has the option to extend the contract for three (3) additional, one-year extensions or portions of a year thereof at the absolute unfettered discretion of the Authority under the same terms and conditions as contained in the executed contract. Based on a 3-year average of materials screened, this contract would have a value of approximately \$156,000 per year.

The tender closed on April 27th at noon and only one bid was received from Frank Dupuis Landscaping and Trucking Ltd., who successfully met the requirements of the RFT. Their bid was \$3.24 per yard (excluding tax).

It's important to note that Frank Dupuis Landscaping and Trucking Ltd. successfully held the previous contract (2018-2023) with the Authority for this work. As a result of this competitive procurement process, the specialization of work, and past work with Frank Dupuis Landscaping and Trucking Ltd. Authority Administration recommends awarding this contract to Frank Dupuis Landscaping and Trucking Ltd.

Financial Implication

The Authority's Operational Plan and Budget uses historical data to estimate the number of yards of compost that will require screening to calculate a budget figure. The approved 2023 Budget includes \$134,000 for the screening of organic waste for this program. As a result of the new bid price, there is a potential for an unfavourable variance of approximately \$8,000 to the 2023 Budget based on historical volumes.

Recommendation

That the Board award the tender for the provision of equipment and labour for the screening of organic waste at Essex-Windsor Solid Waste Authority facilities in Essex County to Frank Dupuis Landscaping and Trucking Ltd. as per their tender submission dated April 27, 2023 for the term May 8, 2023 – May 8, 2026 The contract term is for a three (3) year period from May 8, 2023 – May 8, 2026, where the Authority has the option to extend the contract for three (3) additional, one-year extensions or portions of a year thereof at the absolute unfettered

discretion of the Authority under the same terms and conditions as contained in the executed contract.

Submitted By



Catharine Copot-Nepszy, Manager of Waste Diversion



Essex-Windsor Solid Waste Authority

Administrative Report

April 24, 2023

To: The Chair and Board of the Essex-Windsor Solid Waste Authority

From: Cathy Copot-Nepszy, Manager of Waste Diversion

Meeting Date: Tuesday, May 02, 2023

Subject: FoodCycler Organics Pilot Program (FOPP)

Purpose

To provide the Board information on a new Waste Diversion pilot program that the Authority will be offering to residents to support the diversion of food waste from the Essex-Windsor Regional Landfill.

Background

Ontario's Food and Organic Waste Policy Statement (Policy Statement), pursuant to Section 11 of the Resource and Circular Economy Act, requires certain Essex-Windsor municipalities to provide either depot or curbside collection of food and organic waste to single family dwellings in urban settlement areas and to achieve diversion targets of 50 to 70% by 2025.

To comply with the Policy Statement, the Region will be implementing a food and organic waste program that would divert organic waste away from the Essex-Windsor Regional Landfill. It is estimated that a typical garbage set-out contains approximately 40% food waste that is landfilled.

To prepare residents for this new program, in 2022 Administration issued a public survey to receive public feedback and understand their interest levels on key aspects of an organics food waste program. Participation was quite high in this survey where 2,534 residents responded from the Essex-Windsor region. Residents expressed great interest in an organics food waste program and noted the importance around diverting waste, program convenience and cost.

Additionally, as the Policy Statement currently does not require the collection of food and organic waste from multi-residential and rural properties Authority Administration began to explore potential alternatives to allow participation by these residents.

Discussion

In 2022, Food Cycle Science (FCS), who is a social purpose organization, approached the Authority to discuss their FoodCycler product. FCS shared that the FoodCycler is a great solution for multi-residential units, condos, apartments, remote areas, etc. who may not have access to municipal diversion programming. The FoodCycler is an innovative countertop food digester (which is about the size of a bread-maker) that completely dehydrates and processes food waste into a tenth of its original volume. FoodCycler in the end makes a nutrient-rich by-product that can be used to enrich soil for houseplants, gardens, landscaping, etc.

FCS manufactures two models: FC-30 and Maestro which can process 2.5 L and 5 L (respectively) of food waste per cycle. The FoodCycler processes food waste within 4 to 9 hours (depending on the unit and food that it is digesting) into soil amendment. Power consumption per cycle is ~0.8 kWh (FC-30) / ~1.3 kWh (Maestro) which FCS equates to approximately the use of one laptop.

Furthermore, FCS explained that their FoodCycler initiative was a finalist of the Government of Canada's: Impact Canada's Food Waste Reduction Challenge, under the project: "Residential On-Site Food Waste Diversion for Northern, Rural, and Remote Communities". With this award FCS is the recipient of a \$400,000 grant that is being 100% redistributed to Canadian municipal partners in support of their FoodCycler initiatives and pilot programs. As of the date of this proposal, there are a total of 73 Canadian municipalities who have signed on to participate in a FoodCycler program with FCS. In 2022, as a result of several factors, FCS offered the Authority to be an "Implementation Partner" in 2023 to launch 250 subsidized units in households across Essex-Windsor. After extensive review of FCS, the FoodCycler and other municipal programs, the Authority in 2022 agreed that this pilot program would be a good fit and allocated funding in the 2023 budget to support the launch of this program.

How does the FoodCycler Organics Pilot Program (FOPP) work?

FCS has allocated 250 FoodCyclers for the Authority that will be made available to Essex-Windsor residents to purchase at a subsidized rate in June (see Financial Implications section for more detail). Qualified residents will have a choice to register and potentially own one of two FoodCycler units:

1. FC-30 (retails at \$500.00)-resident subsidized price of \$150.00 plus HST

2. Maestro (retails at \$800.00)-resident subsidized price of \$300.00 plus HST

To participate in the FOPP, residents must first register and complete an on-line survey and then the first 250 residents that meet program criteria will receive an offer to purchase a FoodCycler. Qualified residents will then be given a pick-up day and location for them to purchase and pick-up their new FoodCycler. Some program criteria that will be used to determine the allocation of FCS units to residents include: municipality, type of household (e.g., multi-residential) and number of residents per household, and type of FoodCycler so that a good cross-section of households in Essex-Windsor are able to participate in this pilot.

After purchase, the participating resident will use their newly purchased FoodCycler for the duration of the 12-week FOPP where they will be given a simple tracking sheet that they will use to note how often they use their FoodCycler unit. When the 12-week pilot program is over, the participating resident will submit the tracking sheet back to the Authority and FCS for data collection and analysis. This data is key to all partners: the Authority, FCS, and Impact Canada who are subsidizing the cost of the units so that they can collect important food waste diversion data.

Some notable benefits why residents who fulfill the program's criteria might participate in the FOPP:

- Opportunity to trial a food and organic waste diversion solution at a cost well below market prices
- Reducing residential waste generation and therefore their carbon footprint
- Opportunity to get in the habit of separating food waste from the garbage stream and increase individual diversion efforts
- Efforts will support a positive approach towards extending the life of the local Essex-Windsor Regional Landfill
- Be a part of an innovative pilot program that looks to manage food waste efficiently and thereby reduce greenhouse gas (GHG) emissions
- Ability to fertilize their soil for houseplants, gardens, landscaping, etc. by generating a nutrient-rich soil amendment from food waste
- Odourless immediate solution to managing food waste
- Increase awareness on food waste behaviours and potentially alter this conduct

Through this partnership, the Authority can achieve immediate and impactful benefits, acquire valuable insight about food waste diversion in the region, and showcase itself as an environmental leader and innovator in Canada.

How residents can participate in the FOPP:

In May 2023, the Authority will first look to promote registration to Authority e-newsletter subscribers. Two days after this push, the Authority will then promote on-line registration of the FOPP to its municipal partners and the general public through the Authority’s social media handles and website. Registration will remain open until the Authority has effectively allocated the 250 units to local residents.

Financial Implications

The 2023 Operational Plan and Budget includes a cost of \$25,000 for this pilot program funded by a contribution from the Waste Diversion Reserve. This represents a subsidy of \$100 per unit for 250 units. There have been no unforeseen additional financial implications to report at this time.

FOPP Funding Model

Unit Cost and Funding	FoodCycler FC-30	FoodCycler Maestro
FoodCycle Retail Price	\$500	\$800
Impact Canada Funding	(\$ 50)	(\$150)
FoodCycle Science Funding	(\$200)	(\$250)
Municipal Subsidy	(\$100)	(\$100)
Resident Cost (plus HST)	\$150	\$300

Recommendation

THAT the Board receive this report as information.

Submitted By



Cathy Copot-Nepszy, Manager of Waste Diversion

Attachments:



Figure 1. Shares information on both FoodCycler products: FC-30 and Maestro.



Essex-Windsor Solid Waste Authority Administrative Report

April 17, 2023

To: The Chair and Board of the Essex-Windsor Solid Waste Authority

From: Tom Marentette, Manager of Waste Disposal

Meeting Date: Tuesday, May 02, 2023

Subject: Regional Landfill Leachate Management

Purpose

The purpose of this report is to provide the Essex-Windsor Solid Waste Authority (the Authority) Board with an update regarding the management of leachate generated at the Essex-Windsor Regional Landfill.

Background

Leachate is defined as a liquid that results from from water percolating through the waste mound, as well as liquid present within the waste, at a solid waste disposal site, accumulating contaminants, and moving into subsurface areas such as leachate collection pipes.

The management of leachate at the Essex-Windsor Regional Landfill (Landfill) is comprised of several key components; collection, conveyance, retention, trucking and treatment. Following the excavation of a new cell in preparation of waste placement, a clay liner is placed and compacted throughout the floor of the cell. Next, the cell floor is covered by filter cloth and a series of perforated collection pipes are placed above that within a layer of drainage stone. The drainage layer provides protection for the leachate collection piping network and allows for leachate to pass through to the collection pipes which can then be conveyed to pumping stations. Leachate is then pumped to retention lagoons where the leachate is ultimately loaded into tanker trucks and transported to the Lou Romano Pollution Control Plant (LRPCP) in the City of Windsor (the City) for treatment.

On January 12, 2022, Administration advised the Board of the findings of the consulting firm, WSP Canada Inc. (WSP), regarding Contaminating Lifespan Evaluations for the Essex County Closed Landfill No. 2 and the Essex County Closed Landfill No. 3 located in the Town of Kingsville and the Municipality of Lakeshore, respectively. Administration requested WSP prepare Contaminating Lifespan Evaluation reports for the closed landfills in order to evaluate and estimate the potential active lifespan of closed landfills where leachate continues to be generated and require treatment. The end of the Contaminating Lifespan Evaluations as identified by WSP are estimated to be 2125 (103 years) for Landfill No. 2 and 2100 (78 years) for Landfill No. 3. These estimates are generally comparable to other Southwest Ontario closed landfill sites with similar waste and leachate characteristics and landfill size/waste volumes.

The Contaminating Lifespan Evaluations for these sites forecast significant financial burden to the Authority for ongoing site and infrastructure maintenance as well as leachate transportation and treatment. Similarly, the Landfill will most likely yield even longer perpetual care impacts as it will remain an active landfill site into 2040 and potentially beyond, while also accepting a unique waste stream compared to other landfill sites in Canada.

Over the past year, Authority Administration has been reviewing leachate volumes as part of normal operations and budget projections and also investigating trends with respect to major factors that contribute to leachate. One of the most obvious factors is precipitation which has a direct correlation to leachate generation. Perhaps less obvious, but arguably even more impactful, is the ongoing and increasing intensification of the greenhouse industry and that industry's need for regular disposal of vines and spent growing media. Sampling of typical vine loads indicates an approximate water content of up to 95% water.

On September 14, 2022, the Board was provided information regarding the management of leachate at the Landfill and the effects of increasing demands on the collection system. In addition, Administration also informed the Board that they would be engaging with the Town of Essex and their Consulting Engineer (Stantec) to study available treatment plant capacity and to explore the possibility of accepting leachate from the Landfill at the Essex Pollution Control Plant (Essex PCP).

In recent years, a number of factors have contributed to an increase in leachate generation:

1. Change in waste stream (e.g. greenhouse vine-based waste material which has a high moisture content, therefore, increases leachate generation and leachate chemical strength);
2. Waste settlement has increased due to the decayable nature of the greenhouse vine-based waste material leading to the need for more frequent airspace recovery operations; and
3. Increase in waste footprint area (e.g. more area to capture precipitation, which increases leachate generation).

Also, at the September 14, 2022 meeting, the Board received a Leachate Generation Study report prepared by RWDI AIR Inc., a consulting engineering firm engaged by the Authority, to assist with evaluating leachate generation at the Landfill over time with a focus on the main cause or causes in an effort to understand and potentially reduce volumes.

Short-term and long-term operational leachate management considerations were summarized as follows;

- Increase in leachate trucking and disposal costs due to increased volume.
- Possible difficulties for waste water treatment plants to treat the volume and/or strength of leachate generated.
- Biofouling of the leachate collection and conveyance system resulting in a potentially reduced operational effectiveness and possible increased maintenance efforts (requiring increased flushing and cleaning frequencies as well as need for chemical washes).
- Leachate seeps along side slopes (e.g. perched leachate underlying clay capped areas or decaying organic material in the void space within the waste mound that would normally allow leachate to percolate down toward the collection system).
- Expected continued growth of this agricultural sector will ultimately result in further increases in leachate generation and a proportional increase in leachate chemical strength.

Further at the September meeting, it was noted that the current leachate trucking contract with the Authority expires on June 30, 2027 with an option to extend the contract for a one (1) year period under the same terms and conditions.

Due to the complexity of any long-term leachate management program and the possible lengthy timeline of initiating such projects, consideration of alternative programs such as a supplemental treatment facility or alternative method of

transport should be reviewed without delay to coincide with the trucking contract end date.

Leachate Quality

Leachate quality is affected by many factors that can complicate processing at the pollution control plant. Some of the main factors are:

- Biochemical oxygen demand (BOD) – BOD is a measure of the amount of oxygen used by microorganisms as they feed upon organic matter. As the liquid moves through the landfill, many organic and inorganic compounds may be picked up and carried in the leachate. If the leachate contains high levels of organic matter, then it will also test high for BOD levels. Materials with relatively high BOD levels that are discharged into natural waters cause a rapid increase in the growth of microorganisms that deplete the oxygen required for other aquatic life. The use of aerators induces oxygen into the water in attempt to reduce BOD. Currently, the Landfill leachate has 8 aerators in 3 lagoons.
- Total Suspended Solids (TSS) – TSS are waterborne particles that exceed 2 microns in size. TSS could be anything that floats or “suspends” in water, including sand and sediment. TSS affects water’s clarity, so the higher a water source’s TSS content, the less clear it will be.
- Total Kjeldahl Nitrogen (TKN) –TKN measures the combined amount of organic nitrogen and the amount of ammonia nitrogen in a given sample. TKN is used as an indicator parameter when measured within the influent of a wastewater treatment facility to provide insight on how well the biological system is handling ammonia within the system.
- Ammonia – Ammonia is an inorganic compound that creates toxic conditions if present in high concentrations and can have a detrimental impact on aquatic life. Elevated levels may require what is called ‘air stripping’ to reduce the amount of ammonia to comply with sewer use bylaws.
- Chloride - Chloride is a mineral naturally found in various waste streams and can be problematic in high concentrations within landfill leachate due to its inability to be consumed by natural processes which results in a buildup within the waste water. For this reason, chloride concentration is used as a primary parameter when determining the contaminating lifespan for perpetual care of landfills.
- Chemical Oxygen Demand (COD) – COD is an indicative measure of the amount of oxygen that can be consumed by reactions in a measured solution. COD is useful in terms of water quality by providing a metric to determine the effect an effluent will have on the receiving body, much like biochemical oxygen demand (BOD).

Discussion

The following is a brief overview of some of the events that have occurred since the September 14, 2022 Board meeting;

In November 2022, the City requested a meeting to discuss leachate treatment with the City's Pollution Control Plant operators and Authority Administration.

Based on the City's analytical testing of their effluent, the City identified specific parameters (TSS, BOD, TKN and Chloride) as the potential parameters that may be reducing the efficiency of their final UV disinfection treatment of water.

The City advised that it appeared that those parameters noted above had increased significantly over the last few years, and that the volumes and concentrations of the leachate being delivered from the Landfill could potentially be contributing to the noted increased parameters and further be causing operational issues at the LRPCP.

The City further advised that several published scholarly articles suggest that substances in landfill leachate can impact the effectiveness of UV disinfection, as light cannot effectively penetrate the liquid.

At that meeting, the City requested a temporary suspension of the delivery of leachate from the Landfill to the LRPCP until they could assess their system and operations.

The Authority was able to suspended leachate trucking from the Landfill for approximately 50 days in an effort to allow the City to reset and balance conditions at the LRPCP. As precipitation frequency increased during this period, leachate storage capacity at the Landfill became a concern and the Authority requested that trucking of leachate resume on January 16, 2023.

Following the resumption of leachate trucking, the City mandated the Authority to adhere to a reduced daily number of loads of leachate and limited schedule for delivery times in order to assess treatment plant performance.

As a result, the Authority and City operations staff have established a standing meeting every 2 weeks in order to continue to collaborate and discuss operational issues at both the Landfill and LRPCP.

The City has further requested that the Authority explore pre-treatment methods as well as alternative or contingency disposal options.

The Authority's consulting engineer of record, WSP, has been tasked by the Authority to conduct additional analytical testing of leachate chemistry at the Landfill by gathering samples from leachate lagoons and pump stations. This data was shared with the City and other municipalities that operate pollution control plants in the area, including Essex, Lakeshore, Leamington and Chatham, to determine if leachate could be processed at alternate facilities as part of a contingency or long-term plan. This testing information continues to be regularly shared with the City, and the City in turn, has shared their test results from the LRPCP with the Authority for comparison.

In January 2023, the Authority met with staff from the Municipality of Lakeshore (Lakeshore) to discuss potential leachate disposal options. Some options included accepting some volume from Landfill No. 3 at a small existing treatment plant located at County Rd. 22 and Patillo Rd. and possible outlet into existing sanitary sewer infrastructure when current treatment plant upgrades are completed in late 2023.

In April 2023, the Authority attended a follow-up meeting with Lakeshore to review further details and capacity constraints regarding a potential pilot test for acceptance of leachate into small package treatment plant at County Rd. 22 and Patillo Rd. There was discussion on long term disposal/forcemain to existing sanitary sewer infrastructure (CR 42 and Puce Rd.) in 2024, following completion of treatment plant upgrades. Further discussion with the Authority will be scheduled following internal review of capacity constraints and estimated disposal cost by Lakeshore staff.

In February 2023, the Authority ordered 3 additional pond aerators and contracted for electrical upgrades to assist with improvement of leachate quality. The goal of this purchase is to improve the quality of leachate by reducing BOD with additional aeration.

Also, in February 2023, following a series of discussions with the Municipality of Leamington Pollution Control Plant Manager about leachate chemistry and the potential for them to receive leachate, Leamington advised that they will not accept leachate from the Landfill as part of a contingency plan.

On March 1, 2023, the Ministry of the Environment, Conservation and Parks (MECP) Provincial Officers conducted an announced site visit of the Landfill. The primary purpose of this inspection was to conduct a routine inspection and assess

compliance with our Waste ECA A011101. A summary of issues noted during the inspection was provided to the Authority and Administration has reviewed and responded in accordance with the specified due date. Any follow-up items will be addressed by Administration accordingly.

Of particular note, as it pertains to this report, was the comment from the MECP that if Essex-Windsor is unable to transport leachate off-site for a period of more than seven (7) consecutive days, submit a notice of this stoppage, in writing, to the Windsor Area Office. Further, the Authority operations manual must be updated accordingly.

On behalf of the Authority, WSP submitted a response to MECP and requested a 90-day extension to prepare and submit a contingency plan to address potential future stoppages of off-site transport of leachate by July 25, 2023. The findings of the Stantec report will also be included in the formal Contingency Plan.

Feasibility Study of the Leachate Treatment at the Essex Pollution Control Plant (PCP) - Stantec

Following the communication with the Board in September regarding the intention to engage Stantec, Authority Administration developed the scope of work and on December 20, 2022, authorized Stantec to assess the feasibility of receiving some fraction of the Landfill's leachate at the Essex PCP (Pollution Control Plant) to provide a secondary or contingency outlet for the disposal of leachate. The information in this study will allow the Authority to assess the financial viability of this solution, including daily trucking volumes that can be received, estimate of additional cost for exceeding the sewer-use bylaw and potential infrastructure upgrades necessary at the Essex PCP to allow leachate to be received.

The scope of work for the initial phase of this study included:

- Analysis of background information on the leachate quantity and quality generated at the Landfill, and existing Essex PCP historical operational data;
- Development of a design basis based on background information, including leachate quantity and quality for the feasibility study of accepting leachate at the Essex PCP;
- Determination of the reserve capacity within the Essex PCP to receive some fraction of the leachate from the Landfill and reduce transportation costs;
- Estimation of the daily volume of leachate that could be received and treated at the Essex PCP given the reserve capacity; and
- Identification of potential infrastructure upgrades (if any) at the Essex PCP needed to allow leachate receiving (e.g., flow/load equalization, odour control, etc.).

Some of the key findings summarized by Stantec in their initial phase study report included that:

- A leachate strength factor was determined for each quality parameter of concern based on the concentrations from the Essex PCP historical raw wastewater data and the design concentrations. Equivalent leachate flow values were determined by dividing 1150 m³/d (the estimated reserve capacity at the Essex PCP) by the leachate strength factor. Therefore, the ammonia strength factor would limit the treatment of leachate at the Essex PCP to approximately 36 m³/d or approximately one (1) truck per day at 25% of the total plant's rated capacity;
- The feasibility of receiving leachate at the Essex PCP would likely need to be confirmed by a pilot program;
- An ECA amendment for the Essex PCP would be required to receive leachate from the Landfill; and
- Stantec completed a high-level estimate for a 100 mm diameter forcemain that would run from the Landfill Site to the Essex Pollution Control Plant, (roughly 13 km). The opinion of probable cost of this forcemain is in the range of \$5M.

On April 15, 2023, Stantec sent an email to the Authority stating that the initial phase study report (Task 1) and review comments as provided by the Authority had been incorporated and updated.

- Stantec advised, that the main objective of Task 2 of the study is to assess the pre-treatment requirements for pumping leachate to the Essex PCP via forcemain in order to eliminate trucking entirely. Stantec stated that in order to pump all of the leachate to the Essex PCP, the Landfill would need some type of on-site pre-treatment system that has the ability to produce wastewater quality effluent acceptable (conform to sewer-use bylaw) to the Essex PCP.
- Stantec further advised that they had a meeting with the Town of Essex (Essex) to discuss their interest in the opportunity. Essex stated that they are not interested in accepting any untreated leachate from the Landfill, however, they are interested in reviewing Task 2 findings.
- On April 19, 2023, the Authority advised Stantec to pursue Task 2 of their study to review the feasibility of an on-site leachate treatment system such as a Reverse Osmosis (RO), Membrane Bioreactor (MBR), Moving Bed Biofilm Reactor (MBBR) or other advanced treatment methods.
- When the final report has been completed by Stantec, it will be submitted to the Board as information.

Long Term Capacity Constraints

Leachate generation has increased in recent years as a direct result from Landfill expansion and this trend will most likely continue to increase with the construction and build out of the remaining cells. Steady increases in the quantity of agricultural waste delivered from nearby greenhouses (vines), which were initially accepted for disposal in 2016, have also contributed to increases in leachate generation largely due to their high moisture content.

The original Landfill design which includes the Design and Operation Report, as well as the site Environmental Compliance Approval, included the requirement for the construction of a leachate treatment facility at the site. A notification of the continuation of the trucking of leachate for off-site processing and on-site irrigation as a method of on-site consumption was submitted to the MECP, with a note that the Authority will continue to assess other leachate management alternatives. A formal ECA amendment and technical rationale will be required should the Authority elect to increase on-site leachate storage or pursue an on-site treatment facility. Presently, the design of additional leachate storage capacity is not included in the current design of Cell 5 North which is scheduled for construction in 2024.

Long Term Treatment Options

While Stantec has not yet completed their full study (Task 1 & 2 - expected, June 2023), Authority staff have been working concurrently with Stantec to identify all potential options for the management of leachate going forward. Some pros and cons of the 3 options are outlined as follows;

Option 1 – Status quo - trucking and treatment at pollution control plant.

- Continued and increasing financial burden for the trucking and treatment of leachate.
- Continued burden on municipal road infrastructure due to the trucking of leachate to the LRPCP.
- Potential infrastructure investment required at the LRPCP plant to install a feed tank to control flow/dosing rate into the plant.
- Potential increases in sewer surcharge costs to process leachate due to chemistry/strength.
- Ongoing capacity constraints that would require the construction of additional lagoons or tanks for storage of leachate or increased trucking to accommodate leachate generation.

- Potential inability for local Municipalities to provide treatment due to leachate chemistry/strength.
- Ministry of Environment, Conservation & Parks (MECP) – MECP is now requesting notification of any scheduled or mandated pollution control plant shutdown for system adjustments and a contingency plan for alternative disposal during the shutdown.

Option 2 – Installation of an on-site, pre-treatment solution and truck or forcemain to pollution control plant.

- Capital expenditure and operational & maintenance cost of an on-site treatment plant, including chemical additives.
- Continued and increasing financial burden for the trucking and treatment of leachate.
- Continued burden on municipal road infrastructure due to the trucking of leachate to a PCP.
- Pre-treatment of leachate to conformance with sewer use bylaws may allow for disposal at other smaller PCP's such as in Essex, Leamington or Lakeshore or the option to construct a forcemain (eliminate trucking) to Essex PCP or reduced trucking (shorter distance) and treatment costs (no sewer surcharge).
- MECP permitting will be required to review and approve a pre-treatment solution.
- MECP permitting will be required to review and approve leachate forcemain if leachate quality is acceptable to Essex PCP.
- Onsite storage tanks will be required to contain processed leachate for trucking to the pollution control plant.
- Construction costs associated with a forcemain to the Essex PCP.
- Requires construction of building, approximately 60'w x 80'l x 35'h to contain treatment equipment in a climate-controlled environment.
- Landfill site improvements to support new infrastructure (Misc. piping, electrical, paving, signage, etc.).

Option Three – Installation of an on-site solution and discharge to surface water drain

- Capital expenditure and operational & maintenance cost of an on-site treatment plant, including chemical additives.

- Treatment of leachate with a Reverse Osmosis (RO) system or equivalent, may provide the ability to discharge directly to surface water/municipal drainage system, subject to MECP review and approval.
- No pollution control plant treatment or trucking costs.
- Effective on-site treatment of leachate may be more cost effective in the long term.
- Elimination of trucking may have environmental impact reduction (decreased carbon footprint).
- Elimination of trucking will reduce burden on municipal road infrastructure.
- Requires construction of building, approximately 60'w x 80'l x 35'h, to contain treatment equipment in a climate-controlled environment.
- Landfill site improvements to support new infrastructure (Misc. piping, electrical, paving, signage, etc.)

Potential Leachate Treatment Solutions

Membrane Bioreactor (MBR) – Stantec to include in their final report.

Moving Bed Biofilm Reactor (MBBR) – Stantec to include in their final report.

Conventional treatment systems such as biological solutions– Stantec to include in their final report.

Evaporation – This process utilizes landfill methane gas to power engines and the waste heat (exhaust) generated from the engines is combined with additional heat generated from the landfill gas flare used to evaporate leachate water. The Authority has spoken with Heartland Technologies located in Massachusetts, USA and a preliminary review of the Landfill's current gas collection system volume in relation to what would be required to evaporate leachate production is 90/1280 (std. ft³/min) scfm or 7% of what would be required. To make up the deficit, additional landfill gas would be required (installation of additional wells) or a secondary fuel source such as natural gas would be required as a supplement.

Reverse Osmosis (RO) – Is a process in which pressure is applied to contaminated water to force the pure water molecules through a semi-permeable membrane. The majority of the dissolved contaminants, organic material, bacteria and suspended solids are unable to physically pass through the membrane and are discharged from the system in the rejected concentrate. The clean water is generally referred to as permeate (which means to pass through). The by-pass water or rejected concentrate is returned to and disposed of in the landfill. Generally, the volume of leachate that can be treated ranges between 75-90%.

Chemical use in a RO system for treating leachate helps to reduce deposits, impurities, and scale in the system's membranes. Antiscalants and antifoulants are specially designed chemicals that keep these contaminants from attaching to the membrane surface.

RO treatment technology is currently being used in the United States and Europe, as well as in Canada, at the Port Hope Area Initiative – Canadian Nuclear Laboratories. On March 14, 2023, Manager of Waste Disposal, Tom Marentette and Supervisor of Waste Disposal, Hassan Fakih, met with the technical team for Rochem Americas (Rochem). Rochem is a manufacturer of RO systems used for treating water and produce advanced membrane modules and systems for leachate treatment, desalination and other difficult applications.

The meeting was in Lansing, Michigan and provided the Authority an opportunity to discuss Rochem's leachate treatment system and review the system operation and effectiveness with the Manager of a West Michigan landfill that is currently using their system to treat leachate and discharge to surface water. Mr. Marentette and Mr. Fakih concluded their visit with a tour of the Orchard Hill Sanitary Landfill and their RO treatment plant, located in Watervliet, Michigan.

On April 14, 2023, the Authority authorized a proposal by Rochem Americas to conduct an on-site bench scale demonstration study at the Landfill to demonstrate the treatment ability of their system with leachate generated at the Landfill.

Rochem will perform a bench test at the Landfill on approximately 50 gallons of raw leachate and samples of the processed effluent (or permeate) will be sent to an independent analytical lab for analysis. Rochem will provide the bench scale RO equipment and a trained technician to operate the test.

The testing will be conducted in the maintenance building at the Landfill and the cost included in this proposal is assuming that the test will take 2 days to complete. If additional testing is requested, the technician may stay for additional time at a cost of \$1,000 per day.

The bench scale test will simulate the three primary steps of the RO leachate treatment process. Raw leachate will be pH adjusted with sulfuric acid and then pumped from the feed tank through a 10-micron filter and then through a bench scale RO module. The concentrate will be recirculated back to the feed tank. The permeate will be collected in a separate tank. The process will be run until approximately 90% recovery has been achieved or max pressure is reached. This will simulate the operation of the leachate stage and high-pressures stages. The system will then be rinsed and the permeate collected during the first test will be

reprocessed through the RO membranes. This will simulate the permeate stage. During the RO test, samples will be collected for water chemistry analysis by an independent lab.

Rochem will provide a report on the results of the RO bench testing within 2 weeks after the receipt of the final analytical results. The bench test is tentatively scheduled for the week of May 1, 2023.

Financial Implications

The 2023 budget includes a number of expenditures related to the treatment of leachate with the most significant being the \$1,259,300 cost to truck and treat leachate generated at the Landfill. Costs to truck and treat leachate are expected to rise in the future due to both inflationary pressures and the continued expansion of the waste cells.

Other costs in the approved 2023 budget include consulting fees of \$20,000 to fund the alternative leachate management plan currently being performed by Stantec. Additionally, Administration intends to utilize \$5,000 of the unspent funds included in the 2022 approved budget plus the \$20,000 budgeted for this study.

The 2023 budget also included \$103,000 for the placement of additional clay capping material on the Landfill to improve final cover on the side slopes and final cover on interim cover areas. This effort is to decrease permeability through the waste and encourage rain water to run off the landfill rather than being collected in the leachate collection system. Having been in receipt of large quantities of contaminated soil in the latter half of 2022 and the first quarter of 2023, the need to purchase additional clay capping material has greatly diminished. In turn, funds have been redirected to rebuild and purchase new aerators in the leachate storage lagoons. In 2023, \$87,200 was spent relating to the noted purchases with additional cost of approximately \$30,500 to upgrade electrical infrastructure and install the new aerators.

The total cost for Rochem to provide the on-site bench scale demonstration study at the Landfill, including additional costs to be supplied by the Authority (electrical connections, chemicals and laboratory analysis), is approximately \$12,000. If additional testing is requested, the technician may stay for additional time at a cost of \$1,000 per day.

Any potential long-term solution identified will require significant investment by the Authority. For example, high level capital expenditure estimates for a RO system to support the management of Landfill leachate, subject to competitive procurement, ranges between \$3.5 – 4.5 million CDN Dollars. Additional capital funds would be required for upgrades to site infrastructure including additional

electrical demands and facilities, building construction, holding tanks and tanker equipment to transport concentrate for disposal back to the Landfill tipping face. Depending on the method and level of leachate treatment, operation and maintenance costs may vary widely.

Conclusions

The final Stantec report will assess the feasibility of receiving leachate from the Landfill at the Essex PCP (Pollution Control Plant) with a review of both treatment and pre-treatment options. The review will focus on RO, MBR, MBBR and other conventional treatment options and the final report will be provided to the Board as information when completed.

Administration will also provide information to the Board regarding the outcome of the Rochem on-site bench scale demonstration study and the results of the analytical testing data.

Finally, based on the outcome and recommendations of both the Stantec report and Rochem on-site trial, Administration will be preparing a report to the Board to recommend a long-term approach for the management of leachate at Landfill. The report will include high level cost estimates, a procurement strategy as well as potential funding options for the Board's consideration.

Recommendation

That the Board receive this report for information.

Submitted By



Tom Marentette, Manager of Waste Disposal



Essex-Windsor Solid Waste Authority Administrative Report

April 21, 2023

To: The Chair and Board of the Essex-Windsor Solid Waste Authority
From: Steffan Brisebois, Manager of Finance and Administration
Meeting Date: Tuesday, May 02, 2023
Subject: EWSWA 2023 Budget Approval Status

Purpose

The purpose of this report is to update the Board on the status of the 2023 EWSWA Budget approval process.

Background

At the Authority's February 7, 2023 meeting the Authority Board approved the 2023 budget recommendations.

At the March 7, 2023, Administration advised the Authority Board that Essex County Council resolved to approve the Authority's Budget at the March 1, 2023 meeting.

Discussion

On April 3, 2023, Authority Administration attended Windsor City Council to present the 2023 Budget, address questions and seek approval. Authority Administration were not requested by Council to make a formal presentation but did appear as a delegation to answer questions. At this meeting, City Council resolved to approve the 2023 EWSWA Budget.

Recommendation

For the Board's information.

Submitted By



Steffan Brisebois, Manager of Finance and Administration



Essex-Windsor Solid Waste Authority Administrative Report

April 27, 2023

To: The Chair and Board of the Essex-Windsor Solid Waste Authority

From: Steffan Brisebois, Manager of Finance and Administration

Meeting Date: Tuesday, May 02, 2023

Subject: January to March 2023 – Three-Month Operating Financial Review

Purpose

The purpose of this report is to present a three-month financial review of the Authority's operating costs and revenue for the period January to March 2023.

Background

Section 5(I) of the Agreement between the City of Windsor and County of Essex that created the Essex-Windsor Solid Waste Authority states: "The Authority shall receive operating statements and reports on a quarterly basis, or more frequently if desired by the Authority and/or City or County Council."

Discussion

Historically the delivery of material for disposal at the Authority depots is much lower during the period of January to March than in other months of the year. This creates a challenge for Administration to compare actual first-quarter results to budget estimates. Administration has therefore only included in this report items that have a material variance to budget or are significant in nature such as Municipal and Industrial/Commercial/Institutional delivered refuse revenue and the quarterly recycling material sales revenue.

Operating Revenue

Municipal Tip Fee Revenue – Refuse

Municipal tip fee revenue increased marginally due to the increase in tonnes and tipping fee rate when compared to the same period in 2022. The revenue increase amounted to \$26,695 (\$1,032,175 in 2023 vs \$1,005,480 in 2022). In the first three months of 2023, a total of 25,175 tonnes was received for disposal compared to 25,137 tonnes delivered during the same period in 2022.

Municipal Tip Fee Revenue – Organics

Most municipal organic programs do not operate in the winter months however on February 23, 2023, a significant ice storm struck the Windsor/Essex Region which lead to some municipalities offering residents a special yard waste collection day(s). Due to this event, yard waste tonnages have increased by 564 tonnes in the first three months of the fiscal year when compared to the same period in 2022 (766 tonnes in 2023 vs 202 tonnes in 2022).

Industrial/Commercial/Institutional (IC&I) Tip Fee Revenue – Landfilled Material

Revenue from IC&I customers is higher in the first quarter when compared to the same period in 2022 due to increase tonnages. The Regional Landfill received 36,820 tonnes of landfillable material during the first quarter of 2023 compared to 30,220 tonnes for the same period in 2022. A reason for the increase is due to a large-volume hauler renewing their minimum put-or-pay contract at a higher tonne level than in previous years. The chart below breaks down IC&I waste by material type and compares the January to March 2023 tonnages to the January to March 2022 tonnages so to identify any significant variances.

Description	2023 Tonnes	2022 Tonnes	Variance
Industrial, Commercial or Institutional Waste	19,753	14,699	5,054
Greenhouse Vines and Growing Medium	14,585	12,156	2,429
Contaminated Soil	2,482	3,365	(883)
Total Tonnes	36,820	30,220	6,600

Industrial/Commercial/Institutional Tip Fee Revenue – Non-Landfilled Material

The bulk of ICI Non-Landfilled Material primarily consists of daily cover material (i.e. Auto Shredder Fluff). Additional cover material was received in the first three months of 2023 when compared to the same period in 2022. The variance amounted to 11,159 tonnes of additional cover material than during the same period in 2022 (23,024 tonnes in 2023 vs. 11,865 tonnes in 2022). The increase is attributable to the increasing size of the Regional Landfill and its increasing tipping face.

Sale of Recyclable Goods

Recyclable material commodity prices on average are higher than budgeted in the first three months of 2023. The average commodity price was \$28 per tonne more than budget (\$138 vs. \$110) while the average total marketed tonnes fell by 316 tonnes (5,043 actual tonnes vs 5,359 budgeted tonnes). The net resulted in a \$107,823 positive variance in the first quarter (\$697,851 Actual vs. \$590,028 Budget).

Commodity prices fluctuate as a result of the global market’s needs and conditions. Some commodity prices have recovered from a downward trend in 2022. Aluminum cans, PET and HDPE were especially impactful in contributing to the positive variance during the first quarter of 2023.

The following table contains the 2023 budget figures, year to date and current prices per tonne for each recyclable material.

Material	2023 Budget Price Per Tonne	January to March Average Price	April 2023 Sales Price
Newspaper	\$112	\$87	\$88
OCC (Cardboard)	\$67	\$72	\$98
Boxboard/Hardpack	\$15	\$18	\$30
Clear Glass	\$0	\$30	\$30
Tin/Steel	\$241	\$352	\$440
Fine Paper	\$124	\$124	\$124

Material	2023 Budget Price Per Tonne	January to March Average Price	April 2023 Sales Price
Aluminum	\$2,033	\$2,368	\$2,179
PET – Plastic	\$224	\$366	\$455
HDPE – Plastic	\$240	\$425	\$485
Polycoat	\$10	\$1	\$2
Mixed Plastics	\$35	\$70	\$85
Mixed Metals	\$325	\$236	\$236
Mixed Fibre	\$0	\$0	\$11
Container Residual	\$5	\$11	\$11

Operating Expenditures

An unfavourable variance has been identified relating to the following operating expenditure in the first three months of 2023:

Description	Budget	Actual	Variance
City of Windsor – County Blue Box Program	\$860,755	\$940,964	(\$80,209)

The increase in cost is primarily attributable to an increase in the collection labourer hours of the City of Windsor to operate the County Blue Box program.

No other significant expenditure variances have been identified in the first three months of 2023.

Financial Implications

Both the increase in revenues and expenditures will be monitored and further updates will be presented to the Board as part of the January to June 2023 six-month financial report.

Recommendation

THAT the Board receive this report as information.

Submitted By



Steffan Brisebois, Manager of Finance and Administration



Essex-Windsor Solid Waste Authority

Administrative Report

April 21, 2023

To: The Chair and Board of the Essex-Windsor Solid Waste Authority

From: Steffan Brisebois, Manager of Finance and Administration

Meeting Date: Tuesday, May 02, 2023

Subject: 2022 Financial Statements and Auditors' Report

Purpose

The purpose of this report is to present the Authority's 2022 audited financial statements as well as KPMG's Auditors' Report.

Discussion

KPMG has issued an "unmodified" audit opinion regarding the 2022 financial statements meaning that the statements "...present fairly, in all material respects, the financial position of the Authority as at December 31, 2022 and the results of its operations and changes in net debt and cash flows for the year then ended.

2022 Financial Statements

The following is a presentation of the major figures included in the 2022 financial statements.

Statement of Financial Position

Due from City of Windsor

The balance of \$4,899,791 (2021 - \$5,111,061) represents the December 31, 2022 market value of proceeds from the settlement of the MFP suit. These proceeds were made payable to the City of Windsor and are being held in an investment account in trust for the EWSWA. The investment instruments are Government of Canada and Province of Ontario stripped coupon bonds. At

maturity in 2024 the final stripped coupon bond will be used to finance the construction of cell 5 at the Regional Landfill.

Regional Landfill Post Closure Costs

The balance of \$16,812,232 (2021 - \$18,242,227) represents the liability that must be recorded in the Authority's financial statements in accordance with a calculation prescribed by section PS 3270 of the Public Sector Accounting Board recommendations. The liability must be shown whether or not funds have been set aside. The recommendations state that "The liability for closure and post-closure care begins when the site starts accepting waste." and "Financial statements should recognize a liability for closure and post-closure care as the landfill site's capacity is used. Usage should be measured on a volumetric basis (e.g. cubic metres)."

The actual reserve balance at December 31, 2022 is \$2,547,390 (2021 - \$2,482,194). The reserve balance is the result of the Authority's 2011 Business Review. The consultant recommended that based on the current projection of available landfill capacity the \$500,000 annual contribution to the Regional Landfill Perpetual Care Reserve be suspended until the Sunlife debenture payment period is complete in 2031. At that time contributions to the Perpetual Care Reserve will be resumed. Also, that the Authority cap the current Regional Landfill Perpetual Care Reserve balance at \$2,000,000 plus interest earned until the debenture has been repaid and the balance in the reserve be transferred to the Rate Stabilization Reserve. The Authority board adopted these recommendations at the November 2011 Board meeting.

Net Long-Term Liability

The balance of \$52,488,076 represents a debenture due to Sun Life Assurance Company Limited on account of the Regional Landfill. The City of Windsor and the County of Essex are jointly liable for this debenture. The last payment is scheduled for 2031.

Reserve Funds

The nature of the Reserves as well as their December 31, 2022 balances are shown on the following table. The \$49,087,920 in total reserves forms part of the calculation of the \$293,024 Accumulated Surplus as found on the Statement of Financial Position and Note 8 of the financial statements.

Reserve Name	Description	Balance as at December 31, 2022
Rate Stabilization	To manage future years' tipping fees	\$11,511,913
Waste Reduction	To assist with potential organics program implementation	\$1,862,831
Recycling	To assist with increased program delivery costs relating to the Blue Box Program	\$276,460
Working Capital	To manage cash flow	\$650,000
Insurance	To fund potential deductible costs	\$250,000
Recycling and Landfill Equipment Replacement	Equipment replacement	\$8,438,340
Regional Landfill Debt Retirement	To pay Sun Life Debenture for Regional Landfill	\$7,822,413
Regional Landfill	To be used for Reg. LF related property matters	\$2,923,437
Regional Landfill Perpetual Care	To be used once the landfill is closed	\$2,547,390
Regional Landfill Future Cell Construction	For Cells 4S, and 5 (including strip bonds as indicated above)	\$12,525,508
Landfill #2 Perpetual Care Accumulated Surplus	These monies will be used to finance 2023 expenses	\$15,126
Landfill #3 Perpetual Care Accumulated Surplus	These monies will be used to finance 2022 expenses	\$264,502
As of December 31, 2022	Total	\$49,087,920

Tangible Capital Assets

The balance of \$27,333,541 represents the net book value of Authority assets. This figure is comprised of \$83,092,264 in historical costs of the assets less depreciation of \$55,758,723. Assets include such items as buildings, machinery, heavy equipment, vehicles, land and the Regional Landfill.

Statement of Operations and Accumulated Surplus

2022 Accumulated Surplus

The Accumulated Deficit totalling \$293,024 at December 31, 2022 represents the Authority's equity or retained earnings and is a function of the net investment in capital, unfunded liabilities, long-term debt and reserve balances.

Highlighted in the chart below is a summary comparison of the Authority's Accumulated Surplus for 2022:

Description	2022 Accumulated Surplus (Deficit)	2021 Accumulated (Deficit)
Invested in tangible capital assets (net)	\$20,787,344	\$21,530,121
Long term debt	(52,488,076)	(55,735,413)
RL post closure & employee benefit liabilities	(17,094,164)	(18,513,44)
Reserves	49,087,920	48,414,866
Total	\$293,024	(\$4,303,870)

2022 Operating Surplus

Operations for 2022 resulted in an excess of revenues over expenditures of \$1,621,982. The following table provides a summary of specific revenues and expenditures where actual results differed materially from what was presented in the 2022 projection figures included in the 2023 Operational Plan and Budget approved by the Authority Board at the February 7, 2023 Meeting:

Increase (Decrease) to the Rate Stabilization Reserve	
Description	Variance
Higher than projected interest income	\$87,338
Lower than projected employee wages, benefits and vacation	\$76,344
Lower than projected Transfer Station 1 refuse hauling costs	\$66,994
Lower than projected insurance premiums	\$50,967
Lower than projected consulting fees	\$32,931
Lower than projected other expenditures	\$154,128

Increase (Decrease) to the Rate Stabilization Reserve	
Description	Variance
Higher than projected City of Windsor Blue Box County Collection program cost	(\$168,905)*
Higher than projected City of Windsor Blue Box program cost	(\$89,951)*
Lower than projected ICI landfilled refuse	(\$64,719)
Lower than projected other revenues	(\$70,205)
Total	\$74,922

*Additional 2022 costs to operate both the City of Windsor and County Blue Box program were presented by the City of Windsor Administration on March 17, 2023 to the Authority Administration after the 2023 budget was approved by EWSWA Board.

Notes to The Financial Statements

Note 8 Accumulated Surplus

Note 8 includes disclosure of \$20,787,344 pertaining to the net book value of tangible capital assets. This figure is derived from the figure shown on the Statement of Financial Position of \$27,333,541 less \$6,546,197. The \$6,546,197 figure represents the amount that must be raised by the Authority in future years to retire the debt associated with the acquisition and construction of capital items from prior years. The funds required to finance the acquisition of these capital items came from internal borrowing from various Authority reserves. This was done so that external borrowing wouldn't take place. The Authority can borrow from its own reserves at a better rate of interest than from an external source such as a bank. The \$6,546,197 figure is not shown as a separate schedule within the financial statements and is therefore presented within this report:

Description	Unfinanced Capital
Regional Landfill Heavy Equipment (2020 - 2024)	\$616,638
Regional Landfill Cell #3 South & Cell #4 North (2016 - 2027)	4,599,322
Windsor Transfer Station (2008 - 2027)	396,448
Recycling Centre Building (2008 - 2027)	933,789
Total Unfinanced Capital	\$6,546,197

Financial Implications

The 2022 operating surplus of \$1,621,982 has been transferred to the Rate Stabilization Reserve.

Recommendation

THAT the Board approve this report, the 2022 financial statements and the associated auditors' report.

Submitted By



Steffan Brisebois, Manager of Finance and Administration

Attachment (s)

- 2022 Auditors' Report
- 2022 Financial Statements

Financial Statements of

**ESSEX-WINDSOR SOLID
WASTE AUTHORITY**

And Independent Auditors' Report thereon

Year ended December 31, 2022

DRAFT



KPMG LLP
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Windsor ON N8W 5K8
Canada
Telephone (519) 251-3500
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INDEPENDENT AUDITORS' REPORT

To the Members of the Essex-Windsor Solid Waste Authority

We have audited the financial statements of Essex-Windsor Solid Waste Authority (the Entity), which comprise:

- the statement of financial position as at December 31, 2022
- the statement of operations and accumulated surplus (deficit) for the year then ended
- the statement of change in net debt for the year then ended
- the statement of cash flows for the year then ended
- and notes to the financial statements, including a summary of significant accounting policies

(Hereinafter referred to as the “financial statements”).

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Entity as at end of December 31, 2022, and its results of operations, its changes in net debt and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the “Auditors’ Responsibilities for the Audit of the Financial Statements” section of our auditors’ report.

We are independent of the Entity in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.



Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Canadian public sector accounting standards and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Entity's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Entity or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Entity's financial reporting process.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit.

We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.

The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Entity's internal control.



- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Entity to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Chartered Professional Accountants, Licensed Public Accountants

Windsor, Canada
Approval Date

ESSEX - WINDSOR SOLID WASTE AUTHORITY

STATEMENT OF FINANCIAL POSITION DECEMBER 31, 2022, WITH COMPARATIVE INFORMATION FOR 2021

	2022	2021
	\$	\$
FINANCIAL ASSETS		
Cash and temporary investments	38,259,509	34,321,932
Accounts receivable	5,203,538	5,837,116
Due from City of Windsor (Note 2)	4,899,791	5,111,061
Due from municipalities (Note 11)	-	229,188
Other current assets	1,282	1,282
TOTAL FINANCIAL ASSETS	48,364,120	45,500,579
FINANCIAL LIABILITIES		
Due to County of Essex	496,194	462,575
Accounts payable and accrued liabilities	5,700,437	4,476,952
Holdbacks payable	-	7,910
Employee benefits payable (Note 4)	281,932	271,217
Regional landfill post closure costs (Note 5)	16,812,232	18,242,227
Net long term liability (Note 6)	52,488,076	55,735,413
TOTAL FINANCIAL LIABILITIES	75,778,871	79,196,294
NET DEBT	(27,414,751)	(33,695,715)
NON-FINANCIAL ASSETS		
Tangible capital assets (Note 7)	27,333,541	29,123,505
Prepaid expenses and deposit	374,234	268,340
TOTAL NON-FINANCIAL ASSETS	27,707,775	29,391,845
ACCUMULATED SURPLUS (DEFICIT) (Note 8)	293,024	(4,303,870)
CONTINGENCY (Note 12)		

The accompanying notes are an integral part of this financial statement.

ESSEX - WINDSOR SOLID WASTE AUTHORITY

STATEMENT OF OPERATIONS AND ACCUMULATED SURPLUS (DEFICIT) FOR THE YEAR ENDED DECEMBER 31, 2022, WITH COMPARATIVE INFORMATION FOR 2021

	Budget 2022 \$ (Note 9)	Actual 2022 \$	Actual 2021 \$
Revenue			
Tipping fees	21,687,760	25,333,518	23,103,705
Sale of recyclable materials	3,674,200	4,681,932	4,965,280
Recovery of perpetual care costs	912,660	912,660	861,450
Rent	224,400	224,388	224,388
Interest income	698,470	736,982	426,855
Sale of scrap metal - public drop-off depots	187,800	149,995	163,354
Other	536,600	520,013	694,430
Stewardship Funding - recycling operating funding	3,335,250	3,660,426	3,335,252
Stewardship Funding - municipal household or special waste	168,000	149,946	156,771
Sale of electronics	66,000	62,413	66,501
Sale of blue boxes	41,000	32,943	32,052
Sale of organic material	225,000	239,237	223,693
Gain on sale of tangible capital assets	-	150,263	48,642
Total revenue	<u>31,757,140</u>	<u>36,854,716</u>	<u>34,302,373</u>
Expenses			
Administration	2,074,020	1,850,776	1,876,237
Realty	26,710	15,587	15,446
Recycling	9,048,210	10,213,801	8,945,162
Municipal Hazardous or Special Waste	512,800	502,404	509,052
Waste Reduction and Reuse	1,278,000	1,056,678	1,233,848
Advertising and Public Education	376,350	268,250	276,698
Perpetual Care - Landfill Site # 2	300,500	295,267	229,310
Perpetual Care - Landfill Site # 3	824,670	659,623	616,743
Regional landfill	3,452,410	3,986,262	3,465,415
Regional landfill - initial construction and future cell development	-	(3,247,337)	(2,795,475)
Windsor Transfer Station #1	1,874,360	1,889,797	1,247,911
Kingsville Transfer Station #2	712,050	759,028	702,980
Windsor Public Depot	1,395,370	1,409,247	1,185,951
Regional landfill debenture payments	5,658,100	6,584,087	6,331,369
Town of Essex compensation	2,592,960	3,500,229	2,890,258
Residents compensation	81,880	76,074	63,456
Post employment/retirement employee benefits	-	10,715	(7,782)
Regional landfill post closure costs (Note 5)	-	(1,429,995)	(709,250)
Amortization of tangible capital assets	3,857,329	3,857,329	3,008,876
Total expenses	<u>34,065,719</u>	<u>32,257,822</u>	<u>29,086,205</u>
Annual surplus (deficit)	<u>(2,308,579)</u>	<u>4,596,894</u>	<u>5,216,168</u>
Accumulated deficit, beginning of year		<u>(4,303,870)</u>	<u>(9,520,038)</u>
Accumulated surplus (deficit), end of year		<u>293,024</u>	<u>(4,303,870)</u>

The accompanying notes are an integral part of this financial statement.

ESSEX - WINDSOR SOLID WASTE AUTHORITY

**STATEMENT OF CHANGE IN NET DEBT
FOR THE YEAR ENDED DECEMBER 31, 2022, WITH COMPARATIVE INFORMATION FOR 2021**

	Budget 2022 \$	Actual 2022 \$	Actual 2021 \$
	(Note 9)		
Annual surplus (deficit)	(2,308,579)	4,596,894	5,216,168
Acquisition of tangible capital assets	(3,419,900)	(2,475,099)	(513,314)
Amortization of tangible capital assets	3,857,329	3,857,329	3,008,876
Gain on sale of tangible capital assets	-	(150,263)	(48,642)
Proceeds on sale of tangible capital assets	-	557,997	75,867
	<u>(1,871,150)</u>	<u>6,386,858</u>	<u>7,738,955</u>
Acquisition of prepaid expenses and deposits	-	(374,234)	(268,340)
Use of prepaid expenses and deposits	-	268,340	205,516
	<u>(1,871,150)</u>	<u>6,280,964</u>	<u>7,676,131</u>
Change in net debt	(1,871,150)	6,280,964	7,676,131
Net debt, beginning of year	<u>(33,695,715)</u>	<u>(33,695,715)</u>	<u>(41,371,846)</u>
Net debt, end of year	<u>(35,566,865)</u>	<u>(27,414,751)</u>	<u>(33,695,715)</u>

The accompanying notes are an integral part of this financial statement.

ESSEX - WINDSOR SOLID WASTE AUTHORITY

STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED DECEMBER 31, 2022, WITH COMPARATIVE INFORMATION FOR 2021

	2022 \$	2021 \$
	<u> </u>	<u> </u>
Cash provided by (used in):		
Operation Activities		
Annual surplus	4,596,894	5,216,168
Items not involving cash:		
Amortization of tangible capital assets	3,857,329	3,008,876
Gain on sale of tangible capital assets	(150,263)	(48,642)
Change in employee benefits payable	10,715	(7,782)
Regional landfill post closure costs	(1,429,995)	(709,250)
Change in non-cash assets and liabilities:		
Accounts receivable	633,578	(580,508)
Due from City of Windsor	211,270	93,910
Due from municipalities	229,188	229,170
Prepaid expenses and deposits	(105,894)	(62,824)
Other current assets	-	1,089
Due to County of Essex	33,619	(10,739)
Accounts payable and accrued liabilities	1,223,485	486,237
Holdbacks payable	(7,910)	(36,921)
Net change in cash from operating activities	<u>9,102,016</u>	<u>7,578,784</u>
Capital Activities		
Proceeds on sale of tangible capital assets	557,997	75,867
Cash used to acquire tangible capital assets	(2,475,099)	(513,314)
Net change in cash from capital activities	<u>(1,917,102)</u>	<u>(437,447)</u>
Financing Activities		
Decrease in net long term liability	(3,247,337)	(2,795,475)
Net change in cash from financing activities	<u>(3,247,337)</u>	<u>(2,795,475)</u>
Net change in cash and temporary investments	3,937,577	4,345,862
Cash and temporary investments, beginning of year	<u>34,321,932</u>	<u>29,976,070</u>
Cash and temporary investments, end of year	<u><u>38,259,509</u></u>	<u><u>34,321,932</u></u>

The accompanying notes are an integral part of this financial statement.

The Essex-Windsor Solid Waste Authority (the "Authority") is a Joint Board of Management created by the Corporation of the County of Essex (the "County") and the Corporation of the City of Windsor (the "City") pursuant to an agreement dated May 18, 1994, (the "EWSWA Agreement") to establish, operate and manage, among other things, the Regional Landfill, recycling and waste diversion programs.

1. Summary of Significant Accounting Policies and Reporting Practices:

The financial statements of the Authority are prepared in accordance with accounting policies prescribed by the Public Sector Accounting Board of the Canadian Institute of Chartered Accountants.

Basis of accounting:

(i) **Accrual:**

The accrual basis of accounting recognizes revenue as it is earned and is measurable. Expenses are recognized as they are incurred and are measurable as a result of the receipt of goods or services and the creation of a legal obligation to pay.

(ii) **Non-financial Assets:**

Non-financial assets are not available to discharge existing liabilities and are held for use in the provision of services. They generally have useful lives extending beyond the current year and are not intended for sale in the ordinary course of operations.

(iii) **Tangible Capital Assets:**

Tangible Capital Assets are recorded at cost which includes amounts that are directly attributable to acquisition, construction, development or betterment of the asset. The cost, less residual value, of the tangible capital assets, excluding land and landfill sites, are amortized on a straight-line basis over their estimated useful lives as follows:

Asset Classification & Amortization Schedule

Classification	Useful Life (Years)
Buildings	15-20
Machinery & Equipment	5-15
Vehicles	7-10
Land Improvements	10-20
Heavy Machinery	7-10
Office Equipment	10

The Regional Landfill has an estimated service capacity of 12,200,000 tonnes and is being amortized using the units of production method based on capacity used during the year.

Land has an infinite life and accordingly is not amortized.

1. Summary of Significant Accounting Policies and Reporting Practices (continued):

(iv) Landfill closure and post closure liability:

The liability for closure and post closure care of the Regional Landfill is recognized over the term of operation of the landfill, beginning when the site first accepted waste and will be fully recognized when the site stops accepting waste. The change in the liability and annual expense is determined pro-ratably based on the percentage of cumulative cubic metres used over total estimated cubic metres of capacity, to estimated total closure and post-closure expenses, less expenses previously recognized.

The Authority also monitors two closed landfills. Under agreements with five local municipalities, the Authority can recover the post closure care costs from the local municipalities in the same proportion as the waste deposited in the landfill. The local municipalities bear the cost of monitoring the closed landfills and therefore the liability for post closure costs have not been included in the liability for landfill post closure costs.

(v) Employee future benefit obligations:

The Authority has adopted the accrued method of accounting for employee future benefits as required by the Canadian Institute of Chartered Accountants. The cost of future benefits earned by employees is actuarially determined using the projected benefit method prorated on service and assumptions of mortality and termination rates, retirement age and expected inflation rate. Actuarial gains and losses on the accrued benefit obligation arise from differences between actual and expected experience and from changes in the actuarial assumptions used to determine the accrued benefit obligation. Actuarial gains and losses for non-pension post-retirement benefits are amortized over the average remaining service period of active employees, which is 13 years. Actuarial gains and losses for post-employment benefits are fully recognized in the year they arise.

(vi) Use of estimates:

The preparation of the financial statements in conformity with Canadian public sector accounting standards requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the dates of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Significant items subject to such estimates and assumptions include the valuation of accounts receivable, the valuation of employee benefits, the carrying value of Regional Landfill post-closure costs and the carrying value of tangible capital assets. Actual results could differ from those estimates.

2. Due from City of Windsor:

As more fully described in note 6, the Authority received certain proceeds and investments in settlement of certain litigation. These investments are held in trust by the City on behalf of the Authority and consist of the following:

	Market Value 2022	Market Value 2021
	\$	\$
Government of Canada Stripped Coupon Bond Maturing December 1, 2024 - \$5,317,650	4,899,683	5,110,953
RBC Dominion Securities - Cash	108	108
	<u>\$4,899,791</u>	<u>\$5,111,061</u>

3. Pension Agreements:

The Authority contributes to the Ontario Municipal Employees Retirement System (OMERS) on behalf of 27 employees. OMERS is a multi-employer, defined benefit plan which specifies the amount of the retirement benefit to be received by employees based on their length of service and earnings. However, as OMERS does not segregate its pension assets and liabilities information by individual employer, there is not sufficient information to enable the Authority to account for the plan as a defined benefit plan. The plan has been accounted for as a defined contribution plan.

The amount contributed to OMERS for 2022 was \$190,567 (2021 - \$197,140) for current service. Contributions in the current year have been included as an expense within the statement of operations and accumulated deficit.

4. Employee Benefits Payable:

Employee future benefit obligations are future liabilities of the Authority to its employees and retirees for benefits earned but not taken as at December 31, 2022 and consists of the following:

	2022	2021
	\$	\$
Post retirement benefits	163,626	186,301
Post employment benefits	-	2
WSIB future benefits	118,306	84,914
	<u>\$281,932</u>	<u>\$271,217</u>

The Authority measures its post retirement and post employment benefit obligation for accounting purposes as at December 31 each year and consists of the following:

	2022	2021
Discount rate	3.75%	3.75%
<i>Medical trend rate</i>		
Initial	6.09%	6.42%
Ultimate	3.75%	3.75%
Dental trend rate	3.75%	3.75%

The medical trend rate has an initial rate of 6.75% but reduces by 0.3333% per year to 3.75% in 2029.

4. Employee Benefits Payable (continued):

Information about the Authority's future obligation with respect to post retirement and employment benefits are as follows:

	2022	2021
	\$	\$
Accrued benefit liability at the beginning of the year	271,217	278,999
Current service cost	39,724	38,497
Interest	16,346	16,785
Amortization of actuarial loss	16,685	2,862
Expected benefit payments	(62,040)	(65,926)
Accrued benefit liability at the end of the year	281,932	271,217
Unamortized net actuarial gains	(100,487)	(123,510)
Obligation for benefits	181,445	147,707

5. Regional Landfill Post-Closure Costs:

The Statement of Financial Position reflects a balance of \$16,812,232 (2021 - \$18,242,227) for Regional Landfill post-closure care expenses, representing an estimate of expenses that would otherwise be incurred had the Regional Landfill ceased receiving waste as of December 31, 2022. This liability for perpetual care is to be recognized over the term of the Regional Landfill operation, the balance of which is currently estimated to be an additional 14 years, based on past and projected waste levels. The site has an approximate capacity of 12.2 million cubic metres, of which 7.24 million has been consumed to December 31, 2022. The nature of post-closure expenses will relate to monitoring, hauling and treating leachate; monitoring ground and surface water; monitoring gas and maintenance of drainage system and final cover.

It is being estimated that by the time the Regional Landfill ceases operating in 2036, \$127 million will be required for post-closure care for a period of 40 years subsequent to its closure, which is management's current best estimate of the period such care will be necessary.

The Authority has established a reserve to help fund these future expenses, and at December 31, 2022, the balance in this reserve fund approximated \$2.547 million (2022 – \$2.482 million).

6. Net Long-Term Liability:

In July 2005, the County, City and Authority (the "Plaintiff") settled a legal action commenced in the Ontario Superior Court of Justice against MFP Financial Services, Leasing-Infrastructure Financing Trust 1 ("LIFT") and others in which the Plaintiffs had alleged that certain of the defendants had fraudulently and negligently misrepresented the rate of interest payable by the Plaintiffs in respect of a head lease and sublease intended to be a loan to finance certain costs incurred by the Authority to develop the Regional Landfill and pay the costs of future landfill expansions.

Under the terms of the mediated and Court approved settlement, LIFT assigned its rights under the original head lease which the Court ruled was a loan from LIFT to the County and City, to Sun Life Assurance Company Limited ("Sun Life"). Sun Life restructured the loan, in favour of the debenture in the amount of \$62,808,331, bearing interest at 6.427% per annum, issued by the County, on behalf of the County and the Authority. The County and the City are jointly liable for the debenture, which provided for principal and interest payments on January 15 and July 15 of each year, commencing January 15, 2006 and maturing on July 31, 2031. Total interest over the term of the debenture will aggregate \$88,454,959. Other significant terms and conditions of the settlement are as follows:

- (a) Cash proceeds of \$5,728,000 held by LIFT on account of a payment previously owing under the head lease were distributed to the County and City and used to retire certain indebtedness incurred in prior years by the Authority with respect to Regional Landfill expenses.

6. Net Long-Term Liability (continued):

- (b) Investments held by another defendant with a book value of \$10,195,743 at the date of settlement were distributed to the County and the Authority. At their respective maturity dates, these investments will be considered as further advances by LIFT as provided under the original head lease agreement.
- (c) Payment of \$7,146,880 by LIFT to the County and City, which was used, along with interest earned thereon, towards payments otherwise due with respect to the Sun Life debenture during the period commencing January 15, 2006 and ended on January 15, 2008. Those proceeds were intended to effectively reduce the original cost of borrowing included in the head lease and sub-lease during this period. As part of the agreement, no other payments with respect to the debenture are payable during this timeframe.

The investments noted in paragraph (b) above are currently being held by the City in trust for the Authority.

- (d) Payment of \$2,400,000 by MFP Financial Services Limited on account of costs of the legal action incurred by the Plaintiffs.

Net Long-term liability consists of:

	2022	2021
	\$	\$
Debenture payable	50,971,277	54,124,774
Accrued Interest	1,516,799	1,610,639
	<u>\$52,488,076</u>	<u>\$55,735,413</u>

Under the terms of the debenture agreement, no principal repayments were required until 2013 and the excess of interest otherwise payable over the actual amount of the debenture payments due annually was capitalized as part of the debenture payable. Principal repayments began in 2013.

Principal payments due over the next five years and thereafter are as follows:

	\$
2023	3,621,153
2024	3,938,176
2025	3,692,677
2026	3,498,841
2027	3,768,779
2028 and thereafter	32,451,651

Essex-Windsor Solid Waste Authority
Notes to the Financial Statements (continued)
For the Year Ended December 31, 2022

7. Tangible Capital Assets:

2022

	Regional Landfill Construction	Land	Land Improvements	Building and Improvements	Vehicles	Heavy Machinery	Machinery and Equipment	Office Furniture & Equipment	Computer Systems	Total
Cost										
Balance, beginning of year	\$ 46,950,933	\$ 4,450,709	\$ 5,325,372	\$ 12,574,556	\$ 484,143	\$ 4,502,537	\$ 8,025,388	\$ 21,396	\$ 127,741	\$ 82,462,775
Additions	-	-	-	91,355	42,888	2,340,856	-	-	-	2,475,099
Disposals	-	-	-	-	(18,940)	(1,804,334)	(22,336)	-	-	(1,845,610)
Balance, end of year	\$46,950,933	\$4,450,709	\$5,325,372	\$12,665,911	\$508,091	\$5,039,059	\$8,003,052	\$21,396	\$127,741	\$83,092,264
Accumulated Amortization										
Balance, beginning of year	\$31,289,269	-	\$3,109,948	\$10,296,941	\$395,323	\$2,078,756	\$6,034,020	\$15,240	\$119,773	\$53,339,270
Disposals	-	-	-	-	(18,940)	(1,402,184)	(16,752)	-	-	(1,437,876)
Amortization Expense	2,360,141	-	168,005	485,726	23,884	538,561	270,904	2,140	7,968	3,857,329
Balance, end of year	\$33,649,410	-	\$3,277,953	\$10,782,667	\$400,267	\$1,215,133	\$6,288,172	\$17,380	\$127,741	\$55,758,723
Net Book Value, end of year	\$13,301,523	\$4,450,709	\$2,047,419	\$1,883,244	\$107,824	\$3,823,926	\$1,714,880	\$4,016	-	\$27,333,541

Essex-Windsor Solid Waste Authority
Notes to the Financial Statements (continued)
For the Year Ended December 31, 2022

7. Tangible Capital Assets (continued):

2021

	Regional Landfill Construction	Land	Land Improvements	Building and Improvements	Vehicles	Heavy Machinery	Machinery and Equipment	Office Furniture & Equipment	Computer Systems	Total
Cost										
Balance, beginning of year	\$ 46,950,933	\$ 4,450,709	\$ 5,325,372	\$ 12,500,037	\$ 484,143	\$ 4,449,536	\$ 7,861,779	\$ 21,396	\$ 127,741	\$ 82,171,646
Additions	-	-	-	83,267	-	266,438	163,609	-	-	513,314
Disposals	-	-	-	(8,748)	-	(213,437)	-	-	-	(222,185)
Balance, end of year	\$46,950,933	\$4,450,709	\$5,325,372	\$12,574,556	\$484,143	\$4,502,537	\$8,025,388	\$21,396	\$127,741	\$82,462,775
Accumulated Amortization										
Balance, beginning of year	\$ 29,747,322	-	\$ 2,941,943	\$ 9,824,439	\$ 372,662	\$ 1,758,606	\$ 5,763,446	\$ 13,100	\$103,836	\$ 50,525,354
Disposals	-	-	-	(8,748)	-	(186,212)	-	-	-	(194,960)
Amortization Expense	1,541,947	-	168,005	481,250	22,661	506,362	270,574	2,140	15,937	3,008,876
Balance, end of year	\$31,289,269	-	\$3,109,948	\$10,296,941	\$395,323	\$2,078,756	\$6,034,020	\$15,240	\$119,773	\$53,339,270
Net Book Value, end of year	\$15,661,664	\$4,450,709	\$2,215,424	\$2,277,615	\$88,820	\$2,423,781	\$1,991,368	\$6,156	\$7,968	\$29,123,505

8. Accumulated Surplus (Deficit):

Accumulated surplus (deficit) consists of individual fund surpluses (deficits) and reserves as follows:

	2022	2021
DEFICIT	\$	\$
Invested in tangible capital assets	20,787,344	21,530,121
Unfunded		
Net long-term liability	(52,488,076)	(55,735,413)
Landfill post-closure costs	(16,812,232)	(18,242,227)
Employee benefits	(281,932)	(271,217)
Total deficit	<u>(48,794,896)</u>	<u>(52,718,736)</u>
RESERVES		
Equipment Replacement	8,438,340	8,946,452
Rate Stabilization	11,511,913	9,812,283
Working Capital	650,000	650,000
Regional Landfill	2,923,437	2,939,997
Regional Landfill Perpetual Care	2,547,390	2,482,194
Regional Landfill Debt Retirement	7,822,413	8,566,688
Regional Landfill Future Cell Construction	12,525,508	12,550,122
Landfill 2 Perpetual Care	15,126	85,263
Landfill 3 Perpetual Care	264,502	236,595
Waste Diversion	1,862,831	1,895,272
Recycling	276,460	-
Insurance	250,000	250,000
Total reserves	<u>49,087,920</u>	<u>48,414,866</u>
Total accumulated surplus (deficit)	<u><u>293,024</u></u>	<u><u>(4,303,870)</u></u>

Essex-Windsor Solid Waste Authority
Notes to the Financial Statements (continued)
For the Year Ended December 31, 2022

9. Budget Data:

The audited budget data presented in these financial statements is based upon the 2022 operating and capital budgets approved by the Authority on November 2, 2021. Amortization was not contemplated on development of the budget and, as such, has been included based on the actual 2022 figure. The chart below reconciles the approved budget to the budget figures reported in these consolidated financial statements.

	Budget Amount
Revenue:	
Operating Budget	\$ 30,208,390
Capital Budget	3,419,900
Add:	
Transfers from other funds	(1,871,150)
Total Revenue	\$ 31,757,140
Expenses:	
Operating Budget	\$ 34,065,719
Capital Budget	3,419,900
Less:	
Capital Expenses	(3,419,900)
Total Expenses	\$34,065,719
Annual Deficit	(\$2,308,579)

10. Expenses by Object:

	2022	2021
	\$	\$
Operating goods and services	15,312,149	13,821,779
Regional Landfill financing costs	6,584,087	6,331,369
Municipal and residential compensation	3,576,303	2,953,714
Salaries, wages and employees benefits	2,927,954	2,970,467
Amortization	3,857,329	3,008,876
	<u>32,257,822</u>	<u>29,086,205</u>

11. Due from Municipalities:

The Statement of Financial Position reflects a balance of \$nil (2021 - \$229,188) due from the City of Windsor, the Municipality of Lakeshore and the Town of Tecumseh for the costs relating to the clay capping project at closed Landfill 3. The Authority manages the perpetual care of closed Landfill 3 in Lakeshore and charges back the 3 municipalities for all expenditures based on the percentage of waste originally deposited in the landfill when it was operational. The clay capping project cost for 2013 to 2016 was \$2,322,458. The Authority is financing the project cost by borrowing internally from one of its reserves and charging the 3 municipalities over a 10 year period. The interest income the reserve would have otherwise earned will also be charged to the Landfill 3 budget and borne solely by the City of Windsor, Municipality of Lakeshore and Town of Tecumseh.

12. Contingency:

During the normal course of operations, the Authority may be subject to various legal actions. The settlement of these actions, if any, is not expected to have a material effect on the financial statements of the Authority.



Essex-Windsor Solid Waste Authority Administrative Report

April 24, 2023

To: The Chair and Board of the Essex-Windsor Solid Waste Authority
From: Michelle Bishop, General Manager
Meeting Date: Tuesday, May 02, 2023
Subject: Staffing Requests – 2023 Budget

Purpose

To recommend to the Board the addition/enhancement of two staff positions, as included in the 2023 Budget. The recommended departments/positions are as follows:

- Waste Diversion – Project Lead – Non-union - Temporary Full-time
- Waste Diversion – Labourer, Material Recovery Facility – CUPE 2974.1 - Full Time

Background

At the February 7, 2023 Board meeting, the 2023 Operational Plan and Budget was approved. The budget for the Waste Diversion department was also approved as part of the overall Budget which included funding for the addition of the two above referenced positions.

Discussion

The following is a summary of the positions:

Waste Diversion – Project Lead – Temporary Full-time Position

This non-union position, reporting to the Manager of Waste Diversion, will be responsible to lead projects related primarily to the launch of the new Regional Food and Organic Waste Management Program and transition of the Blue Box Program to Extended Producer Responsibility, as well as support other solid waste

management initiatives for the Authority. The position has been included in the Budget as a 2-year temporary contract position funded by a contribution from the Waste Diversion Reserve.

Some of the key responsibilities of this position include:

- Lead key solid waste projects (e.g., EPR programs) across all phases: concept, develop, implement, evaluate and control, as well as, critically identify risks, resources, timelines, etc.
- Conduct research into assigned areas, ensuring that such research includes: developments within the field, corporate policies and practices, legislation and initiatives by other levels of government.
- Lead projects pertaining to procurement, policies, procedures, strategic direction, etc., as it relates to implementation of the Authority's Regional Food and Organic Waste Management Plan.
- Prepare responses, project plans, grant submissions, reports, presentations and status updates on behalf of the Manager of Waste Diversion and other Authority management.
- Develops training course material, conducts training and provides presentations, as required, to various levels of internal and external management/stakeholders.

Waste Diversion – Labourer, Material Recovery Facility

Reporting to the Manager of Waste Diversion, this position for a Labourer – Material Recovery Facility is an enhancement to the two existing full-time positions. The primary duties of this position include:

- Direct traffic, inspect incoming loads and send traffic to designated areas on the worksite as needed.
- Operate heavy machinery such as a large front-end loader, smaller articulated loader and forklift.
- On the work site, sort incoming materials to various streams (e.g. organic yard waste, electronics, rail ties).

Previous Waste Diversion budgets have included this position on a part-time basis. The 2023 budget document includes the enhancement of this position to full-time. The last full-time enhancement to this department was prior to 2010. The site is open 6 days per week and has extended operating hours in the spring, summer and fall. Previously much of this work was performed by summer students.

With students returning to school, increased traffic volumes, aging workforce along with the implementation of enhanced health and safety protocols Authority management has concluded that it can not longer operate the site effectively with the 2 existing full-time employees. Further, for the reasons noted above the Essex-Windsor Regional Landfill often operates short-staffed, with the enhancement from part-time to full-time, this position would allow the for the opportunity to back-fill vacant shifts at this site and avoid the need to operate short or incur overtime costs to fill the shift.

Financial Implications

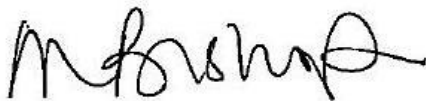
Full budget impacts of the creation of these positions were included and approved in the Waste Diversion sections of the 2023 budget.

Recommendation

THAT the Essex-Windsor Solid Waste Authority Board **Approve** the hiring of the following positions as included in the 2023 Operational Plan and Budget:

- Waste Diversion – Project Lead – Temporary Full-time
- Waste Diversion – Labourer, Material Recovery Facility – Full-time

Submitted By



Michelle Bishop, General Manager



Essex-Windsor Solid Waste Authority Administrative Report

March 15, 2023

To: The Chair and Board of the Essex-Windsor Solid Waste Authority
From: Michelle Bishop, General Manager
Meeting Date: Tuesday, May 02, 2023
Subject: Extension of Agreement for Farmland Rent

Purpose

The purpose of this report is to recommend that the Authority Board exercise the option to extend the agreement between the Authority and Chris Malott Farming Enterprises Inc. (CMFE) for a one-year period November 1, 2023 – October 31, 2024 at the current agreement price of \$276 per acre.

Background

Commencing in 2016, the Authority entered into a 5-year agreement with CMFE for the period November 1, 2016 – October 31, 2021. The agreement contains an option clause which allows for 3 additional extensions of one year each upon mutual consent of the parties.

In November 2020, the Authority approved the first one-year extension for the period of November 1, 2021 – October 31, 2022.

In March 2022, the Authority approved the second one-year extension for the period of November 1, 2022 – October 31, 2023.

Discussion

Although the current term does not expire until late in 2023, Mr. Malott has communicated with Authority administration and confirmed his intention to request a second extension.

Mr. Malott has complied with all terms and conditions of the agreement and has made investments to enhance the condition of the soil of the various parcels of land.

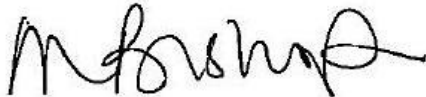
Financial Implications

The current agreement price is \$276 per acre for 10 parcels of farmland making up 813 acres in the vicinity of the Regional Landfill. This agreement earns the Authority revenue of \$224,388 per year.

Recommendation

THAT the Board authorize the General Manager to execute an extension agreement with Chris Malott Farming Enterprises Inc. for a one-year period November 1, 2023 – October 31, 2024 at the current agreement price of \$276 per acre for 10 parcels of farmland making up 813 acres in the vicinity of the Regional Landfill.

Submitted By



Michelle Bishop, General Manager



Essex-Windsor Solid Waste Authority

Administrative Report

April 21, 2023

To: The Chair and Board of the Essex-Windsor Solid Waste Authority

From: Michelle Bishop, General Manager

Meeting Date: Tuesday, May 02, 2023

Subject: Update - County of Essex Council Motion Re. Regional Waste Collection

Purpose

The purpose of this report is to advise the Authority Board of a further update relating to the Motions passed at the June 15, 2022 meeting of Essex County Council with regards to waste collection within the seven County municipalities.

Background

The 1994 agreement between the City of Windsor and the County of Essex that created the Authority (the Agreement) includes the following:

Section 5 (q) - Powers and Obligation of the Authority

- (i) It is understood and agreed that, until otherwise determined by the parties hereto, waste collection and recycling collection within the City of Windsor, as well as operations at the City of Windsor Waste Transfer Station, will remain the responsibility of the City of Windsor.*
- (ii) It is understood and agreed that, until otherwise determined by the parties hereto, waste collection in the County of Essex will remain the responsibility of the individual local municipalities.*
- (iii) Despite paragraphs (i) and (ii) above, the Authority may enter into agreements with either the City or the County respecting the*

purchase of a waste management service, subject to such terms and conditions as may be agreed upon.

In October 2006, the Agreement was amended to include the City of Windsor Waste Transfer Station (now Transfer Station #1) as part of the facilities of the integrated solid waste management system operated by the Authority.

At the March 16, 2022 meeting, Essex County Council resolved the following:

063-2022

Moved by Marc Bondy

Seconded by Aldo DiCarlo

And Further that County Council advise the EWSWA prior to March 31, 2022, that all Essex County municipalities will participate in a regional solution for the collection and processing of organic waste material from urban settlement areas, at a minimum, as part of the short-term processing contract commencing January 1, 2025 or immediately upon the expiration of a municipality's existing waste collection contract, whichever is later.

Carried

Further, at the June 15, 2022 meeting of Essex County Council, discussion took place regarding the waste collection within the seven County municipalities. Currently all seven municipalities procure and manage seven different waste collection contracts. It has been identified that potential cost savings exist if waste services were regionalized.

The following motions were carried unanimously:

155-2022

Moved by Richard Meloche

Seconded by Marc Bondy

That Essex County Council direct Administration to work with the Essex-Windsor Solid Waste Authority (EWSWA) to prepare a report on potential cost savings to be realized by transferring the jurisdiction of garbage collection from local municipalities to the County and ultimately to EWSWA, to manage garbage collection services for the County municipalities.

Carried

156-2022

Moved By Richard Meloche

Seconded By Leo Meloche

That Essex County Council direct Administration to conduct consultations and seek formal concurrence from each local municipality, in accordance with Section 189(2) of the Municipal Act, 2001, to transfer the jurisdiction of garbage collection, and examine the individual potential impacts of recovering fees for all waste and/or organic collection and disposal from a user fee pay system to a tax levy billing system.

Carried

Discussion

At the July 5, 2022 meeting of the Board, Administration advised Board members of the motions passed by Essex County Council and noted that County of Essex and Authority Administration would commence discussions with the municipalities with respect to regionalizing waste services. In particular, to pursue concurrence to upload garbage collection from the local level to the upper tier level and to seek consultation on a cost allocation/recovery model for regional waste services (including organics) on the basis that the services would be operated entirely at the regional/upper tier level.

The following is a summary of activities that have taken place since that meeting:

Task	Date
Kick off meeting with County municipal Administration re. regional waste/organics discussions.	August 8, 2022
EWSWA Board approval of the award of the RFP for the Provision of Processing Source Separated Organic Waste to Seaclyff Energy Corp. commencing in spring 2025.	August 10, 2022
Development and issue of an RFP for a "Review of Existing Municipal Waste Collection Logistics and Transfer Sites and Development of a Strategic Plan as it relates to the Commencement of an Organic Waste Collection Program and Regional Solid Waste Collection Program".	September 2022 – November 2022

Task	Date
Meeting with County CAO, Windsor CAO, EWSWA GM and City Commissioner, Infrastructure Services to provide an update on County regional waste discussions.	November 1, 2022
RFP submissions were evaluated, successful candidate (EXP Services Inc.) was selected and retained.	November 15 - 22, 2022
Data being compiled from the EWSWA, City and County municipalities to be provided to EXP. Site visits done by EXP.	November 2022 – February 2023
Presentation and discussion at Regional CAO meeting.	February 2, 2023
Anticipated final report submission by EXP.	April 2023
Decision from City of Windsor and County Municipalities re. regional waste collection.	<i>Target: Spring 2023</i>
RFT for Collection Services.	<i>Target: 2023</i>

At the February 2, 2023 meeting of the Regional CAOs, which included the City of Windsor CAO and the 7 County municipalities, it was determined that since the motions passed were during the previous term of County Council it would be beneficial to ensure that new and returning members of County Council were aware of the initiative and have the opportunity to provide input and ask questions.

On April 19, 2023, the Authority General Manager, Authority and County Solicitor, David Sundin, County Director of Finance/Treasurer Sandra Zwiers presented an update to County of Essex Council.

The following recommendation was passed at that meeting:

That Essex County Council (1) receive this Report, (2) reconfirm its commitment to a regional approach to waste management, and (3) direct County Administration to report back at a future meeting of County Council with any further feedback received from local municipalities and the necessary By-law to upload the collection of waste to the County.

Next steps identified at the meeting include:

- Circulation of a draft County By-law for lower tier municipalities to provide comments on.
 - A draft by-law will be provided to the 7 County municipality's Administration so that municipalities are given the opportunity to provide comments and ask questions.
- Identification of additional information required from EWSWA and/or County.
 - Municipalities were asked to contact any of the representatives if there was further information required.
- Individual meetings with each local if requested.
 - If Councils would like us to appear at individual meetings please contact us to arrange a date.
- Timing of administrative reports to local councils.
 - Once we have provided the above we will be requesting information from local Administration regarding the timing of their individual Council reports.

As of the writing of this report a presentation has been made at the Town of Tecumseh and requests have been made to appear at the Town of Essex and the Municipality of Leamington.

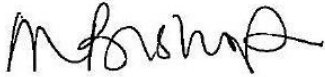
Financial Implications

No financial implications to report at this time.

Recommendation

THAT the Board receive this report as information.

Submitted By



Michelle Bishop, General Manager

Essex-Windsor Solid Waste Authority

By-Law Number 3-2023

Being a By-Law to Authorize the Execution of an Agreement between the Essex-Windsor Solid Waste Authority and Frank Dupuis Landscaping & Trucking Ltd. for the Provision of Equipment and Labour for the Screening of Organic Waste at Authority Facilities in Essex County

Whereas the Essex-Windsor Solid Waste Authority has approved entering into an Agreement with Frank Dupuis Landscaping and Trucking Ltd. for the Provision of Equipment and Labour for the Screening of Organic Waste at Authority Facilities in Essex County for a three (3) year term, May 8, 2023 – May 8, 2026, with the option to renew the contract for three (3) additional, one-year extensions or portions of a year thereof at the absolute unfettered discretion of the Authority, and such extensions shall be under the same terms and conditions contained within the executed Contract.

Now Therefore the Essex-Windsor Solid Waste Authority enacts as follows:

1. THAT EWSWA hereby approves a contract with Frank Dupuis Landscaping & Trucking Ltd. upon and subject to the terms, covenants and conditions contained in the Agreement.

THIS By-Law shall take effect upon the final passing thereof.

ESSEX-WINDSOR SOLID WASTE AUTHORITY

Gary McNamara
EWSWA Board Chair

Michelle Bishop
General Manager

**Read a First, Second and Third Time, Enacted and Passed
this 2nd Day of May, 2023.**

Essex-Windsor Solid Waste Authority

By-Law Number 4-2023

Being a By-law to Authorize the Extension of Agreement between the Essex-Windsor Solid Waste Authority and Christopher Malott Farming Enterprises Inc. for the Rental of Farmland in the vicinity of the Regional Landfill

WHEREAS the Essex-Windsor Solid Waste Authority has approved entering into an extension Agreement with Christopher Malott Farming Enterprises Inc. for the Rental of Farmland in the vicinity of the Regional Landfill.

NOW THEREFORE the Essex-Windsor Solid Waste Authority enacts as follows:

- 1) **THAT** EWSWA hereby approves an extension Agreement with Christopher Malott Farming Enterprises Inc.
- 2) **THAT** the term of the original Agreement be extended for a one-year period effective November 1, 2023 – October 31, 2024 at the current agreement price of \$276 per acre for 10 parcels of farmland making up 813 acres in the vicinity of the Regional Landfill.

THIS By-Law shall take effect upon the final passing thereof.

ESSEX-WINDSOR SOLID WASTE AUTHORITY

Gary McNamara
EWSWA Board Chair

Michelle Bishop
General Manager

**Read a First, Second and Third Time, Enacted and Passed This
2nd Day of May, 2023.**

Essex-Windsor Solid Waste Authority

By-Law Number 5-2023

Being a By-law to Confirm the Proceedings of the Meeting of the Board of the Essex-Windsor Solid Waste Authority

WHEREAS by Agreement dated 18 May 1994, made between the Corporation of the County of Essex and the Corporation of the City of Windsor, the Essex-Windsor Solid Waste Authority (The Authority) was created as a joint board of management pursuant to Sections 207.5 and 209.19 of the *Municipal Act, RSO 1990, Chapter M.45* and;

WHEREAS Subsection 5.(3) of the Municipal Act, RSO 2001, Chapter 25, provides that the powers of a municipality shall be exercised by By-Law and;

WHEREAS Section 1 of the Municipal Act RSO 1990, Chapter M 46 defines a municipality as including a board, commission or other local authority exercising any power with respect to municipal affairs or purposes and;

WHEREAS it is deemed expedient that the proceedings of the Authority at this meeting be confirmed and adopted by By-Law

NOW THEREFORE the members of the Authority enact as follows:

- 1) The action of the members of the Authority in respect to each recommendation contained in the Report/Reports of the Committees and each motion and resolution passed and other action taken by the members of the Authority at this meeting is hereby adopted and confirmed as if all such proceedings were expressly set out in this by-law.
- 2) The Chair and the proper officials of the Authority are hereby authorized and directed to do all things necessary to give effect to the action of the members of the Authority referred to in the preceding section hereof.
- 3) The Chair and the General Manager of the Authority are authorized and directed to execute all documents necessary in that behalf.

ESSEX-WINDSOR SOLID WASTE AUTHORITY

Gary McNamara
EWSWA Board Chair

Michelle Bishop
General Manager

**Read a First, Second and Third Time, Enacted and Passed This
2nd Day of May, 2023**