



Essex-Windsor Solid Waste Authority Regular Board Meeting Agenda

Meeting Date: Wednesday, August 9, 2023
Time: 4:00PM
**Location and:
Meeting Instructions:** Meeting will be conducted via Zoom
Board Members and Staff will receive e-mail
notification which will include log-in instructions

Anyone from the public or media wishing to be able to listen to the meeting is required to send an e-mail request to the Authority's General Manager, Michelle Bishop at mbishop@ewswa.org by 11:00AM of the meeting date. Log-in instructions will be provided. The public and media will be able to listen to the meeting but will not be able to participate in the discussions.

| <u>LIST OF BUSINESS</u> | <u>PAGE NUMBERS</u> |
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| 1. Call to Order | |
| 2. Declaration of Pecuniary Interest | |
| 3. Approval of the Minutes | |
| A. July 12, 2023 Regular Meeting Minutes | 1-15 |
| 4. Business Arising from the Minutes | |
| 5. Waste Disposal | |
| A. Regional Landfill Leachate Management | 16-19 |
| 6. Other Items | |
| 7. By-Laws | |
| A. By-Law 7-2023 Being a By-Law to Authorize the Execution of an Agreement between the Essex-Windsor Solid Waste Authority and Rochem Americas for a one (1) year term in the amount of \$874,320 USD for the year [\$72,860 USD per month] for the rental of a 50,000 Gal-per-day (gpd) (189m ³ per day) portable high- | 20 |

pressure Reverse Osmosis system to treat and process leachate at the Regional Landfill

- B. By-Law 8-2023 21
Being a By-Law to Confirm the Proceedings of the Meeting of the Board of the Essex-Windsor Solid Waste Authority for August 9, 2023.

8. Next Meeting Dates

Wednesday, September 13, 2023
Thursday, October 5, 2023
Tuesday, November 7, 2023
Tuesday, December 5, 2023

9. Adjournment



Essex-Windsor Solid Waste Authority Regular Board Meeting MINUTES

Meeting Date: Wednesday, July 12, 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 |
| Rob Shepley | County of Essex |
| Michael Akpata | County of Essex |
| Kirk Walstedt | County of Essex |
| 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 |
| Shawna Boakes | Executive Director of Operations |
| Mark Spizzirri | Manager of Performance Management and Business Case Development |

County of Essex Staff:

| | |
|---------------|--|
| Mary Birch | Director of Council & Community Services/Clerk |
| Sandra Zwiers | County CAO |
| Kate Hebert | Manager Records and Accessibility/Deputy Clerk |
| David Sundin | County Solicitor |

Absent:

| | |
|---------------------------|-------------------------------------|
| Drew Dilkens | City of Windsor (Ex-Officio) |
| Gary Kaschak – Vice Chair | City of Windsor |
| Tony Ardovini | Deputy Treasurer Financial Planning |

1. Call to Order

Chair McNamara called the Regular meeting to order at 4:00 PM.

2. 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 it would be noted at that time.

3. Approval of the Minutes

Moved by Kieran McKenzie
Seconded by Mark McKenzie

THAT the minutes from the Essex-Windsor Solid Waste Authority Regular Meeting, dated May 2, 2023, be approved and adopted.

**40-2023
Carried**

4. Business Arising from the Minutes

There were no items raised for discussion.

5. Correspondence

- A. County of Essex - May 24, 2023 Letter to Minister David Piccini, Ministry of Environment, Conservation and Parks Re: Waste Diversion Programs for Industrial, Commercial and Institutional (IC&I) Sector – Food and Organic Waste

The Chair asked if there were any questions or comments. No questions were asked.

Moved by Kirk Walstedt
Seconded by Rob Shepley

THAT the correspondence from the County of Essex dated May 24, 2023 be received as information.

**41-2023
Carried**

- B. City of Windsor Council Decision June 12, 2023

The Chair noted that Mr. Kaschak was not in attendance to speak on this decision. He asked if another member would like to speak on this item.

Mr. Kieran McKenzie asked if Administration can provide any comments on what is being proposed.

The General Manager stated that the Authority would work with the City's Administration on this request and provide any necessary support.

Mr. Kieran McKenzie asked if it would require direction from the Board to go forward.

The General Manager stated that the intention would be to work with the Technical Staff Committee (TSC).

The Chair asked if there were any questions. No questions were asked.

Moved by Kieran McKenzie

Seconded by Rob Shepley

THAT the City of Windsor Council Decision dated June 12, 2023 be received as information.

**42-2023
Carried**

6. Delegations

- A. EXP. Presentation - Logistics and Transfer of Regional Solid Waste and Source Separated Organics: Review and Strategic Plan.

The General Manager provided a summary of the EXP engagement, timelines and scope of work. She noted that the presentation by EXP would be recorded and that Administration staff from the County municipalities may be viewing the presentation virtually.

Mr. John Smith, Mr. Mike Birett and Mr. Jean-Louis Gaudet from EXP provided a PowerPoint presentation of the conclusions and recommendations included in the final report.

Mr. Kieran McKenzie asked how the recommendations and the services are going to be implemented. He asked how other municipalities responded to the implementation of clear bag policies and Every Other Week (EOW) garbage collection. He also asked if there are other things that we should be concerned about and how to address these concerns in particular illegal dumping.

Mr. Smith stated that EOW garbage collection is a critical tool to use and has become a best practice in Ontario. Most municipalities have implemented EOW garbage collection. It is critical to have a very good promotion and education (P & E) program and to implement it early before changes in the program. In regards to dumping, some municipalities have seen a small uptake at the beginning but then levels off when the program matures but most

municipalities that he has spoken with have not seen an increase in illegal dumping. He cannot stress enough that diversion targets will not be met without the implementation of EOW garbage collection.

Mr. Birett stated that the obligation to the policy statement is to achieve waste diversion targets and this is the preferred methodology. He noted that Waterloo, which has the same demographics as Essex-Windsor, tried to stay with weekly collection but has since changed to EOW garbage collection. Generally, the concerns occur over a month and then residents get comfortable with the program. He also noted that they did not see an increase in illegal dumping in the communities that have rolled out these programs.

Mr. Birett stated that with a clear bag program, bag limits become less of a concern than the problem of inequity among residents with larger families. There are many similar communities (i.e. Peterborough) that have gone this route and he can provide further information if required.

Mr. Kieran McKenzie asked if the economics and financial portion of the report are based on the assumptions that we implement the recommendations as presented.

Mr. Smith confirmed that this is correct.

Mr. Morrison stated that the logic sounds very sensible and is comfortable with EOW garbage collection. He asked if there are statistics to show that clear bags have improved diversion rates.

Mr. Smith stated that clear bags increase the diversion of Source Separated Organics (SSO) and recycling. Typically, there is a 5% to 25% increase in diversion rates with a clear bag program. He asked Mr. Birett to provide further comments.

Mr. Birett stated that statistically, residents set out 1.8 bags of garbage in the average household and most people will not notice a difference if a two-bag limit is implemented. To really increase diversion rates, limits would have to decrease to a one-bag limit and that is why clear bags tend to be a better option due to family sizes. Diversion rates can increase 10-20% (i.e. Peterborough).

Mr. Morrison stated he is excited about the idea of clear bags. He asked if they had seen value in implementing a clear bag program before the implementation of the SSO program.

Mr. Smith stated that clear bags can be implemented before the SSO program and you would see an increase in diversion in other recycling programs.

Mr. Birett stated that you will want to take the time and educate the public. The public will have concerns about privacy and putting unmentionable items in

a clear bag. With a clear bag program, residents are allowed a privacy bag to be placed inside the clear bag.

Mr. Morrison would support moving to clear bags as soon as possible even before the implementation of the SSO program.

Mr. Kieran McKenzie understands that the collector would be charged with the task of inspecting the clear bags. He asked if there are inefficiencies in adding this task into the collection framework.

Mr. Smith stated that he had not heard of any inefficiency issues. It is easy for the collector to take a visual inspection of the bag and they get used to what they are looking for.

Mr. Kieran McKenzie commented that the recommendation is for the Board to receive the reports. He asked if Administration would be bringing forward a report to the Board with recommendations and timelines to implement these programs.

The General Manager stated that currently, the Authority does not manage any individual collection of traditional waste in the County of Essex or the City of Windsor. She noted that this is the primary reason why this information was provided to all of the local municipalities so that they are aware of what the consultant has recommended. Depending on the decision of the regionalization of waste, the Authority is using this document as a roadmap to move forward to provide financial and environmental options for the municipalities to use in their own decision-making or be brought back to the Board for their consideration.

Mr. Kieran McKenzie stated that he approves the motion.

Mr. McNamara asked what type of educational programs are there for the municipalities responsible for the pickup. He noted the Town of Tecumseh (Tecumseh) at one time had twice a week garbage collection and changed to once a week collection and they were bombarded by residents. It took a while to educate the public. He also stated that Tecumseh has a by-law that garbage has to be set out in hard sided containers due to rodents. He asked how these programs were received by the general public. He noted a change in culture is not easy to achieve. He would be interested in knowing how Peterborough, Kitchener and Waterloo handled the changes in their programs.

Mr. Birett stated that these are very legitimate questions as they have also been asked by other municipalities. There are many municipalities that had garbage collection twice a week and there will be a perception that service levels are reduced. Typical concerns are rodents. There has been an evolution in the design of containers to eliminate rodents. The key is moving all the material that smells out of the garbage. Many municipalities will have to

implement by-laws. One way to implement this is to allow residents to use their hard-shell containers but put their clear bags inside the container. Other municipalities have residents put material loose into a container. He agrees that there will be many concerns and to address these concerns through public consultation. Mr. Birett can provide a "Frequently Asked Question" sheet as many of the concerns are the same across municipalities. If public education is done correctly, residents will accept the program and the change. He noted that hiring enforcement and temporary staff in the first 3-4 months due to the increase in telephone coverage should be considered to address issues. The clear bag policy component should be initiated separately from the EOW garbage collection.

Mr. Walstedt stated that he has some of the same concerns as Chair McNamara. He asked what kind of program are we going to have to educate the public. He also asked how will this be handled and how will residents be notified.

The General Manager stated that the Authority will provide education if the regionalization of waste is implemented. If not, any changes to the collection would be handled by each municipality. The implementation of an SSO program will be done through P & E via the Authority. With the implementation of an SSO program, it is critical to start a P & E program on how the program is used and what material is collected. The most critical step is educating the community. She asked Mr. Birett to provide further comments.

Mr. Birett stated it will be a challenge and be mindful of budget implications. A sufficient budget will be required to notify and consult with the public.

The Manager of Waste Diversion stated that in 2021, the Authority implemented a no plastic bag ban and a six-month P & E campaign was conducted. One P & E example for this campaign was installing banners on the recycling trucks in order to raise awareness of the program changes. A lot of information regarding the ban was provided to residents and a budget had been formed at that time to account for these P & E costs. The Authority saw a good rate of participation. This was a big change to the program and there are now no plastic bags placed in the recycling. The collectors have also been supportive. She noted that garbage may be a little harder to implement but can definitely work towards this.

Mrs. MacDonald stated that she was on the Association of Municipalities of Ontario (AMO) Waste Task Force. She has brought this up to her colleagues and they said all other municipalities have implemented this many years ago. This is best practice and we need to move forward. She noted that it will not be easy but we have a responsibility to think about the environment and the future. We cannot always think about just the dollar value and we are not the first to implement this.

Chair McNamara agreed with Mrs. MacDonald's comments. Each municipality will have to speak to its residents. He noted that there was positive feedback from the survey regarding the green bin program.

Mrs. MacDonald stated that the younger generation support environmental changes and they look forward to this change.

7. Waste Diversion

A. EXP. – Logistics and Transfer of Regional Solid Waste and Source Separated Organics: Review and Strategic Plan

Moved by Hilda MacDonald

Seconded by Rob Shepley

THAT the Board receive this report as information;

And further that the Board received the attached report from EXP. as information.

And further that the Board received the presentation from EXP. as information.

**43-2023
Carried**

B. 2022 Residential Waste Diversion Report

The Manager of Waste Diversion stated the purpose of the report is to provide an overview of the annual Waste Diversion report. The report fulfills Condition 5.2 of the Environmental Assessment Approval for the Regional Landfill (Landfill). The report provides information on the Authority's waste diversion programs. She provided a summary of the report. The overall waste diversion rate for 2022 was 32%. This figure represents residential tonnes diverted from the Landfill.

The Chair asked if there were any questions.

Mr. Kieran McKenzie asked if the increase in the usage of the Recycle Coach app was due to new users or existing users utilizing the app more often.

The Manager of Waste Diversion stated that there has been an increase in new users but also there have been more interactions on the app due to collection changes. Municipalities are also using the app to communicate with residents by asking the Authority to send out notifications regarding garbage collection issues.

Mr. Kieran McKenzie stated the Authority may have to look at promoting the app more. He noted it was a good tool and he utilizes the app weekly.

Mr. Morrison stated that we should be able to improve the diversion rate dramatically when the SSO program begins.

Mr. Morrison asked if waste audits are still being conducted.

The Manager of Waste Diversion stated the audits are still being conducted. One more quarter of data still needs to be collected and the results of the audits will be shared with the Board.

Mr. Morrison asked when audits are done are we looking at implementing change or just looking for information.

The Manager of Waste Diversion stated they are provincial audits and the audits provide information on all programs. She noted that 100 homes are randomly selected for an audit to be conducted in all four seasons. Three of the four seasons have been completed and looking to see if habits changed. The waste is collected and brought to the Landfill to sort.

Moved by Kieran McKenzie

Seconded by Jim Morrison

THAT the Board receive the 2022 Residential Waste Diversion Report as information.

**44-2023
Carried**

C. Outreach Program Update

The Manager of Waste Diversion provided an update on the Authority outreach activities in Essex-Windsor. She noted that this year the activities will focus on food and organic waste to prepare residents for the upcoming organic and food waste curbside collection program in 2025. The activities such as Earth Day, the Gold Star program and "What Goes Where" spring campaign will provide residents with strategies to divert waste from the garbage. There were no financial implications as all the activities were included in the 2023 budget.

She asked if there were any questions.

Mr. Morrison asked about the FoodCycler pilot project.

The Manager of Waste Diversion stated that the last unit was sold today. The units were distributed over a two-week period. There were 1800 residents on a waitlist.

The Chair asked if there were any further questions. No questions were asked.

THAT the Board receive the report as information.

Moved by Rob Shepley

Seconded by Kirk Walstedt

**45-2023
Carried**

8. Waste Disposal

A. Leachate Management at the Regional Landfill

The Manager of Waste Disposal stated the purpose of the report is to provide the Board with an update regarding the management of leachate at the Landfill. In addition, Administration is requesting that the Board approve the release of an Advance Contract Award Notice (ACAN) procurement document for an on-site Reverse Osmosis (RO) system rental unit for the purpose of simultaneously performing a pilot study and improving the quantity and quality of leachate being sent to the City of Windsor (City) for treatment.

The Authority has received the final report from Stantec for Task 1 and Task 2. Task 1 was presented to the Board at the previous meeting. Task 2 was revised to include a review of an on-site leachate treatment system such as RO, Biological or other advanced treatment methods.

The Manager of Waste Disposal summarized the scope and findings of the Stantec report.

The revised scope of work included the review of standalone leachate treatment alternatives to identify potential preferred options for treating leachate at the Landfill and a recommendation on a preferred alternative treatment.

The Stantec report also included a technical and financial analysis of on-site pre-treatment options which included the construction cost, operating and maintenance costs and a 20-Year Life Cycle Cost (LCC).

Stantec identified two treatment options, a Membrane Bioreactor (MBR) or Biological treatment option discharging to surface water or a RO treatment option discharging to surface water.

The Manager of Waste Disposal stated that it was important to note that an additional study will be required to confirm the site-specific suitability of any process, whether RO or Biological. This would include things like; Class EA planning, Assimilative Capacity Study (ACS) to confirm effluent limits, pilot testing to confirm treatment performance, additional engineering to better define scope and costs, and assist in obtaining regulatory approval from the Ministry of the Environment, Conservation and Parks (MECP). Regardless of the chosen treatment method, the report states that any onsite solution could take three (3) years to construct and to obtain the necessary approvals which may coincide with the current leachate trucking contract end date.

As discussed in Stantec's report, a surface water discharge from any leachate treatment process will require some additional treatment to provide quality assurances, and to accomplish a pilot study or studies are recommended.

The Manager of Waste Disposal discussed the proposed pilot study included in the report and explained it would include operating a process for an extended period, approximately one (1) year, to assess performance and this will also improve the MECP approval process by being able to engage them in the process. The current problem is securing equipment to implement the pilot study which is dependent upon equipment availability and scheduling. He further discussed the availability of both plants.

Currently, only a RO plant is available.

An MBR Biological plant would not be available for approximately 28-32 weeks. The MBR plant would not provide relief of current volume issues. The treatment capacity of an MBR pilot plant would only be in the range of 10m³ per day providing virtually no capacity for processing leachate to assist with current leachate volumes in the Landfill.

Rochem has submitted a proposal to the Authority to provide for the rental of a 50,000 Gal-per-day (gpd) (189 m³ per day) plant to conduct a full-scale pilot study. This would also include operating the RO process for approximately one (1) year to assess the performance and hopefully improve the MECP approval process. This containerized RO system will provide capacity for processing approximately four (4) additional truckloads per day of leachate at the Landfill on a 24-hour cycle. Currently, this plant is available for immediate deployment.

The RO system has also demonstrated that it has the capability to address contaminants of concern that are expected to become regulated by the MECP in the coming years, including perfluorooctane sulfonate (PFOS), and polyfluoroalkyl substances (PFAS), also termed "forever chemicals". The biological treatment options are not equipped to remove these chemicals from the leachate stream.

The Authority acknowledges that timelines outlined in the Stantec report do not provide the Landfill or the City of Windsor's Lou Romano Water Reclamation Plant (LRWRP) with any short-term relief and the Authority cannot continue to hold excess amounts of leachate on site. The Manager of Waste Disposal described additional work being done to determine additional corrective measures that could be implemented at the landfill to improve leachate quality in order to truck more leachate.

The recommendation by RWDI is a short-term, pre-treatment of leachate by means of RO. This pre-treatment will allow the leachate quality to meet the requirements for the LRWRP and for the Authority to significantly reduce current leachate levels.

Administration has met with the TSC to discuss the current status of leachate at the Landfill, the recommendations provided in the Stantec and RWDI reports and discussed that a long-term solution that examines the operational, financial and environmental needs of the Authority should be pursued. The TSC also acknowledges that an immediate and short-term solution or pilot is required that supports operations at both the Landfill and the LRWRP that will eventually provide a long-term solution.

While the Stantec report identifies an MBR system as being more cost-effective, this is a similar system at the LRWRP. Leachate concentrations currently being delivered to the LRWRP are resulting in operational issues as previously noted to the Board and the TSC has noted concerns regarding a similar Biological system being constructed at the Landfill. The Manager of Waste Disposal discussed the potential challenges of operating an MBR system.

The outcome of the Rochem on-site bench scale demonstration study and the results of the analytical testing data demonstrated the effectiveness of RO in processing leachate at the Landfill. The availability of a RO system not only provides an opportunity to further demonstrate the effectiveness of RO on a large-scale operation, but it will also provide some immediate relief by processing approximately four (4) additional truckloads per day of leachate at the Landfill. However, the RO system will not provide any financial relief as it relates to the hauling and treatment costs due to the inability at this time to discharge the treated leachate to surface water until permitting is approved, but this would be the case with any system. Scheduling for procurement and delivery of the service is of critical importance due to the high demand for this equipment and its limited availability in the marketplace.

Administration recommendation is that the initial pilot study be completed using RO as a short/long-term approach to the management of leachate at the Landfill. Administration will also continue to further explore a pilot study on an MBR system for comparison, which could be completed simultaneously.

The Manager of Waste Disposal described the procurement process and noted that the financial implications were outlined on page 45 of the agenda package. He asked if there were any questions.

Mr. Kieran McKenzie commented that the process to look at alternatives to treat leachate has moved very quickly. He questioned about the capacity if we move forward with the RO pilot process. He asked what we would do with the excess if we are currently producing six (6) trucks and begin to process four (4) additional trucks.

The Manager of Waste Disposal stated that in November 2022, the Authority was sending 12-13 trucks of leachate per day. The reason we were hauling that much leachate is that we were trying to draw down ponds to ascertain the condition of these ponds and try to make room for potential rain. When the

City of Windsor had issues with treatment, we stopped hauling. Currently, we are restricted to LRWRP. He noted we seem to be losing ground. RO is an expensive process but has its advantages.

Mr. Kieran McKenzie asked if the RO positions us better due to regulations.

The Manager of Waste Disposal stated that this is correct. One of the selling points of the RO system is its ability to filter out the forever chemicals such as PFAS and PFOS.

Mr. Kieran McKenzie asked what is the timeline to implement the system.

The Manager of Waste Disposal stated that Rochem has committed to holding a plant for the Authority. It could be available September to October timeframe.

Mr. Akpata stated that he watched the presentation regarding PFOS. He asked what does it mean for us and our response to the environment when these chemicals are going to be filtered out.

The Manager of Waste Disposal stated that the news article uses a different process. Similar to RO, when you treat leachate you get clean water and concentrate, the portion that is filtered out. For this system, the concentrate (approximately 20%) would go back to the waste stream or used as dust control. Additional filters would have to be incorporated into a RO plant if we were to purchase. With the bench scale testing, we could run through the filters one time and allow us to send more leachate to the treatment plants.

Mr. Morrison stated the timing of this is very important. He and others went on a tour of the LRWRP plant and realizes the urgency of this issue. He asked if the MBR pilot would be held concurrently.

The Manager of Waste Disposal stated that the MBR is something that the Authority can pursue. Administration will continue to work to determine the cost of the pilot.

Mr. Morrison referred to the report regarding greenhouse vines and potential funding.

The General Manager stated that vines are 95% water and they don't take up much space but are problematic because they create leachate. For 2023, the Authority was able to mitigate the cost because of savings in other areas. In 2024, the TSC will be charged with looking at the costs and develop a plan to fund this ongoing issue.

The Chair asked if there were further questions.

Chair McNamara asked if discussions have started with Hydro One.

The Manager of Waste Disposal stated that he has already engaged in discussions with Hydro One.

Due to this being a pilot, Chair McNamara asked if there is a more permanent solution.

The Manager of Waste Disposal stated that a permanent solution would likely require two (2), 75,000 gallon per day units. This would build in redundancy if one goes down.

Moved by Kieran McKenzie
Seconded by Rob Shepley

THAT the Board receive this report as information.

THAT the Board receive three (3) attachments as information.

THAT the Board approve the release of an Advance Contract Award Notice (ACAN) to be published to provide notice to any potential proponents with available RO equipment and leachate processing experience an opportunity to submit a written statement of capabilities that clearly demonstrates how they meet the requirements of the ACAN.

**46-2023
Carried**

9. Finance & Administration

A. 2023-2024 EWSWA Insurance

The Manager of Finance and Administration provided an update on the Authority's comprehensive insurance program for the period of July 1, 2023 to June 30, 2024. He noted that all the policies and deductibles have remained consistent from prior year with premiums increasing by approximately 7% year over year. The portion of the renewal for 2023 resulted in a favourable variance of approximately \$500.

Moved by Kirk Walstedt
Seconded by Rob Shepley

THAT the Board receive this report as information.

**47-2023
Carried**

10. Other Items

No other items were raised for discussion.

11. By-Laws

A. By-Law 6-2023

Moved by Rob Shepley

Seconded by Hilda MacDonald

THAT By-Law 6-2023, 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 12th day of July, 2023.

**48-2023
Carried**

12. Next Meeting Dates

Tuesday, August 1, 2023 (Cancelled) – New date to be determined

Wednesday, September 13, 2023

Thursday, October 5, 2023

Tuesday, November 7, 2023

Tuesday, December 5, 2023

13. Adjournment

Moved by Mark McKenzie

Seconded by Rob Shepley

THAT the Board stand adjourned at 6:05PM.

**49-2023
Carried**

All of which is respectfully submitted.

Gary McNamara
Chair

Michelle Bishop
General Manager



Essex-Windsor Solid Waste Authority Administrative Report

August 2, 2023

To: The Chair and Board of the Essex-Windsor Solid Waste Authority
From: Tom Marentette, Manager of Waste Disposal
Meeting Date: Wednesday, August 09, 2023
Subject: Regional Landfill Leachate Management

Purpose

The purpose of this report is to recommend that the Board enter into a contract with Rochem Americas ("Rochem") for a one (1) year term for the rental of a 50,000 Gal-per-day (gpd) (189 m³ per day) portable high-pressure reverse osmosis ("RO") system to treat and process leachate at Essex-Windsor Regional Landfill ("RL").

Background

On July 12, 2023, Administration provided the Authority Board an update reading regarding the management of leachate at the RL. The Board was provided copies of reports, including recommendations prepared by Stantec and RWDI Air Inc. Additionally, the Board was provided with details relating to Rochem's RO system, provided an estimated cost and recommended publishing an Advance Contract Award Notice ("ACAN").

The following recommendation was approved by the Board on July 12, 2023:

Moved by Kieran McKenzie
Seconded by Rob Shepley

THAT the Board receive this report as information.

THAT the Board receive three (3) attachments as information.

THAT the Board approve the release of an Advance Contract Award Notice (ACAN) to be published to provide notice to any potential proponents with available RO equipment and leachate processing experience an opportunity to submit a written statement of capabilities that clearly demonstrates how they meet the requirements of the ACAN.

Carried

Discussion

On July 17, 2023, Administration published the ACAN for a period of fourteen (14) days so potential Service Providers could respond and provide a statement of capability. At the expiry of the ACAN, no Service Provider was capable of meeting the Authority's requirement which was outlined in the ACAN.

Given that the Authority received no Service Provider capable of meeting the requirements and per the Authority's Procurement Policy (EW-008), which states that: "if the Goods or Services can be supplied only by a particular Supplier and no reasonable alternative or substitute Goods or Services exist for any of the following reason(s):

- (iii) due to absence of competition for technical reasons (CFTA, CETA)", that the Authority may enter into a contract with the Service Provider directly.

It is the recommendation that the Authority enter into a one (1) year term contract with the Service Provider Rochem for the rental of a 50,000 Gal-per-day (gpd) (189 m³ per day) portable high-pressure RO system to treat and process leachate at RL.

If the contract is awarded, Administration will work with the Service Provider to establish a delivery date, commence work on critical infrastructure upgrades and begin site preparation to support the plant and the pilot study.

Financial Implications

The Authority would be obligated to pay Rochem for the cost to rent the RO system and some specific chemicals. The table below outlines the annual rental cost and an estimate of the chemical costs needed to operate the plant. The chemicals are a commodity so costs could fluctuate depending on the market and the volume consumed to operate the plant.

| SUMMARY OF ESTIMATED COSTS PAYABLE TO ROCHEM | ONE YEAR \$ | SEPT - DEC 2023 \$ |
|---|------------------------|-----------------------------------|
| EQUIPMENT RENTAL (Note 1) | \$1,180,330 | \$393,440 |
| OPERATING COSTS (Note 1) | | |
| Cost of Cleaning Chemicals | | |
| Alkaline | 54,430 | 18,140 |
| Acid | 16,440 | 5,480 |
| Cost of Antiscalant Chemical | 16,740 | 5,580 |
| Cost of PH Adjustment | 194,360 | 64,790 |

Note 1 – Equipment rental and maintenance costs are quoted in US dollars, an estimate of 35% exchange has been added to the figures.

| ESTIMATED ONE-TIME COSTS | ONE YEAR \$ | SEPT - DEC 2023 \$ |
|---------------------------------|------------------------|-----------------------------------|
| Hydro service upgrades | \$90,000 | \$90,000 |

As discussed at the July 2023 Board meeting, the RL does not have the existing power required to operate a RO system. The power upgrade would be needed to support any long-term leachate treatment solution. Administration is recommending a one-time contribution from the Rate Stabilization Reserve to fund this service upgrade.

As included in the July report, the 2023 rental and operating costs will form part of the Regional Landfill Operating Program, a portion of those costs will be offset by revenue earned from the delivery of episodic waste and from savings in leachate hauling and treatment expenditures. The final cost will form part of the 2023 operating surplus (deficit) figure. The 2024 costs will be included in the 2024 Operating Plan and Budget which has yet to be created. Details will be presented at the time of the 2024 Budget presentation.

Recommendations

1. THAT the Board authorize the Chair and General Manager to execute a contract with Rochem Americas for a one (1) year term in the amount of \$874,320 USD for the year [\$72,860.00 USD per month] for the rental of a 50,000 Gal-per-day (gpd) (189 m³ per day) portable high-pressure Reverse Osmosis system to treat and process leachate at the Regional Landfill.
2. THAT the Board approve the one-time contribution from the Rate Stabilization Reserve to fund the hydro service upgrades at the Regional Landfill.

Submitted By

A handwritten signature in black ink, appearing to read 'Tom Marentette', written in a cursive style.

Tom Marentette, Manager of Waste Disposal

Essex-Windsor Solid Waste Authority

By-Law Number 7-2023

Being a By-Law to Authorize the Execution of an Agreement between the Essex-Windsor Solid Waste Authority and Rochem Americas for a one (1) year term in the amount of \$874,320 USD for the year [\$72,860 USD per month] for the rental of a 50,000 Gal-per-day (gpd) (189m³ per day) portable high-pressure Reverse Osmosis system to treat and process leachate at the Regional Landfill

Whereas the Essex-Windsor Solid Waste Authority has approved entering into an Agreement with Rochem Americas for a one (1) year term in the amount of \$874,320 USD for the year [\$72,860 USD per month] for the rental of a 50,000 Gal-per-day (gpd) (189m³ per day) portable high-pressure Reverse Osmosis system to treat and process leachate at the Regional Landfill.

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

1. THAT EWSWA hereby approves a contract with Rochem Americas 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 9th Day of August, 2023.**

Essex-Windsor Solid Waste Authority

By-Law Number 8-2023

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
9th Day of August, 2023**