



Date: Monday, December 12, 2022

From: Cynthia Fletcher, CAO Township of Georgian Bluffs and Patty Sinnamon,
CAO/Clerk Township of Chatsworth

Subject: BioGRID Assets Update

Report: CAO2022-006

Recommendation

That staff be directed to issue an RFP to invite proposals for majority shareholder of the jointly owned Derby BioGRID facility; and

That the attached RFP be approved; and

That staff be directed to report back to both Councils at a Joint Council meeting with the results of the RFP and recommendation for future ownership/operating arrangement for the Derby BioGRID; and

That staff issue payment to Saugeen Agri Services Ltd, as outlined in the report.

Background

The Province of Ontario is creating legislation which aims to divert 100% of organic material from landfills. This shift means municipalities need to look at infrastructure and/or operating programs that divert organic material from landfill.

The BioGrid has potential to support the diversion of Food and Organic Waste (FOW) from landfill sites if the operating model was changed. The challenge has been that the cost to operate and maintain the facility is not financially beneficial in its current state and with the historical operating model. If changes are implemented, there is potential the facility will provide an economically feasible waste solution for municipalities and businesses in the area and beyond the geographic areas of the two municipalities.

Albeit the BioGRID facility has potential benefit, it is becoming increasingly challenging for the two Townships to manage and operate the BioGRID assets alone. The Townships also need to move beyond “potential” opportunities to a tangible and viable plan moving forward.

The Assets

The Derby BioGRID facility is located 062111 Sideroad 3, Georgian Bluffs and is jointly owned by the Townships of Georgian Bluffs and Chatsworth. The BioGRID property is comprised of different assets:

- Wastewater lagoons constructed in 1975.
- the BioGRID facility constructed in 2011.

A BioGRID Joint Board of Management governs the Derby facility, for the processing of organic waste. The BioGRID facility has been a source of concern for several years, as costs have outpaced revenues. The facility needs some upgrades/modifications and is currently operating below maximum potential.

This report outlines previous reports & studies and recommendations for next steps in the process to determine the future of the BioGRID assets.

Supporting Reports related to the BioGRID Assets:

1) Feed-In-Tariff (FIT) Contract

In October of 2012, the Cook Solar Project was constructed, and the Township entered a Feed-In Tariff (FIT) contract for electric power generation. To maximize the FIT contract, the facility is required to generate 1,074 m³ biogas per day. In the current operating model, the facility is estimated to produce 490m³ biogas per day, which is well below the requirement to maximize the FIT contract.

To maximize the power generation and associated revenue a new combined heat and power unit is required

- 2) [BioGRID System Decommissioning and Recommissioning Plan](#): Because the costs to operate and maintain the BioGRID have outpaced the revenues, the Townships commissioned GHD, to conduct an BioGRID System Decommissioning and Recommissioning Plan (found in Appendix C of the appended study). As this study was underway, potential partners/suppliers of feedstock emerged and there was an indication that the assets may provide economically feasible and required waste diversion solutions. The Township of Georgian Bluffs commissioned a feasibility

study, to outline potential options for future scenarios for the assets.

- 3) [Source Separated Organics \(SSO\), Digester Technology and Biogas utilization Feasibility Study](#): OCWA (Ontario Clean Water Agency) was commissioned to review the BioGRID assets and outline options for the future of the assets for consideration by the Joint Board. The report Source Separated Organics (SSO), Digester Technology and Biogas utilization Feasibility Study outlined the potential scenarios in the analysis section of the report. The study was funded by the Federation of Canadian Municipalities Green Municipal program.

Analysis

The Province of Ontario is shifting toward a circular economy as described in its [Strategy for a Waste- Free Ontario: Building the Circular Economy \(2017\)](#), which aims to divert 100% of organic material from landfills. In the traditional waste management system, materials move through a linear “make-use-dispose” process where they are manufactured from raw resources, consumed, and ultimately sent to landfill. This model of consumption has resulted in an increase in absolute greenhouse gas emissions, as the amount of waste disposed in landfills has increased.

A circular economy aims to eliminate waste, not just from recycling processes, but throughout the lifecycles of products and packaging. The intent is to maximize value and eliminate waste by improving the design of materials, products, and business/operating models.

This shift means municipalities need to look at infrastructure and/or operating programs that divert organic material from landfill. The BioGRID facility could also support opportunity for the Townships to implement a future household separated organics and yard waste disposal program, as these materials would become feedstock.

Current State

In the spring of 2022, it was identified the mixer unit for the Biodigester needed replacing. Initial attempts to remove the mixer identified a further need to clean out the tank of material that had built up over several years. The tanks had not been cleaned out since operation of the facility began.

On May 25, 2022, the Township Councils met in a joint meeting to consider the report CAO2022-002 [Bio-Gas Feasibility Study – Special Joint Council Meeting](#).

June 1, 2022: The Township Councils met in a joint meeting as a follow up to the meeting of May 25th, to consider immediate maintenance investment required to operate the jointly owned Biodigester. While the Councils met to jointly consider the report from the two Township CAOs, the approval of the immediate maintenance for the Biodigester as outlined in Report CAO2022-03 [Bio-Grid Assets Follow up from the Special Joint Council Meeting of May 25, 2022 was](#) referred to both the respective Councils for approval. The Townships initiated a clean out project in summer/fall 2022. During the project, the contractor found the volume of material and the complexity of the clean out and repair to be more than initially anticipated.

At the end of July/Early August, CAOs informed the following:

- The Contractor proceeded with additional cleanout work
- OCWA staff were unaware of the additional work performed/did not give approval
- OCWA advised that costs will be much higher for the project

The Township CAOs put an immediate stop on work and made the position of the Townships very clear;

- No approval was given for additional work
- Staff have no authority to approve additional work of the extent/additional cost without Council approval
- The Townships have higher expectations for OCWA oversight of the work related to the assets
- The Townships would expect the contractor to provide a written change order and receive authorization of that change order for the extent of work undertaken.

The CAOs communicated that the Townships will not pay for the additional work that was not communicated to and authorized by the Councils. Staff explained that, while in the opinion of the service providers the work was necessary, the Joint Councils should have had the opportunity to discuss and approve/not approve the additional work.

The matter was escalated to the upper management of OCWA, who indicated the firm values their long-term relationship with the Townships and their staff was working internally to review and determine how they might “cover the cost overrun”. With staffing changes at OCWA, it took some time to review information and schedule meetings with CAOs and VP. In early November, the CAOs were informed that, while OCWA will cover the cost overrun, they can only pay through the Townships, with whom they have a contract. We have received the payment of \$88,629.02 for the additional work. Staff is informing the Joint Councils of the reason for the payment received and the payment to Saugeen Agri Services Ltd.

The BioDigester has been winterized and is in suspended operation awaiting the outcome of the RFP.

Considerations for the future of the BioGRID assets

- The 2 Townships cannot continue to be the sole owners/operator of the BioGRID
- The current state of the assets requires further clean out and the installation of a covering membrane.
- The BioGRID assets need Capital investment to be better optimized.
- Legislation will require municipalities to divert organic waste from landfill

The assets could support local efforts in waste diversion and there is the opportunity to support waste diversion requirements of others: broader range of municipalities, private industry, other public sector organizations.

In addition to further maintenance clean out, there are three bottlenecks requiring capital investment to optimize operations:

- 1) Site access roads: The access roads limit the size of waste supply vehicles that can deliver to the facility, which excludes potential high volume waste suppliers or increases costs for multiple trips with smaller vehicles.
- 2) Storage Area and Loading/Unloading Equipment. With space re-configured on site and ease of loading/unloading, the BioGRID operation can provide more planning certainty for feedstock suppliers and more efficient processing on-site.
- 3) Biogas flare: The installation of this new equipment will allow for better management of feedstock and associated biogas production (i.e., excess biogas can be burned off safely). The lack of this equipment limits the volume of feedstock that can be accepted and processed on site.

To implement the changes to optimize the facility operations, the Environmental Compliance Approval (ECA) will also need to be updated.

Potential Partner/Investors

As outlined above, the two Townships cannot continue to operate the BioGRID assets alone and any potential to optimize the assets requires investment. Rather than the two Townships investing resources to determine the best future business model, staff recommend that the Joint Councils give direction to move directly to issue a Request for Proposal (RFP) for optimal operating and ownership model. For the Townships, there is interest in retaining use of the lagoons. We may find through the RFP process there is

merit to retaining some interest in use and proceeds of the Biodigester. The recommendation is for some ownership share to be retained by the Townships, as separating the assets is not viable and there is interest in retaining access to the lagoons. The physical space is constrained and the Environmental Compliance Approval (ECA) contemplates the assets as one property.

Staff have received inquiries about the BioGrid Assets from those who are interested in operating in the research/development sector, operating for their own business use and those operating within the energy sector. Although the Townships have previously been approached by potential partners, feedstock providers and investors, the recommendation is to allow those who have interest and expertise in this field to submit proposals for review by the Joint Board of Management and the Joint Council's selection.

Next Steps:

With endorsement of the recommendations contained in this report, staff will issue the RFP (Appendix A)

- RFP will be issued for 4-6 weeks
- Staff will compile the proposal submissions for review by the Joint Board of Management
- Meeting of Joint Board of Management to short list the 3 top submissions
- Evaluation of the 3 short listed proposals by the Joint Board of Management
- A summary of all submissions and recommendation of the preferred submission presented to the Joint Township Councils for review and direction to proceed with negotiations
- Negotiation team established
- Negotiated agreement presented to the Joint Councils for approval

Concurrently, staff will continue to seek grants and funding related to the BioGRID assets. Legal advice will be sought as deemed necessary by the Joint Board of Management.

Financial Impact

No financial impacts at this time.

Strategic Priorities

Township of Georgian Bluffs:

Demonstrate and Enhance Environmental Stewardship

The Township of Georgian Bluffs strives to become a leader in Environmental Stewardship by reducing energy consumption, reducing solid waste, increasing diversion rates of recyclable materials, and lessening the environmental impact of existing and future infrastructure through innovation and upgrading.

3.1 Continually strive to reduce environmental footprint by reducing energy consumption and greenhouse gas emissions to minimize climate change.

- (a) Investigate and pursue opportunities to improve the Biodigester to ensure long term sustainability including the acceptance of source separated organics and a reduction in operating costs to attract septage waste.

Township of Chatsworth:

Fiscal Management, Accountability and Transparency

The Township of Chatsworth adopts the theme of long-term financial planning as essential to the financial viability of the Township. This will require creative thinking, an anticipatory outlook and innovative performance.

- a) To be leaders of best practices and champions of good government.

Conclusion

The Province of Ontario is creating legislation which aims to divert 100% of organic material from landfills. This shift means municipalities need to look at infrastructure and operating programs that divert organic material from landfill.

Although the BioGRID assets provide “potential” opportunity to support the waste diversion requirements for the Townships of Georgian Bluffs and Chatsworth, the current ownership and operating model cannot continue. Staff is recommending initiating a formal RFP (Request for Proposals) for optimal ownership/operating model. The draft RFP is attached to this report as Appendix A.

A summary of all submissions and recommendation of the preferred submission will be presented to the Joint Township Councils for review and direction to proceed with negotiations.

The intent is for the Joint Township Councils to determine the future ownership and operating model for the BioGRID assets during 2023.

Respectfully Submitted:

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Appendix "A"