



Township of Georgian Bluffs and Township of Chatsworth Special Joint Council Agenda

December 12, 2022, 5:00 p.m.

Council Chambers
177964 Grey Road 18, R.R#3,
Owen Sound, ON N4K 5N5

Pages

1. **Call to Order**

2. **Land Acknowledgement Statement**

We acknowledge with respect, the history, spirituality, and culture of the Anishinaabek: The People of the Three Fires known as Ojibway, Odawa, and Pottawatomi Nation, who have inhabited this land from time immemorial. And further give thanks to the Chippewas of Saugeen, and the Chippewas of Nawash, now known as the Saugeen Ojibway Nation, as the traditional keepers of this land. We also recognize, the Metis and Inuit whose ancestors shared this land and these waters. May we all, as Treaty People, live with respect on this land, and live-in peace and friendship with all its diverse peoples.

3. **Approval of Agenda/Additions to the Agenda**

Recommendation:

That the regular order of business be amended to host closed session discussion as agenda item 5 prior to Staff Reports; and

That the agenda be approved as amended.

4. **Declaration of Pecuniary Interest**

5. **Staff Reports**

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.

6. Closed Session

To be considered as item 5.

Recommendation:

That Council of the Township of Georgian Bluffs move into closed session at __:__ p.m. in the Council Chambers with the CAO, Acting Clerk and CAO/Clerk of the Township of Chatsworth remaining in the room for:

6.1 The purpose of educating or training the members

7. Confirming By-law

Recommendation:

That By-law No. 2022-072, being a by-law to confirm the proceedings of Council on December 12, 2022, be read a first, second and third time, finally passed, signed by the Mayor and Clerk, sealed with the Seal of the Corporation and engrossed in the By-law Book.

8. Date of Next Regular Meeting/Adjournment

Next meeting of joint Councils to be determined.



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:

Cynthia Fletcher
CAO, Township of Georgian Bluffs

Patty Sinnamon
CAO/Clerk, Township of Chatsworth

Appendix "A"



TOWNSHIPS OF GEORGIAN BLUFFS AND CHATSWORTH



JOINT REQUEST FOR PROPOSAL

DERBY BIOGRID FACILITY – OPTIONS TO PURCHASE ASSET

ISSUE DATE: JANUARY 5, 2023

CLOSING DATE: FEBRUARY 13, 2023

The Township of Georgian Bluffs and the Township of Chatsworth jointly own and operate the Derby BioGRID facility, processing organic waste and has the potential to support divert FOW from landfills (Owners)

The two municipalities are seeking Proposals from interested parties to purchase certain assets of the BioGrid facility, while the Townships retains access and/or ownership to the lagoon for the treatment of septage on behalf of properties located within the Townships.

BACKGROUND

The Townships jointly own a wastewater lagoon and Derby BioGRID facility located in the Township of Georgian Bluffs. The wastewater lagoon was constructed in 1975 and the BioGRID facility in 2011.

The Township also entered into a Feed-In Tariff (FIT) contract for electric power generation but is not currently being maximized.

The Province of Ontario is creating legislation which aims to divert 100% of organic material from landfills. This shift means that municipalities need to look at infrastructure and/or operating programs that divert this material from our landfills. The facility has the potential to support the diversion of Food and Organic Waste (FOW) with further capital investment.

The Townships commissioned both a BioGrid System Decommissioning and Recommissioning Plan and a Source Separated Organics (SSO) Digester Technology and Biogas Utilization Feasibility Study in 2021. Copies of those reports are available on the Townships' websites. The feasibility study was funded by the Federation of Canadian Municipalities Green Municipal program.

The Townships initiated a cleanout of the facility in the summer of 2022. Additional cleanout needs to occur. The BioGrid facility is currently in a suspended operation status pending the outcome of this RFP

It is the intent of the Owners to ensure an equal opportunity for qualified individuals and firms.

Mandatory Site Meeting: A mandatory briefing and site tour has been scheduled for 10:00 AM at the BioGRID site located at 062111 Sideroad 3, Georgian Bluffs on Monday, January 16, 2023. Safety boots and safety glasses are required for the site tour. Failure to attend the site visit may result in disqualification of any submitted Proposal.

Voluntary Site Visits: The Owners will make the Site available for up to two (2) visits of not more than eight (8) hours each to Bidders for further inspection upon request. All questions from the site visits must be submitted in writing, no questions will be answered during the site visits. Site visits must be completed prior to the deadline for questions

Deadline for Questions: January 24, 2023 at 4:00 pm. All questions must be in writing.

Closing date for the acceptance of proposals is **February 13 at 1:00 PM local time.**

Late Proposals will not be accepted.

Highest or any Proposal will not necessarily be accepted and is conditional upon the acceptance of the BioGRID Joint Board which is supported by the councils of both the Township of Georgian Bluffs and the Township of Chatsworth.

Accepted Proposals will be opened in private on the same day as soon as possible after 1:00 PM February 13 2022, at the Township of Georgian Bluffs Municipal Office, 177964 Grey Road 18, Georgian Bluffs.

The Owners thank all interested parties for their Proposals. Written notification will be provided to all Bidders once a decision has been made by the Owners.

Cynthia Fletcher, CAO
Township of Georgian Bluffs
376-2729 Ext. #229
cfletcher@georgianbluffs.ca

Patty Sinnamon, CAO/Clerk
Township of Chatsworth Phone: 519-
Phone: 519-794-3232, Ext. 124
patty.sinnamon@chatsworth.ca

List of Appendices

1.0 General Information

1.1 Definitions

"Agreement" and "Contract" mean any written contract between the Owners and the successful bidder with respect to the purchase or partial purchase of the BioGRID assets

"Appendices" means the supporting background information listed below:

Appendix A	Environmental Compliance (ECA) number 2206-8KSQZV dated August 23, 2011
Appendix B	Copy of FIT Contract
Appendix C	Feasibility Study
Appendix D	Decommissioning Study

"Bidder" means a legal entity, being a person, partnership, firm, or consortium that submits a Proposal in response this RFP.

"BioGRID Joint Board" means the Township of Georgian Bluffs and Township of Chatsworth joint management committee for the BioGRID plant.

"Closing Date" means the specified deadline for Proposals to be submitted to the Owners as indicated in the RFP and any subsequent Addenda.

"Confidential Information" means any information which may be provided by The Township of Georgian Bluffs and The Township of Chatsworth (whether oral, written, or computerized) and which is identified orally or in writing to the Bidder as being information of a "confidential", "restricted", or "protected" nature and shall include any excerpts of or copies made of such information and any notes made from the review of such information by the Bidder. If the Bidder is in doubt whether certain information is Confidential Information, it shall treat such information as Confidential Information until advised by the Owners that it is not Confidential Information.

"Environmental Compliance Approval" and "ECA" mean an approval issued by the MOECC under the Environmental Protection Act (EPA) and includes a Certificate of Approval issued under the EPA prior to October 31, 2011.

"MOECC" means the Ontario Ministry of the Environment and Climate Change.

"Owners" means the owners of the BioGRID plant and includes the Township of Georgian Bluffs and the Township of Chatsworth.

"Proposal" means an offer submitted by a Bidder in response this RFP, which includes all of the documentation necessary to satisfy the submission requirements of this RFP.

"Septage" means the partially treated sludge collected from a septic tank.

"Sewage" means wastewater collected from a holding tank.

"Site" means the BioGRID site located at 062111 Sideroad 3, Georgian Bluffs (Lot 4, Concession 6, former Township of Derby, County of Grey).

"RFP" means this Request for Proposal package in its entirety, inclusive of all Appendices and any bulletins or Addenda that may be issued by the Owners.

1.2 Interpretation

In this RFP and in the Agreement, unless the context otherwise necessitates,

- a reference to any Act, bylaw, rule or regulation or to a provision thereof shall be deemed to include a reference to any Act, bylaw, rule or regulation or provision enacted in substitution thereof or amendment thereof;
- all amounts are expressed in Canadian dollars and are to be secured and payable in Canadian dollars;
- any words and abbreviations which have well-known professional, technical or trade meanings, are used in accordance with such recognized meanings;
- all information in the RFP or any related document are given for the convenience of Bidders and such must be taken only as a general guide to the items referred to. It must not be assumed that such numbering is the only reference to each item. The documents as a whole must be fully read in detail for each item.

1.3 Assessment of Proposals

The Proposals received by the Owners will be considered primarily but not limited to the following criteria:

- i) Value to the Townships and the Community and possibly broader community (outside the geographic borders of the Townships (not necessarily monetary)
- ii) Expertise in operating the lagoon and the biodigester

- iii) Monetary value;
- iv) Value of access to the lagoon by the Townships
- v) Value Added innovation and future optimization of the asset

1.4 Submission of Proposals

The highest or any Proposal will not necessarily be accepted.

Bidders shall provide one (1) signed, printed original marked "Original" and three (3) printed copies of the Proposal.

There is no bid form in this RFP. Bidders are required to set out as clearly as possible, all terms and conditions of their proposal to meet the criteria in 1.3 above.

Proposals will be disqualified unless:

- (a) Signed in ink with an authorized signature
- (b) The dollar value is legible

1.5 Acceptance of Proposal

The Owners reserve the right to accept any Proposal which it deems to be in its own interest or to reject all Proposals.

1.6 Tax

H.S.T. should be noted, where applicable.

1.7 Termination

If the Successful Bidder fails to fulfil their obligations under this Proposal or negotiating a final agreement with the Townships within ninety (90) days of the closing of the bid proposals the Owners may terminate the contract for any reason whatsoever with a 15 day notice from the Owners in writing to the Successful Bidder.

1.8 Facsimile or Email Bids

Facsimile or email bid submissions will not be accepted.

1.9 Confidential Information

All Confidential Information, as defined in Section 1.1, shall be held by the Bidder in the strictest confidence.

1.10 Proprietary Information

If any portion of the Proposal contains or involves any propriety right(s), the Bidder must clearly identify any and all such portions of the Proposal and set forth in an Appendix to the Proposal, the complete basis for the Bidder's assertion of such proprietary rights, including but not limited to, identifying the person and/or entity who owns such rights.

1.11 Proposal Expiry Date

All Proposals shall remain open for acceptance by the Owners for a period of not less than one hundred and twenty (120) days from the closing date for the receipt of Proposals.

1.12 Bid Bond

The Proponent must provide a bid security for the Services. The bid security must be in the form of a \$100,000.00 bid bond or letter of credit. If a Proposal is accepted and the Bidder fails to enter into an Agreement the bid bond will be exercised and forfeited.

The bid bonds must be executed by the Bidder and a guarantee surety company authorized by law to carry on business in the Province of Ontario, and acceptable to the Owners, and valid for a period of not less than one hundred and twenty (120) days.

The form of the bid bonds shall be in accordance with the latest edition of the Canadian Construction Documents Committee (CCDC) approved bond forms (see <http://www.ccdc.org/>).

1.13 Modified Proposals

In the event that a preferred Proposal does not entirely meet the requirements of the Owners, the Owners reserve the right to enter into negotiations with the selected bidder/s to arrive at a mutually satisfactory arrangement with respect to any modifications to the Proposal

1.14 Conflict Of Interest

Bidders shall disclose to the Owners prior to awarding of the contract any potential conflict of interest. If such a conflict of interest does exist, the Owners may, at their discretion, withhold award of the contract/s until the matter is suitably resolved. Bidders will upon request, provide all pertinent information regarding ownership of their company. This information is to be supplied within forty-eight (48) hours after request.

1.15 Litigation

No submission will be accepted from any person or corporation who, or which, has a claim or instituted a legal proceeding against the Owners against whom the Owners have a claim or has instituted a legal proceeding with respect to any previous contract, without prior approval.

1.16 Reliance on Information Provided

The Bidder is to confirm on-Site to their own satisfaction, both the accuracy of the information provided in the RFP and the current Site conditions prior to submission of a Proposal. Bidders cannot rely solely on any information provided by the Owners.

2.0 BioGRID Plant Overview - General

The Owners own and currently operate the BioGRID anaerobic digestion system on the existing municipal sewage lagoon site in Georgian Bluffs. The facility is located at 062111 Sideroad 3, Georgian Bluffs (Lot 4, Concession 6, former Township of Derby, County of Grey). The BioGRID plant commenced operation in February 2011. The municipal sewage lagoons have been in operation since the early 1980's.

2.1. BioGRID Plant

The BioGRID (Bio Green Renewable Industrial Digester) plant is an anaerobic digester which can accept sanitary wastewater (septage from holding tanks or septic tanks); fats-oils-grease; and other select organic waste materials, in accordance with Ontario Ministry of the Environment and Climate Change (MOECC) Environmental Compliance (ECA) number 2206-BKSQZV dated August 23, 2011; included as Appendix A.

This green energy project digests the organic materials, generating biogas, which is used to run a generator and produce electrical power. The BioGRID plant includes septage screening and dewatering, a pasteurizer, anaerobic digester, biogas storage, biogas generator, digestate storage, associated piping, roadways, and a pump house/operations center.

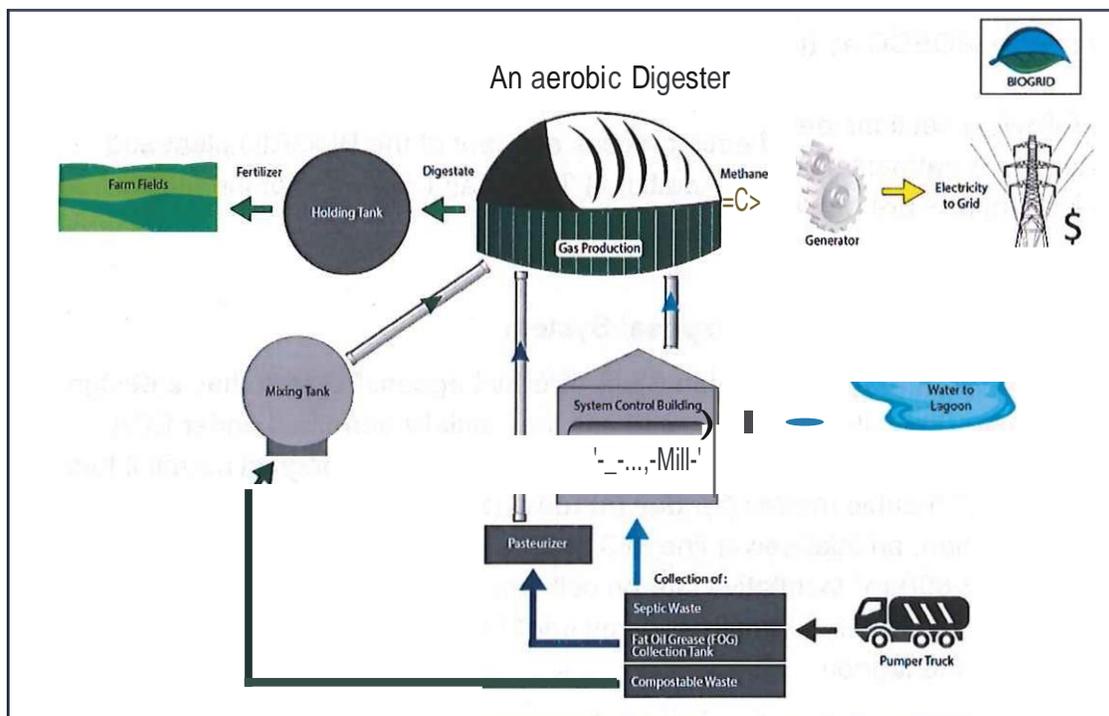


Figure 1: Overview of the BioGRID Process

Located at the site of the existing Derby Wastewater Treatment system, the BioGRID system was added in-line within the headworks portion of the existing wastewater system, to screen-out and process solids within the received septage wastewater materials, and to allow additional waste materials to be accepted for processing. Feedstocks to the biodigester are pre-processed onsite, and then input to the digester unit to anaerobically breakdown, creating a methane-based biogas and liquid digestate output products.

The biogas is used to operate an onsite engine that generates electricity, is metered, and then input to the local utility electrical grid as a revenue source; waste heat from the engine is used within the pre-processing system and to warm the digester. When the engine is unavailable, a backup boiler system is in place to take the digester biogas and generate heat for the process.

Screened septage and sewage liquids are directed to the original wastewater system (aerated and facultative lagoon cells, subsequently spray-irrigated for disposal). The output digestate goes to a holding tank, and is sent to farm fields as a soil amendment material during favourable application periods. The digestate is currently managed as a Non-Agricultural Source Material (NASM) under the Nutrient Management Act.

The BioGRID plant is currently maintained by one operator on an "as needed basis"; and the lagoons are managed by Veolia Canada. Employees working at the Site must be licensed by MOECC as (minimum) Class 1 Wastewater Treatment Operators.

The following sections detail each process element of the BioGRID plant and wastewater treatment system. Additional figures and drawings of the facility from previous reports are provided in Appendix B.

2.2 Sewage Lagoon and Disposal System

The original Township of Georgian Bluffs "Derby Lagoons" system has a design report and construction drawings dated 1980 and was initially permitted under ECA Number 2665-5NZHHS dated August 25, 2003. Within the original permit it has a rated capacity of 57.5-cubic metres per day (m³/day) (5 days per week), a sewage/septage receiving station, an inlet sewer line, a 3,300-m³ aerated lagoon cell, two 5-hp aeration blowers, a 22,500-m³ facultative lagoon cell, one 10-hp effluent transfer pump, and an onsite 9,410 m² contained granular spray irrigation area for seasonal disposal of effluent from the lagoon.

These original treatment and disposal elements remain in operation; the BioGRID system, which was commissioned during early 2011, was installed as a stand-

alone parallel process adjacent to the existing sewer line between the sewage/septage receiving station and the aerated-cell. Sewage/septage deliveries are now normally diverted through the BioGRID pre-processing system and the bypass that allows direct flow to the aerated-cell is normally closed.

2.3 BioGRID Process

The BioGRID system has three primary input points where wastewater and organic materials can be introduced into the process:

1. The dewatering system receives diverted sewage/septage deliveries previously directed to the aerated-cell, and other sources of septage/sewage that are available.
2. The pasteurization system receives specific deliveries of fats-oils-grease, and also other organic products that are available that may require pasteurization.
3. The hydrolyzer system receives specific deliveries of waste organics that have a higher solid mass or fibrous content, and can also receive wastewater liquids that do not require dewatering or pasteurizing.

Details of the above sub-systems are presented below.

2.3.1 Receiving - Wastewater Headworks

Septage and sewage are normally delivered to the unloading station located adjacent to the municipal road outside the perimeter fencing of the facility, allowing deliveries to be received 24 hours per day, 7 days per week. The unloading station is a below-grade concrete chamber, approximately 1.5-m deep and 1.0 x 1.0-m inside dimensions (roughly 1.5-m³ or 400-USG capacity), complete with a 150-mm outlet pipe and a lockable fabricated metal cover.

There is an operator control panel adjacent to the unloading station chamber, to allow delivery personnel to interface with the dewatering system (i.e., volume recording and billing management via card control, which will also start/stop the process controller).

The outlet pipe from the unloading station transfers wastewater to a secondary below-grade concrete chamber (installed in conjunction with the BioGRID system), where unloading can also be performed and where bar screens are installed to remove oversize materials from the influent stream. This chamber is somewhat larger and can provide some temporary buffer storage but is not designed to be an interim holding tank; all flows exit the chamber by gravity after passing through the bar screen. The bar screen is manually cleaned and is reported to have 9-

mm spacing.

From the bar screen, wastewater flows into a diversion chamber (manhole), where flow is either diverted through an open-valve to the dewatering system (normal operations), or the flow can by-pass the dewatering outlet through a normally closed valve, and makes its way to the aerated lagoon cell.

2.3.2 Process Building - Dewatering System

Wastewater from the diversion chamber flows through a 200-mm pipe into the Process Building, passes through a magnetic flow meter, and flows into a mixing tank where polymer is added, prior to entering a drum separator for dewatering; the drum separator has a rated capacity of 1.42-m³/min (85.2-m³/hr or 375-US.gpm). There is a polymer chemical tote tank in a secondary containment sump, a polymer transfer pump, and a diluted polymer injection pump, with outlet piping directed to the mixing tank.

Screened liquids from the drum separator flow by gravity through a 200-mm pipe to a manhole located outside of the Process Building, and from there to the aerated lagoon cell. Dewatered septage is pushed by spiral auger-flights along the rotating drum to the outlet end, where it exits through a discharge pipe.

Dewatered septage can then be directed through transfer pumps (or bypassed), with discharge directed to either the digester (normal operations), or the hydrolyzer tank. Each of the two dewatered septage transfer pumps is rated for 454-L/min (27.2-m³/hr or 120-US.gpm); designed to be one primary unit and one standby.

Recent operations at the BioGRID have been directing influent septage and sewage through the drum screen at a rate in excess of the design loading rate, with partially dewatered septage and sewage sent direct to the hydrolyzer tank. Transfer pumps are not in operation and it appears that the screened liquids volume being directed to the aerated lagoon cell might be less than design, due to the excess loading rate to the drum screen.

2.3.3 Receiving - Pasteurization System

Similar to the wastewater headworks, there is an unloading station for the receipt of materials that are to be pasteurized. Unloading from delivery vehicles is directly into a buried (flush-with-grade) covered 50-m³ (13,200-USG) concrete holding tank. Liquids in this tank are transferred by pump to the second-floor level of the Process Building, where they are batch-processed in a 2-m³ pasteurizer tank. From the pasteurizer tank, outflow can be directed to the digester or the hydrolyzer. Hot water from the biogas engine/boiler

system (approximately 80 degrees Celsius [°C]) is used to heat the pasteurizer (for one hour at 70°C).

Adjacent to the pasteurization system is a central ventilation system, which collects headspace tankage-air from various points in the facility, draws the air through an odour removal unit canister-type filter, and then discharges the air through a sidewall vent to the outdoor atmosphere. This is a low-volume process, with a 100-mm diameter outlet pipe.

2.3.4 Receiving -- Hydrolyzer System

Similar to the other receiving points onsite, there is an unloading station for the input of materials to the hydrolyzer tank. The hydrolyzer is a buried (flush-with-grade) covered 100-m³ (26,400-USG) concrete holding tank, complete with a "loading chute". The tank is partially insulated, and is heated/warmed utilizing hot water from the engine/boiler system.

Inputs such as corn stover, corn silage, wheat straw, canola straw, grain seed by-products, aquatic plants, fruit/vegetable wastes, manure, greenhouse and nursery or flower shop wastes, grass clippings, yard waste, plant-based processing wastes, food processing waste/byproducts, many source separated organic (SSO) wastes, and several other similar materials may be accepted at the facility and processed in this tank, including screened/clear liquid wastes that do not require dewatering. Liquids can be added as necessary to make the mixture more fluid; there is an option to direct outputs from the dewatering system and from the pasteurization system into the hydrolyzer tank.

Within the hydrolyzer tank, materials are blended and conditioned prior to transferring into the digester. There is a transfer/feed pump to move the hydrolyzer product into the digester.

2.3.5 Receiving - Agricultural Products Storage Area

There are two level-graded areas where products can be stored, the permitted storage areas are 28.5 x 21-m and 30 x 13-m (approximately 988m²), both are gravel bed areas that can be used to store loose or baled agricultural products for utilization in the process.

2.3.6 Anaerobic Digester

The digester, designed by CH Four Biogas, has a diameter of approximately 16.0-m, a working depth of about 5.2-m, a design operating volume of 1,000m³ a freeboard depth above the working liquid depth, with biogas storage above liquid level. Inlet, outlet, and overflow of liquids from the tank is controlled to retain biogas in the headspace, outlet from the tank is by gravity flow to digestate

storage. There are two propeller mixers submerged in the tank, which can be manually adjusted for elevation, angle, and direction.

The biogas is retained in the digester above the liquid level utilizing a rubber-membrane and netting system, which can rise and fall with changing gas volume; poles across the tank are used to keep the dome from collapsing into the liquid.

The digester tank is warmed with waste hot-water from the engine/boiler system, and is maintained at a controlled set point temperature to ensure optimal biogas production. This unit operates in the "mesophilic" temperature range, between 25 and 45°C.

The design basis for the 1000-m³ digester is 4-kg.VS (volatile solids) per cubic meter of digester, a maximum of 40-m³/day septage at 4-percent total solids, and a min/max throughput rate of 20- to 45-m³/day (including supplemental organic materials); this design basis was established by CH Four Biogas, a partner in the project design and construction.

2.3.7 Digestate Storage

Digestate is transferred to one of two storages on an ongoing basis as the digester is filled with fresh material. The original digestate holding tank has a diameter of approximately 14.0-m, a working depth of about 5.6-m, and a design operating volume of 854-m³

A second digestate holding tank was permitted for construction 6-months after commissioning of the original process, having a diameter of approximately 43.6-m, with a working depth of about 3.8-m, and a design operating volume of 5,630-m³.

Together, the digestate tanks have a total design working capacity of 6,484-m³ total storage capacity of approximately 4.5 to 10.5-months (based on a min/max throughput rate of 20- to 45-m³/day).

2.3.8 Biogas Utilization

Biogas is cooled in a series of below-ground pipes, and is then utilized by a 6-cylinder engine to operate a generator and produce electricity. The generator is rated for up to 100-kW/hr of single phase output power providing revenue from Hydro One, paying approximately \$0.1658/kWh (indexed FIT Contract rate, see copy of FIT Contract provided in Appendix C). The engine is permitted by ECA Number 9930-8AFH7R (issued December 15, 2010) for discharging the products of combustion into the atmosphere at a maximum volumetric rate of 0.037-actual.m³/s (133-m³/hr or 78-cfm), through a 150-mm diameter stack.

When the engine/generator is not available, biogas can be directed to a hot water boiler that has a matched consumption capacity; there is no flaring system installed at this site. The hot water boiler acts as a secondary gas burning

facility. Bidders are required to evaluate the efficacy of the backup boiler system as a secondary biogas burning device for the purpose of satisfying the conditions of the Site ECA.

The engine jacket is cooled using a closed-loop water recirculation system; delivering waste heat at approximately 80°C to be utilized in the process (pasteurization, hydrolyzer, and digester tank); and when not available, the boiler supplies the heated water.

2.3.9 Process Control

Various portions of the system operations are automatically monitored and logged on an ongoing basis by a process logic controller (PLC), which also automates various ongoing operational events given specifically programmed setpoint conditions. Other aspects of system operations are manually monitored and recorded on a regular basis by the operator.

Process alarm conditions are logged, and critical events create an alarm notification to an operator on call. Internet connectivity is provided by point-to-point wireless communication (microwave or similar); process status and control is available to operators through a secure web-interface.

2.3.10 Process Control

Various portions of the system operations are automatically monitored and logged on an ongoing basis by a process logic controller (PLC), which also automates various ongoing operational events given specifically programmed setpoint conditions. Other aspects of system operations are manually monitored and recorded on a regular basis by the operator.

Process alarm conditions are logged, and critical events create an alarm notification to an operator on call. Internet connectivity is provided by point-to-point wireless communication (microwave or similar); process status and control is available to operators through a secure web-interface.

2.4 Process Reporting

Regular inspection and data-log reporting is completed on a daily basis, with summary reports on system operations made monthly and annually by the operator. Available operating logs and reports are provided with the background information package specified in Section 2.0.

3.0 Scope

The two municipalities are seeking Proposals from interested parties to purchase certain assets of the BioGRID facility, while the Townships retains access and/or ownership to the lagoon for the treatment of septage on behalf of properties located within the Townships.

The ECA and physical site make separating the assets (BioGRID and lagoons) impossible.

It is important to the Townships that a creative partner who has the experience and capability to maximize the potential of the BioGRID and lagoon assets or other value to the Community be realized.

Bidders are welcome to present a proposal that includes innovation and future use of the asset, but must consider the Townships' desire to retain access or ownership of the lagoon system.

4.1 Proposal Content

4.1.1 Bidder Profile

- Overview of the Bidder firm(s) and history (date company started)
- Products and/or services offered
- Experience in Operating a biodigester and lagoon system
- Total number of employees, organization, and ability to deliver and support the Services over the period of the Contract
- Experience in innovation technology

5.0 Evaluation of Proposals

5.1 Evaluation Process

The Owners will carry out the evaluation of the Proposals by an Evaluation Team consisting of the BioGRID Joint Board and staff from the Owners. Engineering consultants and legal advisors may also be utilized for respective expertise/technical support if required. The evaluation will be on a points scoring of the criteria as outlined below.

By responding to this RFP, Bidders will be deemed to have agreed that the decision of the Owners will be final and binding.

The Proposal of the Bidder that, at the absolute discretion of the Owners, provides the best value in satisfying the Owners' requirements for the Services may be designated as the Successful Bidder. No obligation arises until the Agreement, based on this RFP and the accepted Proposal, are negotiated and executed. The

relevant terms, text, and content of this RFP, RFP addenda, and Successful Bidder's Proposal, will be incorporated into the Agreement, subject to negotiation and award by Owners' respective Councils. The Successful Bidder will have the opportunity to negotiate an agreement with the Owners. If the Owners cannot conclude an agreement with the Successful Bidder, other Bidders may be asked to begin negotiations.

All submitted Proposals shall become the property of the Owners but shall not be used for the purposes of the services unless the Bidder is the Successful Bidder.

5.2 Proposal Evaluation

RFP responses will be evaluated on how well the Proposal submissions meet with the RFP requirements. The following weightings will be generally used when scoring the Proposal.

Proposal Evaluation		<i>Maximum Score</i>	<i>Bidder's Score</i>
<i>Rated Requirements</i>			
1	Bidder's Profile	15	
2	Value to the Townships and the Community (not necessarily monetary)	25	
3	Expertise in Operating the lagoon and BioGRID	20	
4	Monetary Value to the Townships	25	
5	Value Added Innovation and Future Use of the Asset	15	
Total Score		100	

Should an interview be scheduled, the interview will be used to review /refine / revise assigned Proposal scores. Bidder must score a minimum of 37.5 out of 50.0 points on the combined rated requirements items 1 and 2 in the Proposal Evaluation table above.

The Corporation of the Township of Georgian Bluffs

By-law Number 2022-072

Being a By-law to confirm the proceedings of the Special Council meeting of the Corporation of the Township of Georgian Bluffs held on December 12, 2022.

Whereas, Section 5 (1) of the *Municipal Act S.O. 2001, c. 25* states that the powers of a municipality shall be exercised by Council; and

Whereas, Section 5 (3) of the *Municipal Act S.O. 2001, c. 25* provides that municipal power shall be exercised by by-law; and

Whereas, the Council of the Corporation of the Township of Georgian Bluffs deems it expedient and necessary that the proceedings of the Special Council meeting held on December 12, 2022, are confirmed and adopted.

Therefore, the Council of the Corporation of the Township of Georgian Bluffs enacts the following:

1. That the actions of the Council of the Corporation of the Township of Georgian Bluffs at its special meeting held on December 12, 2022, in respect to each motion and resolution passed, reports received and direction given by the Council at the said meeting, are hereby adopted and confirmed.
2. That the Mayor and the proper Officials of the Corporation are hereby authorized and directed to do all things necessary to give effect to the said actions of the Council.
3. That the Mayor and Clerk are authorized and directed to execute all documents necessary in that behalf, and the Clerk is authorized and directed to affix the Seal of the Corporation to all such documents.
4. That this by-law shall come into force and effect upon being passed by Council.

Read a first and second time this 12th day of December 2022.

Read a third time and finally passed this 12th day of December 2022.

Mayor – Sue Carleton

Acting Clerk – Carly Craig