

May 3, 2024

Niall Lobley (he/him/they)
Chief Administrative Office (CAO)
Township of Georgian Bluffs
177964 Grey Road 18, R.R. #3,
Owen Sound, ON N4K 5N5

Re: Proposal No: GEOBLN1329-2418 - BioGRID System – Evaluation and Decommissioning Costs

Dear Mr. Lobley:

The Ontario Clean Water Agency (OCWA) is pleased to submit a proposal to undertake a study to evaluate and develop costs to decommission the BioGRID system at Georgian Bluffs in the County of Grey.

1 Background

The BioGRID system (Bio Green Renewable Industrial Digester) is owned and managed by the BioGRID Joint Board of Management, consisting of the Township of Georgian Bluffs and the Township of Chatsworth.

The WWTW sewage lagoons were installed in 1975 in the Township of Georgian Bluffs, and the BioGRID system was implemented in 2011.

However, the BioGRID system has encountered various operational and financial hurdles. These include difficulties in securing organic waste feedstocks, determining appropriate tipping fees for organic waste feedstocks, addressing capacity limitations and bottlenecks in the anaerobic digestion process, as well as challenges with the material receiving station and other associated infrastructure. Additionally, issues have arisen concerning renewable energy generation and the overall operation of the sewage lagoons.

Given these challenges, the Townships are currently exploring the full decommissioning of the BioGRID system, which would involve the demolition and removal of all associated structures and equipment related to the biodigester.

The Townships want to provide definite cost estimates to Council members and are presently soliciting pricing for the decommissioning of the plant, site remediation, and improvements to the existing access road leading to the lagoons. Additionally, the pricing is to include a resale or scrap value for the biodigester equipment.

[2022/11/17]

2 Scope of Work and Methodology

OCWA proposes to complete the following tasks for the development of costs for the decommissioning of the BioGRID system.

2.1 Activity 1: Project Initiation

OCWA will compile and review record drawings, plant design documents, operations and maintenance manuals, and any previous studies completed on the BioGRID system. This will facilitate the development of a comprehensive inventory of equipment and their materials of construction. Additionally, OCWA will engage in discussions with operations staff regarding the potential usability of equipment for the lagoon system's operations, and will take inventory of any newer equipment purchased or installed in recent years for resale value. OCWA will also evaluate the Class EA amendment requirements and coordinate with the MECP.

Concurrently, OCWA will engage the services of a demolition contractor to review drawings, assess site conditions, and estimate costs for the demolition work.

2.2 Activity 2: Site Assessment

OCWA expects to conduct two days of site visits with the demolition contractor to complete the following activities:

- Assess the condition of each piece of equipment
- Determine if any equipment can be salvaged for resale or scrapped for materials
- Evaluate accessibility to existing infrastructure
- Determine whether concrete, and other materials require designated substance testing
- Determine quantity of the materials in the digester
- Evaluate the content in the digester to be tested for hazardous materials

2.3 Activity 3: Investigation and Cost Development

After the site review, OCWA will inquire about equipment identified as scrap and the resale value of materials. Additionally, OCWA will thoroughly review the costs provided by the contractor to ensure that all aspects of the demolition work are accounted for in the estimates.

2.4 Activity 4: Reporting

OCWA will prepare a draft report summarizing the findings from the activities above and provide a recommendation on the most suitable options for decommissioning the BioGRID plant. The report will encompass a comprehensive plan for decommissioning, including costs for demolition, site remediation, and restoration of the road to the lagoon site. These costs will incorporate any items intended for salvage for future use, resale, or scrap value.

The Townships will review the report, and any comments from Councilors will be incorporated into the final report.

3 Project Team

Shairose Alarakhia, P.Eng., PMP – Project Manager

Shairose Alarakhia has more than 20 years of professional experience in the water and wastewater industry. Her experience includes designing water and wastewater treatment systems for the private sector to project managing the design and construction of water and wastewater treatment plants. Shairose has experience with removals of equipment and construction management.

Shairose manages water and wastewater projects on behalf of municipalities and First Nations all across Ontario.

Jananan Muththalagan, M. Eng., P. Eng., PMP – Project Engineer

Jananan Muththalagan joined OCWA in October of 2022. Jananan is a Professional Engineer with over five years of experience in construction management, transportation engineering and linear underground infrastructure. Prior to joining OCWA, Jananan worked at the Ontario Ministry of Transportation and has prior experience working in private construction and Engineering consulting. In addition, Jananan has experience with site inspections, construction administration and project management. Jananan graduated from the University of Western Ontario with a Bachelor of Engineering Science in Civil Engineering and a Masters of Engineering in Water Resources Engineering.

4 Schedule

We understand that time is of the essence. OCWA is ready to start the project immediately upon approval. The full project is expected to take approximately 10 weeks to complete according to the schedule provided below and assuming the project is approved to start by May 10, 2024. Table 1 contains a list of the key milestone dates for the project.

Table 1: Key Milestones

Task	Schedule	Milestone date
Project Approval to Start		May 10, 2024
Project Start Date		May 20, 2024
Project Initiation	1 week	May 24, 2024
Site Assessment	2 days	June 7, 2024
Investigation and Cost Development	3 weeks	June 28, 2024

Task	Schedule	Milestone date
Draft Report	2 weeks	July 15, 2024
Review Draft Report	2 weeks	July 29, 2024
Final Report	1 week	August 5, 2024

5 Project Budget

In reviewing the above scope of work, OCWA proposes a project budget of **\$27,935** (exclusive of HST) for our professional fees, disbursements and travel expenses. OCWA proposes to invoice the Township monthly on a time and material basis.

In addition, OCWA recommends that the Township anticipate a budget of ranging from approximately \$40,000 - \$45,000 for completing the study including \$27,935 for OCWA's services. OCWA estimates \$5,000 - \$10,000 for demolition contractor services and a 15% contingency allowance for total project costs.

A Time Task Matrix for this project is provided in **Appendix A**. If additional services are required outside of the scope of this proposal, this cost would be in accordance with our Engineering Schedule of Rate attached in **Appendix B**. Table 2 summarizes the budget by task.

Table 2: Budget Summary

Task	Budget
Activity 1: Project Initiation	\$ 9,951
Activity 2: Site Assessment	\$ 8,246
Activity 3: Investigation and Cost Development	\$ 5,601
Activity 4: Reporting	\$ 4,137
Total Budget	\$27,935
Demolition Contractor (estimate)	\$5,000 - \$10,000
Third Party Contractor/Service Provider Admin Fee (5%)	\$ 500
Contingency Allowance (15%)	\$ 5,765
Overall Project Total (exclusive of HST)	\$44,200

6 Terms and Conditions

The Township will be required to sign an Engineering, Procurement and Construction Management (EPCM) Contract with OCWA to define payment terms, dispute resolution, and

insurance requirements and to identify OCWA as an “Agent of the Township”. The Township will be provided a draft copy of the EPCM Contract for review and comment prior to finalization

7 Assumptions and Limitations

Based on current understanding of the project, OCWA has assumed the following in development of the scope of work:

- Information on the design of the plant will be provided upon start of the project
- There is adequate information available on the as-built drawings of the existing system
- A presentation to council(s) is not included in the scope of work. Should it be required, it will be at an additional cost.

We are ready to start the project upon receipt of approval notice. Should you have any questions on the above, please feel free to contact the undersigned at salarakhia@ocwa.com or 416-709-6549.

Sincerely,

Shairose Alarakhia, P.Eng., PMP
Senior Engineer/Project Manager

cc: Leo-Paul, Senior Operations Manager, Orangeville Hub
Susan Budden, Business Development Manager, Midwest & Georgian Highlands
Lisa Babel, Director, Project Planning and Delivery

COUNTERSIGNATURE:

By signing below, I accept the scope of work described in the above proposal and provide permission on behalf of the Town to proceed.

(Signature)

Date

APPENDIX A

Time Task Matrix

Task Description		Total Hours	PM/Eng. Fees	Disbursements	Direct Expenses	Other Expenses	Total Cost
1 Activity 1: Project Initiation							
1.1	Project Setup and Closeout	6.5	\$948.00	\$56.88	\$0.00	\$10,000.00	\$11,004.88
1.2	Collection and Review of Background Information	26	\$3,874.00	\$232.44	\$0.00	\$0.00	\$4,106.44
1.3	Project Management and Communications and Project Financials	16	\$2,434.00	\$146.04	\$0.00	\$0.00	\$2,580.04
1.4	Agreement with Contractor	8	\$1,130.00	\$67.80	\$0.00	\$0.00	\$1,197.80
1.5	Kick off Meeting (Meeting#1-Virtual) with Contractor	7	\$1,001.00	\$60.06	\$0.00	\$0.00	\$1,061.06
Subtotal Task Hours		63.5					
Percentage of Overall Task/Activity Time		100%					
Subtotal Costs			\$9,387.00	\$563.22	\$0.00	\$10,000.00	\$19,950.22
2 Activity 2: Site Assessment							
2.1	Preparation of Information Collection Documents	13	\$2,072.00	\$124.32	\$487.20	\$0.00	\$2,683.52
2.2	Site Visit	35	\$3,962.00	\$237.72	\$0.00	\$0.00	\$4,199.72
2.3	Development of Data Collection and Analysis	8	\$1,286.00	\$77.16	\$0.00	\$0.00	\$1,363.16
Subtotal Task Hours		56					
Percentage of Overall Task/Activity Time		100%					
Subtotal Costs			\$7,320.00	\$439.20	\$487.20	\$0.00	\$8,246.40
3 Activity 3: Investigation and Cost Development							
3.1	Scrap and resale equipment value investigation	14	\$2,226.00	\$133.56	\$0.00	\$0.00	\$2,359.56
3.2	Review of Draft Costs	6	\$936.00	\$56.16	\$0.00	\$0.00	\$992.16
3.3	Finalize the Costs	13	\$2,122.00	\$127.32	\$0.00	\$0.00	\$2,249.32
Subtotal Task Hours		33					
Percentage of Overall Task/Activity Time		100%					
Subtotal Costs			\$5,284.00	\$317.04	\$0.00	\$0.00	\$5,601.04
4 Activity/Phase 4: Reporting							
4.1	Draft Report with Decommissioning Plan	20	\$2,902.00	\$174.12	\$0.00	\$0.00	\$3,076.12
4.2	Final Report	7	\$1,001.00	\$60.06	\$0.00	\$0.00	\$1,061.06
Subtotal Task Hours		27					
Percentage of Overall Task/Activity Time		100%					
Subtotal Costs			\$3,903.00	\$234.18	\$0.00	\$0.00	\$4,137.18
Subtotal Task Hours		0					
Percentage of Overall Task/Activity Time		0%					
Subtotal Costs			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Project Hours and Fees							
Total Project Hours		179.5					
Percentage of Overall Time		100%					
Total Project Fees			\$25,894	\$1,554	\$487	\$10,000	\$37,935
						<i>Third Party Contractor/Service Provider Admin Fee</i>	5% \$500.00
						<i>Contingency Allowance</i>	15% \$5,765.23
						Overall Project Total	\$44,200
						<i>HST</i>	13.00% \$5,746.01
						Project Grand Total	\$49,946

APPENDIX B

Schedule of Rates

Engineering Schedule of Rates – 2024

CATEGORY	DESCRIPTION	HOURLY RATE
Director	Director	\$200.00
E04	Senior Specialist Engineer /Project Manager	\$189.00
E03	Senior Engineer/Project Manager	\$168.00
E02	Engineer/Project Manager	\$150.00
E01	Engineer In-Training	\$117.00
	Student Engineer	\$100.00
	Administrative Assistant	\$67.00
	Financial Analyst	\$97.00

Currency: Canadian Dollars, excluding HST

Expenses and Disbursements:

General office expenses including long distance, cellular/data charges, printing, office supplies and courier charges will be charged at 6% of Professional Fees.

Special expenses such as travel and living expenses, third party consultants, capital equipment, contractors fees, permitting fees and any other items not otherwise listed will be charged at cost plus 5% administration fee.

Invoicing:

Professional fees and expenses will be invoiced monthly unless otherwise stated and are payable within 30 days. Taxes will be added as applicable.

Technology and Operations Expertise:

Technology and Operations experts will be charged at specific individual rates to be provided as needed.

Overtime:

Overtime will be charged at 1.5 times the rates stated above, but only if pre-approved by client.

Terms and Conditions:

OCWA standard terms and conditions will apply.

Revision:

This Schedule of Rates is valid until December 2024 after which time it will be reviewed and updated for 2025.