



Georgian Bluffs –Chatsworth Biodigester Joint Board Minutes



Friday August 16th, 2013, 8:00 AM

Members Present:

Mayor – Alan Barfoot, Township of Georgian Bluffs
Mayor – Bob Pringle, Township of Chatsworth
Deputy Mayor – Dwight Burley, Township of Georgian Bluffs
Deputy Mayor – Terry McKay, Township of Chatsworth

Staff Present:

Chief Administrative Officer – Murray Hackett, Township of Georgian Bluffs
CAO/Clerk - Will Moore Township of Chatsworth
Treasurer – Holly Morrison, Township of Georgian Bluffs
Biodigester Operator – Troy Unruh, Township of Georgian Bluffs
Deputy Clerk – Christine Fraser-McDonald Township of Georgian Bluffs (Recording Secretary)

Other

Ross Slaughter, Senior Environmental Engineer, Genivar

1. Call to Order:

Chair Alan Barfoot called the meeting to order at 8:00 a.m.

2. Declaration of Pecuniary Interest and the General Nature Thereof:

None at this time

3. Minutes of Previous Meeting:

Motion Number: BIO 042-2013

Moved by: Member Bob Pringle

Seconded by: Member Dwight Burley

That the Biodigester Joint Board minutes of July 5th, 2013 be adopted as presented.

Carried

4. Hearing of Delegations or Deputations:

None

5. Correspondence

None

6. Reports and Recommendations:

Finance:

- 1) Accounts for approval

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Motion Number: BIO 043-2013
Moved by: Member Dwight Burley
Seconded by: Member Bob Pringle

Be it resolved that the Georgian Bluffs – Chatsworth Biodigester Joint Board approves accounts for payment in the amount of \$72,722.56 for the period from June 18th, to August 9th, 2013.

Carried

2) Financial Report

Treasurer Morrison reviewed the Revenue and Expenses Report with the Board. She noted that the engineering fees were budgeted for \$55,000. As of July 27th, they are now \$10,000 over budget.

A motion will be prepared for the next meeting for the additional funding sources for engineering fees.

Operations

1) Report BR004-2013 MAN Engine Re-build.

In his report to the Board, Biodigester Operator Troy Unruh said that a tender document was prepared internally by staff. This document was forwarded to several companies in the area that perform engine rebuilds. The tender document was also advertised on the Georgian Bluffs Website.

Of the seven firms that the documentation was forwarded to, only one company responded. This proposal did not include the removal and installation of the engine once rebuilt. The cost for the rebuild was substantially higher than the budgeted/estimated amount for the complete project. It would appear that not one company can perform all of the requirements of the proposal (remove, rebuild and install).

Therefore, consideration needs to be given to hire two different companies: one to remove and install and the second one to complete the rebuild. In an effort to have this work completed within the estimated amount, additional research was investigated. This included contacting local machine shops, and heavy equipment suppliers. They supplied staff with different rebuild options, which do not follow the requirements that were included in the original tender package. The suggestion is to have the rebuild completed “in frame” which is having the engine remain on site.

The Board directed staff to inquire if the engine can be rebuilt on site in the month of October and to move forward with the rebuild by Wright Automotive Machine Shop at a cost of \$33,809.60 including HST.

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2) Report BR005-2013 Servicing of Doda Pumps.

Biodigester Operator Troy Unruh in his report said the manufacturer's specifications are to change the oil in the gear box and shaft every 2 years. The FOG pump is not always starting, which could mean additional work may be required. The Hydrolyzer pump is working well, but should be serviced as well. While the MAN engine is down for rebuild, it would be good to service both pumps one at a time so he can continue feedings while one pump is being serviced. Three quotes for the removal, service and install of the pumps have been obtained. Any material or labour required will be an additional cost.

The following recommendation was made:

Motion Number: BIO 044-2013
Moved by: Member Dwight Burley
Seconded by: Member Bob Pringle

Be it resolved that the Georgian Bluffs – Chatsworth Biodigester Joint Board accepts a quotation from Triple M Mechanical in the amount of \$2,000.00 plus HST to service the Doda Pumps at the Biodigester. The funding source will be from the 2013 operating budget.

Carried

3) Report BR006-2013 Servicing SUMA Mixer.

In his report to the Board, Biodigester Operator Troy Unruh said as per manufacturer's specifications, the digester mixer is to be serviced every 2,000 hours or every two years. Staff contacted Suma in the USA to find a company in Ontario that would service the mixer. Suma provided the contact information for Kilmarnock for the removal and install of the pump. Suma came to the site with another company and they could service the pump but not remove it. One company to do both removal and install and service versus trying to get two companies (one to remove and install) and the other to service could create a lot of challenges. The price could vary depending on how everything goes with the service. Quotes have been obtained from Kilmarnock and Suma for consideration by the Board.

The Board directed the Biodigester Operator to proceed with ordering a hardened steel propeller. A motion will be brought forward at the next Board meeting in this regard.

The following recommendation was made:

Motion Number: BIO 045-2013
Moved by: Member Terry McKay
Seconded by: Member Dwight Burley

Be it resolved that the Georgian Bluffs – Chatsworth Biodigester Joint Board accepts a quotation in the amount of \$4,850.00 plus HST to service the SUMA

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Mixer at the Biodigester. The funding source will be from the 2013 operating budget.

Carried

4) Report BR007-2013 Venting Hydrolyzer Ltd.

In his report to the Board, Biodigester Operator Troy Unruh said that staff was given direction from the Board to get three quotes for the hydrolyzer venting.

Three quotes have been provided for the Board's consideration and the following recommendation was made:

Motion Number: BIO 046-2013

Moved by: Member Bob Pringle

Seconded by: Member Dwight Burley

Be it resolved that the Georgian Bluffs – Chatsworth Biodigester Joint Board accepts a quotation from Air Tech Mechanical in the amount of \$1,990.00 plus HST for the venting of the Hydrolyzer at the Biodigester. The funding source will be from the 2013 operating budget.

Carried

5) Report BR008-2013 Servicing Stamford Generator.

In his report, Biodigester Operator Troy Unruh said as per the manufacturer's specifications, it is recommended to inspect and replace the main bearing in the generator. At 19,000 hours the main bearing in the generator started to fail and the generator was shut down to prevent further damage and Rolan replaced the bearing.

On August 8th, staff noticed the bearing failing again and noticed sparks between the fan and housing at random times and sparks around the housing. The bearing was replaced on August 12th, 2013. Rolan's technician noticed that the housing where the bearing sits at the back plate had movement. Rolan notched it and lock tightened it to take the slack out. The generator is still sparking and a ground brush was installed to help with static build up. Sommers Generators estimated the cost for inspection of between \$800 and \$1,000 over the phone. Rolan estimated cost was a minimum of \$500.00 over the phone. Both estimates are for the basic inspection but cost of machining housing or replacing and finding the problem with the spark would be an additional cost.

The Board directed the Biodigester Operator to have the generator pulled and maintained at the same time as the engine repairs are ongoing.

6) Report BR009-2013 Proposal for Solar Bee.

Biodigester Operator Troy Unruh said that while looking into odour issues, staff found a surface aerator for both tanks. Staff contacted H²O Logics that provide Solar Bee aerators and received a proposal on July 11th, 2013.

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After looking over the proposal, it would appear that the SB-2500 would be a good option if a grant could be found for green uses. GF-5000 is more reliable with grid power but there would be an added cost of running the electrical to each tank or to the large tank. H2O said that the grid powered aerators use 36 KW per month under 500KW per year. Something to consider is the cost of running power to the large tank or both tanks. If the aerators are used only in the summer, that would benefit the solar power. The cost for the SB2500 would be \$45,436.00 plus install (large tank only); the cost for the GF5000 would be \$35,669.00 plus install (Large tank only).

One of the other comparable companies that Engineer Ross Slaughter proposed was Blue Frog at a cost of \$65,000 plus tax for both tanks.

Due to the prohibitive cost of the above noted proposal, the Biodigester Operator spoke to the Region of Waterloo to inquire what they use for odour control. Subsequently, Troy then contacted Ecolo Odour Control Solutions. This company provided an option of using Ecolo's BioStreme 201. This is added directly into the wastewater that is on the top layer of the digester. This is a micronutrient formulation that supports the growth of bacteria that will help the decomposition of organic material that is causing the odours.

The cost of the BioStreme 201, for a 20 litre container, is \$210.00. 80 litres are required for a two week trial with expected daily treatment costs of approximately \$35-40 per day. The trial period will determine the amount of BioStreme 201 required to eliminate the odours.

Ross Slaughter recommended to the Board that BioStreme 201 be used first as it is the cheapest and easiest option for odour control. The Biodigester Operator will need to test and monitor for the trial period.

The Board directed the Biodigester Operator to order the BioStreme 201 and to start immediately upon receipt of the material. The Biodigester Operator will speak to the company regarding their recommendations Public Question Period:

7. Public Question Period:

Mike Lemme had questions regarding warranties and general maintenance on parts for the digester, dates for emptying the digestate tanks, smell from the biodigester and that the Board should give notice to the MOE that a new product will be used at the site for odour control.

8. In Camera Session:

None.

9. Unfinished Business:

- 1) OPA Grant Application.

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Ross Slaughter noted that an OPA Grant had been applied for on July 5, 2013, but was subsequently turned down.

- 2) Request to Minister of Energy for meeting to discuss funding for the Biodigester.

CAO Murray Hackett said that a call had been made to the Minister of Energy, but they had not responded to the Township at this time.

10. New Business:

- 1) Storage capacity as it relates to the draft collection and disposal of Septic Waste By-law.

A report from Ross Slaughter of Genivar provided the Board with alternative solutions for septage dewatering and treatment for the new proposed sewage By-law. The report said it is expected that approximately 10,000 m³ of septage would be received at the Biodigester if the new proposed By-law is passed. This septage will mainly be received over an eight month period from April to November of each year. The design of the existing system as built, was to accept approximately 40 m³/day during the April to November period, which is approximately 10,000 m³ of septage. The Board reviewed the alternatives as provided in the report from Genivar.

The Board directed staff to consult with Ross Slaughter to prepare a timetable in line with the implementation of the proposed By-law, Public Meetings etc.

11. Future Meeting Date:

A meeting date was not set at this time.

12. Adjournment:

The Biodigester Joint Board meeting adjourned at 10:16 a.m. on a motion moved by Member Burley.

Mayor Alan Barfoot

Christine Fraser-McDonald,
Recording Secretary