

GANGES SEWER LOCAL SERVICE COMMISSION

Notice of Meeting on **TUESDAY**, **October 29**, **2013 at 2:00 PM**Portlock Portable Meeting Room 145 Vesuvius Bay Road, Salt Spring Island, BC

AGENDA

- 1. Approval of Agenda
- 2. Adoption of Minutes from October 4, 2012
- 3. Reports
 - 3.1 Chair Report
 - 3.2 CRD Director Report
- 4. New Business
 - 4.1 Technical Review of the Ganges Wastewater Treatment Plant Process

That the Ganges Sewer Local Services Commission approve the utilization of \$8,000 in funds from the Capital Reserve account to retain GE Water and Process Technologies to conduct a review of the Ganges Treatment Plant Process.

- 5. Other Business
- 6. Adjournment



Minutes of the Regular Meeting of the Ganges Sewer Local Service Commission Held October 4, 2013 in the Portlock Park Meeting Room, Salt Spring Island, BC

DRAFT

PRESENT: **Director:** Wayne McIntyre

Commission Members: Louis Pepin, John Sprague, Gary Utter

Staff: Karla Campbell, Senior Manager; Sarah Shugar, Recording Secretary

ABSENT:

Commissioners: Tom Toynbee (Chair), Rod Scotvold

L. Pepin called the meeting to order at 3:05 pm.

1. APPROVAL OF AGENDA

MOVED by J. Sprague, **SECONDED** by G. Utter, That the agenda be approved with the addition of: Item 5.1 SSI Liquid Waste Commission delegation

CARRIED

2. ADOPTION OF MINUTES OF NOVEMBER 27, 2012

MOVED by J. Sprague, **SECONDED** by G. Utter, That the minutes of the meeting of November 27, 2012 be adopted.

CARRIED

3. REPORTS

3.1 Chair Report

There was no report at this time.

3.2 CRD Director Report

Director McIntyre reported the following items:

- The Drake Road Affordable Housing proposal is 50-80 units. It is a joint CRD/School District #64 project. School District #64 donated the property.
- It may be timely for the Commission to consider low consumption incentives.
- Union of BC Municipalities Small Systems Working Group will be publishing their report soon. The report is three years in progress and will include best in class financial practices, ways to handle subdivisions, amalgamation etc.

There was discussion regarding capacity issues. Manager Campbell advised the consultant for the Drake Road Affordable Housing project has the Standtek Study. The project planner may request reduced capacity charges.

4. NEW BUSINESS

4.1 Request for inclusion of property in the Ganges Sewer Local Service Area – 212 Fulford Ganges Road

The staff report provided an update on the request for inclusion.

MOVED by J. Sprague, SECONDED by G. Utter,

That the Ganges Sewer Local Service Commission:

- 1. Approve the request to include Parcel F (DD 75556) Section 20, Range 3E, portion of North Sat Spring Island, Cowichan District in the Ganges Sewer Local Service area subject to written agreement to pay all engineering and construction costs associated with the service extension to the property line and the capacity purchase charge as per Bylaw No. 3262; and
- 2. Direct staff to prepare a bylaw for CRD Board approval, to amend the service area boundary to include the subject property.

CARRIED

5. OTHER BUSINESS

5.1 SSI Liquid Waste Commission delegation Commissioner Sprague reported that his term on the SSI Liquid Waste Commission ends on December 31, 2013 and he will not be renewing his term. It was agreed this would be an agenda item at the next regular meeting.

6. ADJOURNMENT

MOVED by G. Utter, **SECONDED** by W. McIntyre, That the meeting be adjourned at 3:25 pm.

CARRIED



REPORT TO GANGES SEWER LOCAL SERVICE COMMISSION MEETING OF TUESDAY OCTOBER 29, 2013

SUBJECT TECHNICAL REVIEW OF THE GANGES WASTEWATER TREATMENT PLANT PROCESS

ISSUE

The hollow fiber membranes used in the Membrane Bioreactor at this facility are beginning to exhibit signs of delamination and individual strand breakage and need to be assessed in advance of the planned 2014 replacement.

BACKGROUND

The Ganges Wastewater Treatment Plant was retrofitted to Membrane technology in 1997, followed by existing ultraviolet disinfection. The hollow fiber membranes used in the Membrane Bioreactor at this facility are beginning to exhibit signs of delamination and individual strand breakage. These factors usually indicate that the membranes are nearing their expected life cycle. Preventive maintenance inspections have also identified unusual wear within the stainless steel support structure causing abnormal deflections in the cassette assemblies. This is believed to be the cause of solid intrusion in the final effluent. The membranes are scheduled to be replaced in 2014, as identified in the 2013 budget. Further to this planned work, there may be a need to address the failing support structure. A technical review of the present process and infrastructure would be instrumental in the determining actual cost and planned replacement time frame.

The membranes are planned to be replaced next year at an estimated cost \$500,000. Given the cost of the membranes, it is prudent at this time to review the existing technology and infrastructure with the goal of optimizing the treatment process. The Capital Regional District (CRD) contacted GE Water and Process Technologies, the supplier of the membranes, and requested a review of the Ganges plant by the technical expert. Staff received a quotation of \$8,000 for the review, which will include a site review, analysis and report. It is proposed to utilize funds from the Ganges Sewer Capital Reserve fund, which has a balance of \$11,635.47 as of July 17, 2013.

ALTERNATIVES

1. That the Ganges Sewer Local Service Commission approve the utilization of \$8,000 in funds from the Capital Reserve account to retain GE Water and Process Technologies to conduct a review of the Ganges Treatment Plant process.

2. That the Ganges Sewer Local Service Commission not approve the utilization of the funds from the Capital Reserve account in the amount of \$8,000 to retain GE Water and Process Technologies to conduct a review of the Ganges Treatment Plant process.

IMPLICATIONS

Alternative 1

The operating reserve fund has funds available to undertake this work and the operation of the plant will not impacted as a result. The potential benefits of a review by GE at this time may identify improvements to the process that result in improved efficiency, lower operating costs and eliminating catastrophic failure of the system. The choice of membranes may also be impacted.

Alternative 2

The potential benefits of the opportunity to review and optimize the treatment process, prior to expending significant funds to replace the membranes, will not be realized.

CONCLUSION

A timely technical review of the process for the Ganges Treatment Plant may identify improvements to the process or choice of membranes that result in lower capital cost replacements, improved efficiency and lower operating costs.

RECOMMENDATION

That the Ganges Sewer Local Service Commission approve the utilization of \$8,000 in funds from the Capital Reserve account to retain GE Water and Process Technologies to conduct a review of the Ganges Treatment Plant process.

Craig-Gottfred, P.Engl.

Manager, Regional Wastewater Integrated Water Services

Ted Robbins, B , C. Tech.

General Mana er

Integrated Water Services

Concurrence

CG:ls