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SALT SPRING ISLAND LIQUID WASTE DISPOSAL LOCAL SERVICES COMMISSION
Notice of **Special** Meeting on **Thursday, December 1, 2022** at **10:00 AM**
Creekside Meeting Room (CRD Office) #108-121 McPhillips Avenue, Salt Spring Island, BC

Gary Holman Mary Richardson Sandra Ungerson Peter Meyer Jodie Miller

Zoom:
https://us06web.zoom.us/j/85020800298?pwd=a2xVTFN3cEg2T3dRa3FiTDNlZjhFZz09

AGENDA

1. **Territorial Acknowledgement / Call Meeting to Order**

2. **Approval of Agenda** 1

3. **New Business**

   3.1 **Burgoyne Septage Treatment Options Analysis – Project Charter** 2-7

   That the Salt Spring Island Liquid Waste Disposal Local Services Commission approve the Burgoyne Septage Treatment Options Analysis – Project Charter as presented.

4. **Outstanding Business** – None

5. **Next Meeting** – TBD

6. **Adjournment**

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PROJECT CHARTER

LAST UPDATED: Thursday, November 17, 2022

Project Name:	Burgoyne Septage Treatment Options Analysis
Project Service Area:	Salt Spring Island Septage & Composting – 3.705
Department Name / Division Name:	Executive Services / Salt Spring Island Electoral Area
Budget / Account Code:	CE.803.8301
SharePoint File No.:	
Prepared By / Date:	Doug Weihing, Engineering Technician, SSI

1. PROJECT BACKGROUND

1. The Burgoyne Septage Treatment Facility (the Site) is located at 133 Burgoyne Bay Road, approximately 900 m southwest of the intersection of Burgoyne Bay Road and Fulford-Ganges Road on Salt Spring Island.

2. In 1988, Gulf Islands Septic Ltd. received a permit from the BC Ministry of Environment & Climate Change Strategy (ENV) for the construction of two lagoons for the purpose of septage disposal.

3. From 1988 till 1998, septage and sludge from Salt Spring Island was deposited into two lagoons at the site which are commonly referred to as the "Old Lagoons".

4. In 1993, the CRD took on the administration and operation of the septage facility.

5. Three new lagoons were constructed in the centre of the site in 1994. Due to environmental concerns, the new lagoons were abandoned shortly after the start of their operations and these lagoons were decommissioned in late 1995. "One of the new lagoons reportedly operated for approximately one year (November 1994 to November 1995), the second lagoon was used for approximately two months and the third lagoon was never used".

6. From 1997 to 2012, the site was used as a dewatering facility. During this time, filtrate liquids were disposed in a weeping field located at the site, and dewatered solids were trucked to the Hartland Landfill on the Saanich Peninsula.

7. Groundwater monitoring and sampling was conducted in 2006.

8. In 2009, due to the potential for contamination that could have resulted from site operations, the site was listed on the BC Environment Contaminated Site Registry.

9. In May 2010 Dayton Knight Ltd. Consulting Engineers presented a 'Pre Design Report' and comprehensive drawings for the design of a new Septage Processing Facility. The new plant was to include:

- a new septage receiving station
- new dewatering equipment
- new operator facilities
- upgraded filtrate aeration and treatment system.

A pre-tender construction estimate to complete the work was $3.5 million, not including the composting facility.

10. Given the unexpectedly high cost to upgrade the facility, the CRD carried out a business case analysis to identify and evaluate alternative means of long-term septage collection, treatment and disposal for Salt Spring Island.

11. In January 2012 Stantec provided the "Salt Spring Island Septage Disposal Business Case Analysis Report" which offered six options for handling the septage and sludge generated on Salt Spring Island.

- Option A: Upgrade Burgoyne Facility
    - New card reader receiving station (truck off-load).
    - New sludge storage and balancing tanks.
    - Refurbishment and expansion of existing Fournier rotary press.
    - New Membrane Bioreactor (MBR) filtration equipment.
    - Upgraded haul road, disposal field and operator facilities.

- Option B: Develop the Burgoyne Site in stages.
- Option C: Option A plus a sludge composting facility on site.
- Option D: Smaller version of option A without the capacity to treat sludge from Ganges and Maliview wastewater treatment plants.
- Option E: The entire service is privatized and the Burgoyne facility is closed.
- Option F: The Burgoyne facility is converted to a receiving station on a permanent basis and no treatment equipment is installed.

Option A was recommended.

12. In 2014, the design and construction of the receiving station and storage tanks project was initiated and completed in 2018. Since 2012, the site has been solely used as a transfer facility. Septage from Salt Spring Island is deposited into holding tanks on the site and, two to three times a week, the septage is trucked for disposal to SPL Wastewater Recovery Center (SPL) in Victoria.

13. In March of 2014 a regulatory closure plan for the lagoons was prepared and submitted to the Ministry of Environment. The closure plan was not approved.

14. In 2020/2021, Phase 1 and 2 Preliminary Site Investigations were completed to understand potential contamination risks to determine whether any site remediation efforts may be required and to use the report to close the historical permits and address the outstanding requirement for site investigation listed on the BC Site Registry.

2. PROJECT OBJECTIVES

To investigate technology options for septage treatment that are innovative, reduce capital costs, reduce operating and maintenance costs, minimize environmental impact and reduce the total volume of solids which must be shipped off island. Complete an Options Analysis which will compare all viable options and make a recommendation of preferred options for the facility.

3. SCOPE OF WORK

Scope of Work
• Review all relevant background information, all current and relevant provincial and federal regulations specifications, guidelines and best practices for all aspects of wastewater treatment and disposal. • Compilation and assessment of current, historic and future discharge volumes and determine the makeup of all effluent discharged, and to be discharged, at the site. • Geotechnical exploration and assessment as well as site surveys where required. • Assess and determine required treatment parameters based on characteristics and properties of all effluent disposed on site.

Scope of Work

• Investigate treatment and disposal options including but not limited to:
  ○ Treatment ponds
  ○ Sludge separation
  ○ Disposal of liquid to ground
  ○ Other current treatment methods such as MBR, MBBR, Geotube^{R} and World Clean Crystals.
  ○ Sludge disposal (consider a broad range of technologies and processes such as, but not limited to, reed beds, incineration technology, fertilizer, etc.).
 	
• Determine three or four preferred options and present them in a report containing:
  ○ Pros and cons for each option.
  ○ Class C capital cost estimate for each option.
  ○ Annual operational cost estimate for each option.
  ○ Life cycle costs (net present value) for each option.

Out of Scope
• Investigation of site remediation

4. PROJECT DELIVERABLES

No.	List of Project Deliverables	Acceptance Criteria *(Specific standards, written criteria, etc.)*
1.	Technical Report which includes preferred option selected from three or four alternatives.	Report developed by a qualified consultant signed and stamped by a B.C. P. Eng.
2.	Class C capital cost estimate for each option.	Estimate developed by a qualified consultant.
3.	Operational and life cycle costs for each option.	Report developed by a qualified consultant.
4.	Geotechnical Report (as required)	Signed and stamped by a B.C. P. Eng.
5.	Site Survey Report (as required)	Signed and stamped by a BCLS.

5. TIMELINES

Milestones, etc.	Target Timeline	Revised Timeline
Request For Proposal	November 2022	
Proposals Closing Date	December 2022	
Contract Award	January 2023	
Consultation Process	February and March 2023	
Receive Technical Memo from Consultant	May 2023	
Consultant Presents Technical Memo	June 2023	
CRD Decides on Course of further Action	July 2023	

6. BUDGET

Project approval and budget CE.803.8300.

Cost Explanation	Amount ($)	Actual ($)	Funding Source
Project Management	$7,000		Capital Reserve Fund
Professional Services	$63,000		Capital Reserve Fund
Total	**$70,000**		

7. PROJECT TEAM

The following is a description of the roles and responsibilities for the project team.

Role	Team Member	Responsibilities
Senior Manager/Project Sponsor (CRD)	Karla Campbell	• Identifies alignment issues and manage resolution of conflicts (with the team and consultants/contractors, etc.). • Spokesperson.
Project Manager (CRD)	Dean Olafson	• Overall responsibility for project performance with respect to scope, schedule, budget, risk and mitigation strategy.
Project Manager (Consultant)	TBD	• Overall responsibility for project performance with respect to scope, schedule, budget, risk and mitigation strategy.
Project Engineer (CRD)	Doug Weihing	• Manage all design services and compliance with contracts, progress reports, budgets, schedule, change orders, payments, etc.
Project Administrator (CRD)	SSI Administration Staff	• Administrative support to the project team

8. KEY STAKEHOLDERS

The following stakeholders' (internal and external) interests must be considered throughout the project:

Stakeholder	How Stakeholder is Affected by/Interested in Project	Role or Involvement in Decision Making (see legend below)
CRD Board	Needs to be kept informed of the project and political issues. Commitment and support for project is necessary.	A
SSI Electoral Area Director	Needs to be kept informed of the project and political issues. Commitment and support for project is necessary.	I
SSI Salt Spring Island Septage & Composting Commission	Needs to be kept informed of the project. Commitment and support for project is necessary.	I, C

Stakeholder	How Stakeholder is Affected by/Interested in Project	Role or Involvement in Decision Making (see legend below)
CRD Archaeological, Heritage and First Nations	Project Manager will liaise on an as needed basis on an ongoing basis throughout the project.	C
SSI Operations Maintenance Staff	Kept informed of the project and provide input during investigation and design, work integration, etc.	I, C
SSI Administrative Staff	Kept informed of the project. Assist with procurement documents and payments. Receive public comments and respond to public inquiries.	I, C
Ministry of Environment	Will need to be informed and consulted regarding treatment disposal options.	I, C
Private Property Owners	To be kept informed and consulted.	I, C
Special Interest Groups	Ensure stakeholder requirements are represented on the project. Group's level of concern can have a high impact on outcomes.	I

Legend
NI = no involvement
I = information only
C = consulted
PD = planning and decision making
A = approval rights to say "Yes" or "No" to a decision

9. RISK IDENTIFICATION

No.	Risks Identification *(Related to scope, schedule, budget, stakeholders, etc.)*	Likelihood to Occur (low, medium, high)	Impact if Occurs (low, medium, high	High Level Risk Response Strategy *(if applicable)*
1	Adequate staffing is unavailable to manage and implement the project.	Low	High	Ensure staffing requirements are met through either employees, contract employees or consultants.
2	Delays in signing off the project.	Medium	Medium	Inform CRD finance if project budgets need to be pushed ahead into following years.
3	Project costs are greater than budgeted.	Medium	High	If costs appear likely to exceed budgeted costs a staff report will be completed and presented to the SSI Septage & Composting Commission.
4	Project costs are greater than budgeted and no further funding allocated.	Medium	Medium	Project may be delayed or cancelled

No.	Risks Identification *(Related to scope, schedule, budget, stakeholders, etc.)*	Likelihood to Occur (low, medium, high)	Impact if Occurs (low, medium, high	High Level Risk Response Strategy *(if applicable)*
5	Political Opposition	Low	High	Project charter sign off should mitigate this.
6	Public Opposition	Low	High	Ensure effective community communication strategy throughout the process to mitigate impact.
8	Complications with Regulatory and Government bodies such as ME, FLNRO approvals process.	Low	Medium	Allow for adequate review time and time and budget for potential design changes.
9	Change in scope as result of First Nations Consultation, Heritage and Archaeology assessments.	Medium	High	Consult and assess early in conceptual/preliminary design stage.
10	Material and labor cost increases may affect estimate.	Medium	Medium	Build in contingency amounts

10. SIGN-OFF *(Signoff provides authorization for the project to proceed.)*

Position/Title	Print Name	Signature	Date
Project Sponsor	Karla Campbell		
Project Manager	Dean Olafson		
Project Engineer	Doug Weihing		