

**REPORT TO SALT SPRING ISLAND LIQUID WASTE DISPOSAL LOCAL SERVICE COMMITTEE  
MEETING OF TUESDAY, 30 MAY 2007**

---

**SUBJECT      STATUS OF PROPOSED 2007 BURGoyNE BAY SEPTAGE FACILITY  
IMPROVEMENTS AND PRESENTATION OF FUNDING STRATEGY**

**PURPOSE**

To provide the Salt Spring Island Liquid Waste Disposal Local Service committee (the committee) with an update of the status of the proposed 2007 works and seek their approval for the proposed funding strategy.

**BACKGROUND**

A report was presented to the committee in March 2007 which identified operational issues and deficiencies facing the septage/sludge processing operation at Burgoyne Bay and outlined a longer term plan to upgrade the facility and develop a biosolids composting component on the site. In order to partially fund the proposed works, a parcel tax increase was approved for 2007. In the report, tasks and budget costs were identified for 2007, anticipating committee support, and at the meeting the committee directed staff to proceed with the safety related tasks immediately. Since the meeting, staff have begun completing site electrical work and have been working with the composting consultant to further develop the concept for the proposed compost facility.

Since March, additional equipment failures at the plant have required the expenditure of funds for repairs to keep the operation functional, which has forced staff to modify the initial funding concept for the 2007 works. Accordingly, a revised proposed scope of work and funding strategy has been developed for 2007, with the three main objectives: complete the electrical and operational improvements necessary to resolve the immediate safety concerns and keep the facility functional; establish a compost facility by year-end to reduce or eliminate disposal costs that will rise in 2008 and initiate work on permanent site facilities. The proposed works are as follows:

**Electrical Work**

The electrical improvements completed to date are: deadman switch installation on cake conveyor, electrical bonding of all structures, main site electrical feed switch maintenance and overhead line brush clearing. The costs for this work are estimated at \$10,500. The outstanding work is the installation of a new pump station control kiosk. An electrical contractor has provided an estimate of \$24,500 to supply and install the kiosk. Total cost of electrical work is \$35,000

**Septage Processing Equipment**

In recent weeks there have been several equipment failures that have required considerable staff time to repair. The conveyor belt that transfers dewatered cake from the press to the bins, the bar screen at the receiving station and the flow meter that records the discharge volume from haulers have all required attention. In order to reduce the risk of not being able to accept or process septage, staff are proposing to replace the conveyor, reconstruct the bar screen and chamber at the receiving station and resolve the issues with the flow meter. The total cost of equipment replacement is \$25,000

**Salt Spring Island Liquid Waste Disposal Local Service Committee – 30 May 2007**  
**Re: Burgoyne Septage Facility Improvements – Status and Funding Strategy**  
**Page 2**

Composting Facility

After reassessing the available finances and considering the recent unplanned expenditures, it is not possible to undertake design and construction of the large scale, permanent composting facility this year. It is proposed instead to begin composting on some level to avoid or reduce the solids disposal costs as soon as possible. Staff have reviewed several options for a facility with the consultant while ensuring that the proposed facility satisfies the Capital Regional District (CRD) composting facilities bylaw and the provincial *Organic Matter Recycling Regulation*. It is proposed that a *pilot* composting facility be constructed this year, as the funding requirements for the facility are much less than the large scale facility. The concept for the pilot facility has been approved in principle by CRD Solid Waste division staff and would be permitted to operate for a period of one year with a *Provisional Recycler Licence* under the CRD Bylaw. Final approval from the Ministry of Environment and Islands Trust (development variance permit revision for siting and area) would still be required. The concept for the pilot facility is generally:

- Aerated windrows with tyvek covers on poly ground cover, graded to a leachate collection barrel.
- The windrows would be situated on the existing gravel area above the septage facility.
- The blowers, temperature control and data logging would be with a leased mobile control unit.
- Mixing of dewatered sludge and wood chip bulking agent would be by a trailer mounted, PTO driven, mechanical mixer that would be located in the existing bin enclosure (the mixer would replace one of the existing bins; one bin would remain for redundancy).
- Curing and amendment storage would be in tarped piles on poly ground covers; the leachate collection system would extend to these piles.

Staff have retained Transform Compost Systems to prepare a pre-design report for the pilot facility and the permanent facility. Equipment necessary for the pilot facility may be purchased or leased/leased to own. Any major equipment that would be purchased for the pilot facility would be incorporated into the final facility. CRD Solid Waste division has agreed to fund the pre-design report which will be approximately \$6,000. A maximum allowance of \$100,000 is proposed to fund the above capital works and initial operation of the compost facility.

Water Well

Drilling and developing the water well on site is still a high priority for 2007, to provide water to the site for equipment wash down, process water and washroom facilities for the operator. Estimates have been provided to drill, develop and pump test the well. Additional works to put the well into service would include construction of an access road to the well, power and piping installation to the well and completion of the well head. The total cost of well and water system is \$50,000.

Compost Marketing Study and Wood Waste Collection/Processing Study

CRD Solid Waste division staff have initiated a marketing study for the use and demand for the final compost product. A study has also been initiated for the development of a wood waste collection program and transfer/processing station, with the intent of using the material in the composting process. The Solid Waste division is funding this work.

**FUNDING STRATEGY**

In summary, the proposed 2007 works and costs are:

1. Electrical Improvements	\$35,000
2. Septage Processing Equipment	\$25,000
3. Pilot Composting Facility Pre-Design and Construction	\$100,000
4. Water Well and Distribution System	\$50,000
5. Compost Marketing Study and Wood Waste Collection/Processing Study	N/C

**Salt Spring Island Liquid Waste Disposal Local Service Committee – 30 May 2007**  
**Re: Burgoyne Septage Facility Improvements – Status and Funding Strategy**  
**Page 3**

It is proposed to fund the above noted works, through a five year term borrowing of up to \$210,000. The debt charges would be recovered from approximately \$38,000 in parcel tax and \$13,000 in contingency in 2007. Debt servicing costs would decrease in subsequent years as the principle is paid. Once the reduction in disposal costs is realized in 2008, the funds that are currently budgeted for hauling and disposal can be used to fund a second borrowing to finance the permanent facilities. And, as noted in the previous report, additional funds from the core budget will also become increasingly available in 2008 and 2009 as the existing debt nears retirement.

**ALTERNATIVES**

The electrical improvements and facility equipment improvements can no longer be delayed, as the existing conditions present a safety hazard and failure could result in temporary closure of facility. The installation of the well and water system at the site to address health and operational issues can no longer be delayed. The pilot composting facility project could be delayed, but additional operating funds would be required in 2008 to fund increased disposal costs. The ultimate goal of funding the construction of a permanent composting facility and operations building can not be realized until the current disposal costs are eliminated.

**FINANCIAL IMPLICATIONS**

It is proposed that, with the approval of the committee, up to \$210,000 in funds could be borrowed for a five-year term to finance works in 2007. The debt charges would be recovered from parcel tax and reserve funds.

**SUMMARY/CONCLUSIONS**

A modified project list and funding strategy has been identified and is proposed for implementation in 2007. Completion of the projects would resolve the current health and safety concerns at the plant, improve some of the equipment deficiencies and establish a pilot biosolids composting facility at the site. It is proposed to finance the \$210,000 project through a five-year borrowing, funded from operating and reserves.

**RECOMMENDATION**

That the Salt Spring Island Liquid Waste Disposal Local Service committee:

1. approve a project to expend \$210,000 from operating and contingency funds as provided for in the 2007 operating budget to fund the site electrical improvements, septage processing equipment improvements, pilot composting facility design, construction and operation and water well installation and distribution system construction; and
2. fund the project by way of a five-year borrowing agreement.

  
\_\_\_\_\_  
Ted Robbins, CTech, BSc  
Engineering Technician 5

TR:ls