

# REPORT TO SALT SPRING ISLAND LIQUID WASTE DISPOSAL LOCAL SERVICE COMMISSION MEETING OF TUESDAY 29 NOVEMBER 2011

## <u>SUBJECT</u> CAPITAL UPGRADE PROJECT - SALT SPRING ISLAND SEPTAGE DISPOSAL

## <u>ISSUE</u>

An approved capital budget of \$2.1 million is insufficient to complete the necessary facility upgrades to provide an effective and reliable long-term septage disposal facility to residents on Salt Spring Island.

## BACKGROUND

In November 2008, the Capital Regional District (CRD) received approval of the electors of Salt Spring Island to borrow up to \$2.1 million to conduct capital improvements to the existing septage facility and to create a solids composting facility. In 2009, Opus DaytonKnight Consultants Ltd. (Opus) was engaged by the CRD to prepare the design for the improvements. Based on the final design, the Opus pre-tender cost estimate was \$3.35 million, excluding the composting facility work which would require additional funding to complete.

In 2011, the CRD engaged Stantec Consulting Ltd. (Stantec) to conduct a business case analysis whereby they identified options for service delivery and completed an analysis. In summary, Stantec recommended that the CRD should continue to provide the septage service and complete the proposed work as designed by Opus since it was the lowest life-cycle cost, but additional funding would be required. Further, Stantec recommended not to carry out solids composting because of the high capital and operating costs, high risk of odours and risk of limited end-user market (refer to the Stantec Consulting Ltd. report entitled Salt Spring Island Septage Disposal Business Analysis, dated July 7, 2011).

The CRD staff have contemplated the proposed service delivery options and have developed and refined the service options and considered the following alternatives.

## **ALTERNATIVES**

#### Alternative 1

That the Salt Spring Island Liquid Waste Septage Disposal Local Service Commission direct CRD staff to:

- 1. Initially convert the existing facility to a septage transfer station for off island disposal and take the existing septage treatment system off line;
- Construct and commission the proposed transfer station work only, as designed by Opus including the receiving station, grit removal, storage tanks, pumpout points and access road improvements;
- 3. Enter into a two year service agreement for the provision of transporting, treatment and disposal of septage off Salt Spring Island to a regional treatment facility; and
- **4.** Make a recommendation in year two to either continue to operate the service as a transfer station only, or seek public approval to raise additional funds to complete the full facility upgrade as proposed by Opus, without the composting work.

Salt Spring Island Liquid Waste Disposal Local Service Commission - 29 November 2011 Re: Capital Upgrade Project - Salt Spring Island Septage Disposal Page 2

## Alternative 2

That the Salt Spring Island Liquid Waste Septage Disposal Local Service Commission direct CRD staff to continue to operate the facility without completing the proposed capital improvements and replace or repair the equipment on an as required basis.

### **IMPLICATIONS**

## Alternative 1.

Alternative 1 would result in the CRD continuing to provide the service and upgrade the facility in a phased approach. Initially, the facility would be operated as a receiving and transfer station with the construction of the receiving station works as designed by Opus and taking the treatment system off line. The cost of construction of the receiving station works only, is approximately \$800,000, which is available in the existing capital budget without further borrowing. The select elements of the Opus design would be issued to public tender in the first quarter of 2012, with procurement and approvals being achieved by July of 2012 and construction completed in the fall of 2012.

During the first year the viability of operating the transfer station would be evaluated and the commission could make a decision to either:

- 1. Continue to operate the service as a transfer station only; or
- 2. Seek public approval to raise additional funds to complete the full facility upgrade as proposed by Opus, without the composting work.

### Alternative 2.

Without significant improvements to the facility equipment there would be greater risk of failures and unplanned expenditures for emergency repairs and replacements, as well as the consequence of regulatory noncompliance.

## CONCLUSION

The existing septage facility is in need of improvements and the pre-tender cost estimate for the proposed work as designed by Opus exceeds the capital budget. In order to implement the full design, additional funding is needed. Alternatively, a revised operating plan for the service could be implemented on a trial basis.

### **RECOMMENDATION**

That the Salt Spring Island Liquid Waste Disposal Local Service Commission direct CRD staff to:

- 1. Initially convert the existing facility to a septage transfer station for off island disposal and take the existing septage treatment system off line;
- Construct and commission the proposed transfer station work only, as designed by Opus including the receiving station, grit removal, storage tanks, pumpout points and access road improvements;
- 3. Enter into a two year service agreement for the provision of transporting, treatment and disposal of septage off Salt Spring Island to a regional treatment facility; and
- **4.** Make a recommendation in year two to either continue to operate the service as a transfer station only, or seek public approval to raise additional funds to complete the full facility upgrade as proposed by Opus, without the composting work.

Salt Spring Island Liquid Waste Disposal Local Service Commission - 29 November 2011 Re: Capital Upgrade Project - Salt Spring Island Septage Disposal Page 3

Ted Robbins, BSc, CTech

Senior Manager, Water Management

J.A. (Jack) Hull, MBA, P.Eng. General Manager, Integrated Water Services

Concurrence

TR/SM:Is