

**DATE:** April 4, 2018

**FILE:** 5340-05

**TO:** Chair and Members  
Comox Valley Sewage Commission

**FROM:** Russell Dyson  
Chief Administrative Officer

Supported by Russell Dyson  
Chief Administrative Officer

*R. Dyson*

**RE: Biosolids Composting Facility Expansion - Project Update**

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### **Purpose**

To provide an update on the biosolids composting facility expansion.

### **Recommendation from the Chief Administrative Officer:**

For information purposes only.

### **Executive Summary**

The Comox Valley Regional District (CVRD) removes biosolids as part of its wastewater treatment process at the Comox Valley Water Pollution Control Centre (CVWPCC). The CVRD has been composting biosolids from the City of Courtenay, the Town of Comox, K'ómoks First Nations and CFB Comox using aerated bunker technology since 2003. The compost facility is located adjacent to the Comox Valley Waste Management Centre (CVWMC) located at 3699 Bevan Road in the Village of Cumberland.

In June 2016, the Comox Valley Sewage Commission approved the award of engineering and design services to Associated Engineering for the biosolids composting facility expansion. The expansion is required to accommodate present biosolids production and future growth within the Comox Valley Sewerage Service.

Delays to the completion of the engineering and design have been primarily driven by revisions to the project scope to remain within the project budget. The project will increase the capacity of the facility by 35 per cent and will be able to accommodate growth within the region until approximately the year 2033 (15 years). A general site layout detailing the upgrades is attached as Appendix A. The upgrades include:

- Retrofits to the existing biosolids receiving and mixing system transfer conveyors to increase the capacity. The current system is not capable of meeting new daily capacity requirements;
- Incorporation of the new mixer, which was approved for purchase in January, and ancillary structures;
- Addition of a new stationary primary screening system to reduce the volume of material that is handled in the subsequent processing steps;
- Development of a new curing building, including a new turner, to ensure compost meets regulatory criteria for sale as finished compost;
- Replacement of the existing surface water pond with an expanded leachate pond to collect and reuse leachate as necessary;
- Adding a product storage building for final product storage to ensure material stays dry and attractive for sale to the public;

- Incorporation of heat exchangers to reduce composting time in the winter, increasing plant capacity.

The 50 per cent design is now completed and a cost estimate has been completed. The total capital cost is estimated at \$5.7 million and detailed in Table No.1 below. The 2018-2022 financial plan includes \$6.48 million for this project, over the years 2018 and 2019.

**Table No.1: Updated Capital Cost Estimate.**

Item	Cost
Direct Costs	\$3,990,000
Other Costs	\$1,197,000
Indirect Costs	\$479,000
<b>Total Capital Cost</b>	<b>\$5,666,000</b>

The facility expansion provides the following benefits:

- Increased capacity to accommodate growth within the region;
- Design accommodates further capacity increases with minor upgrades in the future, estimated to increase the capacity by another 40 per cent and meet CVRD requirements to 2055;
- Increased efficiency and safety for the compost facility operators, allowing them to operate the facility at higher capacity with the same staffing levels at a higher level of safety;
- Greater confidence in meeting Class A compost requirements through a more controlled curing process.

Construction for the project is estimated to take 7.5 months. The updated project schedule is provided below:

- June 2018: Detailed design complete and construction contract awarded;
- Summer 2018: Construction begins;
- Winter 2019: Project completion.

Prepared by:

Concurrence:

Concurrence:

***K. La Rose***

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**Stakeholder Distribution (Upon Agenda Publication)**

None	✓
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Attachments: Appendix A – “General Layout Drawing”

