

DATE: November 22, 2018

FILE: 5340-05

TO: Chair and Directors
Comox Valley Regional District
(Comox Strathcona Waste Management) Board

Supported Russell Dyson
Chief Administrative Officer

FROM: Russell Dyson
Chief Administrative Officer

R. Dyson

RE: Bio-solid leachate treatment and revenue

Purpose

The purpose of this report is to provide the Comox Strathcona Waste Management Board (Board) information related to an operational arrangement between the Comox Valley Regional District (CVRD) sewage service and the Comox Strathcona Waste Management (CSWM) service that will result in efficient delivery of service through synergies and revenues to the CSWM service.

Recommendation from the Chief Administrative Officer:

This report is for information purposes only.

Executive Summary

The capacity at the leachate treatment plant (LTP) at the Comox Valley Waste Management Centre (CVWMC) will not be fully utilized until after 2023. Within the design of the LTP, additional impacts from the biosolids facility were considered to deliver the most cost effective and efficient service to tax payers.

The CVRD biosolids composting facility is currently undergoing an expansion and the proximity to the CVWMC leachate treatment plant provides an opportunity to minimize operational costs.

- Anticipated landfill leachate generated will be 180 m³/per day for the next five years;
- Generation will increase to the full LTP capacity of 250 m³/day in 2023 from October to April;
- There are provisions to ensure management of the leachate, including:
 - Leachate ponds design to meet peak demands;
 - Operational processes to control pumping of leachate from the landfill and biosolids facility;
 - The volume of leachate generated at the biosolids composting facility has been minimized through the design upgrade.

These provisions allow for the ability to manage the leachate from the biosolids composting facility without impacting the leachate treatment needs of the landfill leachate treatment. The nature of a regional district provides these opportunities to find synergies when delivering services, but fair cost recovery is essential.

The following considerations were reviewed to ensure this arrangement could occur:

- CVRD sewage service undertook a study to quantify the volume of leachate from the biosolids composting facility;

- The fee charged to the CVRD service will be reflective of the use of the facility for both capital and operation costs;
- The biosolids composting facility would generate five per cent of the leachate expected;
- Leachate from the biosolids composting facility will be metered;
- Landfill leachate generation is estimated to be 48,667 m³;
- Biosolids leachate is estimated to be 2,490 m³ per year;
- Based on the leachate generation, the CVRD sewer service budgeted \$35,000 per year to contribute based on operational and capital costs of the facility;
- These costs for operations and future renewal will be reviewed to ensure proper allocation of shared costs occur.

The leachate treatment plant has been in operation since early 2018 and there are still cost estimates and operational efficiencies to be undertaken. In fairness to both services there will be an annual review of the costs and the rate for leachate treatment will be allocated based on the use of the facility.

During the design process of the leachate treatment facility, the Ministry of Environment and Climate Change Strategy (MoE) requested all possible sources of leachate generated at the site and the biosolids leachate was provided as one. The MoE states that all leachate collected at the site must be treated and that volumes must be provided as part of the site annual report.

The Board will be updated if significant changes to the arrangement between CVRD sewer service and the CSWM service are required.

Prepared by:

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