

Report to Council



Date: July 30, 2018
File: 1846-65
To: City Manager
From: Kevin Van Vliet, Utility Services Manager
Subject: Budget Amendment – Leachate Management at Biosolids Compost Facility
Report Prepared by: Jose Garcia, Biosolids Supervisor

Recommendation:

THAT Council receives for information, the report from the Utility Services Manager dated July 30, 2018 regarding the Regional Biosolids Compost Facility (RBCF), Biosolids Leachate Containment Project;

AND THAT Council authorize the additional expenditure totaling \$300,000 for the RBCF, Biosolids Leachate Containment Project;

AND FURTHER THAT the 2018 Financial Plan be amended to increase the budget of the RBCF, Biosolids Leachate Containment Project by \$300,000 with \$100,000 being funded from the City of Vernon and \$200,000 being funded from the Wastewater Utility.

Purpose:

To update the Financial Plan and amend the project budget to ensure that the City can remain in compliance with minimum requirements set out in the RBCF's operating permit #108537 under the BC Environmental Management Act.

Background:

The RBCF is jointly operated with the City of Vernon. The operating permit allows for the discharge of pollution to air, but not to the ground or waterways. As such the permit requires the City of Kelowna to upgrade its leachate management system to ensure that no liquid (including stormwater) can be discharged to the environment by October 31, 2018.

The RBCF has two sources of leachate. High strength leachate is generated from the primary and secondary compost piles. This high strength leachate is collected through the aeration system process and sent to the North Okanagan Regional District septage handling facility for treatment. Low strength leachate consists of stormwater run-off that is generated on the rest of the facility, roadways,

compost screening and compost storage. The low strength leachate is directed into a drainage trench into a holding pond, formerly purposed as a high strength septage handling and disposal pond by the previous land owner (pre-dating the RBCF). From the holding pond, a significant portion of the low strength leachate evaporates, with the rest pumped into a City of Vernon effluent pipe that discharges into the McKay Reservoir for final treatment (settling). It should be noted that there is to be no overland discharge into the environment from the low strength holding pond.

The Ministry was concerned that the channel and the pond did not have an engineered impermeable lining to prevent leachate infiltrating to groundwater. The 2018 budget included a \$500,000 estimate to address this issue. A commitment for completed and conceptual design now estimates the cost in the order of \$800,000.

The proposed solution now includes lining the existing trench and pond, and requires sensitivity to construction timing to address Wildlife Permit requirements prior to construction. It is the lowest cost solution and after review of the options, is supported by the Biosolids Advisory Committee of Council. Accounting for construction, environmental and engineering costs, an additional \$300,000 of funding is required to complete the project.

Internal Circulation:

Utility Planning Manager
Budget Supervisor

Legal/Statutory Procedural Requirements:

The Leachate Management Project is required to be completed by October 31, 2018 under the facility's operating permit under the BC Environmental Management Act.

Financial/Budgetary Considerations:

A total of \$500,000 of budget is available in the 2018 RBCF - Biosolids Leachate Containment capital project. To provide the necessary \$800,000 project budget, additional funding of \$300,000 is required with \$200,000 funding provided through the Wastewater utility and \$100,000 from the City of Vernon.

Considerations not applicable to this report:

Legal/Statutory Authority:

Existing Policy:

Personnel Implications:

External Agency/Public Comments:

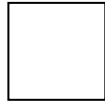
Communications Comments:

Alternate Recommendation:

Submitted by:

K Van Vliet, P. Eng., Utility Services Manager

Approved for inclusion:



J. Creron, Deputy City Manager

cc:

George King, Financial Planning Manager

Genelle Davidson, Divisional Director of Financial Services

Rod MacLean, P. Eng., Utility Planning Manager