

DATE: September 1, 2021

FILE: 5360-30/Organics

TO: Chair and Directors
Comox Strathcona Waste Management Board

Supported by Russell Dyson
Chief Administrative Officer

FROM: Russell Dyson
Chief Administrative Officer

R. Dyson

RE: Regional Organics Compost Project Budget Amendment and Update

Purpose

To obtain approval for a budget amendment to the 2021-2025 financial plan for the Comox Strathcona Waste Management (CSWM) service, functions 391 – 393, for the construction of the Regional Organics Compost Facility and to provide a status update on the Regional Organics Compost Project (Project).

Recommendation from the Chief Administrative Officer:

THAT the 2021-2025 financial plan and capital expenditure program for the Comox Strathcona Waste Management Service, functions 391 to 393, be amended by increasing solid waste infrastructure expenditures in 2022 for the organics facility by \$2,180,000 for a project budget of \$17,300,000, with additional funding from the capital works reserve;

AND THAT the 2021-2025 financial plan and capital expenditure program for the Comox Strathcona Waste Management Service, functions 391 to 393, be amended by shifting \$2,180,000 of funding in 2022 for the Comox Strathcona Waste Management Centre Cell 2 project from capital works reserve to debt.

Executive Summary

The Project, a strategic priority of the CSWM Board, will provide in-region organics waste processing critical to advance the waste diversion goals in the current Solid Waste Management Plan (SWMP).

- Tendering for construction of the compost facility and transfer station closed in mid-August 2021 and the bids received are above the current approved project budget. A budget amendment is required in order to award construction contracts for both the compost facility and the transfer station.
- The responses for the compost facility construction tender were tightly grouped reflecting a competitive procurement process and a well-defined design. While the same procurement process was followed for the transfer station construction tender, the responses varied largely due to the structural requirements of the facility. The costing of the transfer station, a pre-engineered steel structure, was heavily impacted given the volatility of the steel market which has resulted in a price increase of 97 per cent over the past year.

- The key drivers for the cost increases were:
 1. Impacts of the COVID-19 pandemic have seen price increases in construction largely attributed to supply chain and labour inefficiencies, as well as the unique challenges of additional safety guidelines and protocols including potential further government or owner-imposed shutdowns, all of which add costs and additional contingencies to construction projects.
 2. The 2021 – 2025 financial plan was based on pre-engineering estimates. The costs were refined as detailed engineering progressed to incorporate:
 - public consultation feedback;
 - test digs to determine bedrock depth;
 - transfer station operational considerations which resulted in:
 - the addition of a 4th bay
 - compost facility operational considerations which resulted in:
 - improved storm water management with aeration to remove sediments prior to re-infiltration back into the ground
 - increased the size of the storage building to house finished compost
- With the receipt of tenders, project costs are now very well defined with firm pricing and construction schedules in hand.
- Throughout the detailed design the CSWM design engineer has been committed to finding and implementing cost reductions in the design while maintaining strict environmental controls for odour and groundwater protection.
- Given the time and funding invested in the organics project to date and the \$6.45M grant attached to this project, staff recommend moving forward and approving the amendment with additional funding and overall CSWM capital plan funding shift. These change will not impact revenue from municipal requisition.

Staff have been advancing the Project with the goal of a fully commissioned facility by fall 2022. In addition to the recommended budget amendment, this report provides an update on permitting approvals, outcome of the procurement process and outlines construction plans for the new facility. A high level project timeline is outlined below in Table 1:

Table 1

| Timeline | 2021 | | | | 2022 | | | |
|--|--------|--------|--------|------|--------|--------|--------|------|
| | Winter | Spring | Summer | Fall | Winter | Spring | Summer | Fall |
| Compost facility and transfer station design | | | | | | | | |
| Phase 2 public engagement | | | | | | | | |
| Regulatory/DP permit approvals | | | | | | | | |
| ITT for construction | | | | | | | | |
| Construction award | | | | | | | | |
| Construction | | | | | | | | |
| Compost facility commissioning | | | | | | | | |
| Municipal organic collection phased in | | | | | | | | |

| | |
|--|-----------|
| | Completed |
| | Pending |

As previously communicated, the project team is committed to providing the CSWM Board with project updates as major design, procurement and construction milestones are achieved. CSWM staff is in regular communication with municipal staff to coordinate and prepare for the curbside collection of organics well in advance of the upcoming changes.

Prepared by:

C. Makinson

Cole Makinson
Manager of CSWM Capital
Projects

Concurrence:

V. Schau

Vivian Schau
Senior Manager of CSWM
Services

Concurrence:

M. Rutten

Marc Rutten, P.Eng.
General Manager of
Engineering Services

Background/Current Situation

The following section provides an update on project permitting, project design and procurement.

Project Permitting

Task: Regulatory Approval – Solid Waste Management Plan Targeted Amendment

Status: *COMPLETE*

The current 2012 SWMP supported a regional organics management strategy to advance the CSWM's waste diversion goals. However, Ministry of Environment and Climate Change Strategy (MOECCS) advised a targeted amendment was required to clearly outline the intended approach with confirmation of adequate public and stakeholder consultation with respect to siting, and potential environmental, social and financial impacts.

The targeted amendment and supporting documentation was submitted to the MOECCS on March 18, 2021 and approved by the Minister of MOECCS on July 30, 2021.

Task: City of Campbell River Development Permit Approval – Compost Facility

Status: *COMPLETE*

City of Campbell River development permit approval was received on July 22, 2021 for the construction of the compost facility on Block J in Campbell River.

Task: Village of Cumberland Development Permit Approval – Transfer Station

Status: *COMPLETE*

Village of Cumberland development permit approval was received on May 31, 2021 for the construction of the transfer station at Comox Valley Waste Management Center in Cumberland.

Task: Regulatory Approval – Organic Matter Recycling Regulation Operating Permit

Status: *In Progress*

The MOECCS administers and regulates air quality issues, including odour concerns, under the authority of the *Environmental Management Act* [SBC2003]. The Organic Matter Recycling Regulation (OMRR) governs production, quality and land application of certain types of organic matter. An operating permit is required to produce Class A compost for resale for facilities producing >5,000 dry tonnes of finished compost per year. The regional organics compost facility is designed for an annual throughput of 14,500 wet tonnes, resulting in 3,800 dry tonnes of finished compost per year. Although a full operating permit under the OMRR is not required at this time, submission has been made concurrently for 1) a full operating permit; and 2) notification for an operation of <5,000 dry tonne of finished compost per year.

Project Design and Procurement

Task: Detailed Design of the Compost Facility and Transfer Station

Status: COMPLETE

In Fall 2020, staff retained the engineering services of Sperling Hansen Associates (Sperling Hansen) for the detailed design of the compost facility and transfer station. The detailed design was completed and issued for tender in June 2021.

Task: Invitation to Tender for Construction of Facilities

Status: *In Progress*

The design of the regional organics compost facility and transfer station was completed by Sperling Hansen in June 2021. The compost facility and transfer station tenders were issued separately and closed August 10 and 12, respectively.

The impacts of the COVID-19 pandemic has seen large price increases in construction largely attributed to the supply chain and labour inefficiencies, as well as the unique challenges of additional safety guidelines and protocols, and potential further government or owner-imposed shutdowns, all of which add costs and additional contingencies to construction projects. Throughout the design, CSWM staff and our design engineer have been committed to finding cost reductions while maintaining strict environmental controls for odour and groundwater protection.

The bids received were above the approved project budget and as such a budget amendment is required in order to award construction contracts for the compost facility and transfer station.

Financial Factors

In September 2020 an amendment to the 2020 – 2024 financial plan for this project was approved by the CSWM Board resulting in a total project budget of \$15.55M with funding provided by a combination of \$9.1M in capital works reserves and \$6.45M in federal and provincial grants for the 2020-2022 fiscal years. This staff report recommends a further increase to the project budget by \$2,180,000 to fund the higher costs to construct the compost facility and transfer station, based on the recently received tenders, which would bring the 2021/2022 project budget to \$17,300,000.

The recommended funding source for this project budget increase is the capital works reserve, however in conjunction with this budget amendment staff are recommending a shift in the overall funding strategy for the CSWM capital plan to ensure sustainable funding over the approved 2021-2025 financial plan. The \$48.8M five-year capital plan included \$28.9M funding from the capital works reserve, \$13.6M from debt, and \$6.2M grants. This funding mix is for key projects to move forward on the solid waste management plan including the Campbell River landfill closure, Tahsis landfill closure, Zeballos landfill closure, and Gold River landfill closure, the construction of Cell 2 at the Comox Valley landfill, and the construction of the organics compost facility.

Due to cost savings in previous capital projects as well as operating surpluses within this service over the past few years, of the total borrowing for this service from the approved \$45.3M to close the Comox Valley historical landfill, construct the new Comox Valley landfill and leachate treatment facility, and close the Campbell River landfill, only \$34.3M of borrowing was expected to be utilized, providing for a total debt reduction in this service of \$11M.

In the 2021-2025 financial plan, the construction of Cell 2 of the new Comox Valley landfill planned for 2021/2022 is funded by capital works reserve due to these savings, however given the significance of the capital plan over the next 5-10 years and the increase in the organics facility budget, staff are recommending that a funding shift occurs in the 2021-2025 financial plan.

Comox Valley landfill Cell 2 project budget of, \$8.8M would be funded \$2,180,000 by debt, and \$6,620,000 from capital works reserve. This shift will ensure that the capital works reserve balance remains stable throughout the five year plan moving through a significant capital plan, and utilizes borrowing authorized and previously intended for a portion of this project.

This shift in funding still results in a significant reduction in borrowing utilized in this service for enacting core projects of the solid waste management plan of \$36.6M to \$45M approved and authorized, which maintains a borrowing reduction from that originally planned of \$8.9M. The shift in borrowing for this recommended funding strategy is detailed in Table 2.

Table 2

| CSWM Projects Borrowing | Approved | Debt Utilized | Remaining Utilization | Unutilized |
|--|---------------------|----------------------|------------------------------|---------------------|
| CVWMC Closure | \$10,620,000 | \$8,045,000 | \$- | \$2,575,000 |
| CVWMC Expansion | \$21,550,000 | \$14,419,192 | \$- | \$7,130,808 |
| CRWMC Closure | \$13,125,000 | \$234,307 | \$11,632,559 | \$1,258,134 |
| Approved 2021-2025 Financial Plan | \$45,295,000 | \$22,698,499 | \$11,632,559 | \$10,963,942 |
| Amendment Cell 2 CVWMC | | | \$2,180,000 | \$2,180,000 |
| Amended 2021-2025 Financial Plan | \$45,295,000 | \$22,698,499 | \$13,812,559 | \$8,783,942 |

As part of the September 2020 COVID-19 Response and Renewal Action Plan report, the CSWM service reduced the tax requisition for 2021 to 2025 from \$6M to \$5M by reducing the transfers to capital reserves. This strategy is still maintained with this project amendment and related funding shift; utilizing a blend of reserves, debt and grants to fund the significant project budget over the next 5-10 years has provides for a sustainable funding strategy to complete necessary projects.

The projected ending reserve balances in this service over the five year plan including this amendment is summarized in Table 3 below:

Table 3

| | 2021 | 2022 | 2023 | 2024 | 2025 |
|------------------------------------|-------------------|------------------|-------------------|-------------------|-------------------|
| Future Expenditure Reserve | 1,550,467 | 1,650,467 | 1,750,467 | 1,850,467 | 1,950,467 |
| Capital Works Reserve | 9,700,920 | 1,317,673 | 2,977,382 | 3,743,322 | 3,659,267 |
| Engineered Landfill Reserve | 2,404,343 | 2,404,343 | 2,404,343 | 2,404,343 | 2,404,343 |
| Landfill Closure Reserve | 3,033,570 | 3,219,580 | 3,305,590 | 2,680,590 | 2,809,590 |
| | 16,689,300 | 8,592,063 | 10,437,782 | 10,678,722 | 10,823,667 |

The approved and recommended amendment to the organics facility budget in the 2021 – 2025 Financial Plan is shown in Table 4 below:

Table 4 2021 - 2025 CSWM Financial Plan - Regional Organics Composting Project

| 2021 – 2025 CSWM Financial Plan | 2021 | 2022 | Total |
|--|--------------|-------------|--------------|
| Approved | \$13,000,000 | \$2,120,000 | \$15,120,000 |
| Recommended amendment | \$13,000,000 | \$4,300,000 | \$17,300,000 |

Given the time and funding invested in the organics project to date and the \$6.45M grant attached to this project, staff recommend moving forward on the project and approving the amendment with additional funding and overall CSWM capital plan funding shift. Additionally, the organics facility is a key component in meeting landfill diversion goals by reducing the amount of waste and leachate to manage in the landfill system as well as reducing greenhouse gas emissions. Diverting organics from

the landfill will save costs by delaying the future needs for expansion of additional cells at the Comox Valley landfill, and is a key component of solid waste management in the CVRD and Strathcona Regional District regions.

Options

The board has the following options:

1. Amend the current financial plan for construction of the regional organic compost facility and transfer station.
2. Not amend the financial plan and provide alternative board direction.

Option 1 is recommended to progress the construction of the regional organic compost facility and transfer station and increase organic diversion at the landfill.

While the CVRD reserves the right to reject any or all tenders, if the board chooses not to approve Option 1, the board will need to provide staff with further direction as this will require scope refinement, redesigning, and retendering, resulting in delays which pose a significant risk to the CSWM regional organics diversion strategy with direct impact to the member municipalities, as well as potential loss of grant funding.

Legal Factors

In order to meet this deadline, Notice of Award will need to be issued no later than September 10, 2021 with substantial completion slated for September 2022.