

REPORT TO CAPITAL REGIONAL DISTRICT BOARD MEETING OF WEDNESDAY, MAY 08, 2024

SUBJECT **Biosolids Monthly Update – May**

ISSUE SUMMARY

To provide a monthly update to the Board on the status of the short-term options for biosolids management, as well as progress on the advanced thermal pilot project. The Long-term Biosolids Beneficial Use Strategy will be reported under separate cover.

BACKGROUND

The Capital Regional District (CRD) has been responsible for the beneficial use of Class A biosolids produced at the Residuals Treatment Facility since the commissioning of the core area wastewater treatment project in 2020. Currently, the CRD is operating under the Short-term Biosolids Management Plan (2020-2025), with the primary beneficial use options being incineration as an alternative fuel in a cement manufacturing plant in Richmond, BC, and integration with landfill cover systems as contingencies. When neither of these options are available, landfilling biosolids at Hartland Landfill has been the only alternative. In 2011, the CRD Board passed a resolution to ban the land application of biosolids from CRD facilities; however, in 2023, given the operational and logistical challenges with the short-term plan, the CRD Board amended its position to allow limited non-agricultural land application of biosolids as a contingency option. The CRD has secured the use of biosolids for industrial land reclamation at a quarry near Cassidy, BC. Staff continue to seek additional short-term beneficial use contingency options, in order to limit or avoid landfilling of biosolids when the other options are not available.

The CRD is also required to develop a Long-term Biosolids Beneficial Use Strategy by June 2024. Plan development has included input from the Technical and Community Advisory Committee, First Nations engagement and public consultation.

Short-term Biosolids Management Plan Implementation

Land Reclamation in Cassidy, BC: The quarry received the majority of biosolids produced in April. Biosolids are blended with sand and are being stored by the landowner under cover, pending regulatory approval for mixing and placement of biosolids growing medium (BGM), in accordance with the *Organic Matter Recycling Regulation* and approvals under the *Mines Act*. The quarry has capacity to accept 2,000 cubic metres in 2024 and received approximately 500 cubic metres through April.

Cement Kiln in Richmond, BC: The cement facility received one load (25 tonnes) of biosolids in early April, but an equipment malfunction occurred shortly after offloading that has prevented additional deliveries. The equipment is expected to be repaired in late May.

Landfilling at Hartland Landfill: In April, no biosolids were landfilled. Landfilling is not a beneficial use, as per provincial and federal expectations, and consumes valuable airspace at the landfill.

Second Quarry Site in the Regional District of Nanaimo: As reported last month, the CRD has been approached by a site operator of a second gravel quarry within the Regional District of

Nanaimo to receive CRD Class A biosolids for site reclamation. This option is on hold pending further consultation with First Nations and the Regional District of Nanaimo.

Composting Facilities in Parksville/Port Alberni/Chemainus: An operator of various composting facilities on southern Vancouver Island has expressed interest in receiving CRD biosolids and either mixing into BGM or co-composting with other organic feedstocks. Finished BGM or compost is sold wholesale throughout southern Vancouver Island. With Board approval, this is a viable short-term option for the program.

Provincial (Organic Matter Recycling Regulation) Technical Working Group (TWG) Review: In 2023, the provincial Ministry of Environment and Climate Change Strategy conducted a review of the Organic Matter Recycling Regulation, including an evaluation of emerging contaminants of concern in the context of land application. The TWG completed its work in late 2023; the final report is expected to be released in May. The Ministry has not altered its regulatory direction at this time. As per Board Direction in March, staff brought forward options to undertake an independent literature review at the April 17, 2024 Environmental Services Committee meeting, and Committee recommendations on completing independent literature and legal reviews are being presented to the Board under separate cover.

Letter to Minister Requesting Meeting: On March 19, the CRD Board Chair, as directed by the Board, sent a letter to the Minister of the Environment & Climate Change Strategy, requesting a meeting to discuss the extension of the submission deadline for the Long-Term Biosolids Beneficial Use Strategy. The CRD Board Chair was scheduled to meet with the Minister on May 6, 2024.

Advanced Thermal Pilot Project Status

The CRD hired GHD as the technical advisor to support staff to develop terms and technical requirements for a Request For Proposals (RFP) for a demonstration plant. The advisor has begun working on the technical specifications, and it is anticipated that the RFP for the demonstration plant will be issued in Q2, with a preferred proponent selected in Q3-Q4 2024.

CONCLUSION

The Capital Regional District continues to implement the Short-term Biosolids Management Plan while also developing the draft Long-term Biosolids Management Plan. The short-term program continues to experience operational challenges and there is inadequate contingency capacity to ensure the sustainable beneficial use of biosolids. Staff are currently exploring additional contingency options to support short-term and long-term operations.

RECOMMENDATION

There is no recommendation. This report is for information only.

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