



REPORT TO CAPITAL REGIONAL DISTRICT BOARD MEETING OF WEDNESDAY, MARCH 13, 2024

SUBJECT Biosolids Monthly Update – March

ISSUE SUMMARY

To update the Board on the status of the short-term options for biosolids management, as well as progress on the development of the Long-term Biosolids Management Plan and the advanced thermal pilot project.

BACKGROUND

Since the commissioning of the core area wastewater treatment project in 2020, the Capital Regional District (CRD) has been responsible for the beneficial reuse of Class A biosolids produced at the Residuals Treatment Facility. Currently, the CRD is operating under a five-year Short-term Biosolids Management Plan, with the primary beneficial use options being incineration as an alternative fuel in a cement manufacturing plant in Richmond, BC, industrial land reclamation at a quarry near Cassidy, BC, and integration with landfill cover systems as contingencies. When none of these options are available, landfilling biosolids at Hartland Landfill is the only alternative. In 2011, the Board banned the land application of biosolids; however, in 2023, given the operational and logistical challenges with the short-term plan, the Board amended its position to allow non-agricultural land application of biosolids as a contingency option. Staff continue to seek additional short-term beneficial use contingency options consistent with CRD Board direction (short-term, out-of-region and non-agricultural land application options).

The CRD is also required to develop a Long-term Biosolids Management Plan by June 2024. Plan development will include input from the Technical and Community Advisory Committee (TCAC), First Nations engagement and public consultation.

Short-term Plan Implementation

Cement Kiln: The Lafarge facility experienced a mechanical failure of the receiving silo in November 2023, and has been in a winter maintenance shutdown since February 10. Staff anticipate the first shipment of biosolids in 2024 to be March 12.

Landfilling: Currently, all biosolids are being landfilled, as no other short-term management options are available. In February, 332 tonnes of biosolids were landfilled. Landfilling is not a beneficial use, as per provincial and federal expectations, and continues to consume valuable airspace at the landfill.

Land Reclamation in Cassidy, BC: A blend of biosolids and sand is currently being stored by the land owner under cover on the Cassidy site, pending regulatory approval for mixing with other organics and placement of biosolids growing medium, in accordance with the Organic Matter Recycling Regulation and approvals under the *Mines Act*. Reclamation of the quarry will be carried out in phases, and there is a short-term limit on the quantity of biosolids that can be received at this time. This limit was met in early January; therefore, shipping of biosolids to the quarry has been paused until the material on site is mixed and placed under the facility's reclamation plan.

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Second Quarry Site in the Regional District of Nanaimo, BC: As reported last month, the CRD has been approached by a site operator of a second gravel quarry within the Regional District of Nanaimo (RDN) to receive CRD Class A biosolids for site reclamation. The RDN Board Chair has since sent correspondence on behalf of the RDN Board, dated February 29, 2024, that requests the CRD Board of Directors cease considering land application within the RDN as a viable option for biosolids generated in the Capital Region. The letter indicates that the RDN is pursuing its Biosolids Beneficial Use Plan that incorporates land application and is concerned that the CRD's activities may limit RDN's options as its population continues to grow.

Unless directed otherwise, staff will continue to explore this opportunity with the site operator and will report back to the Board before any contracts are entered into.

Long-term Planning

Public Engagement: Public engagement on the Long-term Biosolids Management Plan was launched January 11, 2024 and closed March 6, 2024. The consultant will prepare a "What We Heard" report, which will inform a staff report introducing a draft long-term management plan for the April 10 CRD Board meeting. The engagement included background information and multiple opportunities to provide feedback, all of which are available via the CRD's Get Involved engagement platform (https://getinvolved.crd.bc.ca/biosolids). The CRD hosted a virtual open house on February 20, 2024, and included presentations from CRD staff and the technical consultant, as well as a moderated question and answer period. There were approximately 55 participants and 175 questions/comments submitted, of which more than 100 questions were answered. A recording of the event is available on the engagement website. The TCAC is also reviewing the available beneficial reuse options and providing input at its meeting this month.

First Nations Engagement: Staff have retained an engagement consultant to conduct First Nations engagement on long-term biosolids management options and planning. The consultant has experience working with Indigenous communities in BC and anticipates completing First Nations engagement parallel to the public engagement process. In-person and virtual open houses are scheduled for late March with 18 First Nations.

Advanced Thermal Technology Demonstration Plant: A Request for Proposals (RFP) for a technical advisor to support CRD staff in developing terms and technical requirements closed on March 11. The subsequent RFP for the demonstration plant is expected to be issued in Q2, with a preferred proponent selected in Q3/Q4 2024.

Organic Matter Recycling Regulation Technical Working Group 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 report was anticipated in late 2023, but staff have been advised that the date has been delayed again until Q2 of 2024. The Ministry has not altered its regulatory direction at this time.

CONCLUSION

The Capital Regional District (CRD) continues to implement the Short-term Biosolids Management Plan while also developing the draft long-term plan. The short-term program has experienced operational challenges and has inadequate contingency capacity consistent with CRD Board policy to ensure the beneficial use of biosolids. The CRD has exhausted its contingency options under the Short-term Biosolids Management Plan and is currently landfilling biosolids contrary to provincial regulatory direction.

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RECOMMENDATION

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

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