

**REPORT TO CAPITAL REGIONAL DISTRICT BOARD
MEETING OF WEDNESDAY, SEPTEMBER 11, 2024**

SUBJECT **Short-term Biosolids Management Plan – September Update**

ISSUE SUMMARY

To provide a monthly update to the Board on the status of short-term options for biosolids management.

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 was 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.

Short-term Biosolids Management Plan Implementation

Cement Kiln in Richmond, BC: Consistent shipment of biosolids was achieved in July and August, with the majority of biosolids produced (approximately 80%) sent to the cement kiln for use as an alternative fuel. Short shutdowns of the kiln, and minor operational issues, prevented some biosolids from being transported; these biosolids were mixed with sand at Hartland and shipped to the Cassidy quarry.

Land Reclamation in Cassidy, BC: In July, the quarry paused receiving biosolids while stockpiled material was mixed into biosolids growing medium and placed on closed areas of the site, in accordance with the *Organic Matter Recycling Regulation* and with the mine's reclamation plan. The quarry resumed receiving material in August. With regular shipments to the cement kiln, staff anticipate sufficient contingency capacity at the quarry for the remainder of 2024. However, the Cassidy site is currently not able to receive biosolids during periods of significant wet weather. Staff are actively exploring possible solutions and potential contingency options.

Landfilling at Hartland Landfill: There was no landfilling of biosolids in July or August. Landfilling is not a beneficial use, as per provincial regulations, and consumes valuable airspace at the landfill.

Provincial (Organic Matter Recycling Regulation) Technical Working Group Review: In 2023, the Ministry of Environment and Climate Change Strategy (ENV) conducted a review of the Organic

Matter Recycling Regulation (OMRR), including an evaluation of emerging contaminants of concern in the context of land application. The OMRR Technical Working Group report was issued August 21, 2024 (Appendix A). The report presents five key messages but maintains that land application, in accordance with OMRR, is a beneficial use of biosolids, and adhering to provincial regulation ensures protection of human health and the environment.

Long-term Biosolids Management Strategy Implementation

The draft long-term strategy was submitted on June 18, 2024 for regulatory review; the CRD has not yet received a response from the Province.

Tier 1: A Request for Proposals (RFP) for an advanced thermal demonstration plant was issued on July 10 and, as of drafting this report, will close on September 11. Staff anticipate reviewing submissions and developing the contract with the successful bidder for Board review and approval in the coming months. Staff have also requested a pre-meeting with ENV to discuss the regulatory permitting process for the demonstration facility and anticipate this will occur late in 2024.

Tier 2: Staff issued a broad Request for Expressions of Interest for biosolids management under Tier 2 of the Long-term Biosolids Management Strategy in August. The RFEOI closes on October 31 and submission review is planned for November, with the intent of building a portfolio of management options in accordance with the Long-term Strategy by Q2, 2025. Staff issued a separate RFP seeking biosolids management options that are available immediately to provide an additional contingency beneficial use for biosolids during the coming winter months. This RFP closes on September 27.

CONCLUSION

The Capital Regional District continues to implement the Short-term Biosolids Management Plan while operationalizing a Long-term Biosolids Management Strategy. The short-term program has seen improvements in reliability and consistency over the past two months; however, additional options are required to ensure the continued beneficial use of biosolids. Staff have initiated processes to identify and procure Tier 2 contingency options in accordance with the Long-term Strategy, with the goal of ensuring reliable regulatory compliance in the coming years.

RECOMMENDATION

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

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ATTACHMENT

Appendix A: Organic Matter Recycling Regulation – Technical Working Group Report 2024