

**REPORT TO CAPITAL REGIONAL DISTRICT BOARD
MEETING OF WEDNESDAY, FEBRUARY 12, 2025**

SUBJECT Short-term Biosolids Management Plan – February Update

To provide a monthly update to the Capital Regional District (CRD) Board on short-term biosolids management and the implementation of the Long-term Biosolids Management Strategy.

BACKGROUND

The 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 the contingency. 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 then began supplying biosolids to an industrial land reclamation project at a quarry near Cassidy, BC.

Short-term Biosolids Management Plan Implementation

Cement Kiln in Richmond, BC: The facility resumed receiving biosolids for use as alternative fuel in mid-January. The facility is expected to close from mid-February to mid-March for planned maintenance.

Land Reclamation in Cassidy, BC: The Cassidy quarry continued to receive biosolids. All biosolids not shipped to the cement kiln were mixed with sand at Hartland Landfill and shipped to the Cassidy quarry.

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

Long-term Biosolids Management Strategy Implementation

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

A Request for Proposals (RFP) was issued in August 2024 to seek biosolids management options, identifying the use of biosolids in potted cedar plants as a viable out-of-region project. The initial capacity of this option is 25 tonnes/month, and preparation is underway with the first shipment of biosolids tentatively scheduled for March 2025. To add further resilience to the CRD's portfolio for beneficial use of biosolids, staff have posted another RFP to identify additional non-agricultural out of region options, which will be open for a longer period of time.

Environmental Protection Agency Risk Assessment on Select PFAS in Biosolids

The US Environmental Protection Agency released a draft risk assessment on January 14, regarding the potential human health risks associated with the presence of two types of per- and polyfluoroalkyl substances (PFAS) chemicals in biosolids in an agricultural land application scenario. The authors concluded that risks could be best mitigated by source control of PFAS sources to the sewer systems. Overall, the CRD already mitigates risks identified in the study by excluding agricultural land application from current short-term and future biosolids management practices, as outlined in Tier 2 and Tier 3 of the Long-Term Biosolids Management Strategy. Staff continue to monitor and report out on the ongoing research on contaminants in biosolids.

CONCLUSION

The Capital Regional District continues to implement the Short-term Biosolids Management Plan while awaiting the regulator's response for a Long-term Biosolids Management Strategy. The short-term program saw some improvement in reliability and consistency in 2024; however, additional options are required to ensure the continued beneficial use of biosolids in 2025. Staff have identified an additional small-scale contingency option and will continue to identify and procure nonagricultural out-of-region options 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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