

REPORT TO CAPITAL REGIONAL DISTRICT BOARD MEETING OF WEDNESDAY, JANUARY 08, 2025

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

To provide a monthly update to the Capital Regional District (CRD) Board on the status of short-term options for 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 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: No biosolids were shipped to the facility in December, as the facility was down for planned maintenance. The facility is expected to reopen in early January 2025.

Land Reclamation in Cassidy, BC: All biosolids produced in December were mixed with sand at Hartland Landfill and shipped to the Cassidy quarry. A covered structure has been constructed, which will allow for biosolids shipments regardless of the weather. Staff continue to explore other possible solutions and contingency options in accordance with Tier 2 of the long-term strategy.

Landfilling at Hartland Landfill: There was no landfilling of biosolids in December. 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.

Tier 1: A Request for Proposals (RFP) for an advanced thermal demonstration plant closed on September 11, 2024. Of the six proponents short-listed after the Request for Expressions of Interest, only three submitted detailed proposals. Staff have reviewed the submissions and are continuing to work towards a recommendation for Board consideration. In late November 2024, staff met with the Ministry of Environment and Parks to discuss the regulatory permitting process for a demonstration facility and received detailed application instructions to guide the next phase of work in obtaining a provincial permit.

Tier 2: Staff issued an RFP in August 2024 seeking biosolids management options consistent with Tier 2 of the long-term strategy. One option was identified and staff have initiated contract discussions with the proponent. This option is anticipated to become available in February 2025, with an initial capacity of 25 tonnes/month but, if successful, could be scaled up to 100 tonnes/month later in 2025.

Staff have initiated another procurement for Tier 2 options, which will be open for a longer time period. Proposals will be reviewed as they are received.

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 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 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.

Submitted by:	Peter Kickham, M.E.T., R.P.Bio., Acting Senior Manager, Environmental Innovation & Strategy
Concurrence:	Glenn Harris, Ph.D., R.P.Bio., Acting General Manager, Parks, Recreation & Environmental Services
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer