

REPORT TO CAPITAL REGIONAL DISTRICT BOARD MEETING OF WEDNESDAY, JULY 10, 2024

SUBJECT Short-term Biosolids Management Plan – July Update

ISSUE SUMMARY

To provide an update to the Board on the status of biosolids management over the month of June.

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 submitted a Long-term Biosolids Management Strategy to the Province on June 18, 2024. Plan development included input from the Technical and Community Advisory Committee, First Nations engagement and public consultation. Staff are seeking approval under a separate staff report to implement a Request for Expressions of Interest for partnerships in alignment with Tier 2 of the long-term strategy.

Short-term Biosolids Management Plan Implementation

Cement Kiln in Richmond, BC: An equipment malfunction in late May prevented any shipments to Richmond during early June. Repairs were completed in mid-June, just as the RTF dryer was taken offline for annual maintenance. Senior staff from the CRD and Lafarge met on June 20 where both parties affirmed their commitment to improving the reliability and resilience of the current process. Recently, Lafarge has completed several improvements to the receiving silo, including additional sensors and fail-safes to address the recent issues hampering biosolids delivery. Shipments resumed on June 25, with two successful biosolids deliveries to Richmond before the end of the month, with additional shipments planned the first week of July.

Land Reclamation in Cassidy, BC: The quarry received the majority of biosolids produced in June. Biosolids are blended with sand and were being stored by the landowner under cover. New shipments of biosolids to the quarry have been paused for the month of July, while existing stockpiles are blended into biosolids growing medium (BGM) and placed as final reclamation cover, in accordance with the Organic Matter Recycling Regulation. Quarry operators have

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confirmed that they will have sufficient capacity for biosolids receiving until Fall 2024, after completing this activity.

Landfilling at Hartland Landfill: There was no landfilling of biosolids from April through the end of June. With the Cassidy quarry site pausing biosolids shipment, landfilling may be required in July if both the Richmond and Cassidy sites are unavailable and no other contingencies are identified. 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 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 Province has not released the Technical Working Group's report or provided an update on the status of the OMRR review at this time.

CONCLUSION

The Capital Regional District continues to implement the Short-term Biosolids Management Plan while also beginning to operationalize the Long-term Biosolids Management Strategy. The short-term program continues to experience operational challenges and there is insufficient contingency capacity to ensure the sustainable beneficial use of biosolids. Staff continue to explore additional contingency options to support short-term and long-term operations, including seeking approval to issue a Request for Expressions of Interest to identify partners for out-of-region compliance options under Tier 2 of the long-term strategy.

RECOMMENDATION

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

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