

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

SUBJECT Biosolids Beneficial Use Management – October Update

To provide a monthly update to the Capital Regional District (CRD) Board on the beneficial uses of biosolids in alignment with the Long-Term Biosolids Management Strategy.

BACKGROUND

The CRD has been producing Class A biosolids at the Residuals Treatment Facility since the commissioning of the Core Area Wastewater Treatment Project in 2020. On March 19, 2025, the Minister of Environment and Parks confirmed the CRD's Long-Term Biosolids Management Strategy. The strategy prioritizes advanced thermal treatment as the preferred option for biosolids management with a portfolio of out-of-region, non-agricultural beneficial uses for resiliency and contingency purposes.

This report provides a monthly update on the beneficial uses of CRD produced biosolids in alignment with the Long-Term Biosolids Management Strategy.

Biosolids Beneficial Use Management

Biosolids Production and Management

In October 2025, the CRD Residuals Treatment Facility produced 338 tonnes of Class A Biosolids. All the biosolids were beneficially used for out-of-region, non-agricultural applications.

The CRD has established three options for beneficial uses of biosolids including energy feedstock for cement manufacturing in Richmond, BC, as a soil amendment for the reclamation of a quarry site in Cassidy, BC, and as a soil amendment for landscape plant growers in the Fraser Valley.

CRD staff conduct ongoing daily coordination of biosolids management to mitigate costs across its portfolio of options based on available capacity.

The biosolids receiving silo in Richmond has been experiencing ongoing challenges with reliability and as a result, the majority of biosolids produced in October were managed at the Cassidy quarry site, while 28 tonnes were beneficially used at a tree nursery in the Fraser Valley. The tree nursery does not require biosolids for the remainder of 2025. Shipments are expected to resume in spring 2026.

Out-of-region Compliance Options

To add further resilience and to encourage cost-competitive options under the CRD's portfolio for beneficial use of biosolids, staff have posted a Request For Proposals (RFP) to identify additional non-agricultural, out-of-region options, which will remain open until December 31, 2025. As of the date of this report, there have been no new submissions under the RFP.

Financial Implications

At the July 9, 2025 CRD Board meeting, the financial plan was amended from \$1.2 million to \$2.8 million for biosolids management. As of October 29, 2025, year to date expenses were \$2.45 million. The forecasted volume and costs for the balance of the year are expected to be in line with budget.

Advanced Thermal Processing Project Updates

The CRD's Long-Term Biosolids Management Strategy identifies advanced thermal processing as the preferred option for the beneficial use of biosolids. Following Board direction in April 2023, staff led a robust and competitive procurement process that confirmed leading technologies could manage all CRD biosolids at full scale. In June 2025, the CRD announced the selection of Australian company Pyrocal PTY Ltd. as the preferred proponent to design and build an Advanced Thermal Biosolids Beneficial Use Facility.

Staff are working to advance the Project and conduct the next phases of engineering, permitting and engagement work, and negotiations with the selected proponent.

Staff met with the Proponent, Pyrocal, on-site at Hartland Landfill in early October to discuss next steps on the Project.

A plan for public engagement was presented to the Core Area Liquid Waste Management Committee in October. Detailed engagement is planned for early 2026. The engagement plan has been designed to inform residents about:

- what biosolids are, how they are created and how they are managed for beneficial use in alignment with the CRD's Long-Term Biosolids Management Strategy
- current biosolids management practices and their limitations, as well as previous engagement results about top-of-mind interests and concerns
- an overview of the selected technology benefits including environmental and climate change benefits, and the potential for the technology to destroy contaminants of emerging concern found in CRD produced biosolids
- project details including facility location, Proponent, regulatory requirements and funding requirements
- environmental monitoring and reporting
- operational considerations and neighbourhood integration
- potential uses of biochar

Engagement with First Nations will occur through a separate but parallel process, with timelines and approaches tailored to the interests and decision-making processes of each Nation. CRD staff will ensure coordination between public and First Nations engagement while maintaining distinct processes.

Staff and technical consultants continue to develop the permit application package and anticipate submitting the final application in early 2026.

Pending the results of public engagement, engagement with First Nations and permitting, staff anticipate returning to the Board for a final decision to proceed with construction in early 2027.

CONCLUSION

Throughout October, the Capital Regional District (CRD) continued to beneficially use all of its produced Class A biosolids in alignment with the Long-Term Biosolids Management Strategy using a portfolio of out-of-region non-agricultural options. The primary beneficial use for CRD produced Class A biosolids continues to be quarry land reclamation. The project to procure a Biosolids Beneficial Use Advanced Thermal Facility remains on track.

RECOMMENDATION

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

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