

CRD Selects Technology Provider to Convert Biosolids into Biochar



June 26, 2025

Victoria, BC– The Capital Regional District (CRD) Board has selected Pyrocal PTY Ltd., an Australian engineering company, as the preferred proponent to integrate innovative technology into the region’s wastewater treatment system to convert biosolids into biochar. The first of its kind in Canada, the proposed system is designed as an added component to the Residuals Treatment Facility at Hartland Landfill and will process all Class A biosolids produced by the CRD.

Pyrocal’s Continuous Carbonisation Technology (CCT) system converts biosolids and other organic materials into biochar, a charcoal-like substance with various benefits including improving soil through moisture and nutrient retention. The production of biochar is expected to not only offset the technology’s operating greenhouse gas emissions, but also remove additional carbon from the atmosphere, providing a pathway for permanent carbon capture and storage.

“This marks a significant milestone in our commitment to sustainable and innovative waste management solutions,” said CRD Board Chair Cliff McNeil-Smith. “The advanced technology and infrastructure that Pyrocal provides will not only enhance our biosolids management capabilities but also contribute to the long-term environmental benefits for our community.”

The Long-term Biosolids Management Strategy outlines a sustainable approach to managing biosolids produced within the region and was confirmed in March 2025 to fulfill obligations set out in the Core Area Liquid Waste Management Plan. It includes the development of innovative



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gasification or pyrolysis technology as an additional processing step to turn biosolids into biochar. Market options for the biochar will be explored to understand the potential revenue generating opportunities of this project.

“We are proud to lead the country with this innovative solution,” said Chair of the CRD’s Core Area Liquid Waste Management Committee, Chris Coleman. “This state-of-the-art technology will set a new standard for managing liquid waste in an environmentally friendly and efficient manner.”

The costs of biochar production using Pyrocal’s technology are expected to be competitive with the CRD’s current out-of-region management options.

Pyrocal CEO Barry Croker said: “From an Australian first to a Canadian first, we’re thrilled to bring our technology to the CRD region. This project marks a major milestone not just for the CRD and Pyrocal, but for biosolids innovation in North America. We’re proud to support the CRD’s forward-thinking approach to biosolids management, delivering real and lasting environmental and economic benefits to Vancouver Island and demonstrating our ability to deliver impactful solutions across borders.”

Staff will return to the Board with a refined financial analysis, operations plan, project agreement and proposed approach to seek elector approval for financing before seeking direction to commit to the full project costs.

Public engagement will include local engagement about the proposed addition to the Residuals Treatment Facility and the project will follow the required provincial and local regulatory approvals for authorization of air emissions under the Environmental Management Act (EMA) which is anticipated to take up to two years. Throughout the process, the CRD will invite First Nations to review the project and provide any comments or concerns and collaborate to develop mitigation measures for identified impacts.

For more information on CRD’s Long-Term Biosolids Management Strategy please visit our [website](#).

The CRD delivers regional, sub-regional and local services to 13 municipalities and three electoral areas on southern Vancouver Island and the Gulf Islands. Governed by a 24-member Board of Directors, the CRD works collaboratively with First Nations and government partners to enable sustainable growth, foster community well-being, and develop cost-effective infrastructure while continuing to provide core services to residents throughout the region. Visit us online at www.crd.ca.

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