

**REPORT TO PARKS & ENVIRONMENT COMMITTEE  
MEETING OF WEDNESDAY, APRIL 24, 2019**

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**SUBJECT**     **Definitive Plan for Beneficial Use of Biosolids**

**ISSUE**

To provide the Parks & Environment Committee with the Capital Regional District's (CRD) Draft Definitive Plan for Beneficial Use of Biosolids.

**BACKGROUND**

A new Residuals Treatment Facility (RTF) is currently being constructed at Hartland Landfill, as part of the CRD's core area wastewater treatment project. The facility will produce approximately 7,000 tonnes of dried Class A biosolids each year, starting January 1, 2021.

The CRD is required to submit a definitive plan to the BC Ministry of Environment (ENV) by June 30, 2019 to meet the condition in Amendment No. 11 of the Core Area Liquid Waste Management Plan for the beneficial use of these biosolids.

The attached definitive plan (Appendix A), developed with assistance from SYLVIS Environmental, defines the CRD's short-term biosolids management plan and long-term beneficial use strategies. The plan incorporates a summary of biosolids beneficial use options, regulatory requirements, a jurisdictional scan and an implementation plan. The plan will:

- meet the CRD's "No Land Application" policy for biosolids
- provide a short-term beneficial use solution
- lay out implementation timelines for development of a long-term strategy
- advance public and First Nations engagement
- satisfy the Canadian Council of Ministers on the Environment (CCME) *Canada-Wide Approach for the Management of Wastewater Biosolids*
- fulfill ENV's conditional approval requirement

Based on the need to adhere to the CRD's "No Land Application" policy and the CCME requirements, short-term options for biosolids beneficial use are limited. Few proponents throughout the province are interested in utilizing biosolids as an alternative fuel. Those that may consider such an approach may not be able to or wish to apply the residual ash to land, as mandated by the CCME requirements.

One solution has emerged that meets all of the CRD's and provincial requirements. Over the next five years, the CRD intends to manage the dried Class A biosolids by providing the material as an alternate fuel at cement plants on the lower mainland while a long-term management plan is developed. The cement manufacturing plants were shortlisted through an earlier Request for Qualifications (RFQ) and Request for Proposals (RFP) process and a biosolids beneficial use agreement will be pursued. Costs for short-term management of biosolids include transportation, processing and capital costs.

The budget estimates are felt to be reasonable, at this time, and final numbers will be released following the successful negotiation of commercial terms. The CRD also intends to submit funding requests to offset the capital costs.

The substitution of fossil fuels with dried CRD biosolids in the production of cement results in environmental benefits by reducing greenhouse gas emissions and lowering the cost of cement production. This also aligns with the provincial mandate to encourage the use of alternative, lower carbon fuels at cement manufacturing facilities across BC. Furthermore, the ash produced by the combustion of the biosolids in the cement kilns is completely incorporated into the final cement product, thereby eliminating any challenges with residual ash management.

A long-term biosolids management option will be developed in alignment with the CRD's recent climate emergency declaration and other objectives for environmental, social and financial sustainability by June 1, 2023. The long-term plan will consider a broad range of emerging biosolids beneficial use options and may include extension of the short-term plan, if deemed to be the most advantageous to the CRD.

### **NEXT STEPS**

1. Initiate public and First Nations engagement on the definitive plan for beneficial use of biosolids.
2. Initiate negotiations to finalize short-term beneficial use agreements with the cement manufacturing facilities.
3. Report back to the Committee with comments from the public and First Nations on the definitive plan prior to submission to ENV by June 30, 2019.

### **RECOMMENDATION**

That the Parks & Environment Committee recommend to the Capital Regional District Board:

That this report be received for information.

Submitted by:	Stephen May, P.Eng., Senior Manager, Facilities Management & Engineering Services
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Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

JF:cam

Attachment: Appendix A – Biosolids Beneficial Use Definitive Plan – SYLVIS Environmental