

**REPORT TO PARKS & ENVIRONMENT COMMITTEE
MEETING OF WEDNESDAY, MAY 22, 2019**

SUBJECT **Definitive Plan for Beneficial Use of Biosolids – Submission to BC Ministry of Environment and Climate Change Strategy**

ISSUE

To present the Capital Regional District's (CRD) Biosolids Beneficial Use Strategy (Definitive Plan).

BACKGROUND

The CRD is required to submit a definitive plan to the BC Ministry of Environment and Climate Change Strategy (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 biosolids.

The definitive plan (Appendix A), defines the CRD's short-term biosolids management plan and long-term beneficial use strategies. The first draft of the plan was received by the Parks & Environment Committee on April 24, 2019 and by the CRD Board on May 8, 2019. That draft definitive plan was then made available for public and First Nations input through an online survey, open houses and face-to-face meetings. The amended version of the plan now includes feedback from the public and First Nations, positive energy balance estimates for use of the biosolids material as an alternate fuel and updated biosolids GHG emissions assessment.

Key messages heard from the public during the public engagement period were:

- overall support for the proposed beneficial-use in cement manufacturing plants.
- most common feedback is that biosolids should not be applied to land. Some individuals noted however beneficial elements of nitrogen, phosphorus and energy could be extracted for other beneficial use.
- other long-term beneficial use of biosolids options such as gasification, pyrolysis, and biochar for reforestation should be investigated.
- the need for further environmental testing prior to determining the long-term use, concern for wildlife and water quality near the biosolids facility, concern about odours, and ensuring emissions standards are met.
- the importance of safeguarding local freshwater well systems and the Saanich Peninsula aquifers.
- concern around the energy and economic costs of transporting biosolids to the Lower Mainland and felt "closer to home" options were preferred.
- WSÁNEĆ group interested in working with the CRD on future opportunities related to biosolids processing and beneficial use.

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. Negotiations to finalize short-term beneficial use agreements with the cement manufacturing facilities are underway and concurrently, staff are seeking grants to offset capital costs. Final numbers will be released following the successful negotiation of commercial terms.

The 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 technologies and options, and may include extension of the short-term plan, if deemed to be the most advantageous to the CRD.

ALTERNATIVES

That the Parks & Environment Committee recommend to the CRD Board that:

Alternative 1

1. The CRD Biosolids Beneficial Use Strategy (Definitive Plan), complete with the First Nations and public engagement reports, be received for information; and
2. Staff be directed to submit the CRD Biosolids Beneficial Use Strategy (Definitive Plan) to the BC Ministry of Environment and Climate Change Strategy in fulfillment of Amendment No. 11 of the Core Area Liquid Waste Management Plan.

Alternative 2

That the Committee direct staff to provide further information to the CRD Board.

RECOMMENDATIONS

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

1. The CRD Biosolids Beneficial Use Strategy (Definitive Plan), complete with the First Nations and public engagement reports, be received for information; and
2. Staff be directed to submit the CRD Biosolids Beneficial Use Strategy (Definitive Plan) to the BC Ministry of Environment and Climate Change Strategy in fulfillment of Amendment No. 11 of the Core Area Liquid Waste Management Plan.

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

JF:cam

Attachment: Appendix A – CRD Biosolids Beneficial Use Strategy (Definitive Plan)