

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

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**SUBJECT**     **Biosolids Monthly Update – April**

### **ISSUE SUMMARY**

To provide a monthly update to the Board on the status of the short-term options for biosolids management, as well as progress on the development of the Long-term Biosolids Management Plan and the advanced thermal pilot project.

### **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 is also required to develop a Long-term Biosolids Beneficial Use Strategy by June 2024. Plan development will include input from the Technical and Community Advisory Committee, First Nations engagement and public consultation.

### **Short-term Biosolids Management Plan Implementation**

*Land Reclamation in Cassidy, BC:* The quarry resumed receiving mixed biosolids and sand in late March. A blend of biosolids and sand is currently being stored by the landowner under cover, pending regulatory approval for mixing and placement of biosolids growing medium, in accordance with the *Organic Matter Recycling Regulation* and approvals under the *Mines Act*.

*Cement Kiln in Richmond, BC:* The Lafarge facility continues to undertake repairs to the biosolids receiving silo but expects to receive some biosolids before a planned nine-day maintenance shutdown on April 24. The kiln continues to be the priority destination for CRD biosolids under the short-term plan.

*Landfilling at Hartland Landfill:* In March, the majority of biosolids produced were landfilled. Landfilling is not a beneficial use, as per provincial and federal expectations, and continues to consume valuable airspace at the landfill. With the resumption of sending biosolids to the quarry and cement kiln, it is anticipated that landfilling through April will be minimal.

*Second Quarry Site in the Regional District of Nanaimo:* As reported last month, the CRD has been approached by a site operator of a second gravel quarry within the Regional District of Nanaimo to receive CRD Class A biosolids for site reclamation. Discussions are ongoing.

### **Long-term Biosolids Management Planning**

*Public Engagement:* Public engagement on the Long-term Biosolids Management Plan closed March 6, 2024. The CRD hosted a virtual open house on February 20, 2024, which included presentations from CRD staff and the technical consultant, as well as a moderated question and answer period. Members of the public participated in a CRD survey on a voluntary basis and a separate representative survey was conducted by Ipsos. The “What We Heard” consultation report, summarizing the public engagement, will be included in the staff report outlining the draft long-term biosolids management plan, to give the CRD Board a full opportunity to consider all of the engagement feedback.

*First Nations Engagement:* Eighteen First Nations were invited to in-person and virtual open houses held in late March. Some First Nations have requested individual presentations and discussion on the topic, rather than participating in the joint open houses. These meetings are planned for April. A report on First Nations consultation will be included in the staff report outlining the draft Long-term Biosolids Management Plan.

*Long-Term Management Plan:* The draft Long-term Biosolids Management Plan will come forward to the Board at the May 8, 2024 meeting. The Plan, originally scheduled to come forward to the April meeting, has been delayed one month to allow time for fulsome First Nations consultation and a report on this engagement to be prepared. Once received by the Board in May, the Plan and both the public and First Nations engagement reports, will be referred to the Technical and Community Advisory Committee for final review and comment; the Plan will also be distributed to First Nations for comment and it will be posted for public comment on the CRD website. The Plan will subsequently be brought forward to the CRD Board for final approval at the June meeting.

On March 13, 2024, the CRD Board received correspondence regarding a lawsuit filed in Texas against Synagro. Synagro is a partner in Hartland Resource Management Group (HRMG), which is responsible for designing, building, financing, operating and maintaining the residuals treatment facility. CRD staff have met with Synagro executive to obtain more information about the allegations. Synagro confirmed that the biosolids applied to a property in Johnson County between December 2022 and January 2023 were a dried Class A product. The following statement was provided by Synagro to the CRD on April 3, 2024:

*Thank you for reaching out. Per your request regarding the recently filed Johnson County litigation, Synagro can provide the following statement regarding land application of City of Fort Worth biosolids in Johnson County:*

*Synagro denies these allegations, which are unproven and novel, and will contest this lawsuit. As a matter of fact, without any response from Synagro, the plaintiffs have already amended the complaint to drastically reduce the concentrations of PFAS alleged in the complaint when it was originally filed. The biosolids applied by a farmer working with Synagro met all ESEPA and Texas Commission on Environmental Quality (TCEQ) requirements. USEPA continues to support land application of biosolids as a valuable practice that recycles nutrients to farmland and has not suggested that any changes in biosolids management is required.*

*For further background, biosolids are a nutrient-rich end-product of the wastewater solids treatment process that have been treated to ensure safe use in agricultural land application. Biosolids provide multiple benefits to overall soil quality and health, including improved moisture absorption ability, recycling of micro and macro nutrients, carbon sequestering, reduced nutrient leaching, and lower use of industrially produced chemical fertilizers. USEPA and state environmental agencies, including TCEQ, have approved and regulated biosolids for decades and multiple risks assessments and scientific studies have found that biosolids recycling presents little to no risk to human health and the environment.*

*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 report was anticipated in late 2023, but staff have been advised that the date has been delayed until May 2024. The Ministry has not altered its regulatory direction at this time. Options for undertaking an independent literature review will be presented at the April 17, 2024 Environmental Services Committee meeting.

*Letter to Minister requesting extension:* On March 19, the CRD Board Chair, as directed by the Board, sent a letter to the Minister of the Environment & Climate Change Strategy, requesting a meeting to discuss the extension of the submission deadline for the Long-Term Biosolids beneficial Use Strategy. The Minister had not responded to the request as of April 5.

### **Advanced Thermal Pilot Project Status**

The CRD has selected a technical advisor to support CRD staff in developing terms and technical requirements. The advisor has begun working on the technical specifications for the demonstration plant, and it is anticipated that the Request for Proposal for the demonstration plant will be issued in Q2, with a preferred proponent selected in Q3-Q4 2024.

### **CONCLUSION**

The Capital Regional District (CRD) continues to implement the Short-term Biosolids Management Plan while also developing the draft Long-term Biosolids Management Plan. The short-term program continues to experience operational challenges and there is inadequate contingency capacity to ensure the sustainable beneficial use of biosolids. Staff are currently exploring additional contingency options to support short-term operations.

### **RECOMMENDATION**

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

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