

DATE: February 5, 2021**FILE:** 5340-05**TO:** Chair and Directors
Electoral Areas Services Committee**FROM:** Russell Dyson
Chief Administrative OfficerSupported by Russell Dyson
Chief Administrative Officer***R. Dyson*****RE: Biosolids – Land Application Follow-up****Purpose**

To clarify the Comox Valley Regional District's (CVRD) roles, responsibilities and current practices with management of sewage sludge.

Recommendation from the Chief Administrative Officer:

None. This report is for information only.

Executive Summary

A 2019 land application of biosolids on a property on Hamm Road in Puntledge – Black Creek (Electoral Area C) generated some concern within the community. In January 2020, the Electoral Areas Services Committee (EASC) directed staff to investigate the rules and procedures for land application of biosolids in BC. A staff report on this topic ([link](#)) was included on the agenda of the May 11, 2020 EASC meeting; a delegation made by Sylvis Environmental on behalf of the Hamm Road property owner was also received at this same meeting ([link](#)).

At the January 11, 2021 EASC meeting, Phillippe Lucas presented information regarding land application of biosolids on behalf of the Campbell River Environmental Committee, highlighting several concerns, particularly regarding the presence of chemicals within biosolids ([link](#)). Following this delegation, the local online news site Decafnation ran a story about management of sewage sludge ([link](#)).

Beneficial re-use of the resources in biosolids is supported nationally by policy direction provided by the Canadian Council of Ministers of the Environment. In BC, this policy direction is enacted by the province through the Organic Matter Recycling Regulation (OMRR), under the *Environmental Management Act*. Enforcement of OMRR is the responsibility of the BC Ministry of Environment and Climate Change Strategy.

To clarify the CVRD's roles, responsibilities and current practices with management of sewage sludge, a briefing note has been prepared (Appendix A). The Class A compost product produced by the Comox Valley Sewerage Service, and marketed as SkyRocket, has to meet stringent quality standards under OMRR and the federal *Fertilizers Act* prior to its distribution and sale; meeting these standards allows for unrestricted use of this product for landscaping projects, flower gardens and lawns. The biosolids land applied at Hamm Road were Class B biosolids, which meet less stringent OMRR standards, and as such have restrictions on how they are used, including the requirement for a land application plan, prepared by a qualified professional.

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Attachments: Appendix A – “Briefing Note – Land Application of Biosolids”

Land Application of Biosolids January 21, 2021

ISSUE

On January 11, 2021 Philippe Lucas, representing the Campbell River Environmental Committee (CREC), made a delegation to the Electoral Areas Services Committee (EASC) regarding concerns about land application of biosolids. While the concern appears to have originated from a specific example of land application of biosolids within a property on Hamm Road, the presentation raised alarm about land application of biosolids in general. Following the CREC delegation, the local online website Decafnation published an article describing the presentation and tying the concern directly to the Comox Valley Regional District's (CVRD) Skyrocket product.

BACKGROUND

- BC's Organic Matter Recycling Regulation (OMRR) requires a land application plan be approved for any land application of Class A or B biosolids, and Class B compost.
- Class A compost, as produced by the CVRD as part of their biosolids composting process, does not have any restrictions on its final use.
- The City of Powell River and the Municipality of North Cowichan, have legally applied Class B biosolids on a property on Hamm Road in Electoral Area C.
- The land application of biosolids at that location generated some concern from within the community, and the CREC is now advocating more generally against land application of biosolids.
- In response to the concern, in January 2020 the EASC asked staff to report back with a description of the rules and procedures for land applying biosolids in BC.
- In April 2020 staff reported back to the EASC with a comprehensive staff report ([link](#)) that clearly outlines the OMRR requirements for land application of biosolids.
- On January 11, 2021 the CREC delegation spoke strongly against biosolids or their derivatives being used as fertilizer.
- On January 12, Decafnation published an article ([link](#)) summarizing the information presented by the CREC delegation and drew a direct connection to the Class A compost produced by the Comox Valley Sewerage Service (CVSS).
- Neither the CREC nor Decafnation article provided adequate distinction between land application of Class A and B biosolids. Class B biosolids are essentially raw or partially sterilized sludge compared to the highly stabilized Class A compost product the CVSS produces.

KEY POINTS

- Compost made from biosolids is one of the most heavily researched of all soil amendments available, and the safety and benefits of its use are well demonstrated. The in-depth review of this significant body of peer-reviewed research has informed the way biosolids are treated, produced, used, and regulated by the provincial government and CFIA.
- OMRR approves biosolids as an input to Class A compost because they undergo a high level of treatment during the composting and curing process.

- The Class A composting process exposes the material to high temperatures for extended periods of time, which results in a higher level of sterilization of the end product, and higher extent of oxidation of contaminants of emerging concern.
- Ladysmith, Kelowna, and Vernon are the only other BC communities that we are aware of that produce a similar high quality product.
- Regarding pharmaceuticals, there is a lot of interest and research in this topic worldwide. We are trying to keep up with this research. So far the conclusions are that pharmaceuticals that remain in our wastewater after medication return programs are more likely to be discharged in the liquid, and the pharmaceuticals that remain in the biosolids are more likely to be broken down during the composting process – which is reflected by the distinction OMRR makes between composted and non-composted biosolids.
- The CVRD is committed to following what is happening around the world regarding biosolids and wastewater management. At this time, we understand that it is accepted that recycling nutrients and organic matter through composting biosolids is the best way to recycle them.
- It's interesting to note that there is increased discussion in Europe to allow biosolids from smaller communities with less industry to be used on organic farms. The reason for this is that organic farms can only use rock phosphate or compost, and rock phosphate interestingly enough also contains heavy metals. It's also of concern that our world supply of phosphorus is diminishing, so we need to recycle as much as we can.
- The CVSS has chosen not to land apply raw biosolids, and has instead invested heavily to produce a product that has unrestricted use, and is a valuable source of recycled nutrients for the Comox Valley.

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