



REPORT

To: Solid Waste Committee

Report Number: ENV-SWC-024

From: Gerritt Lacey, Solid Waste Manager

Date: November 5, 2020

Subject: Vermicomposting Pilot for the Bessborough Landfill

RECOMMENDATION:

That the Solid Waste Committee recommend that the Regional Board approve the establishment of a three year vermicomposting pilot beginning in 2021 at the Bessborough Landfill.

BACKGROUND/RATIONALE:

Staff has been exploring the potential to establish a second vermicomposting pilot that would be located at the Bessborough Landfill (BBLF)¹. This pilot was described at the September 3, 2020 Solid Waste Committee (SWC) meeting in the report titled "City of Dawson Creek Request – Vermicomposting Pilot Support".

The intention of the second pilot would be to establish an organics diversion program in the region, starting in the South Peace. Feedstock would come from the City of Dawson Creek yard and garden waste program, as well as restaurants and residents that are interested in participating. As incentive for participation, tipping fees would be waived for sorted organic material received at the landfill.

Staff has had some initial high level discussions with City of Dawson Creek staff regarding their yard and garden program. It is estimated that approximately 200 tonnes of yard and garden material will come from the City of Dawson Creek program and another 100 tonnes will come from residents and restaurants making a total of 300 tonnes for each year of the pilot.

Currently, vermicomposting does not fit in the Organic Matter Recycling Regulation (OMRR). Therefore a Work Plan created by a qualified professional will need to be developed that explains how material will be handled to gain Ministry approval.

To establish a vermicomposting pilot at the BBLF staff would work through the following steps:

1. Register the BBLF in accordance with the provincial Organic Matter Recycling Regulation (OMRR).
2. Work with a qualified professional (QP) to develop a Work Plan for the site.
3. Submit the Work Plan to the Ministry of Environment and Climate Change Strategy (MoECCS) to obtain acceptance of a deviation to the OMRR.
4. Develop a handling pad, complete with leachate collection.
5. Establish contract rates for handling material with the current contracted onsite staff.
6. Establish contract rates with a vermicomposting consultant.
7. Develop a communication pamphlet outlining the program requirements.
8. Provide education and outreach to area residents and businesses.

¹ An initial vermicomposting pilot was established at the North Peace Regional Landfill.

9. Transport worms from the North Peace Regional Landfill (NPRLF) to BBLF.
10. Bring processing material in and monitor in accordance with the work plan.

This pilot provides the opportunity to expand on the work conducted to date and build organics processing capacity in the region. Pending the success of this pilot and approval from the MoECCS, the proposed work can be expanded upon to make organics processing permanent in the region.

ALTERNATIVE OPTIONS:

1. That the Solid Waste Committee defer the establishment of a vermicomposting pilot at the Bessborough Landfill in favour of issuing a Request for Proposal for composting services.
2. That the Solid Waste Committee provide further direction.

STRATEGIC PLAN RELEVANCE:

- ☒ Responsive Service Delivery

FINANCIAL CONSIDERATION(S):

Estimated costs for the pilot project are included in the table below:

	2021	2022	2023
QP Work plan for OMRR	\$15,500		
Pad Development	\$25,000		
Worm Transportation	\$5,000		
Operating Staff costs	\$22,000	\$22,000	\$22,000
Consultant costs	\$13,500	\$18,000	\$12,000
Testing		\$2,500	\$2,500
Total Estimated Annual Cost	\$81,000	\$42,500	\$36,500
<i>Potential Lost Revenue for 300 tonnes of organics</i>	<i>\$27,500</i>	<i>\$27,500</i>	<i>\$27,500</i>

If approved, staff will incorporate these estimates into the draft 2021 Financial Plan.

COMMUNICATIONS CONSIDERATION(S):

Staff will coordinate with the City of Dawson Creek to secure the supply of feedstock from their garden and yard waste collection site, and work with the PRRD Communications Department on public education materials.

OTHER CONSIDERATION(S):

At this time collection will be on a volunteer basis. If there is increased public interest, there may be opportunity in year two to offer collection sites around the City of Dawson Creek or the region.

Based on the [Waste Composition Audit](#) conducted in 2017-18, organics represents 30.6% of the entire waste stream.

External Links:

Sept. 3 SWC Meeting - City of Dawson Creek Request – Vermicomposting Pilot Support – See [Item 9.4](#)