



Regional District of Central Kootenay
JOINT RESOURCE RECOVERY COMMITTEE
Open Meeting Agenda

Date: Wednesday, January 15, 2025
Time: 1:00 pm
Location: Hybrid Model - In-person and Remote

Directors will have the opportunity to participate in the meeting electronically. Proceedings are open to the public.

Pages

1. ZOOM REMOTE MEETING INFO

To promote openness, transparency and provide accessibility to the public we provide the ability to attend all RDCK meetings in-person or remote.

Meeting Time:

1:00 p.m. PST

2:00 p.m. MST

Join by Video:

<https://rdck-bc-ca.zoom.us/j/98572164791?pwd=plCY9gqLwVZtdzR2zmtuHXJOMq138L.1>

Join by Phone:

833 955 1088 Canada Toll-free

Meeting ID: 985 7216 4791

Passcode: 701014

2. CALL TO ORDER & WELCOME

Chair Popoff called the meeting to order at _____p.m.

2.1 TRADITIONAL LANDS ACKNOWLEDGEMENT STATEMENT

We acknowledge and respect the Indigenous peoples within whose traditional lands we are meeting today.

2.2 ADOPTION OF THE AGENDA

RECOMMENDATION:

The agenda for the January 15, 2025 Joint Resource Recovery meeting be adopted as circulated.

2.3 RECEIPT OF MINUTES

The December 11, 2024 Joint Resource Recovery minutes, have been received with the following revision:

Addition of "on a 5-year schedule" to Item 3, paragraph 2, of the first motion.

5 - 11

3. RESOURCE RECOVERY BYLAW NO. 2961, 2025 - REPEALING RESOURCE RECOVERY BYLAW NO. 2905, 2023

[All Areas]

The January 15, 2025 Committee Report from Todd Johnston, Environmental Coordinator presenting the proposed Resource Recovery Bylaw No.2961, 2025 (the Bylaw), to REPEAL Resource Recovery Facilities Regulatory Bylaw No. 2905, 2023 (2905); and to present the proposed Resource Recovery Amendment Bylaw No. 3011, 2025 (The Amendment Bylaw), has been received.

NOTE - Staff report will be added to the addenda.

RECOMMENDATION 1:

That the *Resource Recovery Facilities Regulatory Bylaw No. 2961, 2025*, be read a first, second and third time by content to repeal and replace *Resource Recovery Facilities Regulatory Bylaw No. 2905, 2023*.

RECOMMENDATION 2:

That the *Resource Recovery Facilities Regulatory Bylaw No. 2961, 2025*, be ADOPTED and the Chair and Corporate Officer be authorized to sign the same.

RECOMMENDATION 3:

That the *Resource Recovery Facilities Regulatory Amendment Bylaw No. 3011, 2025*, with updated tipping fees aligned with the proposed Tipping Fee Cost Recovery Objectives on a 3-year schedule, be read a first, second and third time by content to amend *Resource Recovery Facilities Regulatory Bylaw No. 2961, 2024*.

RECOMMENDATION 4:

That the *Resource Recovery Facilities Regulatory Amendment Bylaw No. 3011, 2025*, with updated tipping fees aligned with the proposed Tipping Fee Cost Recovery Objectives on a 3-year schedule, be ADOPTED and the Chair and Corporate Officer be authorized to sign the same.

RECOMMENDATION 5:

That the Board direct staff to present tipping fee increases in January of 2026 and 2027, aligned with the proposed Tipping Fee Cost Recovery Objectives on a 3-year

schedule, identified in the RESOURCE RECOVERY BYLAW NO. 2961, 2025 – REPEALING RESOURCE RECOVERY BYLAW NO. 2905, 2023 Committee Report brought to the January 15, 2025 Joint Resource Recovery Committee with adjustments for inflation, for subsequent amendments.

**4. ENVIRONMENTAL MONITORING PROGRAM CONTRACT AWARD
[All Areas]**

12 - 39

The January 15, 2025 Committee Report from Heidi Bench, Projects Advisor presenting a recommendation for the Environmental Monitoring RFP Contract Award, has been received.

RECOMMENDATION:

That the Board approve the RDCK entering into a Consulting Services Agreement with Masse Environmental Consultants for the Resource Recovery Environmental Monitoring Program for the period of January 31, 2025 to March 31, 2028, with the option for up to two (2) one (1) year extensions;

AND FURTHER, that as part of this agreement, Masse Environmental Consultants will sub-contract ALS Canada Ltd. to provide laboratory services for the duration of the Consulting Services Agreement for the Resource Recovery Environmental Monitoring Program;

AND FURTHER, that the total costs for the three-year contract period be paid from the following Services:

- S186 East Resource Recovery Waste Service, not to exceed \$139,365.50
- S187 Central Resource Recovery Waste Service, not to exceed \$212,880.71
- S188 West Resource Recovery Waste Service, not to exceed \$95,966.27
- A119 East Resource Recovery Compost Service, not to exceed \$18,009.55
- A120 Central-West Resource Recovery Compost Service, not to exceed \$44,773.81

AND FURTHER, that the Chair and Corporate Officer be authorized to sign the necessary documents.

**5. INDUSTRIAL, COMMERCIAL AND INSTITUTIONAL ORGANICS COLLECTION PILOT PROGRAM SUPPORTS & DISPOSAL BAN INVESTIGATION
[All Areas]**

40 - 50

The January 15, 2025 Committee Report from Alayne Hamilton, Environmental Projects Lead regarding the Industrial, Commercial and Institutional Organics Collection Pilot Program and Disposal Ban Investigation, has been received.

RECOMMENDATION 1:

That the Board approve the proposed subsidies and supports for the Industrial, Commercial and Institutional organics diversion pilot program within the City of

Nelson, including:

- a. A pilot reduction in commercial organics tipping fees from \$96.75/tonne to \$55/tonne.
- b. Provision of education and training support for participating businesses.
- c. Development of a communications program to promote and support the pilot.
- d. Rebates for up to two organic waste carts for the first 25 participating businesses.

AND FURTHER that \$8,500 be included in the draft 2025-2029 Financial Plan for Service S187 Central Subregion Resource Recovery to fund portions of the communications program materials that are specific to the City of Nelson, and the rebates for the organic waste carts;

AND FURTHER that \$4,000 be included in the draft 2025-2029 Financial Plan for Allocation Service A102 Resource Recovery to fund portions of the communications program materials that are more general and can be utilized for future pilot programs in other communities.

RECOMMENDATION 2:

That the Board direct staff to investigate the feasibility of implementing an Industrial, Commercial and Institutional organics disposal ban, and to return to the Committee in Q3 2025 with a framework for implementing a disposal ban for discussion.

6. CORRESPONDENCE FOR RECEIPT

- | | |
|--|---------|
| 6.1 Letter dated December 14, 2024 from Village of Silverton regarding potential Tipping Fee Increases | 51 |
| 6.2 Healthy Community Society of the North Slokan Valley - Organics Program Report for 2024 and 2025 Budget | 52 - 65 |

7. PUBLIC TIME

The Chair will call for questions from the public and members of the media at _____ p.m.

8. ADJOURNMENT

RECOMMENDATION:

The Joint Resource Recovery Committee meeting adjourn at _____ p.m.



Regional District of Central Kootenay
JOINT RESOURCE RECOVERY COMMITTEE MEETING
Open Meeting Minutes - REVISED

A Joint Resource Recovery Committee meeting was held on Wednesday, December 11, 2024
 1:00 pm PST / 2:00 pm MST through a hybrid meeting model.

ELECTED OFFICIALS	Director G. Jackman	Electoral Area A (Chair)	In-person
PRESENT	Director R. Tierney	Electoral Area B	In-person
	Director K. Vandenberghe	Electoral Area C	In-person
	Director A. Watson	Electoral Area D	In-person
	Alt. Director J. Smienk	Electoral Area E	In-person
	Director T. Newell	Electoral Area F	In-person
	Director H. Cunningham	Electoral Area G	
	Director W. Popoff	Electoral Area H	In-person
	Director A. Davidoff	Electoral Area I	
	Director H. Hanegraaf	Electoral Area J	In-person
	Director T. Weatherhead	Electoral Area K	In-person
	Alt. Director B. Bogle	City of Castlegar	In-person
	Director A. DeBoon	Town of Creston	
	Director S. Hewat	Village of Kaslo	In-person
	Director T. Zeleznik	Village of Nakusp	
	Director K. Page	City of Nelson	In-person
	Director L. Casley	Village of New Denver	
	Director D. Lockwood	Village of Salmo	In-person
	Director L. Main	Village of Silverton	In-person
	Director E. Buller	Village of Slocan	
 STAFF PRESENT	 S. Horn	 Corporate Administrative Officer	
	Y. Malloff	General Manager – Finance, ED, IT	
	U. Wolf	General Manager – Environmental Services	
	A. Wilson	Resource Recovery Manager	
	A. Hamilton	Environmental Projects Lead	
	H. Bench	Resource Recovery Projects Advisor	
	E. Clark	Meeting Coordinator	

1. ZOOM REMOTE MEETING INFO

Join by Meeting Link:

<https://rdck-bc-ca.zoom.us/j/96757636881?pwd=63UFCdJfC3hEbPKxRaSaaJdHQJ5P7s.1&from=addon>

Meeting ID: 967 5763 6881

Passcode: 562073

Dial by your location

- +1 778 907 2071 Canada
- 833 955 1088 Canada Toll-free

In-Person Meeting Location for Hybrid Meeting Model

The following location was determined to hold the in-person meetings for the Joint Resource Recovery Committee:

Location Name: RDCK Board Room

Location Address: 202 Lakeside Drive, Nelson, BC

2. CALL TO ORDER & WELCOME

Chair Jackman called the meeting to order at 1:00 pm.

2.1 Traditional Lands Acknowledgement Statement

We acknowledge and respect the indigenous peoples within whose traditional lands we are meeting today.

2.2 Adoption of the Agenda

Moved and seconded,
And resolved:

The Agenda for the December 11, 2024 Joint Resource Recovery Committee meeting be adopted as circulated.

Carried

2.3 Receipt of Minutes

The November 13, 2024 Joint Resource Recovery Committee Minutes have been received.

2.4 Delegation

City of Nelson, Organics Program

Mary Tress, Climate Programs Coordinator

Carmen Proctor, Climate & Energy Manager

Mary Tress gave a presentation to the Committee regarding the City of Nelson Pre-treated Organics Program. The presentation covered the following areas:

- General update on the program
- Overview of program operations
- Explanation of evaluation methods and ongoing data collection
- Focus areas for extending the program into 2025

The City of Nelson is pleased with participation in the Pre-treated Organics Program in the Fairview neighborhood (79% of eligible households) and looks forward to extending the program in 2025 and completing further evaluation.

Ms. Tress expressed thanks to the RDCK for supporting the program and contributing toward the cost of the drop off bins.

Mary Tress and Carmen Proctor were available to answer the Committee's questions.

Chair Jackman thanked Mary Tress and Carmen Proctor for the presentation.

DIRECTOR PRESENT Director Davidoff joined the meeting at 1:15 pm.

DIRECTOR PRESENT Director Cunningham joined the meeting at 1:20 pm.

3. CHANGES TO MATERIAL MANAGEMENT AND TIPPING FEES
[All Areas]

The November 25, 2024 Committee Report from Heidi Bench, Projects Advisor outlining material management and tipping fee updates proposed for 2025 as a result of the System Efficiency Study, as well as proposing options to address the inequities in the current cost recovery structure, has been received.

DIRECTOR ABSENT Director Watson left the meeting at 1:52 pm.

Moved and seconded to be moved as a block,
MOTION ONLY

That the Board authorize Staff to draft an amendment to Resource Recovery Facilities Regulatory Bylaw No. 2905, 2023 to incorporate rubble and wood waste under the definition and fee schedule for mixed waste.

That the Board authorize Staff to draft an amendment to Resource Recovery Facilities Regulatory Bylaw No. 2905, 2023 updating tipping fees to align with the proposed Tipping Fee Cost Recovery Objectives on a 5-year schedule.

Chair Jackman called for Division.

Moved and seconded,
And Resolved:

Call for division of the question.

RECOMMENDATION NO. 1

Moved and seconded,
And Resolved:

That the following motion **BE REFERRED** to the January 15, 2025 Joint Resource Recovery Committee meeting:

That the Board authorize Staff to draft an amendment to Resource Recovery Facilities Regulatory Bylaw No. 2905, 2023 to incorporate rubble and wood waste under the definition and fee schedule for mixed waste.

Defeated

Moved and seconded,
And resolved that it be recommended to the Board:

That the Board authorize Staff to draft an amendment to Resource Recovery Facilities Regulatory Bylaw No. 2905, 2023 to incorporate rubble and wood waste under the definition and fee schedule for mixed waste.

Carried

RECOMMENDATION NO. 2

The recommendation was amended to include “on a 5-year schedule and a 3-year schedule” prior to being moved and seconded.

Moved and seconded,
And Resolved:

That the following motion **BE REFERRED** to the January 15, 2025 Joint Resource Recovery Committee meeting:

That the Board authorize Staff to draft two amendments to Resource Recovery Facilities Regulatory Bylaw No. 2905, 2023 updating tipping fees to align with the proposed Tipping Fee Cost Recovery Objectives on a 5-year schedule and a 3-year schedule.

Defeated

Moved and seconded,
And resolved that it be recommended to the Board:

That the Board authorize Staff to draft two amendments to Resource Recovery Facilities Regulatory Bylaw No. 2905, 2023 updating tipping fees to align with the proposed Tipping Fee Cost Recovery Objectives on a 5-year schedule and a 3-year schedule.

Carried

DIRECTOR Director Casely left the meeting at 2:53 pm.
ABSENT

RECESS / The meeting recessed at 2:56 pm for a break and reconvened at 3:05 pm.
RECONVENE

4. S188 WEST WASTE FINANCIAL PLAN AMENDMENT – OOTISCHENIA TIPPING WALL BINS
[West Subregion]

The December 3, 2024 Committee Report from Amy Wilson, Resource Recovery Manager requesting amendment of the 2024 Financial Plan to account for the purchase of bins Ootischenia Landfill, has been received.

Moved and seconded,
And resolved that it be **recommended** to the Board:

That the Board approve an amendment to the 2024 Financial Plan for Refuse Disposal (West Subregion) Castlegar, New Denver, Slocan and Areas H, I, J and K Service S188 to decrease the Repairs and Maintenance Account 55010 by \$18,170 and increase the Capital Expense Account 60000 by \$18,170 for the Ootischenia Landfill Tipping Wall Bins.

Carried

5. S187 CENTRAL WASTE MFA EQUIPMENT FINANCING AUTHORIZATION – CENTRAL LOADER
[Central Subregion]

The December 3, 2024 Committee Report from Amy Wilson, Resource Recovery Manager requesting an authorization for a Municipal Finance Authority equipment financing for the 2024 Central Loader, has been received.

Moved and seconded,
And resolved that it be **recommended** to the Board:

That the Board approve an amendment to the 2024 Financial Plan for Refuse Disposal (Central Subregion) – Nelson, Kaslo, Salmo, and Areas D, E, F and G Service S187 to decrease the Proceeds from Equipment Financing Account 43200 by \$284,395 and increase the Transfer from Regular Reserves Account 45000 by \$284,395 for the Central Loader.

Carried

6. S187 CENTRAL WASTE / A120 FINANCIAL AMENDMENT – 2023 INTERNAL TRANSFER
[Central & West Subregions]

The December 3, 2024 Committee Report from Amy Wilson, Resource Recovery Manager requesting an amendment of the 2024 Financial Plan to account for an error in the 2023 internal transfers from Service S187 Central Waste to Service A120 Central-West Compost, has been received.

Moved and seconded,
And resolved that it be **recommended** to the Board:

That the Board approve an amendment to the 2024 Financial Plan for Refuse Disposal (Central Subregion) – Nelson, Kaslo, Salmo, and Areas D, E, F and G Service S187 to increase the Transfer

to Other Services Account 59500 by \$257,493 and increase the Transfer from Other Services Account 45500 by \$257,493 for the missed 2023 transfer for support of the Central Compost Facility.

Carried

7. PUBLIC TIME

The Chair called for questions from the public and members of the media at 3:13 pm.

No questions from the public.

8. ADJOURNMENT

Moved and seconded,
And resolved:

The Joint Resource Recovery Committee meeting adjourned at 3:13 pm.

Carried

CERTIFIED CORRECT



Director G. Jackman, Chair

December 11, 2024

Joint Resource Recovery Committee Meeting

BOARD RESOLUTIONS AS ADOPTED AT THE DECEMBER 11, 2024 JOINT RESOURCE RECOVERY COMMITTEE MEETING

RECOMMENDATION #1

That the Board authorize Staff to draft an amendment to Resource Recovery Facilities Regulatory Bylaw No. 2905, 2023 to incorporate rubble and wood waste under the definition and fee schedule for mixed waste.

RECOMMENDATION #2

That the Board authorize Staff to draft two amendments to Resource Recovery Facilities Regulatory Bylaw No. 2905, 2023 updating tipping fees to align with the proposed Tipping Fee Cost Recovery Objectives on a 5-year schedule and a 3-year schedule.

RECOMMENDATION #3

That the Board approve an amendment to the 2024 Financial Plan for Refuse Disposal (West Subregion) Castlegar, New Denver, Slocan and Areas H, I, J and K Service S188 to decrease the Repairs and Maintenance Account 55010 by \$18,170 and increase the Capital Expense Account 60000 by \$18,170 for the Ootischenia Landfill Tipping Wall Bins.

RECOMMENDATION #4

That the Board approve an amendment to the 2024 Financial Plan for Refuse Disposal (Central Subregion) – Nelson, Kaslo, Salmo, and Areas D, E, F and G Service S187 to decrease the Proceeds from Equipment Financing Account 43200 by \$284,395 and increase the Transfer from Regular Reserves Account 45000 by \$284,395 for the Central Loader.

RECOMMENDATION #5

That the Board approve an amendment to the 2024 Financial Plan for Refuse Disposal (Central Subregion) – Nelson, Kaslo, Salmo, and Areas D, E, F and G Service S187 to increase the Transfer to Other Services Account 59500 by \$257,493 and increase the Transfer from Other Services Account 45500 by \$257,493 for the missed 2023 transfer for support of the Central Compost Facility.



Committee Report

January 15, 2025

Resource Recovery Environmental Monitoring Program Award

Author:	Heidi Bench, Projects Advisor
File Reference:	06_2230_10_2024
Electoral Area/Municipality:	Entire RDCK
Services Impacted	S186 East Resource Recovery Waste S187 Central Resource Recovery Waste S188 West Resource Recovery Waste A119 East Resource Recovery Compost A120 Central-West Resource Recovery Compost

1.0 STAFF RECOMMENDATION

That the Board approve the RDCK entering into a Consulting Services Agreement with Masse Environmental Consultants for the Resource Recovery Environmental Monitoring Program for the period of January 31, 2025 to March 31, 2028, with the option for up to two (2) one (1) year extensions;

AND FURTHER, that as part of this agreement, Masse Environmental Consultants will sub-contract ALS Canada Ltd. to provide laboratory services for the duration of the Consulting Services Agreement for the Resource Recovery Environmental Monitoring Program;

AND FURTHER, that the total costs for the three-year contract period be paid from the following Services:

- S186 East Resource Recovery Waste Service, not to exceed \$139,365.50
- S187 Central Resource Recovery Waste Service, not to exceed \$212,880.71
- S188 West Resource Recovery Waste Service, not to exceed \$95,966.27
- A119 East Resource Recovery Compost Service, not to exceed \$18,009.55
- A120 Central-West Resource Recovery Compost Service, not to exceed \$44,773.81

AND FURTHER, that the Chair and Corporate Officer be authorized to sign the necessary documents.

2.0 BACKGROUND/HISTORY

Environmental monitoring programs (EMPs) are a standard regulatory requirement for modern landfill facilities. The purpose of an EMP is to:

- Identify and characterize potential contaminants of concern, such as leachate (landfill, septage, tailings, etc.);
- Assess, identify, and monitor potential impacts to the environment and public health; and,
- Identify appropriate water quality performance standards and assess compliance at the site boundary.

EMPs must be developed, maintained, conducted, and reported on by a Qualified Professional. EMPs have been conducted at various RDCK facilities since the early 2000s. Table 1 lists the RDCK facilities that currently have an EMP and summarizes the number of monitoring and sampling events, as well as reporting deliverables that are required under the EMP for each site.

Table 1: Annual EMP Events for RDCK Facilities

FACILITY	MONITORING/SAMPLING EVENTS			REPORTING DELIVERABLES	
	Groundwater	Surface Water	Landfill Gas	Interim Memo	Annual Report
Creston Landfill	4	4	4	4	1
Creston Compost Facility	1	1	-	1	-
Crawford Bay Former Landfill	-	1	-	1	-
Destiny Bay Former Landfill	-	1	-	1	-
Central Landfill	1	2	1	2	1
Central Compost Facility	2	2	-	2	-
Grohman Transfer Station	1	-	-	1	-
HB Mine Tailings Storage Facility	4	4	-	4	1
Nakusp Landfill	2	-	2	2	1
Ootischenia Landfill	2	2	2	2	1
Slocan Former Landfill	1	-	-	1	-
TOTAL EVENTS/DELIVERABLES	21	20	9	24	5

Historically the Environmental Technician has overseen the contract and project management of RDCK EMPs. However, due to significantly increasing workload related to several landfill Design and Operation Plan updates, the pending Nakusp landfill closure, and legacy landfill closures, EMP oversight will be transitioning to the Resource Recovery Projects Advisor starting in 2025.

3.0 PROBLEM OR OPPORTUNITY DESCRIPTION

Execution of the EMPs by a Qualified Professional is a regulatory requirement for the RDCK to maintain compliance with facility operational certificates. The existing contract for the monitoring, sampling, and reporting associated with the EMPs expires on March 31, 2025 and does not allow for any additional extensions.

Historically, the RDCK has managed a separate service agreement for laboratory services. The existing contract for the provision of laboratory services associated with environmental monitoring and sampling at RDCK facilities expired December 31, 2024.

To ensure consistent and continuous completion of the RDCK EMPs, and to satisfy the RDCK’s Purchasing Policy, a Request for Proposals (RFP) was posted on the RDCK website and BC Bid on October 25, 2024. The primary scope of work in the RFP was the execution of the EMPs, with an option for the consultant to include a cost breakdown for laboratory services. Four (4) proposals were received and evaluated by a team of three (3) Staff. Staff used an evaluation matrix, included in the RFP, to rank the proposals and propose a solution as described in Section 4 below.

3.1 Alignment to Board Strategic Plan

Consistent and continuous execution of the EMPs aligns with the RDCK's strategic objective for environmental responsibility. It does this by assessing and monitoring potential environmental concerns associated with RDCK facilities and ensuring compliance with regulatory criteria developed for environmental protection.

3.2 Legislative Considerations

Completion and annual review of the landfill EMPs is required to maintain compliance with the Operational Certificates for Creston, Central, Ootischenia, and Nakusp landfills (under the *Environmental Management Act*).

The Pollution Control Permits for the former Slocan, Crawford Bay, and Destiny Bay landfills, issued in the 1990's under the *Waste Management Act*, do not explicitly outline a requirement to conduct an EMP; however for landfill closure under current regulations, a minimum of 25 years of post-closure monitoring is required. All three of these former landfills ceased operations in the early 2000s, at which point EMPs were developed and implemented to support the eventual landfill closure for these sites.

The EMP for Grohman Narrows transfer station is not required by provincial legislation, but is part of an agreement with the former owner of the property directly downgradient of the site; however due to inability to reach the former landowner, this sampling has not been conducted since 2018. Costing for this EMP was conservatively included in the RFP scope of work; however Staff will review historical environmental data and engage with the new property owner in early 2025 to determine whether this sampling should be continued.

Due to the current scale of operations, completion of the EMPs for the compost facilities is not yet regulated under the *Organic Matter Recycling Regulation (OMRR)*; however EMPs were created as part of the facility operational plans and were included in this scope of work in anticipation of future regulation. In addition to routine EMP work, the scope of work for these facilities also included compost solids quality testing required by OMRR for the eventual use and/or sale of the end product.

Completion and annual review of the EMP for the HB Mine Tailings Storage Facility is required as part of the Reclamation and Closure Plan for the site, to maintain compliance with the *Mines Act*.

3.3 What Are the Risks

In addition to non-compliance with Provincial regulations, inconsistent completion of the EMPs could result in potential impacts to the environment not being identified in a timely manner, which could subsequently result in impacts to human or ecological health from RDCK facilities.

4.0 PROPOSED SOLUTION

Staff propose awarding the Resource Recovery EMP contract to Masse Environmental Consultants (Masse). Masse is a Nelson-based consulting firm who has conducted the RDCK routine EMPs since 2016, as well as numerous biological sampling programs and support for short-notice water sampling. The project team has been relatively consistent throughout this time, and as such is familiar with all aspects of the EMPs and the challenges associated with each site. In addition to submitting the lowest cost and highest ranked proposal, they have a proven track record of providing high quality service to the RDCK.

Masse also included an option to sub-contract laboratory services. As part of their proposal, Masse included a cost-comparison for two laboratories, ALS Canada Ltd. (ALS) and CARO Analytical. Both laboratories are fully accredited for the analyses required and the overall cost of laboratory services was almost identical between the

two. For consistency of service, which would reduce the need to adapt to new laboratory sampling and reporting requirements, Masse recommended retaining ALS for laboratory services associated with the EMP.

4.1 Financial Considerations of the Proposed Solution

Reporting associated with the completion of 2024 EMPs is expected to be completed by March 31, 2025 and will be invoiced under Masse’s existing contract. The proposed contract and costing in this section are reflective of field activities completed between the execution of this new agreement and December 31, 2027, and subsequent reporting for activities completed between April 1, 2025 and March 31, 2028.

Masse has the capacity to sub-contract laboratory services and provided costing to include as option in their proposal. Table 2 provides the annual EMP costs from Masse’s proposal, inclusive of monitoring, sampling, reporting, and laboratory services, broken down by sub-region and by Service.

Table 2: Summary of annual EMP costs with lab services managed by Masse (excluding GST)

Sub-region	Cost by Sub-region	Cost by Service	Service
East	\$52,458.35	\$6,003.18	A119
		\$46,455.17	S186
Central	\$85,884.84	\$14,924.60	A120
		\$70,960.24	S187
West	\$31,998.76	\$31,998.76	S188
TOTAL	\$170,341.95		

The estimated laboratory costs provided by Masse were maximum anticipated laboratory fees, based on the assumption that all sampling locations in the EMP for every site are accessible and have sufficient water to sample. This pricing includes a 3% markup on laboratory invoices for Masse to cover associated administrative costs.

All costs associated with the EMPs have been included in the 2025 Financial Plan and is funded via a mix of tipping fees and taxation. Costs related to the compost facilities in Services A119 and A120 are inclusive of compost solids quality sampling required for the eventual use and/or sale of the end product.

4.2 Risks with the Proposed Solution

While having Masse sub-contract the laboratory services is a new component to this service agreement, given their proven track record of successfully completing the EMP for the past eight (8) years, the risk of failure with this proposed solution is considered extremely low.

4.3 Resource Allocation and Workplan Impact

The Resource Recovery Projects Advisor will oversee the contract and project management for the EMP. This will include, but is not limited to:

- Executing the Consulting Service Agreement
- Conducting a project kick-off meeting and ongoing communications with the consultant
- Supporting the consultant with site access for field activities

- Implementing recommendations related to EMPs from the Hydrogeology and Hydrology Assessments completed in 2023 and 2024
- Technical review of all reporting deliverables (summarized in Table 1)
- Submission of environmental reporting deliverable to the Ministry of Environment and Parks (the Ministry)

Routine EMP work is continuous and ongoing. It is estimated that this oversight would comprise up to 20% of the Projects Advisor’s workload in the first year as several EMPs require updates based on the recent Hydrogeology and Hydrology Assessments, and less thereafter. The Projects Advisor’s workplan has been adjusted to reflect this.

The Environmental Projects Lead will be responsible for oversight of communications required and works completed at the HB Mine Tailings Storage Facility, in compliance with the *Mines Act*.

4.4 Public Benefit and Stakeholder Engagement of Proposed Solution

Not applicable.

4.5 Leveraging Technology

Not applicable.

4.5 Measuring Success

Success will be measured by the completion of annual EMP requirements on time and within proposed budgets. Annual reports are not typically presented to the JRRRC; however, if any significant environmental impacts that vary from historical results are identified, Staff will report these to the JRRRC within the year that they are identified.

5.0 ALTERNATIVE SOLUTION(S)

The alternative solution would be to award the contract to Masse for EMP monitoring, sampling, and reporting only, and conduct a separate procurement for laboratory services.

5.1 Financial Considerations of the Alternative Solution(s)

Table 3 provides the annual EMP costs based on Masse’ proposal for monitoring, sampling, and reporting only, with the estimated costs of laboratory services if managed in-house, broken down by sub-region and by Service.

Table 3: Summary of annual EMP costs with lab services managed by RDCK (excluding GST)

Sub-region	Cost by Sub-region	Cost by Service	Service
East	\$55,996.45	\$5,992.87	A119
		\$50,003.58	S186
Central	\$81,437.74	\$8,019.88	A120
		\$73,417.86	S187
West	\$32,199.52	\$32,199.52	S188
TOTAL	\$169,633.70		

Staff assumed an 8% increase in laboratory costs from 2024 based on a 3% increase in lab fees, plus 5% contingency to account for sampling of wells and/or surface water locations that may have been dry or inaccessible in 2024). These values do not account for costs associated with Staff time for procurement, contract management, and finance.

The estimated annual savings of managing the laboratory services contract in-house is just over \$700, which is less than 0.5% of the total expected cost of these services.

5.2 Risks with the Alternative Solution(s)

A potential risk of the alternative solution is that there may be other laboratories with lower rates than ALS; however Masse mitigated this risk by providing a cost analysis between ALS and a second laboratory option, indicating that ALS fees were comparable and slightly cheaper than the other lab. As there are limited accredited laboratory options, it is not expected that a formal procurement would result in significant cost savings for the laboratory services, and could potentially result in higher costs as laboratories often give consultants preferential pricing due to bulk purchasing of services.

5.3 Resource Allocation and Workplan Impact

In addition to the resources discussed in Section 4.3, this option would require more Staff time to conduct an additional procurement. Based on the anticipated value of lab services, this would also require an additional report be brought to the JRRRC for approval. This option would also result in increased project management and administrative time for processing additional invoices.

5.4 Public Benefit and Stakeholder Engagement of Proposed Solution

Not required.

5.5 Measuring Success

Success would be measured in the same way as for the recommended option.

6.0 OPTIONS CONSIDERED BUT NOT PRESENTED

Submissions from three other consultants were reviewed and evaluated; however the budget in all three of these proposals significantly exceeded the amounts in the RDCK draft 2025 budgets for environmental sampling. Based on this, and lower evaluation scores for these proponents (presented in Table 4 below), these were not presented as options.

Table 4: Summary of evaluation scores for EMP proposals

Proponent	Evaluation Score
Masse Environmental Consultants Ltd.	87
SLR Consulting (Canada) Ltd.	57
Steer Environmental Associates Ltd.	67
West Earth Sciences	56

7.0 OPTIONS SUMMARY

Option 1:

Recommendation:

That the Board approve the RDCK entering into a Consulting Services Agreement with Masse Environmental Consultants for the Resource Recovery Environmental Monitoring Program for the period of January 31, 2025 to March 31, 2028, with the option for up to two (2) one (1) year extensions;

AND FURTHER, that as part of this agreement, Masse Environmental Consultants will sub-contract ALS Canada Ltd. to provide laboratory services for the duration of the Consulting Services Agreement for the Resource Recovery Environmental Monitoring Program;

AND FURTHER, that the total costs for the three-year contract period be paid from the following Services:

- S186 East Resource Recovery Waste Service, not to exceed \$139,365.50
- S187 Central Resource Recovery Waste Service, not to exceed \$212,880.71
- S188 West Resource Recovery Waste Service, not to exceed \$95,966.27
- A119 East Resource Recovery Compost Service, not to exceed \$18,009.55
- A120 Central-West Resource Recovery Compost Service, not to exceed \$44,773.81

AND FURTHER, that the Chair and Corporate Officer be authorized to sign the necessary documents.

Option 2:

Recommendation:

That the Board approve the RDCK entering into a Consulting Services Agreement with Masse Environmental Consultants for the Resource Recovery Environmental Monitoring Program for the period of January 31, 2025 to March 31, 2028, with the option for up to two (2) one (1) year extensions;

AND FURTHER, that the costs be paid from the following Services:

- S186 East Resource Recovery Waste Service, not to exceed \$101,060.81
- S187 Central Resource Recovery Waste Service, not to exceed \$138,889.02
- S188 West Resource Recovery Waste Service, not to exceed \$75,998.63
- A119 East Resource Recovery Compost Service, not to exceed \$11,051.49
- A120 Central-West Resource Recovery Compost Service, not to exceed \$19,662.95

AND FURTHER, that the Chair and Corporate Officer be authorized to sign the necessary documents;

AND FURTHER, that the Board direct Staff to procure lab services under a separate procurement process and agreement.

8.0 RECOMMENDATION

That the Board approve the RDCK entering into a Consulting Services Agreement with Masse Environmental Consultants for the Resource Recovery Environmental Monitoring Program for the period of January 31, 2025 to March 31, 2028, with the option for up to two (2) one (1) year extensions;

AND FURTHER, that as part of this agreement, Masse Environmental Consultants will sub-contract ALS Canada Ltd. to provide laboratory services for the duration of the Consulting Services Agreement for the Resource Recovery Environmental Monitoring Program;

AND FURTHER, that the total costs for the three-year contract period be paid from the following Services:

- S186 East Resource Recovery Waste Service, not to exceed \$139,365.50
- S187 Central Resource Recovery Waste Service, not to exceed \$212,880.71
- S188 West Resource Recovery Waste Service, not to exceed \$95,966.27
- A119 East Resource Recovery Compost Service, not to exceed \$18,009.55
- A120 Central-West Resource Recovery Compost Service, not to exceed \$44,773.81

AND FURTHER, that the Chair and Corporate Officer be authorized to sign the necessary documents.

Respectfully submitted,
Heidi Bench – Projects Advisor

CONCURRENCE

Resource Recovery Manager – Amy Wilson
General Manager of Environmental Services – Uli Wolf
Corporate Administrative Officer – Stuart Horn

ATTACHMENTS:

Attachment A – Draft Consulting Services Agreement 2024-275-ENV



Consulting Services Agreement

Contract #:2024-275-ENV

Project: Environmental Sampling, Reporting & Monitoring for Resource Recovery Sites

GL Code: See Schedule B

THIS AGREEMENT executed and dated for reference the:

____ day of _____, 2025
(Day) (Month) (Year)

BETWEEN

REGIONAL DISTRICT OF CENTRAL KOOTENAY

(hereinafter called the "RDCK")

at the following address:

Box 590, 202 Lakeside Drive
Nelson, BC V1L 5R4

Agreement Administrator: Nathan Schilman

Telephone: 205.551.5937

Email: NSchilman@rdck.bc.ca

AND

MASSE ENVIRONMENTAL CONSULTANTS LTD.

(hereinafter called the "Consultant")

at the following address:

812 Vernon Street
Nelson, BC V1L 4G4

Agreement Administrator: Ico de Zwart

Telephone: 250.352.1147

Email: ico@masse-env.com

FOR GOOD AND VALUABLE CONSIDERATION, THE RECEIPT OF WHICH IS CONFIRMED, THE REGIONAL DISTRICT OF CENTRAL KOOTENAY AND THE CONSULTANT AGREE AS FOLLOWS:

- (a) **SERVICES:** The Consultant shall provide the services which are set out in the Consultant's proposal dated December 6, 2024 (the "Proposal") which forms part of this Agreement and as detailed in Schedule "A" of this Agreement (the "Services"). It is agreed that Services may also include any additional services authorized and agreed to by the Consultant and the RDCK by written agreement after the Agreement has commenced ("Additional Services").
- (b) **CHANGES TO SERVICES:** The RDCK and the Consultant acknowledge that it may be necessary to modify the Services, the Project schedule and/or the Budget in order to complete the Project. In the event that the RDCK or the Consultant wishes to make a change or changes to the Services, the Project schedule and/or the Budget it shall notify the other of the proposed change and reason(s) therefore. The party receiving the notification shall review and consider the proposal for change and shall as soon as is reasonably possible and no longer than within five (5) working days, advise in writing the party proposing the change whether it agrees to the change. Where the parties agree to the change, such agreement will form part of this Agreement and be formalized by means of a Scope Change Letter.

Any RDCK authorized services required of the Consultant beyond those Services set out in the Proposal shall

be considered Additional Services. The Consultant shall be compensated for all Additional Services on an hourly or per diem basis, as agreed upon by the RDCK and the Consultant in writing by means of a Scope Change Letter prior to the Consultant performing the Additional Services.

- (c) **TERM:** Notwithstanding the date of execution of this Agreement the Consultant shall provide the Services described in Schedule A hereof commencing on **January 30, 2025** (Start Date) and ending on **March 31, 2028** (End Date) (the "Term").
- (d) **LOCATION:** The location for delivery of the Services shall be the sites listed in Schedule A.
- (e) **PAYMENT:** The total budget for the Services, as specified in the Proposal is **\$511,025.85** (excluding GST) and on the terms set out in Schedule B. The budget for the Services is broken into tasks in the Proposal. The Consultant agrees to complete all of the tasks specified in the Proposal at a cost that will not exceed the budget amount for each task. The Consultant shall submit an invoice to the RDCK for payment, together with supporting documents, in respect of the hours worked and disbursements made on or before the last day of each month, for the RDCK's approval and due processing.
- (f) Schedules A through D are incorporated into, and form part of this Agreement.
- (g) The following terms and conditions are incorporated into, and form part of this Agreement.

THE CONSULTANT' OBLIGATIONS

- 1 The Consultant shall:
 - (a) Undertake all work and supply all materials necessary to perform the Services, unless stipulated otherwise in Schedule A.
 - (b) In performing the Services, at all times, act in the best interests of the Regional District of Central Kootenay (herein after called the "**RDCK**"). Also, the Consultant shall exercise that degree of professional care, skill and diligence required according to generally accepted professional standards current as of the date that the Services are rendered.
 - (c) Engage the services of staff, sub-consultants and sub-contractors who have the education, training, skill and experience necessary to perform the Services, and shall cause them to perform the Services on behalf of the Consultant.
 - (d) Employ only those sub-consultants and sub-contractors identified in the Proposal to supply the Services. The Consultant agrees that it has the responsibility for the coordination of all professional Services rendered to the RDCK by the Consultant or by its sub-consultants or sub-contractors on the Project. The Consultant may, with the written approval of the RDCK, such approval not to be unreasonably withheld, replace any of the identified project team members described in the Proposal with other professional staff possessing equivalent knowledge, ability and skills.
 - (e) Ensure that all personnel hired by the Consultant to perform the Services will be the employees of the Consultant and not to the RDCK with the Consultant being solely responsible for the arrangement of reliefs and substitutions pay supervision, discipline, employment insurance, workers compensation, leave and all other matters arising out of the relationship of employer and employee.
 - (f) Upon the request of the RDCK fully inform the RDCK of the work done by the Consultant in connection with the provision of the Services and permit the RDCK at all reasonable times to inspect, review and copy all works, productions, buildings, accounting records, findings, data, specifications, drawings, working papers,

reports, documents and materials, whether complete or otherwise, that have been produced, received or acquired by the Consultant as a result of this Agreement.

- (g) Comply with all applicable municipal, provincial and federal legislation and regulations.
- (h) At its own expense, obtain all permits and licenses necessary for the performance of the Services, and on request provide the RDCK with proof of having obtained such licenses or permits.
- (i) Promptly pay all persons employed by it.
- (j) Not assign this Agreement, not subcontract any of its obligations under this Agreement, to any person, firm or corporation without the prior written consent of the RDCK.
- (k) At all times, exercise the standard of care, skill and diligence normally exercised and observed by persons engaged in the performance of services similar to the Services.
- (l) Not perform any service for any other person, firm or corporation which, in the reasonable opinion of the RDCK, may give rise to a conflict of interest.
- (m) Be an independent Consultant and not the servant, employee or agent of the RDCK. The Consultant and the RDCK acknowledge and agree that this Agreement does not create a partnership or joint venture between them.
- (n) Accept instructions from the RDCK, provided that the Consultant shall not be subject to the control of the RDCK in respect of the manner in which such instructions are carried out.
- (o) At its own expense, obtain Workers Compensation Board coverage for itself, all workers and any shareholders, directors, partners or other individuals employed or engaged in the execution of the Work. Upon request, the Consultant shall provide the RDCK with proof of such compliance.
- (p) Be responsible for all fines, levies, penalties and assessments made or imposed under the *Worker's Compensation Act* and regulations relating in any way to the Services, and indemnify and save harmless fines, levies, penalties and assessments.
- (q) Not in any manner whatsoever commit or purport to commit the RDCK to the payment of any money.
- (r) Establish and maintain time records and books of account, invoices, receipts, and vouchers of all expenses incurred.
- (s) Notwithstanding the provision of any insurance coverage by the RDCK, indemnify and save harmless the RDCK, its successor(s), assign(s) and authorized representative(s) and each of them from and against losses, claims, damages, actions, and causes of action (collectively referred to as "Claims"), that the RDCK may sustain, incur, suffer or be put to at any time either before or after the expiration or termination of this Agreement, that arise out of errors, omissions or negligent acts of the Consultant or its subconsultant(s), subcontractor(s), servant(s), agent(s) or employee(s) under this Agreement, excepting always that this indemnity does not apply to the extent, if any, to which the Claims are caused by errors, omissions or the negligent acts of the RDCK its other consultant(s), contractor(s), assign(s) and authorized representative(s) or any other persons.
- (t) Use due care that no person or property is injured and no rights infringed in the performance of the Services, and shall be solely responsible for all losses, damages, costs and expenses in respect to any damage or injury, including death, to persons or property incurred in providing the Services or in any other respect whatsoever.

(u) The Consultant must provide the RDCK with a certificate of insurance upon execution of this Agreement in a form acceptable to the Chief Financial Officer of the Regional District and shall, during the Term of this Agreement, take out and maintain the following insurance coverage:

- (i) Automobile Liability (third party) insurance with a minimum limit of \$5,000,000.
- (ii) comprehensive commercial general liability insurance against claims for bodily injury, death or property damage arising out of this Agreement or the provision of the Services in the amount of **\$2,000,000 dollars per occurrence with a maximum deductible of \$5,000;**

Such insurance will:

- (A) name the Regional District, its elected officials, employees, officers, agents and others as an additional insured;
 - (B) include the Consultant's Blanket contractual liability;
 - (C) include a Cross Liability clause;
 - (D) include occurrence property damage;
 - (E) include personal injury;
 - (F) include a Waiver of Subrogation clause in favor of the RDCK whereby the insurer, upon payment of any claim(s), waives its right to subrogate against the RDCK for any property loss or damage claim(s);
 - (G) be primary in respect to the operation of the named insured pursuant to the contract with the RDCK. Any insurance or self-insurance maintained by the RDCK will be in excess of such insurance policy (policies) and will not contribute to it;
 - (H) require the insurer not cancel or materially change the insurance without first giving the RDCK thirty days' prior written notice; provided that if the Consultant does not provide or maintain in force the insurance required by this Agreement, the Consultant agrees that the RDCK may take out the necessary insurance and the Consultant shall pay to the RDCK the amount of the premium immediately on demand.
- (iii) professional liability coverage in the amount of **\$2,000,000 dollars per claim and \$5,000,000 dollars aggregate, with a maximum deductible of \$50,000;**
 - ~~(iv) pollution/environmental impairment liability insurance in the amount of \$ Amount of Insurance dollars per occurrence and \$ Amount of Insurance dollars aggregate, with a maximum deductible of \$50,000;~~

Such insurance will:

- ~~(A) name the Regional District, its elected officials, employees, officers, agents and others as an additional insured;~~
- ~~(B) include the Consultant's Blanket contractual liability;~~
- ~~(C) include a Cross Liability clause;~~

- ~~(D) include occurrence property damage;~~
- ~~(E) include a Waiver of Subrogation clause in favor of the RDCK whereby the insurer, upon payment of any claim(s), waives its right to subrogate against the RDCK for any property loss or damage claim(s);~~
- ~~(F) be primary in respect to the operation of the named insured pursuant to the contract with the RDCK. Any insurance or self insurance maintained by the RDCK will be in excess of such insurance policy (policies) and will not contribute to it;~~
- ~~(G) require the insurer not cancel or materially change the insurance without first giving the RDCK thirty days' prior written notice; provided that if the Consultant does not provide or maintain in force the insurance required by this Agreement, the Consultant agrees that the RDCK may take out the necessary insurance and the Consultant shall pay to the RDCK the amount of the premium immediately on demand.~~

- (v) Keep confidential for an unlimited period of time all communications, plans, specifications, reports or other information used in connection with the Project except:
 - (i) those requiring disclosure by operation of law; and
 - (ii) any disclosure authorized in writing by the RDCK.

CONSTRUCTION SUPERVISION

- (w) Inspect the site where the Services are to be performed (the "Site") and become familiar with all conditions pertaining thereto prior to commencement of the Services.
- (x) Where materials and supplies are to be provided by the Consultant, use only the best quality available.
- (y) Where samples of materials or supplies are requested by the RDCK, submit them to the RDCK for the RDCK's approval prior to their use.
- (z) Not cover up any works without the prior approval or consent of the RDCK and, if so required by the RDCK, uncover such works at the Consultant's expense.
- (aa) Keep the Site free of accumulated waste material and rubbish caused by it or the Services and, on the completion of the Services, leave the Site in a safe, clean and sanitary condition.
- (bb) At all times, treat as confidential all information and material supplied to or obtained by the Consultant or subconsultant as a result of this Agreement and not permit the publication, release or disclosure of the same without the prior written consent of the RDCK.

STANDARD OF CARE

- (cc) The RDCK recognizes that sub-surface conditions may vary from those encountered where samplings, borings, surveys or explorations are located by the Consultant and that the data, interpretations and recommendations of the Consultant are based solely on the information available to it.

UNDERGROUND UTILITIES

- (dd) The Consultant shall be responsible for locating all underground utilities prior to commencing subterranean work and provide proof of such to the RDCK.

SAFETY

- (ee) The Consultant shall be responsible for its activity and that of its employees on the job site. This shall not be construed to relieve the RDCK or any other contractor of their obligation to maintain a safe job site. Neither the presence of the Consultant nor of its employees, sub-consultants, sub-contractors and agents shall be understood to imply control of the operations of others, nor shall it be construed to be an acceptance of responsibility for job site safety.

THE REGIONAL DISTRICT OF CENTRAL KOOTENAY'S OBLIGATIONS

- 2 The RDCK shall:
 - (a) Retain the Consultant to provide the Services as set out in this Agreement.
 - (b) Subject to the provisions of this Agreement, pay the Consultant, in full payment for the Services which in the opinion of the RDCK at the times set out is Schedule "B" of this Agreement (herein called "**Agreement Price**"), and the Consultant shall accept such payment as full payment for the Services.
 - (i) Notwithstanding Subsection 2(b), not be under any obligation to advance to the Consultant more than 90% of the Agreement Price for Services rendered in accordance with Schedule "A" to the satisfaction of the RDCK. The 10% holdback shall be retained and paid back in accordance with the *Builder Lien Act*.
 - (ii) providing that it is not in breach of any of its obligations under this Agreement, holdback from the Agreement Price in addition to the 10% holdback contemplated in Subsection 2(b)(i), sufficient monies to indemnify the RDCK completely against any lien or claim of lien arising in connection with the provision of the Services.
 - (c) Provide the Consultant with all reports, data, studies, plans, specifications, documents and information available to the RDCK and relevant to the Project. The Consultant shall be entitled to rely on the reports, data studies, plans, specifications, documents and other information provided by the RDCK.
 - (d) Provide access to any site or adjacent properties as required to complete the Project. The Consultant shall be liable for any and all injury or damage which may occur to persons or to property due to any act, omission, neglect or default of the Consultant, or of his employees, sub-consultants, sub-contractors or agents.
 - (e) Give the Consultant reasonable notice of anything the RDCK considers likely to materially affect the provision of the Services.
 - (f) Examine all studies, reports, sketches, proposals and documents provided by the Consultant under this Agreement, and render decisions pertaining thereto within a reasonable time.

TERMINATION OF AGREEMENT

- 3 Should the Consultant neglect to complete the Services properly or fail to perform any of its obligations under this Agreement, the RDCK may notify the Consultant in writing that it is in default of its contractual obligations and instruct it to correct the default within fourteen (14) working days of receiving the notice. Failure to comply with the default request extends to the RDCK the option, without any other right or remedy, of suspending the Consultant's performance of the Services or immediately terminating this Agreement. The RDCK shall pay the Consultant for all Services performed and all disbursements incurred pursuant to this Agreement and remaining unpaid as of the effective date of such suspension or termination.
- 4 Other than for reasons set forth in section 3 the RDCK may suspend or terminate this Agreement for any

reason by giving thirty (30) calendar days' prior written notice to the Consultant. Upon receipt of such written notice, the Consultant shall perform no further Services other than those reasonably necessary to close out the Project. In such an event, the Consultant will be paid by the RDCK pursuant to this Agreement, for the completed tasks according to the Project schedule of tasks remaining unpaid as of the effective date of such suspension or termination.

- 5 Should the RDCK fail to perform any of its obligations under this Agreement, the Consultant may notify the RDCK in writing that it is in default of its contractual obligations and instruct it to correct the default within fourteen (14) working days of receiving the notice. Failure to comply with the default request extends to the Consultant the option, without limiting any other right or remedy the Consultant may have, of immediately terminating this Agreement and requesting settlement for all Services performed and for all disbursements incurred pursuant to this Agreement and remaining unpaid as of the effective date of such termination.
- 6 Should the Consultant's Services be suspended by the RDCK at any time for more than thirty (30) calendar days in any calendar year through no fault of the Consultant, the Consultant shall have the right until such suspension is lifted by the RDCK, to terminate this Agreement upon giving seven (7) working days' written notice to the RDCK. In such an event, the Consultant will be paid by the RDCK pursuant to this Agreement, for the completed tasks as per the Schedule of Tasks that remain unpaid as of the effective date of such termination.

GENERAL TERMS

- 7 The RDCK shall be the sole judge of the work, material and the standards of workmanship in respect of both quality and quantity of the Services, and their decision on all questions in dispute with regard thereto, or as to the meaning and intentions of this Agreement, and as to the meaning or interpretation of the plans, drawings and specifications, shall be final, and no Services shall be deemed to have been performed as to entitle the Consultant to payment therefrom, until the RDCK is satisfied therewith.
- 8 The RDCK certifies that the Service purchased pursuant to this Agreement are for the use of and are being purchased by the RDCK and are therefore SUBJECT TO THE FEDERAL GOODS AND SERVICES TAX.
- 9 This Agreement shall be governed by and construed in accordance with the laws of the Province of British Columbia.
- 10 Time shall be of the essence of this Agreement.
- 11 Any notice required to be given hereunder shall be delivered or mailed by prepaid certified or registered mail to the addresses above (or at such other address as either party may from time to time designate by notice in writing to the other), and any such notice shall be deemed to be received 72 hours after mailing.
- 12 This Agreement shall be binding upon the parties and their respective successors, heirs and permitted assigns.
- 13 A waiver of any provision or breach by the Consultant of any provision of this Agreement shall be effective only if it is in writing and signed by the RDCK.
- 14 A waiver under Section 13 shall not be deemed to be a waiver of any subsequent breach of the same or any other provision of this Agreement.
- 15 Everything produced, received or acquired (the "**Material**") by the Consultant or subcontractor as a result of this Agreement, including any property provided by the RDCK to the Consultant or sub-consultant, shall:

- (a) be the exclusive property of the RDCK; and
- (b) be delivered by the Consultant to the RDCK immediately upon the RDCK giving notice of such request to the Consultant.

- 16** The copyright in the Material belongs to the RDCK.
- 17** The RDCK may, at its discretion, notify the Consultant that the terms, amounts and types of insurance required to be obtained by the Consultant hereunder be changed.
- 18** Where the Consultant is a corporation, it does hereby covenant that the signatory hereto has been duly authorized by the requisite proceedings to enter into and execute this Agreement on behalf of the Consultant.
- 19** Where the Consultant is a partnership, all partners are to execute this Agreement.
- 20** Sections 1 f), l), m), s), and 18 of this Agreement will, notwithstanding the expiration or earlier termination of the Term, remain and continue in full force and effect.
- 21** The ideas, processes, or other information contained in the Consultant's Proposal is proprietary and, until the Consultant's Proposal is accepted, shall not be disclosed to any parties outside of the RDCK's staff or be duplicated by any means or used in whole or in part for any purpose. Should the Consultant's Proposal be accepted, the RDCK shall have the right to duplicate, use or disclose the information contained therein.
- 22** Neither the RDCK nor the Consultant will be considered in default of this Agreement for non-performance due to strikes, labour disputes, riots, civil insurrection, mechanical breakdowns, war, floods, or acts of God or for other reasons beyond the reasonable control of the RDCK or the Consultant.
- 23** Unbudgeted disbursements incurred by the Consultant due to delays caused by weather conditions and/or poor site access shall be for the RDCK's account.
- 24** The parties shall make all reasonable efforts to resolve a dispute by amicable negotiations and agree to provide, on a without prejudice basis, frank, candid and timely disclosure of relevant facts, information and documents to facilitate these negotiations.
- 25** All matters in dispute, which cannot be settled by the RDCK and the Consultant, may, with the concurrence of both the RDCK and the Consultant, be submitted to final and binding arbitration to a single arbitrator appointed jointly by them.
- 26** No person shall be nominated to act as arbitrator who is in any way financially interested in the Project or in the affairs of either the RDCK or the Consultant.
- 27** In the event that the RDCK and the Consultant cannot agree to an arbitrator, such arbitrator shall be chosen by reference to a Judge of the Supreme Court of British Columbia.
- 28** If any portion of this Agreement is held to be illegal or invalid by a court of competent jurisdiction, the illegal or invalid portion shall be severed and the decision that it is illegal or invalid does not affect the validity of this Agreement.
- 29** This Agreement constitutes the sole and entire Agreement between the RDCK and the Consultant relating to the Project and completely supersedes and abrogates any prior agreements existing between the RDCK and the Consultant, whether written or oral.
- 30** The headings in this Agreement are for convenience of reference only and shall not affect the interpretation

or construction of this Agreement.

- 31 Part 2 of the Request for Proposals of the RDCK dated October 25, 2024 and the Consultant’s Proposal provided in response are hereby incorporated into and forms part of this Agreement.
- 32 Except as expressly set out in this Agreement, nothing herein shall prejudice or affect the rights and powers of the RDCK in the exercise of its powers, duties or functions under the *Community Charter* or the *Local Government Act* or any of its bylaws, all of which may be fully and effectively exercised as if this Agreement had not been executed or delivered.

IN WITNESS WHEREOF the parties hereto have duly executed this Agreement as of the day and year first above written.

REGIONAL DISTRICT OF CENTRAL KOOTENAY	MASSE ENVIRONMENTAL CONSULTANTS LTD.
<hr/>	<hr/>
(Signature of Authorized Signatory)	(Signature of Authorized Signatory)
<hr/>	<hr/>
(Name and Title of Authorized Signatory)	(Name and Title of Authorized Signatory)
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(Signature of Authorized Signatory)	(Signature of Authorized Signatory)
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(Name and Title of Authorized Signatory)	(Name and Title of Authorized Signatory)

SCHEDULE A - SERVICES

The Consultant will conduct routine and as-needed environmental monitoring and sampling at RDCK Resource Recovery Facilities. The Consultant shall be responsible for developing a project timeline, methodology/approach, and specific steps to meet the overall objectives, adhering to the requirements presented herein.

The Consultant must have the required expertise to carry out the Work in a competent manner. All equipment, labour, materials and associated costs for the monitoring, sampling, and reporting will be the responsibility of the Consultant.

1 GENERAL SITE INFORMATION

Table 1 below summarizes the general site information for RDCK sites requiring environmental monitoring and sampling.

Table 1: General site information

Site Name	Address	Background
Central Landfill	550 Emerald Road, Salmo, BC	Landfill was closed in 2016 and now operates as a transfer station
Central Compost Facility	550 Emerald Road, Salmo, BC	Open-air windrow composting facility constructed in 2023; located at the Central Landfill to the south of the closed landfill cells
HB Tailings Storage Facility	550 Emerald Road, Salmo, BC	Located within and south of the Central Landfill property; accessed via a gravel road that connects the landfill to the HB TSF
Creston Landfill	1501 Mallory Rd, Creston, BC	Active natural attenuation landfill
Creston Compost Facility	1501 Mallory Rd, Creston, BC	Open-air windrow composting facility, constructed in 2021; located at the Creston Landfill approximately 300m to the south of
Crawford Bay Transfer Station	16798 Crawford Creek Rd, Crawford Bay, BC	Former landfill now operates as a transfer station
Destiny Bay Legacy Landfill	Boswell, BC	Former landfill accessed off Highway 3A via Akokli Forest Service Road
Grohman Narrows Transfer Station	Insight Drive, Nelson, BC	Active transfer station, opened in 2014
Nakusp Landfill	1420 Hot Springs Road, Nakusp, BC	Active natural attenuation landfill; formal closure scheduled for 2028
Ootischenia Landfill	671 Columbia Road, Castlegar, BC	Active natural attenuation landfill; will become an engineered landfill as it expands
Slocan Landfill	8875 Slocan South Road, Slocan, BC	Former landfill now operates as a transfer station

2 FIELD PROGRAMS

Routine field activities include one or more of the following: monitoring and/or sampling of groundwater wells, surface water (stream, creek, and/or seep), compost, and/or landfill gas. All field activities including, but not limited to, planning/preparation, equipment calibration and decontamination, preparation of field notes, field monitoring, sample labeling, sample collection, sample storage and shipping, chain-of-custody records, and follow-up activities must be conducted in accordance with site-specific Operational Certificates, Environmental Monitoring Programs (EMPs), and applicable criteria and guidelines, including the following:

- [BC Field Sampling Manual](#)
- [Guidelines for Environmental Monitoring at Municipal Solid Waste Landfills](#) (groundwater, surface water)
- [Landfill Gas Management Facilities Design Guidelines](#) (landfill gas)

EMPs with detailed monitoring and sampling requirements are included in Appendix A. Operational Certificates/Waste Permits are provided in Appendix B, as applicable. Table 2 below provides a general summary of the routine environmental monitoring that currently occurs at each of the sites.

Table 2: Summary of environmental monitoring and sampling

Site Name	Groundwater Wells (#)	Surface Water Locations (#)	Compost Samples (#)	Annual Frequency (# times per year)
Central Landfill	28	8	-	1 (GW and SW) 2 (2 SW locations)
Central Compost Facility	-	2	1-2	3 (SW) ¹ 5-7 (compost) ²
HB Tailings Storage Facility	11	13 ³	-	4
Creston Landfill	14	9	-	4
Creston Compost Facility	4	2	1-2	1 (GW and SW) ¹ 1-3 (compost) ²
Crawford Bay Transfer Station	-	2	-	1
Destiny Bay Legacy Landfill	-	3	-	1
Grohman Narrows Transfer Station	1	-	-	1
Nakusp Landfill	6	-	-	2
Ootischenia Landfill	9	-	-	2
Slocan Landfill	4	-	-	2

¹ Surface water sampling frequency is dependent on weather and water levels within a leachate collection pond.

² Sampling frequency and parameters are dependent on tonnage of material processed and quality of previous samples.

³ Flow measurements are required at two surface water locations.

The number of sites and/or sampling frequency may change at the discretion of the RDCK. There may be times when additional sampling is required on short notice. The Consultant must have the ability to respond to any event-driven sampling requests within 48 hours. If any issues arise resulting in an increase in scope, either during the field program or reporting phase, the Consultant must address these immediately by informing the RDCK and mutually determining a course of action.

2.1 Water Quality Monitoring

Water quality monitoring must be conducted in accordance with the applicable criteria and guidelines listed in the above section. At minimum, groundwater monitoring must include measurement of hydraulic levels (below ground surface, below top of pipe, distance from ground to top of pipe) and field parameters including temperature, pH, conductivity, dissolved oxygen (DO), oxidation-reduction potential (ORP), and turbidity.

2.2 Sampling and Laboratory Submission

Sampling method, frequency, and individual parameters to be analyzed must be in accordance with the respective EMP for each site and include samples as necessary for quality assurance and quality control (QA/QC) as per the guidance documents listed in Section 2.2. The Consultant shall explicitly describe their QA/QC program in writing. The sampling program may be modified to include additional or exclude parameters, locations, or increase or decrease frequency as directed by the RDCK.

The Consultant shall arrange for the laboratory to provide the following:

- Sample containers and preservatives (as required) for samples that are part of the EMP and sufficient QA/QC samples
- Coolers and labels for shipping;
- Filters for field filtering metals (to be paid for by the Consultant);
- Filtering of metals at laboratory (if required);
- Electronic data transfer of results to Ministry of Environment and Climate Change Strategy (the Ministry) electronic management system (EMS) and provide any follow up as necessary; and,
- Electronic copy provided to Consultant and RDCK.

The Consultant is responsible for coordinating with the laboratory regarding analysis requests, ensuring all analyses required by the EMPs for each sampling event at each sample site are sampled for and requested on the Chain of Custody (COC), and ensuring samples arrive at the laboratory within requirements of holding time. Shipments must be sent to the laboratory immediately following the sampling event so samples are received in the required timeline and condition. All samples shall remain the property of the RDCK, until reaching the contracted laboratory's maximum sample holding time.

The Consultant is responsible for reviewing laboratory reports within 24 hours of receipt to ensure:

- All requested analyses were completed by the laboratory; and,
- QA/QC checks are satisfactory and meet data quality objectives.

The Consultant must liaise with the laboratory providing analytical services to resolve errors, omissions, and clarifying results as necessary. If any issue arises from the laboratory report review these must be addressed immediately. The Consultant shall inform the RDCK and mutually determine a course of action.

2.3 Landfill Gas Monitoring

As the RDCK does not have landfill gas probes, monitoring to assess for landfill gas migration is currently conducted by monitoring the headspace gas in monitoring wells without saturated well screens for combustible gases using a GEM5000. This is only performed in monitoring wells at or near the site perimeter at Creston, Ootischenia, and Nakusp landfills, as required by their respective Operational Certificates. As part of their Proposal, Consultants should clearly outline how they would conduct landfill gas monitoring to satisfy the requirements of the Operational Certificates for these sites.

2.4 Flow Measurements

While conducting field programs at the HB Tailings Facility, the Consultant must also complete quarterly flow measurements at two locations using the transect method with a Swiffer Water Velocity Meter, or similar. The flow measurement monitoring and locations are not described in the EMP. Measurements shall be collected from the Spillway Inlet surface water sample location, and the Outlet Ditch surface water sample location, as described in the EMP. Results shall be included in the annual reporting for the site, described in Section 2.3.1.

2.5 Maintenance and Security of Monitoring Wells

While conducting field programs, the Consultant will be expected to take notes on and report the conditions of all sampling sites on a regular basis and recommend maintenance or relocation where necessary. The Consultant may be required to replace caps, locks, and hasps on wells as required.

3 REPORTING

The RDCK is required to provide the Ministry with a sampling event memorandum within 60 days of each sampling event at Creston, Central and Ootischenia landfills. Annual EMP reports are required for the following sites: Central Landfill, Central Compost Facility, Creston Landfill, Creston Compost Facility, Ootischenia Landfill, Nakusp Landfill, and HB Tailings Storage Facility. **No annual reports are required for Crawford Bay, Destiny Bay, Grohman Narrows or Slokan.**

Reports must be prepared and signed off by Qualified Person(s). The Consultant must ensure data standardization across all field notes, results, and reports. The Consultant is responsible for ensuring samples are compared to up-to-date criteria. The criteria must be updated when updates are issued and inform the Consultant must inform the RDCK when criteria are updated.

The scope of the Reports may be modified by the RDCK. The format of all reports shall be approved by the RDCK at the start of the contract term. All draft and final reports shall be reviewed and approved by the RDCK. Reports shall be submitted to the RDCK via email in PDF-format as well as workable Excel and Word formats.

The Consultant shall permit the RDCK to use and share all findings, drawings, figures, specifications, and any other materials found in the final reports provided by the Consultant as a result of this Contract. The ownership of reports and sampling data shall be retained by the RDCK.

3.1 Reporting for Landfills and HB Tailings Storage Facility

Sampling Event Memoranda (Interim Reports)

Following sampling events at each site, the Consultant shall provide the RDCK with the analytical results and summary of findings. Memoranda shall adhere to the requirements in the landfill Operational Certificates and must include:

1. A brief monitoring event summary identifying any exceedance of the selected criteria or non-compliance with the site Operational Certificate;

2. Tabulated analytical results compared to the appropriate criteria, identifying criteria exceedances; and,
3. PDF and Excel laboratory reports with COC records.

The Operational Certificates for Central, Creston, and Ootischenia landfills require that the RDCK provide the Ministry with a memorandum within 60 days of any sampling event.

The Consultant must be able to adhere to the following schedule for this reporting:

Table 3: Summary of reporting timelines

Timeline	Submission Event
Day 1	Sampling event finishes and samples are submitted to laboratory
Day 35	Consultant submits draft report to RDCK
Day 45	RDCK provides feedback to the Consultant
Day 55	Consultant provides final interim report to RDCK
Day 59	Interim report submitted to the Ministry by RDCK

Annual EMP Reports

The annual EMP reports for landfills must be completed in accordance with the Operational Certificate for each site, the most recent version of Guidelines for Environmental Monitoring at Municipal Solid Waste Landfills, and the Landfill Criteria for Municipal Solid Waste. The annual EMP report for the HB Tailings Facility shall follow the landfill annual EMP reporting format. All annual EMP reports must include, at minimum:

- Summary of annual EMP activities, including any deviations from the program
- Results and assessment
 - Identification of applicable water quality standards
 - Field monitoring observations and results
 - QA/QC discussion and results
 - Discussion of analytical results for each substrate sampled (e.g. groundwater, surface water, etc.) including spatial and temporal trends, criteria compliance, and an evaluation of the impacts on the receiving environment
- Recommendations and proposed changes to the EMP
- Tables summarizing the following:
 - EMP activities completed
 - Landfill gas monitoring results, where required
 - Hydraulic monitoring results
 - All other field monitoring results, including flow data for the HB Tailings Facility
 - Analytical results
- One figure showing the site and all sampling locations

Drafts of all annual EMP reports must be submitted to the RDCK by February 10th each year. RDCK staff will review the report and provide feedback within three (3) weeks of receipt. The Consultant shall complete revisions and submit a final copy of the annual EMP report to the RDCK by March 15th of each year.

3.2 Reporting for Compost Facilities

Compost facility annual EMP reports for water quality monitoring and sampling shall follow the same format as the Sampling Event Memoranda requirements described in Section 2.3.1. Results of compost quality sampling do not need to be included in any written report, outside of results received from the laboratory.

4 GREENHOUSE GAS EMISSIONS REPORTING

The RDCK has committed to reducing corporate emissions and achieving carbon neutral operations under the provisions of the Provincial Climate Action Charter. As part of this, the RDCK requires that contractors and consultants who provide routine services for a value of greater than \$25,000 per year communicate the quantity of fuel used as part of the delivery of the services described in their contract on an annual basis. Fuel consumption associated with the provision of these services must be provided to the RDCK with an annual deadline of March 30th at the Consultant's sole cost.

Contractors and consultants are to provide the following information about total fuel consumption from the operation of vehicles, equipment and machinery used in the provision of service to the RDCK's Resource Recovery program:

- Vehicle class (as defined in Table 4 below);
- Type of fuel used by each vehicle; and
- Amount of fuel in litres consumed from the operation of each vehicle and all equipment and machinery for the contracted service between January 1st and December 31st.

Table 4: Description of vehicle class types

Vehicle Class	Includes
Light Duty Vehicle	<ul style="list-style-type: none">• 2 door passenger cars• 4 door passenger cars• Station Wagon
Light Duty Truck	<ul style="list-style-type: none">• SUV's, minivans• Full-size vans• Pick up trucks with a gross vehicle weight rating (GVWR) under 3856 Kg (8500 lbs) and a curb weight under 2722 Kg (6000 lbs)
Heavy Duty Truck	<ul style="list-style-type: none">• Road vehicles with a gross vehicle weight rating (GVWR) over 3856 Kb (8500 lbs) and a curb weight over 2722 Kg (6000 lbs)
Off Road Vehicle	<ul style="list-style-type: none">• Vehicles and equipment not licensed for road use (e.g. snow mobiles, ATVs, lawnmowers and trimmers, tractors, construction equipment)

If actual quantities are not available, an estimate would be acceptable. If providing an estimate, the basis for determining this data must be provided.

5 CONSULTANT'S RESPONSIBILITIES

All equipment, labour, materials and associated costs for sampling and reporting will be the responsibility of the Consultant.

The Consultant must provide a 7-day notification to the RDCK's Projects Advisor prior to the start of any sampling event.

The Consultant must provide a 7-day notification to the Prime Contractor of a site, if the prime contractor is not

the RDCK (e.g. Creston Landfill, Ootischenia Landfill, Nakusp Landfill), prior to the start of any sampling event. Prime contractor contact information will be provided to the successful proponent.

The Consultant must provide a 7-day notification to the RDCK's Environmental Projects Lead prior to the start of any sampling events taking place at the HB Tailings Storage Facility. In addition, the Consultant must abide by the *Mines Act* at all times, while on the tailings facility site. This includes sending a text message to the Environmental Projects Lead when arriving at and leaving the site, and every 2.5 hours while at the site.

Within 2 weeks of the execution of the contract, the successful proponent will be asked to provide a Health & Safety Plan that includes a working alone policy.

6 CONSULTANT EQUIPMENT

If repairs are required on the Consultant's equipment due to the actions of the Consultant, the full costs for repair will be borne by the Consultant.

7 PERSONNEL

The Consultant will, at all times during the term of this Contract, employ a Supervisor charged with the responsibility of supervising the operations of the Consultant. The Supervisor will represent the Consultant in the performance of the Work, and directions given to them by the RDCK will be held to have been given to the Consultant. Contact information for the Supervisor will be given to the RDCK, and the Supervisor must respond promptly to all requests by the RDCK.

The Consultant must employ properly qualified personnel to carry out the Work. The Consultant acknowledges that its employees, agents and sub-contractors may come into contact with the public in the execution of this Contract and that it is of primary importance to the RDCK that excellent relations with the public be maintained. All personnel performing work under this Contract must conduct themselves in a courteous and polite manner towards the public.

8 CONSULTANT'S CONTROL OF THE WORK

The Consultant will have complete control of the Work and must effectively direct and supervise the Work using their best skill and attention. The Consultant will be solely responsible for all means, methods, techniques, sequences and procedures required for the execution of the Work and for coordinating all parts of the Work under the Contract.

9 LABORATORY SERVICES

The Consultant will sub-contract laboratory services from ALS Canada Ltd. for the analyses required in the EMPs and may apply a 3% markup on laboratory invoices to cover associated administrative costs. Laboratory pricing shall adhere to that presented in Appendix 4 of the Consultant's proposal for the three-year term of this Contract.

SCHEDULE B – CONTRACT PAYMENT TERMS

- 1 Total budget shall not exceed \$511,025.85 (excluding GST).
- 2 Invoices to be submitted upon completion of each Task.

The following contract number and GL code(s) **must** be quoted on the invoice(s):

Contract Number: **2024-275-ENV**

GL Codes: **Account:** 54030

Site Work Order:

OPR152-100 Crawford Bay Transfer Station
OPR298-101 Creston Landfill
OPR642-100 Creston Compost Facility
OPR152-100 Destiny Bay transfer station
OPR296-101 Central Landfill
OPR643-100 Central Compost Facility
OPR303-101 Grohman Narrows Transfer Station
OPR417-302 HB Tailings Facility
OPR304-101 Ootischenia Landfill
OPR302-101 Nakusp Landfill
OPR307-101 Slocan transfer station

Invoices should be emailed to ap@rdck.bc.ca, with the contract administrator identified on the first page of this contract in cc.

- 3 Invoices to be paid on net 30 day term.
- 4 GST (if applicable) shall be listed as a separate line item on all invoices.
- 5 All invoices for work performed in the calendar year shall be emailed to ap@rdck.bc.ca, with the contract administrator identified on the first page of this contract in cc, no later than January 10th of the following year.

ANNUAL ADJUSTMENTS

- 6 The price as presented in Schedule C: *Consultant's Proposal and Pricing Schedules* shall be adjusted annually on March 31 according to the following formula:

Cumulative Annual Contract Price x Percentage Change of the Statistics Canada Average Consumer Price Index for British Columbia for All Items of the 12 months prior to the month immediately preceding the date for which the fee rate is being adjusted.

- 7 On the anniversary of the Contract it is the responsibility of the Consultant to engage with the RDCK to determine any adjustments. Supporting calculations and documentation shall be available for both parties to review and approve. The Consultant shall adjust invoices accordingly as soon as possible.
- 8 The RDCK will, at its absolute discretion, reserve the right to review and adjust the formula annually. The tables referenced by Statistics Canada will be the most up to date and relevant tables available at the time

of the adjustment. No other adjustment to the Contract Price will be made during the term of the Contract.

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Committee Report

January 15, 2025

Industrial, Commercial, and Institutional Organics Collection Pilot Program Supports and Disposal Ban Investigation

Author: Alayne Hamilton, Environmental Projects Lead
File Reference: 12-6210-20
Electoral Area/Municipality: City of Nelson
Services Impacted Allocation Service A102 Resource Recovery, Allocation Service A120 Central-West Compost

1.0 STAFF RECOMMENDATION

RECOMMENDATION 1 – ICI PILOT PROGRAM SUPPORTS

That the Board approve the proposed subsidies and supports for the Industrial, Commercial and Institutional organics diversion pilot program within the City of Nelson, including:

- a) A pilot reduction in commercial organics tipping fees from \$96.75/tonne to \$55/tonne.
- b) Provision of education and training support for participating businesses.
- c) Development of a communications program to promote and support the pilot.
- d) Rebates for up to two organic waste carts for the first 25 participating businesses.

AND FURTHER that \$8,500 be included in the draft 2025-2029 Financial Plan for Service S187 Central Subregion Resource Recovery to fund portions of the communications program materials that are specific to the City of Nelson, and the rebates for the organic waste carts;

AND FURTHER that \$4,000 be included in the draft 2025-2029 Financial Plan for Allocation Service A102 Resource Recovery to fund portions of the communications program materials that are more general and can be utilized for future pilot programs in other communities.

RECOMMENDATION 2 – ICI ORGANICS DISPOSAL BAN

That the Board direct staff to investigate the feasibility of implementing an Industrial, Commercial and Institutional organics disposal ban, and to return to the Committee in Q3 2025 with an initial framework for implementing a disposal ban for discussion.

2.0 BACKGROUND/HISTORY

Currently, organics delivered to compost facilities comes almost exclusively from residential curbside collection and self-haul; voluntary Industrial, Commercial, and Institutional (ICI) sector participation in organics diversion remains undeveloped.

The RDCK's Organic Waste Diversion Strategy identified a combined ICI diversion potential of approximately 900 tonnes per year in areas with access to existing organics infrastructure. This diversion estimate includes organics from Nelson, Castlegar, Creston, Salmo, and surrounding electoral areas.

Over the past two years, Staff have worked extensively to encourage voluntary participation in ICI diversion. Efforts to date have included:

- Developing a generators list with estimated diversion potential and contact details from Interior Health and Chamber of Commerce data.
- Mailing surveys and information packages to all ICI sector businesses identified on the generators list, which received a low response rate.
- Reducing organics tipping fees in late 2022 as the limited feedback from the ICI survey was that tipping fees were too high for businesses to justify making the change.
- Setting up the EngageHQ ICI Organic Waste Recycling project page.
- Engaging with waste haulers to discuss ICI organics collection.
- Participating in ICI training opportunities.
- Engaging with other regional districts and municipalities that have had successes or failures with ICI implementation.
- Presenting on ICI organics diversion at Nelson District Chamber of Commerce meetings.
- Attempting engagement with Castlegar and Creston Chambers of Commerce.
- Conducting calls and meetings with the largest generators in each municipality.
- Developing ICI information packages and a new expanded survey.
- Setting up a fully grant funded contract with Nelson District Chamber of Commerce (NDCC) to continue business and hauler engagement around organics diversion and an ICI pilot.
- Developing back-of-house signage for ICI generators to clearly define waste streams, and assist with source separation.

Building on the work staff have completed with NDCC, GFL Environmental Inc. has recently put forward pricing for an ICI organics collection pilot program in the City of Nelson, due to expressed interest by several downtown restaurants, and successes of GFL's ICI pilot program in the Regional District of Kootenay Boundary (RDKB).

The pilot program offer developed by GFL includes weekly servicing of a 1-yard front load bin, at a cost of \$291.60/month which includes tipping fees, a 20% fuel surcharge, and 9.6% environmental fee. Feedback from businesses indicates that while there is interest, the current cost remains prohibitive due to the high monthly costs on top of upfront expenses such as training staff, purchasing smaller bins, and adjusting operations. Staff began looking at options for ways to support the pilot program to make it more feasible for businesses to join.

If the pilot is established and over the year is proven to be a viable business model, GFL could offer expanded services with the option of utilizing larger carts (120 or 240 L) opposed to only the front load bins. This could further encourage participation as some businesses report having space limitations or only a small amount of organic waste. If the pilot is successful, other haulers would likely also be interested in offering services, including in other municipalities. Expansion of the program and increased competition could lead to overall reduced costs.

While the possibility of a pilot program being established is a positive step towards voluntary ICI participation, widespread ICI organics diversion may ultimately require an ICI organics disposal ban. The potential need for a disposal ban was outlined in the RDCK's 2017 Organic Waste Diversion Strategy, which included the following highlights:

- A ban is a common and effective policy tool that is used to signal to generators and haulers that they are expected to source separate organics when alternatives are readily available.
- The ban is enforced at the point of disposal (i.e. at transfer stations and landfills) through the application of significant surcharges on garbage found to contain banned materials.
- The need to enforce a disposal ban is often short-term and minimal if adequate collaboration, communication, and education is completed before implementation.
- The goal of the surcharge is not to make money for the regional district but is to educate.

Haulers have frequently voiced preference for the RDCK to implement a disposal ban, and currently, 67.4 percent of B.C.'s population is covered by an organics disposal ban for both residential and ICI organics.

Providing financial supports to the ICI pilot program, and taking steps towards the early planning stages of a possible ICI organics disposal ban should be considered to continue the work to establish widespread participation in ICI diversion.

3.0 PROBLEM OR OPPORTUNITY DESCRIPTION

Currently, based on scale data, there are no registered waste collection contractors bringing ICI organics to any RDCK facility, although some of the larger loads that are being self-hauled may come from commercial sources. The RDCK has an opportunity to address low participation rates in ICI organics diversion, which hinders waste reduction and methane mitigation efforts, and leads to a higher cost per tonne for processing at the compost facilities.

High costs and operational challenges for businesses remain barriers to voluntary participation in an ICI diversion program. The proposed ICI pilot program, coupled with the proposed financial and educational supports, aims to close this gap and test a scalable model for broader implementation.

Additionally, investigating the feasibility of an ICI organics disposal ban provides a strategic avenue to enforce participation and improve long-term diversion rates, aligning with regional sustainability goals.

3.1 Alignment to Board Strategic Plan

This initiative aligns with the RDCK's 2024 Strategic Plan, particularly the objectives of leading by example and implementing strategies to support environmental stewardship, leveraging available opportunities in order to enhance our waste management system, and supporting our local agriculture and food security. Increasing ICI organics diversion by supporting a pilot and investigating a disposal ban contributes to reducing greenhouse gas emissions, enhancing waste diversion, optimizing existing composting infrastructure, supporting a circular economy, and demonstrating innovation in waste management practices.

3.2 Legislative Considerations

There are no immediate legislative requirements to consider; however, a future possible implementation of an ICI organics disposal ban would require amendments to the Resource Recoveries Facilities Bylaw.

3.3 What Are the Risks

No additional risks that were not identified already in Section 3.0.

4.0 PROPOSED SOLUTION

To support businesses that wish to join the pilot, staff are proposing several supports designed to encourage participation in the program. The possible supports that staff see as feasible to assist with pilot implementation include:

1. Reduction in Commercial Organics Tipping Fees

- Reduce commercial organics tipping fees from \$96.75 to \$55/tonne, which was a recommendation from GFL on how to most effectively reduce costs of the pilot program.
- This could be completed under a pilot structure so that a formal bylaw amendment is not needed.
- Staff are proposing that this tipping fee reduction be in place for 1 year from the commencement of the pilot, before staff return to the Committee with an update on the pilot program, and a discussion on if the tipping fee reduction should be extended further.
- This reduction would lower the commercial hauler service monthly organics collection cost for participating businesses from \$291.60 to \$194.40, a savings of \$97.20.
- Monthly fees are a significant operational cost for businesses. Reducing tipping fees should incentivize participation and increased diversion.

2. Education and Training Support

- Provide on-site training and back-of-house signage for participating businesses, particularly those that are unfamiliar with organics diversion.
- Effective training and clear signage are essential for ensuring proper waste separation and reducing contamination in organics streams. Providing this support will improve the program's effectiveness.

3. Communications Program

- Staff will develop communications that announce the pilot program, highlight its benefits, and explain how businesses can participate. This could include emails, mailers, media release or feature story, sponsored social media posts, and posters.
- Much of this material that will be prepared could be utilized for pilots that are established in other communities.
- Should the pilot be a success, the RDCK will prepare co-communications to highlight the businesses and the programs achievements.
- Clear communication is essential to ensure businesses understand the program's benefits, how to get involved, and why participation is crucial. Joint communications will raise awareness and encourage broader engagement in the program.

4. Rebate for Organic Waste Bins or Carts

The current pilot proposal is for 1-yard front load bins only, so this support option is for back-of-house use to store materials before transport to the 1-yard bin, or for businesses that wish to join the pilot program once cart collection is able to be offered.

- The RDCK could cover the cost of the purchase of up to two organics bins or carts for each business, at up to a total costs of \$400 for the first 25 businesses, with proof of purchase.
- For carts purchased for the pilot program once cart collection is able to be offered, only standardized carts that are compatible with the collection vehicle would be funded.
- For carts that will be stored outside, bear-resistant models would need to be purchased. For carts used for back-of-house and transfer to the larger 1-yard front load bin, bear-resistant models would not be required.

- Smaller bins or carts are ideal for areas where there is limited space, and this support would help businesses with start-up costs.

Although the above supports could help get a pilot program started in Nelson, to support planning for further ICI diversion, staff are also proposing that the Committee begin to consider an ICI organics disposal ban. Implementing a ban can be a very lengthy process, often encompassing 1-2 years of planning, engagement, and education development, and 1-2 years of education, followed by phased implementation with progressive thresholds and enforcement.

Due to these lengthy timelines and that eventual regulation is likely needed to encourage maximum ICI diversion across all areas with access to organics diversion infrastructure, Staff are recommending that the Committee direct staff to complete additional investigation into a ban strategy, and return to Committee in Q3 2025 with a framework for implementation for consideration by the Committee. Starting this process now allows RDCK to proactively address these timelines and avoid delays, should the ICI pilot program in Nelson not result in expansion of an ICI diversion program.

4.1 Financial Considerations of the Proposed Solution

It is difficult to estimate the potential revenue from the proposed pilot program and the financial impacts associated with the proposed supports, as the number of businesses within the City of Nelson that are interested in joining the pilot is small but is expected to grow. The proposed supports include:

1. Reduction in Commercial Organics Tipping Fees from \$96.75 to \$55 per tonne (43.2% decrease).

Although implementing this change will reduce the tipping fee potential, it should result in overall increased revenue for A120 Central-West Compost, which currently has no known revenue from commercial sources.

Although diversion amounts from the pilot are anticipated to be small to start, with increased organics diversion from the ICI sector in the City of Nelson, there will also be an associated decrease in mixed waste tipping fee revenues for Service S187.

2. Education and Training Support

This item has no associated cost outside staff time.

3. Communications Program

It is estimated that \$5,000 should be included in the draft 2025 to 2029 Financial Plan to cover the cost of communications development.

As much of these communications materials could be utilized for other pilots established in other communities in the future, staff are proposing that \$4,000 be paid from Allocation Service A102. For costs that are unique to the City of Nelson pilot, including distributing and printing materials and cost for the development of materials that are Nelson-specific, staff propose including \$1,000 in Service S187 Central Subregion Resource Recovery.

4. Rebate for Organic Waste Bins

Staff are proposing that the RDCK cover up to \$400 per business for up to two cart or bin purchases, for the first 25 businesses that are confirmed to be participating in the pilot. Under the assumption that a variety of bin types will be purchased, and not all businesses will use the maximum amount available, the

total cost of this support is estimated to be \$7,500, to be paid from Service S187 Central Subregion Resource Recovery, and that these costs be included in the draft 2025 to 2029 Financial Plan.

Staff are proposing proceeding with all of the supports listed in Options 1 through 4, at a total cost of up to \$12,500. The pilot period is currently assumed to be 1 year. Depending on the launch date in 2025, some of these costs may extend into 2026; however, for budget purposes the full costs will be included in the 2025 fiscal year.

Staff are exploring with Columbia Basin Trust if commercial organics supports could be added to the existing grant funding received from CBT to support the rural organics curbside program.

4.2 Risks with the Proposed Solution

The risks include financial impact of the proposed supports, which could be mitigated by setting a 1 year timeline before reviewing the reduction in tipping fees and setting a maximum number of businesses that could qualify for the bin purchase rebate initially.

4.3 Resource Allocation and Workplan Impact

ICI diversion planning was identified previously to the Committee as being a focus in 2025 for the Organics Coordinator. The Resource Recovery Manager and Environmental Projects Lead will be supporting the Organics Coordinator in this scope of work. As a result of the heavy focus on this project that will be required in Q1, there may potentially be delays to other items in the Organics Coordinator's work plan for Q1, including assisting with the HB Tailings Facility First Nations Engagement, and developing ICI organics diversion pilot programs in other communities with access to organics infrastructure.

4.4 Public Benefit and Stakeholder Engagement of Proposed Solution

There is no legislated obligation for stakeholder engagements; however, stakeholder engagement, including with businesses and haulers, will be key to success.

The public benefit will be that the program aims to reduce landfill waste, lower greenhouse gas emissions, and promote sustainable practices.

4.5 Leveraging Technology

Staff have already launched the ICI Organic Waste Recycling page on EngageHQ. Business owners can ask questions, take the survey, or subscribe for project updates. Sponsored social media posts will also be used to promote the launch of an ICI pilot program in Nelson.

4.5 Measuring Success

Success will be measured by participation rates in the pilot program after 1 year, increased organics tonnage/revenues from commercial sources, contamination rate and business feedback. The Board will be updated in Q3 2025 with the ICI organics disposal ban framework, and at the 1 year mark after the implementation of the pilot program, to determine if supports should continue.

5 ALTERNATIVE SOLUTION(S)

Alternative 1: Continue with the plan to provide supports for the ICI pilot program within the City of Nelson but instead of reducing commercial organics tipping fees, provide a rebate for monthly collection costs.

Rebates could be offered to businesses for the pilot’s duration (e.g., first 12 months), and could be offered to a set number of businesses that are the first to join the program, or could apply to all businesses that participate in the program. Similar to reducing the commercial organics tipping fee, rebates also lower the cost barrier for businesses to participate in the pilot program, but are administratively more complex than a tipping fee reduction for both the RDCK and the business.

Although rebates are a reasonable fallback option, staff recommend focusing on the tipping fee reduction for simplicity and maximum impact.

Alternative 2: Do not provide any supports for the pilot and continue encouraging voluntary efforts from the ICI sector.

Alternative 3: Do not provide any supports for the pilot and direct staff to work towards implementing a disposal ban as quickly as possible. Accelerating the implementation of a disposal ban would incur upfront consulting, planning and enforcement costs but would likely achieve the highest diversion rates over the shortest amount of time.

5.1 Financial Considerations of the Alternative Solution(s)

Alternative 1: Providing rebates for monthly collection costs would require additional funds be included in the draft 2024-2029 Financial Plan in Service S187 Central Subregion Resource Recovery. Limiting the rebate to a specific number of businesses and a set length of time would provide a funding cap for the expenses. Staff suggest a monthly rebate of \$50 per month per business, for the first 12 months of participation, for the first 25 participating businesses, at a total cost of up to \$15,000.

Alternative 2: Continuing with encouraging voluntary efforts and not providing any supports to the pilot would carry no additional cost to the RDCK but would result in low diversion rates and missed revenue opportunities from increased organic waste processing. The lack of ICI organics disposal revenue in the long-term should be included in the financial assumptions for the organics services in the draft 2025-2029 Financial Plan.

Alternative 3: Accelerating the implementation of a disposal ban would likely require the expertise of a solid waste consultant that has been involved in a disposal ban implementation previously. The cost to have a consultant lead the disposal ban process in an expedited timeline is estimated to be \$25,000. This cost would be paid from Allocation Service A102, and the funds would need to be included in the draft 2025-2029 Financial Plan. Although this option carries a large upfront cost, it would likely achieve the highest diversion rates and organics tipping fee revenues over time.

5.2 Risks with the Alternative Solution(s)

Alternative 1: Administrative complexity with rebates could deter participation, and rebates may not provide sufficient motivation to increase diversion rates significantly. Added workload to our finance department.

Alternative 2: Without supports, businesses have said they could not voluntarily participate in the pilot as it is cost prohibitive. This would result in continued low diversion rates and failure to meet sustainability goals.

Alternative 3: A rapid shift to a disposal ban could still be a multi-year process, and does not address the immediate need to continue with supporting voluntary participation in ICI diversion. If a disposal ban is

implemented in a manner that is too rushed, it could leave inadequate time for stakeholder engagement and may face strong resistance.

5.3 Resource Allocation and Workplan Impact of the Alternative Solution(s)

Alternative 1: Staff time would be required to administer rebate programs, potentially impacting other projects due to the additional administrative workload. The administering of rebates would be completed by the Environmental Services administration staff with support from the finance department.

Alternative 2: Minimal staff resources would be needed as efforts would focus solely on voluntary participation.

Alternative 3: Significant staff time would be required for planning, stakeholder engagement, communications and education, RDCK staff training and enforcement associated with implementing a disposal ban, potentially delaying other initiatives.

5.4 Public Benefit and Stakeholder Engagement of the Alternative Solution(s)

Alternative 1: Engagement efforts would need to focus on educating businesses on the benefits of rebates versus tipping fee reductions. Businesses may connect the direct rebate more so as a benefit from the RDCK, opposed to a tipping fee reduction coming through the contractors billing.

Alternative 2: Limited public benefits, as reliance on voluntary participation is unlikely to significantly increase diversion rates. Continued higher waste tipping fee revenue.

Alternative 3: Implementing a disposal ban would deliver substantial public benefits in terms of waste reduction and sustainability but would require intensive stakeholder engagement to address resistance and ensure compliance.

5.5 Measuring Success of the Alternative Solution(s)

Alternative 1: Success would be measured by the number of businesses utilizing rebates and the associated increase in diversion rates.

Alternative 2: Success would depend on voluntary participation metrics, which are anticipated to remain low.

Alternative 3: Success would be evaluated by the timeline for implementing the disposal ban and the resulting increase in organics diversion, alongside business compliance rates.

6.0 OPTIONS CONSIDERED BUT NOT PRESENTED

Full subsidy of pilot program costs including monthly fees, and all bins and other startup costs for any number of businesses. This option is deemed to be financially unsustainable.

7.0 OPTIONS SUMMARY

RECOMMENDATION 1 – ICI PILOT SUPPORTS

Option 1.1:

Recommendation:

That the Board approve the proposed subsidies and supports for the Industrial, Commercial and Institutional organics diversion pilot program within the City of Nelson, including:

- a) A pilot reduction in commercial organics tipping fees from \$96.75/tonne to \$55/tonne.
- b) Provision of education and training support for participating businesses.
- c) Development of a communications program to promote and support the pilot.
- d) Rebates for up to two organic waste carts for the first 25 participating businesses.

AND FURTHER that \$8,500 be included in the draft 2025-2029 Financial Plan for Service S187 Central Subregion Resource Recovery to fund portions of the communications program materials that are specific to the City of Nelson, and the rebates for the organic waste carts;

AND FURTHER that \$4,000 be included in the draft 2025-2029 Financial Plan for Allocation Service A102 Resource Recovery to fund portions of the communications program materials that are more general and can be utilized for future pilot programs in other communities.

Option 1.2:

Recommendation:

That the Board approve the proposed subsidies and supports for the Industrial, Commercial and Institutional organics diversion pilot program within the City of Nelson, including:

- a) A monthly rebate for the cost of the collection service of \$50 per month per business, for the first 12 months of participation, for the first 25 participating businesses.
- b) Provision of education and training support for participating businesses.
- c) Development of a communications program to promote and support the pilot.
- d) Rebates for up to two organic waste carts for the first 25 participating businesses.

AND FURTHER that \$23,500 be included in the draft 2025-2029 Financial Plan for Service S187 Central Subregion Resource Recovery to fund portions of the communications program materials that are specific to the City of Nelson, and the rebates for the organic waste carts;

AND FURTHER that \$4,000 be included in the draft 2025-2029 Financial Plan for Allocation Service A102 Resource Recovery to fund portions of the communications program materials that are more general and can be utilized for future pilot programs in other communities.

Option 1.3:

Recommendation:

That the Board does not support providing any subsidies or supports for the Industrial, Commercial, and Institutional organics collection pilot.

RECOMMENDATION 2 – ICI ORGANICS DISPOSAL BAN

Option 2.1:

Recommendation:

That the Board direct staff to investigate the feasibility of implementing an Industrial, Commercial and Institutional organics disposal ban, and to return to the Committee in Q3 2025 with a framework for implementing a disposal ban for discussion.

Option 2.2

Recommendation:

That the Board direct staff to immediately commence planning for an Industrial, Commercial and Institutional organics disposal ban;

AND FURTHER That \$25,000 be included in the draft 2025-2029 Financial Plan for Allocation Service A102 for consultant support for organics disposal ban implementation planning.

8.0 RECOMMENDATION

RECOMMENDATION 1 – ICI PILOT SUPPORTS

That the Board approve the proposed subsidies and supports for the Industrial, Commercial and Institutional organics diversion pilot program within the City of Nelson, including:

- a) A pilot reduction in commercial organics tipping fees from \$96.75/tonne to \$55/tonne.
- b) Provision of education and training support for participating businesses.
- c) Development of a communications program to promote and support the pilot.
- d) Rebates for up to two organic waste carts for the first 25 participating businesses.

AND FURTHER that \$8,500 be included in the draft 2025-2029 Financial Plan for Service S187 Central Subregion Resource Recovery to fund portions of the communications program materials that are specific to the City of Nelson, and the rebates for the organic waste carts;

AND FURTHER that \$4,000 be included in the draft 2025-2029 Financial Plan for Allocation Service A102 Resource Recovery to fund portions of the communications program materials that are more general and can be utilized for future pilot programs in other communities.

RECOMMENDATION 2 – ICI ORGANICS DISPOSAL BAN

That the Board direct staff to investigate the feasibility of implementing an Industrial, Commercial and Institutional organics disposal ban, and to return to the Committee in Q3 2025 with a framework for implementing a disposal ban for discussion.

Respectfully submitted,
Alayne Hamilton – Environmental Projects Lead

CONCURRENCE

Resource Recovery Manager – Amy Wilson
General Manager of Environmental Services – Uli Wolf
Chief Administrative Officer – Stuart Horn

ATTACHMENTS:

None



The Corporation of the Village of Silverton
421 Lake Avenue
Silverton, BC | V0G 1S0
Phone: 250-358-2472
Website: <http://www.silverton.ca>

December 10, 2024

Regional District of Central Kootenay
Box 590, 202 Lakeside Drive
Nelson, BC
V1L 5R4

Sent via Email

Attention Chair Watson and Board Members;

Re: Potential Tipping Fee Increase

On behalf of Mayor and Council of the Village of Silverton, we wish to express our opposition to the potential increase in tipping fees for 2025 of between 5 – 10%, as outlined in a letter from Amy Wilson, Resource Recovery Manager, dated October 17, 2024.

The Village of Silverton residents experienced a significant period of inconvenience and extra cost due to increased travel distance when the Rosebery Transfer Station was closed this year, for the purpose of upgrades. It was our hope that the upgrades might include better service to our community and surrounding areas, like a weight scale, and the ability to make payments by debit card. Unfortunately whatever improvements were undertaken are not apparent, and yet we are now being expected to support another tipping fee increase, after a similar 10% increase just last year.

We ask that staff seek alternatives to the proposed tipping fee increase, and that before another increase is considered, the services to the Village of Silverton and area are improved.

Thank you for your attention.

Yours truly,

A handwritten signature in blue ink, appearing to read "Tanya Gordon".

Mayor Tanya Gordon
Village of Silverton



Organic Waste Diversion Project Report December 2024

The Healthy Community Society of the North Slokan Valley is now into its sixth year of managing a successful organic waste diversion program for the Villages of New Denver and Silverton and outskirts.

We use a simple, neighbourhood based composting system that manages most food waste in barrel style composters called Joracans. Jora Canada has recently been bought out and rebranded as Novaterra Canada. It is a Quebec based company that has designed these practical insulated units that are functional until about -15 degrees Celsius and are resistant to wildlife. The units have two sides (one active and one curing) and the curing side is emptied every three to four weeks. The system is low tech and minimizes the use of large equipment and fuel to haul food waste.

We have purchased 11 units between the two villages and added 36 new participants to the program over the last two years. Eight households have purchased their own Joracan composters and several others have designed backyard wildlife proof composting systems. Three resorts and our local supermarket are using our system as is Lucerne School and Early Learning programs and the Youth Centre.

We now have roughly 242 individual year round participants as well as the school/staff population of 115 and we serve greater numbers over the summer months. About 120 residences are served year round. We also support composting at large events such as Garlic Festival.

When the material is removed from the composters it is 80% finished and looks like chocolate brown soil. The composted material then needs a few months to cure which helps lower acidity level and balance oxygen uptake whilst introducing new beneficial bacteria to the mix.

New Curing Area

Thanks to financial support from the RDCK and an agreement with the Village of New Denver, this year we moved our main compost curing area from a private property in Rosebery to a convenient site right on the edge of New Denver at the end of 6th Avenue.

This new curing site will make the program more efficient and sustainable as our contracted manager, who empties and maintains most of the Village composters, will no longer have to haul the product five kilometers to Rosebery with each empty. Furthermore, when participants are welcomed back to get finished compost for gardening, it can be picked up directly from this site without hauling the product back from Rosebery.

The new curing pad is 6ft deeper than the previous pad allowing for more volume. The final step for completion is an electrified fence to deter wildlife, pets and rodents. Channels have been built into the pad that drain toward a leachate catchment tank. With sufficient funds we will also extend the cement blocks forward.



The new location on the edge of New Denver will allow this program to be near a zero ecological footprint. The final product can even be picked up by bicycle!



Background:

Composting has always been part of the culture of the North Slokan but issues with aging, bears, rental rules and now rats have made this practice challenging for many. According to statistics from Revelstoke, food waste alone makes up 22% of the waste stream. Since backyard composting of yard waste is still safe and easy and the Villages do biannual Arbour Day pick up, we have chosen to keep our focus to the diversion of food waste whilst offering educational events on yard waste composting.

We settled on the Joracans after discussions with Wildsafe BC who had tested the Joracans against bears and with the community of Plateau Montreal which has successfully managed 85 Joracan composters in this area for many years with neighbourhood participation.

Community Involvement:

One unexpected benefit of this small scale model has been the neighbourhood camaraderie it has developed in the process. People most often walk their household collection buckets to their neighbourhood Joracan, open the latch, dump in the cut up food waste and some added wood pellets or sawdust then close and turn the unit. Neighbours quite often bump into each other at the composter and socialize while feeling satisfied to be part of a righteous community system.

Many hours of volunteer maintenance replacing parts, shovelling snow and repairing dents by a few super participants has been extremely helpful.

Two local neighbourhoods in the Orchard are so keen that they have become completely independent in the management of their composters and have a roster for emptying the units. We hope other neighbourhoods can follow this same model if the program expands.



After a few months final curing time to reduce acidity and allow for different microbial action, the final product is a highly sought after garden amendment that participants pick up eagerly in large buckets or totes.



Partners:

An initial group that formed at a CBT Climate Action meeting to research community composting has grown to partner with the Healthy Community Society, the Villages of New Denver and Silverton, WildSafeBC and the RDCK. The HCS oversees the project and hires contractors. The Villages have helped with the brochure, photocopying areas for the units, educational venues and some initial funding. The Village of New Denver Sustainability Committee would like to help see the program expand. WildSafeBC continues to promote our program and has involved us in the local Bear Management group. We were part of a monthly Spotlight which included this Vimeo of our program.

<https://vimeo.com/579216954>



Infrastructure:

Besides the now 11 Joracan composters placed throughout our two communities we have a large insulated “Magic Box” designed by Transform for larger batches of compost from events where we manage waste such as Garlic Festival and Windfall Wednesday.

After 6-8 weeks in the Joracans we empty the finished side into 75L totes and drive them to Rosebery for curing. The independent neighbourhoods use a wheelbarrow to take the compost to their yards for final curing. The current value of one Joracan 401 with tax and shipping is roughly \$1700.

At least 8 local households have purchased their own Joracans (slightly smaller models) that they run independently now.

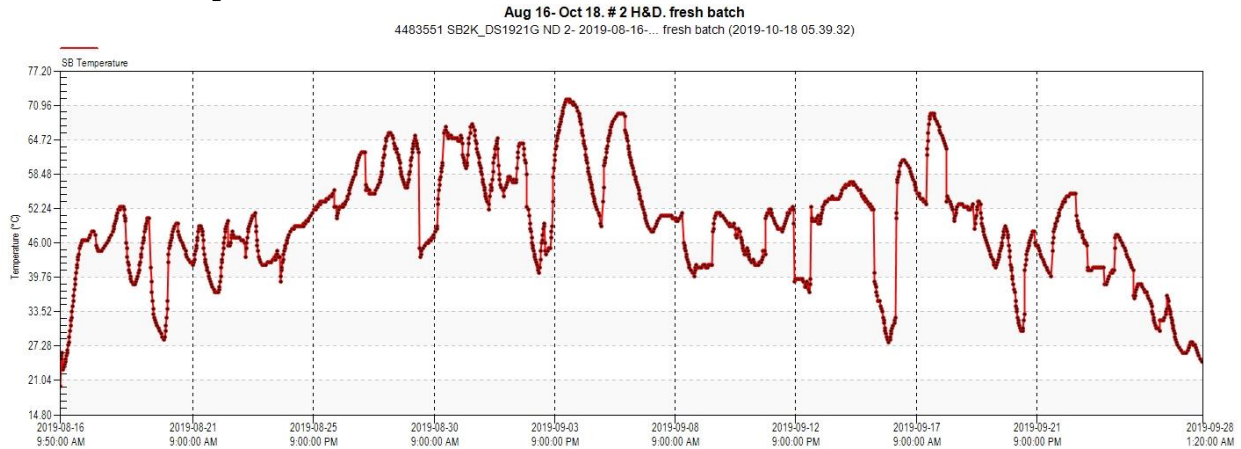
We also own 4 large Grizzly poly carts for safe compost pick up at events or in the event that the Joracans freeze up.



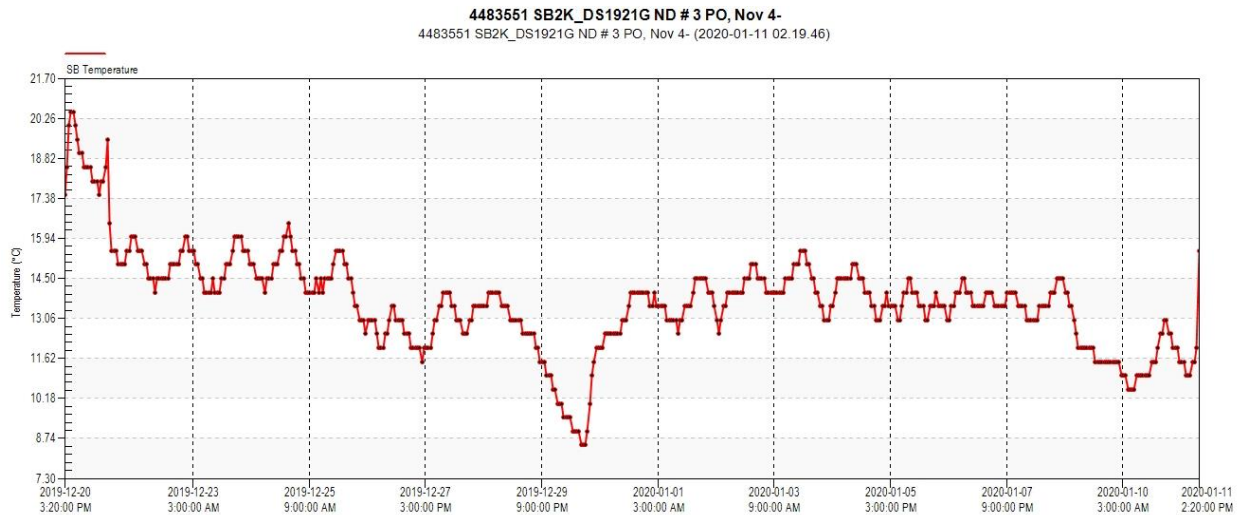
Data Collection/Metrics:

This method of composting falls into a grey area between backyard and commercial composting according to BCs Organic Matter Recycling Regulations. For their purposes the Joracan units are seen as Collection Vessels when in fact they process the waste at high temperatures for sustained periods in all but the coldest weather. The active side is often steaming upon opening and the temperature reading we have done indicate that it reaches the required 55 degree Celsius temperature for many days in the warmer months but less so in the colder months. Last winter we managed to keep the units going for over a week of 15-20 temperatures with diligent turning.

Summer/fall temperatures:



Mid-Winter Temperatures:



Volumes:

This last year our compost manager estimated the compost removed from the various units directly in kilograms to help with a more accurate measurement of tonnage. Previous years we measured in litres and then made an estimate conversion from litres to kilos of compost. To get a picture of actual food waste diverted, we then have to adjust for the significant reduction in volume of the compost out compared with the input of food waste which can be up to 80% water.. Evaporation and microbial action have a large effect on volumes. We compared our data with Marcia Dick's, City of Kamloops Solid Waste Analyst, who has been using the Joracans for a number of years. Our estimates now both assume that the product that we empty out of the composter after an 8 week period is roughly 40% of the original input of food waste.

With this new method of weighing the compost directly we come to a volume estimate of 7950 kilograms of finished product which would be 40% of the 19,875 kilograms of original food waste diverted, or roughly 19.9 tonnes.

This year we also diverted roughly 500 kilograms of food waste at the Garlic Festival which brings the figure up to 20.4 tonnes.

We realized this year that our finished compost going back to participants is well under 20m³ which takes us out of the industrial composting category under the Organic Matter Recycling Regulations and eliminates the requirement for lab testing.

Education and School Involvement:

Education has been a big focus for this project. Every child in our community from pre-school to grade twelve understands how and why we compost and the science behind it. They use they use the final product on the school garden and greenhouse. They take pride in helping make events such as Garlic Fest and Harvest Festival zero-waste and reprimand their elders for throwing food away. Our goal is to make composting easy, normal and interesting and to bring the process full cycle.

Lucerne School boasts one of the first school gardens in our region and has been composting all their yard and food waste since 2008. Compost science and explorations are always part of the HCS led garden based educational programming and a learning station at our annual community Harvest Festival, also based at Lucerne School.

This year two grade twelve students took over at the garden/compost station at Harvest Festival and explained how bringing compost to the garden and taking weeds away was the like "cycle of life". Studying Compost Critters is always popular with all grades. In 2024, as always, we

needed no imported soil for the school garden and greenhouse, except a little potting soil and the children relished in the making and distribution of compost for their flowers and vegetables.



Previous trainings with this program have included two of our members taking the Compost Facility Operator's course in Abbotsford with John Paul Transform Compost Systems who later came up to inaugurate our new program and lead a full day workshop.

Three of our members trained in Community Based Social Marketing to help promote this program and to help monitor barriers and shifts in behaviour from the offset. Additionally, Mario Lanthier, of Crop Health Advising in Kelowna has lead several very popular composting workshops in our community over the years.



Participant Benefits:

Five years in, the large majority of feedback from participants of this program is still positive. People are generally happy not to be throwing food waste into the landfill for environmental reasons and they are grateful for an alternative to backyard piles that attract wildlife. Most people are now aware of the problems with methane emissions from landfills, they feel good about a locally based, small-scale program and they are always eager for the compost for their gardens. The finished product has been almost free of contaminants such as plastics and metals. By the time we deliver, the product is usually full of worms and chestnut brown.

We have a demand for at least 1 or 2 more Joracan units particularly from the residents of the new Osprey affordable housing and the Rosebery residents. Denver Siding residents have also expressed interest in the program and our other units are all used to their maximum potential of 25-30 users each.

Participant barriers:

1. For older participants the units are often hard to turn.
2. For the first three years we included meat bones as accepted inputs but we have eliminated these now to create finished product that is more acceptable to the whole group as the large bones to do decompose.
3. We use a combination lock on several of the units to avoid passers-by throwing in waste and, in the cold of winter these locks can sometime freeze up. We then take them off.

Management concerns:

1. Many of the units are starting to break down after 5 years. Three of them now have new bearings and turn better but we have also had issues with the foam insulation warping and falling out and broken shaft and fixture bolts due to corrosion.
2. Participants do need regular reminders to cut up their waste for the compost process to work properly. There is no cutting action in this system and so whole fruits and vegetables do not compost easily. This can slow down the process and leave whole undecomposed produce when the units are emptied that can draw wildlife.
3. Certain foods such as corn husks and cobs, mango pits, shellfish and avocado products do not break down in this units unless cut very small.
4. The Magic Box works well for large batches but does need a machine ideally to mix, load, empty and reload the product if it dries out.
5. From time to time passers-by do drop contaminants into the units if they are unlocked. Our manager scoops these out on his rounds.

Outreach to other communities:

We have shared our experience and data of this unique rural community composting program with the Villages of Kaslo, Slocan and researchers for the City of Nelson and the Village of New Denver. It sounds of though some of these communities will pilot our method as part of their new organic waste diversion programs.

The Healthy Community Society of the North Slocan Valley has learned a great after five years piloting our Organic Waste Diversion Program for the Villages of New Denver and Silverton. We are glad to have been able to offer a service to our community that has been much needed and appreciated. The added bonuses have been delivering back many tonnes of finished compost for people's gardens and being involved in educating the youth and adults in our community about the wonders of composting.

A photo of a recent tour of the school composting system and gardens with a group from the Kaslo Community Garden looking to service their community.



We hope to continue with this program and perhaps partner with the Villages and the RDCK as new techniques and ideas for small scale rural composting evolve and develop further.

Though funding for expansion of the program has not come through yet, there seems to be a good demand. Our recent partnership with the Village of New Denver and the RDCK for a convenient, local curing area with a larger capacity will help ensure the sustainability of the program and allow for a modest expansion.

We are extremely grateful to the RDCK, WildSafeBC, and to the Villages of New Denver and Silverton for their ongoing support of this program. Please see our budget for 2025 attached.



**Healthy Community Society
Organic Waste Diversion**

2025 Budget			
	Hours/mo	Hours/yr	\$/yr
Manager- Hands on work			\$25.hr
4hr/month check units/pick up and add carbon stocks	4	48	
4hr/month- empty units to curing area	4	48	
Snow removal/Site Maintenance/Jora maint	1	12	
Events- windfall wed, g.fest		10	
Magic Box processing and School Assistance		3	
WCB 1.94%			\$ 60.00
	9	121	\$ 3,025.00
Administration/ Outreach			
Communications/Meetings-Compost Manager /RDCK/Joracan/CBT/ Labs/ Villages/other communities/ Machine Operator/Wildsafe/HCS	1	12	
Promotion-Education- Presentations- Pro-D		12	
Member sign up, public relations, partner agreements	1	12	
Reporting and Budget work, data entry		12	
Support toward independent members		4	
Email notices to members and Villages	1	12	
WCB 1.94%			\$ 30.00
	3	64	\$ 1,600.00
Professional Fees			
Electric Fence assistance		450	
Composter metal fabrication for repair		<u>500</u>	
		950	\$ 950.00
Materials and Supplies	\$ per/yr		
Pellets		1000	
Parts for units		600	
Misc-, tools, totes,		<u>250</u>	
		1850	\$ 1,850.00
Travel/ Program Delivery			
For travel to sites and town trips x3	50	600	
WCB 1.94%		12	
			\$ 610.00
Office Expenses			
Supplies/ Printing		<u>100</u>	
		100	\$ 100.00
Advertising		210	\$ 210.00
Educational Events		500	\$ 500.00
Infrastructure- two new Joracan units shipping included		1452.5	\$ 2,905.00
0			

**Healthy Community Society
Organic Waste Diversion**

Book keeping/ Insurance/ HCS Admin	2025 Budget		
Bookkeeping, invoices, banking, reports, bills, insurance			\$ 1,500.00
Total for Annual Expenses:			
			\$ 13,340.00
Revenue:			
RDCK- 2024			\$ 3,900.00
Event Sponsorship			\$ 500.00
RDCK-2025 Pending			\$ 8,940.00
Total Revenue			\$ 13,340.00