

REPORT TO ENVIRONMENTAL SERVICES COMMITTEE MEETING OF WEDNESDAY, MARCH 20, 2024

SUBJECT Material Stream Diversion – Award of Contract ERM2022-010

ISSUE SUMMARY

To provide an update on implementation of Hartland Landfill policy changes approved by the Capital Regional District (CRD) Board in December 2023, and to seek direction on next steps, including award of contract for construction and operation of a material diversion transfer station (MDTS).

BACKGROUND

In December 2023, the CRD Board passed a motion to adopt bylaw amendments, to come into effect in 2024, to divert materials from Hartland Landfill in alignment with the CRD's Solid Waste Management Plan.

Phase 1 of the Hartland policy changes were successfully implemented beginning January 1, 2024, including a ban on clean wood waste, changes to the tipping fee structure, introduction of a hauler waste stream collector incentive program, increases in fine rates, reductions for early payment of fines, and introduction of an education and warning program. To date, 22 Hartland commercial customers representing approximately 70% of Hartland's total general refuse tonnages have registered for the waste stream collector incentive. In the month of January, staff issued 30 warning tickets/MTIs to provide education around the clean wood ban, and 104.7 tonnes of clean wood was diverted from landfilling for recycling/energy recovery. Staff will continue to provide regular updates on implementation.

Phase 2 of the Hartland policy changes is planned to come into effect July 1, 2024, and includes further policy bans and tipping fee modifications. To support the execution of Phase 2 of the material diversion strategy, a Request for Proposals (RFP) for proponent to construct and operate a MDTS at Hartland to manage the processing, utilization, on-site operations and transportation of source-separated materials from Hartland Landfill was issued in September 2023, and closed January 2024.

Learnings through January's Phase 1 implementation have provided staff with valuable information about market response and participation. Phase 2 currently includes introduction of a new \$300/tonne tipping fee for loads of unsorted renovation and demolition materials that contain banned items including wood waste. Market response to date suggests that under current market conditions, the \$300/tonne rate will incent Hartland customers to seek lower cost landfill disposal options out of region, rather than divert banned materials, including wood waste. This is counter to the Solid Waste Management Plan objectives, and presents financial risk to the solid waste service, as these tipping fees would be paid out of region. To address this risk, staff recommend adding a Phase 3 of implementation in 2026 and shifting the implementation of \$300/tonne rate to Phase 3, to allow the market time to develop processes to ensure removal of banned materials from refuse loads. To eliminate the risk of general refuse waste exiting the region during Phase 3, staff also recommend that the CRD immediately begin consultation on policies to restrict the

flow of general refuse waste outside the capital region. These policies could be implemented as part of Phase 3 and would be subject to future consideration by the CRD Board. Additional material bans including rigid plastics could also be considered as part of Phase 3.

ALTERNATIVES

Alternative 1

The Environmental Services Committee recommends to the Capital Regional District Board:

- 1. That staff be directed to finalize negotiations, and the Chief Administrative Officer be authorized to enter into a two-year operating and construction contract, for a combined value not to exceed \$12,500,000 (excluding GST) with DL's Bins, for the construction and operation of a material diversion transfer station to begin processing of clean wood, treated wood and asphalt shingles on July 1, 2024;
- 2. That staff be directed to return to the Environmental Services Committee with proposed bylaw amendments to shift the ban on carpet and underlay and salvageable wood to Phase 3;
- 3. That staff be directed to return to the Environmental Services Committee with proposed bylaw amendments to shift the implementation of the \$300/tonne unsorted load rate to Phase 3; and
- 4. That staff immediately begin consultation on policies to restrict the flow of general refuse waste outside of the capital region.

Alternative 2

The Environmental Services Committee recommends to the Capital Regional District Board:

- That staff be directed to finalize negotiations, and the Chief Administrative Officer be authorized to enter into a two-year operating and construction contract, for a combined value not to exceed \$12,500,000 (excluding GST) with DL's Bins, for the construction and operation of a material diversion transfer station to begin processing of clean wood, treated wood and asphalt shingles on July 1, 2024;
- 2. That staff be directed to return to the Environmental Services Committee with proposed bylaw amendments to shift the ban on carpet and underlay and salvageable wood to Phase 3.

Alternative 3

That this report be referred back to staff for additional information.

IMPLICATIONS

Alignment with Board & Corporate Priorities

The proposed two-year contract under Alternative 1 aligns with the Board's desire to optimize the diversion of solid waste and maximize resource recovery from waste materials by executing new policies for diverting waste.

Service Delivery Implications

To support the execution of Phase 2 of the material diversion strategy, a RFP for proponent to construct and operate a MDTS at Hartland Landfill was issued in September 2023, and closed in January 2024. The RFP Package is included as Appendix A. Two submissions were received from Emterra Environmental and DL's Bins.

Staff have evaluated the MDTS proposals on technical and financial merit and conducted negotiations with the preferred proponent. Market feedback obtained through the procurement process identified that the costs to process and transport materials diverted from the landfill are higher than identified through the 2021 Market Sounding that was completed. A full financial evaluation is included in the financial implications section of this report.

Both proposals included options for processing clean and treated wood waste, asphalt shingles, and carpet and underlay. Neither proponent provided an option for salvageable wood, however negotiations with the preferred proponent have indicated that this could be considered as part of a Phase 3 alternative. Various options for staging were presented to allow for control of costs.

Staff recommend award of contract for the construction and operation of the MDTS to DL's Bins, enabling the start of Phase 2 policies July 1, 2024.

On the basis feedback obtained through procurement, staff recommend entering into a two-year 'pilot project' contract for the diversion and recycling/recovery of clean wood, treated wood and asphalt shingles. This two-year pilot will enable vendor learning on operational process and end-markets, allow the CRD to fully understand costs of material diversion, and minimize over all costs to the solid waste service.

At the end of the two-year pilot, and pending Board direction at that time, a new Phase 3 of implementation of the material diversion strategy would be implemented. Phase 3 could include a follow-on contract, terms of which are to be negotiated during the pilot period. This contract would extend the operation of the transfer station for a further 5 years, and expand accepted materials to include carpet and underlay, salvageable wood, books and rigid plastic. Additional capital investments at that time would be required to enable additional material streams, and a full financial evaluation would be brought forward at that time. Implementation of the ban on salvageable wood and carpet and underlay would be moved to Phase 3. Additional material bans on books and rigid plastics could also be considered at that time.

Alignment with Existing Plans & Strategies

Implementation of the proposed contract has the potential to divert up to 36,500 tonnes of waste per year from Hartland Landfill's active face, which would align with the Solid Waste Management Plan goal to target an annual disposal rate of 250kg per capita by 2031. Phase 3 could result in additional diverted tonnages.

Financial Implications

Alternative 1 (2-year contract) capital and operating expenditures over the 2-year contract are estimated to be \$12.5 million (\$3.5 million capital and \$9 million operating), to be partially offset by diversion tipping fee revenue of \$750,000 (20,000 tonnes). The shortfall will be funded within the 2024/25 Environmental Resource Management budget approvals and reserves.

Alternative 2 (2-year contract) capital and operating expenditures over the 2-year contract are estimated to be \$12.5 million (\$3.5 million capital and \$9 million operating), to be partially offset by diversion tipping fee revenue of \$750,000 (20,000 tonnes). The shortfall will be funded within the 2024/25 Environmental Resource Management budget approvals and reserves.

CRD Financial Services assisted in evaluating the long-term financial implications of the alternatives. The reserve balances have been projected to provide an indication of financial health and the need for tax requisition. Neither alternative is projected to require requisition support within the current 5-year planning horizon. Below is a summary of the proposed changes to tipping fees, and the implementation date:

Mandatory Recyclables		
Material Type	Tipping Fee (per tonne)	Landfill Ban Implementation Date
Clean Wood	segregated diversion \$80	Phase 1
Treated Wood	segregated diversion \$110	Phase 2
Asphalt Shingles	segregated diversion \$110	Phase 2
Salvageable Wood	segregated diversion \$0	Phase 3
Carpet and Underlay	segregated diversion \$110	Phase 3
Renovation and Demolition Waste		
Clean	segregated diversion \$150	Phase 2
Mixed	segregated diversion \$150, with \$500 fine in effect	Phase 2
Mixed	segregated diversion \$300, with \$500 fine in effect, potential flow control policies	Phase 3

Phase 1: January 1, 2024 Phase 2: July 1, 2024 Phase 3: 2026

CONCLUSION

The Capital Regional District (CRD) Board passed a motion to adopt the Hartland Landfill Tipping Fee and Regulation Bylaw and CRD Ticket Authorization Bylaw on December 13, 2023. The approval of these bylaws supports the goals and strategies of the CRD's Solid Waste Management Plan. Two proposals were received from the Request for Proposals issued in September 2023, one from Emterra Environmental and the other from DL's Bins. Upon review of the two proposals, staff recommend commencing a contract with DL's Bins for the processing, utilization, on-site operations and transportation of source-separated materials from Hartland Landfill.

RECOMMENDATION

The Environmental Services Committee recommends to the Capital Regional District Board:

1. That staff be directed to finalize negotiations, and the Chief Administrative Officer be authorized to enter into a two-year operating and construction contract, for a combined value not to exceed \$12,500,000 (excluding GST) with DL's Bins, for the construction and operation of a material diversion transfer station to begin processing of clean wood, treated wood and asphalt shingles on July 1, 2024;

- 2. That staff be directed to return to the Environmental Services Committee with proposed bylaw amendments to shift the ban on carpet and underlay and salvageable wood to Phase 3;
- 3. That staff be directed to return to the Environmental Services Committee with proposed bylaw amendments to shift the implementation of the \$300/tonne unsorted load rate to Phase 3; and
- 4. That staff immediately begin consultation on policies to restrict the flow of general refuse waste outside of the capital region.

Submitted by:	Russ Smith, Senior Manager, Environmental Resource Management	
Concurrence	Larisa Hutcheson, P.Eng., Acting General Manager, Parks & Environmental Services	
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer	

ATTACHMENT

Appendix A: Material Stream Diversion Request for Proposals Package