

**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE
MEETING OF WEDNESDAY, APRIL 19, 2023**

SUBJECT **Proposed Hartland Bylaw Amendments – Material Stream Diversion**

ISSUE SUMMARY

To seek direction on the implementation of new material stream diversion strategies for Hartland Landfill, in alignment with the Solid Waste Management Plan (SWMP).

BACKGROUND

The SWMP, approved by the Capital Regional District (CRD) Board in May 2021, targets an annual disposal rate of 250 kg per capita by 2031, a reduction of more than one-third from current levels. Other goals include extending the landfill to 2100 and beyond, and engaging and informing citizens while ensuring solid waste services are financially sustainable in support of zero waste and a circular economy.

In response to this direction, the CRD has retained a technical advisor and issued a Request for Expressions of Interest (RFEOI) to understand the processing and marketing capacity for a range of divertible materials. The technical advisor reviewed results of the RFEOI, the CRD's 2022 Solid Waste Stream Composition Study and analyzed the CRD's current system compared to available data from neighbouring jurisdictions. Results of this analysis are included as Appendix A. Based on this work, staff recommend a series of policy changes and corresponding bylaw amendments summarized below.

ALTERNATIVES

Alternative 1

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

1. That the Hartland Landfill Tipping Fee and Regulation Bylaw No. 3881 be amended and come into effect January 1, 2024 to:
 - a) Ban wood waste (clean, treated and salvageable), carpet and underlay and asphalt shingles from Hartland's active face, and classify these materials as mandatory recyclable;
 - b) Modernize the tipping fee schedule to align with the proposed tipping fee schedule (Appendix B), including increasing the general refuse tipping fee to \$150/tonne, and introduce a new 'double charge' category for loads of unsorted renovation and demolition materials that contain mandatory recyclables (including wood waste) to motivate source-separation of these materials;
 - c) Introduce hauler incentive rates to promote multi-stream collection, incent voluntary self-reported waste collection data sharing, and minimize the financial impact of increases to the general refuse tipping fees;

2. That the Ticket Information Authorization Bylaw No. 1857 be amended and come into effect January 1, 2024 to:
 - a) increase fine rates for various offences;
 - b) introduce a graduated ticket structure with higher fines for more egregious infractions and/or repeated infractions from a designated source or waste hauler;
 - c) allow for denial of service for chronic repeat offenders;
3. That service levels be adjusted to enhance enforcement capacity resources to implement the new waste diversion policies, to be reflected in the 2024 preliminary budget; and
4. That staff return with the amended bylaws for Board approval in the fall.

Alternative 2

The Environmental Services Committee recommends to the Capital Regional District Board: That staff bring back alternative policy based on committee direction.

IMPLICATIONS

Environmental & Climate Implications

Implementation of the proposed recommendations has the potential to divert up to 40,500 tonnes of waste per year from Hartland's active face (equivalent to 22% of all waste received at Hartland in 2022), complementing other current and future CRD waste reduction and diversion programs and initiatives, in support of meeting the 2031 waste disposal target of 250 kg per capita. Solid waste contributed approximately 3.7% of the CRD's greenhouse gas emissions (2020 CRD Community Greenhouse Gas Emissions Inventory Report). Implementing the strategies of the SWMP to reuse, recycle or recover materials will encourage diversion from the landfill, reducing the landfill's contribution to greenhouse gas emissions.

Financial Implications

The Hartland general refuse tipping fee has remained between \$107 and \$110/tonne since 2011, significantly lower than neighbouring jurisdictions (Cowichan Valley Regional District - \$192/tonne; Comox Valley Regional District - \$145/tonne; and Regional District of Nanaimo - \$145/tonne, as of April 2023).

Under the policy framework recommended by the CRD's technical advisor (Appendix A), the Hartland tipping fee schedule would be modernized to promote diversion of material from the landfill, and provide better alignment with neighbouring jurisdictions and market conditions. The full proposed tipping fee schedule is included as Appendix B. Key changes recommended by staff are summarized below.

Rate Category	Current Rate (per tonne)	Proposed Rate (per tonne)	Description
General Refuse	\$110	\$150	General refuse rate is increased to align with neighbouring jurisdictions, and fund increased processing costs for mandatory recyclable materials.

Rate Category	Current Rate (per tonne)	Proposed Rate (per tonne)	Description
2024* General Refuse Hauler Incentive Rate	N/A	\$125	Private and municipal haulers are eligible for a reduced rate if they have programs in place to ensure that organics and recyclable materials aren't going into the general refuse stream and voluntarily self-report waste collection data. This time-limited rate will minimize the financial impact of the general refuse rate increase.
2025* General Refuse Hauler Incentive Rate	N/A	\$135	Private and municipal haulers are eligible for a reduced incentive rate if they have programs in place to ensure that organics and recyclable materials aren't going into the general refuse stream and voluntarily self-report waste collection data. This time-limited rate will minimize the financial impact of the general refuse rate increase.
Mandatory Recyclables: treated wood, asphalt shingles, carpet and underlay	N/A	\$110	These materials are currently accepted as general refuse at \$110/tonne. Under the proposed fee structure, source-separated mandatory recyclable materials will be accepted at \$110/tonne to incent source separation of these materials. When these materials arrive at Hartland under the mandatory recyclable category, they will be reused, recycled or recovered through contracts with the private sector.
Mandatory Recyclables: clean wood	N/A	\$80	These materials are currently accepted as general refuse at \$110/tonne. They include wood products that are untreated, unstained and unpainted, such as dimensional lumber, pallets, crating, wood fencing, wood shingles and wooden doors
Mandatory Recyclables: salvageable wood	N/A	\$0	Salvageable wood will be processed off-site for reuse and accepted at the Hartland depot free of charge.
Clean Renovation and Demolition Waste	\$110	\$150	Renovation and demolition material is currently accepted at the general refuse rate of \$110. Clean renovation and demolition, that does not include mandatory recyclable materials, will be accepted at the new general refuse rate of \$150/tonne.
Unsorted Renovation and Demolition Waste (double charge)	\$110	\$300	Renovation and demolition material that includes mandatory recyclable materials (wood, asphalt shingles and carpet and backing) will be subject to a 'double charge' rate of \$300/tonne. The rate will help offset the increased processing costs for mandatory recyclable materials and incent source separation of these materials in support of the Solid Waste Management Plan targets.

* Incentive rates beyond 2025 will be evaluated by the CRD Board and may be extended.

Potential financial impacts are challenging to predict prior to observing actual market response based on the new tipping fee schedule and will ultimately depend on the volume of waste received at Hartland. CRD staff have analyzed the potential financial impact of the proposed Hartland tipping fee schedule under a range of scenarios and in all cases the proposed fee schedule sufficiently addresses risk to quantity and total revenue while still ensuring the landfill remains financially viable.

Staff recommend monitoring the effect of policies on solid waste tonnage and revenue over time and returning to the committee on a quarterly basis for information and/or any recommended policy modifications, as needed, to align with the market conditions and ensure financial sustainability of the solid waste system. If the policies do not achieve the desired diversion, or if waste appears to be migrating out of the region, staff will return to the committee for consideration of flow control policies.

Service Delivery Implications

Appendix A also evaluates Ticket Information Authorization Bylaw No. 1857. Based on this analysis, staff recommend revisions to Schedule 19 of the bylaw. Proposed amendments for additional enforcement measures include:

- increased fine rates from \$50-\$200 to \$100-\$500 for various offences
- a graduated ticket structure with higher fines for more egregious infractions and/or repeated infractions from a designated source or waste hauler
- denial of service for chronic repeat offenders

Implementation of the new policies may require improvements and updates to scale house data collection and equipment, and additional staff will be required to support site operations and bylaw enforcement. Depending on how traffic flow at the site is modified to accommodate drop off of mandatory recyclables, residential quantities of all materials in this classification may need to be accepted at a flat rate, or no charge, at the Hartland depot. If the proposed policies are approved by the Board, the additional resource requirements will be identified through the 2024 budget process, and funded through tipping fee revenues. Staff will also issue a Request for Proposals for the processing of newly-banned materials.

As a consequence of the increased tipping fees for general refuse and mixed material streams, and fines for non-compliance under certain volume scenarios, additional revenue may be generated with the potential to support new and enhanced waste diversion and reduction programs, infrastructure and initiatives that align with the SWMP. These could include investments into recycling depots and infrastructure, enhancements to the rethink waste grant program, and support for increasing diversion from the industrial, commercial and institutional sector. Staff will monitor the effect of policies, and if additional revenues are generated, will recommend programming aligned with the SWMP in future budget years.

Results of the 2022 Solid Waste Stream Composition Study indicate that organic waste makes up the second-largest category of waste being received at Hartland Landfill (16.7%), second only to wood and wood products (18.9%). Addressing organic waste will be critical to meeting the SWMP target. While this report indirectly addresses organic waste through the proposed hauler incentives for multi-stream collection and enhanced enforcement capabilities, it does not directly address organic waste. Staff will return to committee in the future with proposed policies to address organic waste, in line with the SWMP.

In July 2022, the Board endorsed an increase to the tipping fee for international high-risk cruise ship waste to \$500 per tonne, effective January 1, 2024. The fee increase for high-risk waste may incentivize the cruise ship industry to find alternative disposal methods, as well as enhance recycling and waste diversion efforts.

Social Implications

The CRD's technical advisor has indicated that modernization of Hartland's tipping fee schedule is necessary to incent diversion to achieve the targets within the SWMP and to fund the increased costs associated with processing source-separated mandatory recyclable materials. By bringing the new tipping fee schedule into effect January 1, 2024, Hartland customers will have time to prepare for the changes. A communications plan and education campaign will be initiated to educate Hartland customers of the new tipping fee schedule. As the new rates roll out, customers will first be provided with a warning before being issued a ticket or double charge.

To minimize the short-term impact of rate increases on the public, it is proposed that a hauler incentive reduced rate would be available, at a minimum, for the first two years. This rate would be eligible to private and municipal haulers that have programs in place to require multi-stream collection (e.g., curbside collection of organics and recyclables, in addition to general refuse) and voluntarily self-report waste collection data. The incentive program will be available for waste coming from the single-family, multi-family and industrial, commercial and industrial sectors, and will be designed to allow customers to obtain multi-stream collection from more than one hauler, and to recognize backyard composting as a form of multi-stream collection.

CONCLUSION

Capital Regional District staff are working to advance the goals and strategies of the Solid Waste Management Plan. Working with a technical advisor, staff have identified a series of proposed policy changes and corresponding bylaw amendments to incent diversion of materials from Hartland Landfill that could be otherwise recycled, reused or recovered. Recommended changes include modernizing the Hartland tipping fee schedule, classifying wood waste, carpet and asphalt shingles as mandatory recyclable materials and enhancing bylaw enforcement capacity and capability. If directed, staff will amend the Hartland Landfill Tipping Fee and Regulation Bylaw No. 3881. The policy changes are expected to divert up to 40,500 tonnes of waste per year from Hartland's active face.

RECOMMENDATION

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

1. That the Hartland Landfill Tipping Fee and Regulation Bylaw No. 3881 be amended and come into effect January 1, 2024 to:
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4. That staff return with the amended bylaws for Board approval in the fall.

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

ATTACHMENTS

Appendix A: Waste Diversion Framework Memo – GHD (April 4, 2023)
Appendix B: Proposed Hartland Landfill Tipping Fee Schedule