

**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE  
MEETING OF WEDNESDAY, OCTOBER 25, 2017**

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**SUBJECT**     Environmental Resource Management – 2016 Annual Report

**ISSUE**

To present a summary of 2016 activities, results and accomplishments of the Capital Regional District (CRD) solid waste function.

**BACKGROUND**

The Environmental Resource Management (ERM) Annual Report (Appendix A) provides regular updates on solid waste programs, including accomplishments and statistics on activities conducted over the year. It also serves to inform the Environmental Services Committee in its role as Plan Monitoring Advisory Committee for the Solid Waste Management Plan (SWMP). A detailed SWMP monitoring status summary is available upon request.

Appended to the ERM Annual Report is the Hartland Landfill Operating & Environmental Monitoring Report (Appendix B). The Hartland Operational Certificate requires routine monitoring and annual reporting that confirms compliance with regulatory requirements. Staff develop and implement environmental monitoring programs at Hartland landfill to assess potential impacts of contaminant releases from the landfill. The monitoring programs assess landfill gas, groundwater, surface water and leachate quantity and quality. In cooperation with qualified professionals experienced in interpreting monitoring program data, staff provide strategic recommendations to landfill operations.

A new “at a glance” handout (Appendix C) has been prepared this year, which is designed to engage residents through sharing results of the 2016 Waste Composition Study, reinforce the waste reduction hierarchy, and provide an update on the per person disposal rate.

Highlights of solid waste services for 2016 include:

**Diversion Services (Reduce, Reuse, Recycle):**

- Successful transition from two- to three-stream recycling whereby residents were asked to keep their glass containers separate when placing material out for curbside recycling
- Continued provision of transfer services for kitchen scraps, which provided 7,941 tonnes of food waste and soiled paper product feedstock for composting.

**Energy Recovery Services (Recovery)**

- Hartland landfill gas is used to produce enough electricity to power 1,100 homes. In 2016, Hartland captured 61.8% of the landfill gas generated by the site. Hartland’s 2017 gas capture rate is approaching 70%, with the Province’s 75% landfill gas capture target anticipated to be achieved by 2018.

Disposal Services (Residual Management)

- Per capita waste disposal rate of 348 kg for the region, a slight increase from 2015 (345 kg) but remains less than the provincial target of 350 kg per capita for 2020.
- Effective monitoring, assessment and management program is in place and demonstrates regulatory compliance.

**ALTERNATIVES**

*Alternative 1*

That the Environmental Services Committee recommend to the Capital Regional District Board:

1. That the following reports be approved:
  - a) Environmental Resource Management 2016 Annual Report
  - b) Hartland Landfill Operating & Environmental Monitoring 2016 Annual Report; and
2. That the annual report fulfilling regulatory requirements be forwarded to the BC Ministry of Environment.

*Alternative 2*

That the Environmental Services Committee direct staff to submit a revised report.

**ENVIRONMENTAL IMPLICATIONS**

The 2016-2017 monitoring program confirms that regulatory requirements were met. Based on monitoring results, effective measures are in place to ensure environmental impacts are mitigated and that leachate is effectively being controlled and contained onsite.

In addition, the Hartland environmental monitoring report's conclusions and recommendations are considered during annual planning at the landfill. This continuous improvement process contributes to ongoing compliance.

**ECONOMIC IMPLICATIONS**

Funding for all Environmental Resource Management programs, including operating and capital expenses for Hartland landfill, are derived from landfill tipping fees, Extended Producer Responsibility service delivery agreements and the sale of recyclables and power generation.

**CONCLUSION**

In addition to a number of waste diversion programs, the CRD continues to safely operate and maintain the Hartland landfill and meet its regulatory commitments to protect human health and the environment from potential impacts associated with solid waste disposal services.

Staff have prepared an annual report with updates on solid waste programs, operations,

monitoring and other activities.

**RECOMMENDATIONS**

That the Environmental Services Committee recommend to the Capital Regional District Board:

1. That the following reports be approved:
  - a) Environmental Resource Management 2016 Annual Report
  - b) Hartland Landfill Operating & Environmental Monitoring 2016 Annual Report; and
2. That the annual report fulfilling regulatory requirements be forwarded to the BC Ministry of Environment.

Submitted by:	Russ Smith, Senior Manager, Environmental Resource Management
Concurrence:	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

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Attachments: Appendix A – Environmental Resource Management – 2016 Annual Report  
Appendix B – Hartland Landfill Operating & Environmental Monitoring Report  
Appendix C – Solid Waste “At A Glance” Handout 2016