

Notice of Meeting and Meeting Agenda Environmental Services Committee

Wednesday, January 18, 2023

1:30 PM

6th Floor Boardroom
625 Fisgard St.
Victoria, BC V8W 1R7

B. Desjardins (Chair), S. Tobias (Vice Chair), J. Brownoff, J. Caradonna, G. Holman,
D. Kobayashi, D. Murdock, M. Tait, D. Thompson, A. Wickheim, C. Plant (Board Chair, ex-officio)

The Capital Regional District strives to be a place where inclusion is paramount and all people are treated with dignity. We pledge to make our meetings a place where all feel welcome and respected.

1. Territorial Acknowledgement

2. Approval of Agenda

3. Adoption of Minutes

- 3.1. [23-065](#) Minutes of the June 15, 2022 and the minutes of the September 28, 2022 Environmental Services Committee Meeting.

Recommendation: That the minutes of the Environmental Services Committee meeting of June 15, 2022 and September 28, 2022 be adopted as circulated.

Attachments: [Minutes - June 15, 2022](#)
[Minutes - September 28, 2022](#)

4. Chair's Remarks

5. Presentations/Delegations

The public are welcome to attend CRD Board meetings in-person.

Delegations will have the option to participate electronically. Please complete the online application at www.crd.bc.ca/address no later than 4:30 pm two days before the meeting and staff will respond with details.

Alternatively, you may email your comments on an agenda item to the CRD Board at crdboard@crd.bc.ca.

- 5.1. [23-068](#) Delegation - Daniel Kenway; Representing Willis Point Community Association: Re: Agenda Item 6.3.: Evaluation of Passing Lane on Willis Point Road
- 5.2. [23-071](#) Delegation - Philippe Lucas; Representing Biosolid Free BC: Re: Agenda Item 6.2.: Biosolids Short-term Contingency Beneficial Use Plan

- 5.3. [23-072](#) Delegation - Hugh Stephens; Representing Peninsula Biosolids Coalition: Re: Agenda Item 6.2.: Biosolids Short-term Contingency Beneficial Use Plan

6. Committee Business

- 6.1. [23-044](#) 2023 Environmental Services Committee Terms of Reference

Recommendation: There is no recommendation. This report is for information only.

Attachments: [2023 Environmental Services Committee Terms of Reference](#)
[Appendix A: 2023 Environmental Services Committee Terms of Reference](#)

- 6.2. [23-052](#) Biosolids Short-term Contingency Beneficial Use Plan

Recommendation: That the Environmental Services Committee recommends to the Capital Regional District Board:

1. That the Capital Regional District (CRD) Board amend its policy to allow non-agricultural land application of biosolids as a short-term contingency alternative; and
2. That staff be directed to update the CRD's short-term biosolids contingency plan correspondingly.

Attachments: [Staff Report: Biosolids Short-term Contingency Beneficial Use Plan](#)
[Appendix A: Letter to Minister Heyman - December 16, 2022](#)
[Appendix B: Hugh Stephens – Delegation on Biosolids – December 16, 2022](#)
[Appendix C: Summary of Biosolids Production and End Use – 2022](#)

- 6.3. [23-009](#) Evaluation of Passing Lane on Willis Point Road

Recommendation: There is no recommendation. This report is for information only.

Attachments: [Staff Report: Evaluation of Passing Lane on Willis Point Road](#)

7. Notice(s) of Motion

8. New Business

9. Adjournment

The next meeting is February 15, 2023.

To ensure quorum, please advise Jessica Dorman (jdorman@crd.bc.ca) if you or your alternate cannot attend.

Meeting Minutes

Environmental Services Committee

Wednesday, June 15, 2022

1:30 PM

**6th Floor Boardroom
625 Fisgard St.
Victoria, BC V8W 1R7**

PRESENT

Directors: B. Desjardins (Chair), N. Taylor (Vice Chair), L. Helps, M. Hicks (EP), G. Holman (EP), J. Ranns, G. Orr (EP), C. Plant (EP), K. Williams (EP), R. Windsor

Staff: R. Lapham, Chief Administrative Officer; L. Hutcheson, General Manager, Parks and Environmental Services; R. Smith, Senior Manager Environmental Resource Management; N. Elliot, Manager, Climate Action Programs; M. Lagoa, Deputy Corporate Officer; S. Orr, Senior Committee Clerk (Recorder)

EP - Electronic Participation

Regrets: D. Blackwell

The meeting was called to order at 1:30 pm.

1. Territorial Acknowledgement

Vice Chair Taylor provided a Territorial Acknowledgement.

2. Approval of Agenda

**MOVED by Director Windsor, SECONDED by Director Taylor,
That the agenda for the June 15, 2022 Environmental Services Committee
meeting be approved.
CARRIED**

3. Adoption of Minutes

3.1. [22-402](#) Minutes of the May 18, 2022 Environmental Services Committee meeting

**MOVED by Director Windsor, SECONDED by Director Taylor,
That the minutes of the Environmental Services Committee meeting of May 18,
2022 be adopted as circulated.
CARRIED**

4. Chair's Remarks

As the chair of the Solid Waste Advisory Committee, this chart which shows the waste tonnage received at the Hartland Landfill from 2020-2022, has been added to every meeting to remind us of what's happening at the landfill. Tonnage continues to increase with 2022 currently trending 188,300 tonnes, which is a 13 percent increase over 2021. Per capita waste generation continues to rise, with 2022 trending toward 430 kilograms per capita. The new Solid Waste Management Plan targets 250 tonnes by the year 2031 and we are trending significantly in the wrong direction. The highly active real estate conditions and associated construction, demolition, renovation and moving waste in the region are believed to be significant contributory factors driving waste generation. Staff are hopeful that increased waste will slow later this year, if rising interest rates are successful in cooling the market. Staff will work toward implementing the new Solid Waste Management Plan initiatives, but ultimately, Hartland landfill has to receive the waste from the community. What we are seeing is the trend going in the wrong direction and the lifespan of Hartland landfill is going to be shorter. We all play a role with waste and I want to continue to include the chart for this committee because it is stark reminder of how clearly we have to affect some changes.

5. Presentations/Delegations

- 5.1. [22-405](#) Delegation - Marg Gardiner; Representing Fair Sailing, an initiative of the James Bay Neighbourhood Association: Re: Agenda Item 6.2.: Disposal of International Cruise Ship Waste at Hartland Landfill - Follow-up
- M. Gardiner spoke to Item 6.1.

6. Committee Business

6.1. [22-373](#) Construction, Renovation and Demolition Waste - Thermal Pilot

R. Smith spoke to Item 6.1.

Discussion ensued regarding:

- types of waste
- integration of high risk and bio-solids waste
- emerging waste management technologies
- gasification
- deconstruction
- carbon benefit of newer technologies

**MOVED by Director Windsor, SECONDED by Director Ranns,
The Environmental Services Committee recommends to the Capital Regional
District Board:**

**That staff proceed with next steps to conduct research, investigate and report out
on emerging waste management technologies, including a short-term pilot of
thermal destruction of construction, renovation and demolition waste at Lafarge.**

CARRIED

Opposed: Helps, Taylor

6.2. [22-386](#) Disposal of International Cruise Ship Waste at Hartland Landfill - Follow-up

R. Smith spoke to Item 6.2.

Discussion ensued regarding:

- cruise ships ports of origin
- liquid waste
- disposal fees in other ports
- high risk waste
- time frame for rate increase

**MOVED by Director Windsor, SECONDED by Director Helps,
That the Environmental Services Committee recommends to the Capital Regional
District Board:**

**That the Hartland Landfill tipping fee for international high risk cruise ship waste
be increased to \$500 per tonne beginning January 1, 2024.**

**MOVED by Director Helps, SECONDED by Director Windsor,
The main motion be amended to replace "January 1, 2024" with "June 1, 2023".**

DEFEATED

Opposed: Desjardins, Hicks, Orr, Ranns, Williams

The question was called on the main motion:

**That the Environmental Services Committee recommends to the Capital Regional
District Board:**

**That the Hartland Landfill tipping fee for international high risk cruise ship waste
be increased to \$500 per tonne beginning January 1, 2024.**

CARRIED

Opposed: Hicks

- 6.3. [22-387](#) Bylaw No. 4491, "Capital Regional District Climate Action and Adaptation Service Establishment Bylaw, 2008, Amendment Bylaw No. 3, 2022"

N. Elliot spoke to Item 6.3.

Discussion ensued regarding:

- District of Central Saanich rationale for service withdrawal
- regional wide efforts for climate change

**MOVED by Director Ranns, SECONDED by Director Windsor,
That the Environmental Services Committee recommends to the Capital Regional District Board:**

1. That Bylaw No. 4491, "Capital Regional District Climate Action and Adaptation Service Establishment Bylaw, 2008, Amendment Bylaw No. 3, 2022", be introduced and read a first, second, and third time;
2. That staff be directed to proceed with elector approval by way of Municipal Council and Electoral Area Director consent; and
3. That Bylaw No. 4491 be referred to the Inspector of Municipalities for approval.

CARRIED

Opposed: Helps, Plant, Taylor

- 6.4. [22-398](#) Union of BC Municipalities Community Emergency Preparedness Fund - Extreme Heat Risk Mapping, Assessment and Planning - Capital Region Heat Vulnerability Dashboard Project

N. Elliot spoke to Item 6.4.

**MOVED by Director Helps, SECONDED by Director Taylor,
That the Environmental Services Committee recommends to the Capital Regional District Board:**

That the CRD Board support an application to the Union of BC Municipalities Community Emergency Preparedness Fund - Extreme Heat Risk Mapping, Assessment and Planning Grant to support the CRD as the regional lead (primary applicant) for the Capital Region Heat Vulnerability Dashboard Project, and direct staff to provide for overall grant management, including apply for, receive, and manage the grant funding.

CARRIED

7. Notice(s) of Motion

There were no Notice(s) of Motion.

8. New Business

There was no new business.

9. Adjournment

**MOVED by Director Helps, SECONDED by Director Taylor,
That the June 15, 2022 Environmental Services Committee meeting be adjourned at 2:34 pm.**

CARRIED

CHAIR

RECORDER

Meeting Minutes

Environmental Services Committee

Wednesday, September 28, 2022

1:30 PM

**6th Floor Boardroom
625 Fisgard St.
Victoria, BC V8W 1R7**

Special Meeting

PRESENT

Directors: N. Taylor (Acting Chair), B. Desjardins (Chair), D. Blackwell (EP), L. Helps, M. Hicks (1:33 pm) (EP), G. Holman (1:32 pm) (EP), G. Orr (EP), J. Ranns (1:35 pm), K. Williams (EP), R. Windsor

Staff: R. Lapham, Chief Administrative Officer; L. Hutcheson, General Manager, Parks and Environmental Services; R. Lachance, Senior Manager, Financial Services; S. May, Senior Manager, Facilities Management and Engineering Services; R. Smith, Senior Manager, Environmental Resource Management; N. Elliott, Manager, Climate Action Programs; M. Lagoa, Deputy Corporate Officer; J. Dorman, Committee Clerk (Recorder)

EP - Electronic Participation

Regrets: Director C. Plant

The meeting was called to order at 1:30 pm.

1. Territorial Acknowledgement

Chair Desjardins provided a Territorial Acknowledgement.

2. Approval of Agenda

MOVED by Director Helps, **SECONDED** by Director Desjardins,
That the agenda for the September 28, 2022 Environmental Services Committee meeting be approved.
CARRIED

3. Presentations/Delegations

There were no presentations.

3.1. [22-578](#)

Delegation - Nikki Macdonald; Resident of Willis Point: Re: Agenda Item 4.3. Hartland Area Road Access Mitigation

N. Macdonald spoke to Item 4.3.

4. Special Meeting Matters

4.1. [22-486](#) BC Local Government Climate Action Program - Funding Distribution

N. Elliott spoke to Item 4.1.

Discussion ensued on the following:

- grant applications and retrofit programming
- allocation of Electoral Area portion of funding
- EV chargers versus bike rack funding allocation
- reserve funds and replenishment mechanisms

**MOVED by Director Desjardins, SECONDED by Director Helps,
The Environmental Services Committee recommends to the Capital Regional
District Board:**

1. That the funding associated with the new BC Local Government Climate Action Program in 2022, 2023 and 2024 be distributed as follows: \$79,496 for CRD Climate Action Service; \$11,512 for Juan de Fuca Electoral Area; \$24,552 for Salt Spring Island Electoral Area; and \$10,522 for Southern Gulf Islands Electoral Area.
2. That the CRD Board allocate \$73,150 of the funding available through reserves to help complete the Vancouver Island and Coastal Communities Climate Leadership Plan.

CARRIED

4.2. [22-566](#) Award of Contract ERM2022-006 - Curbside Collection of Packaging and Printed Paper

R. Smith spoke to Item 4.2.

Discussion ensued on the following:

- Recycle BC funding and cost review
- service level increase and operation logistics
- impacts of tote usage

**MOVED by Director Windsor, SECONDED by Director Helps,
The Environmental Services Committee recommends to the Capital Regional
District Board:**

1. That staff be directed to enter into a six-year contract with GFL Environmental Incorporated to provide residential curbside blue box collection from January 1, 2024 to December 31, 2029; and,
2. That the Chief Administrative Officer be authorized to execute the contract and do all things incidental to finalizing the agreement.

CARRIED

4.3. [22-558](#) Hartland Area Road Access Mitigation

R. Smith spoke to Item 4.3.

Discussion ensued on the following:

- parking requirements during peak seasons
- passing lane reconsideration and feasibility
- funding allocation and potential re-allocation

Motion Arising:

MOVED by Director Windsor, **SECONDED** by Director Hicks,

That staff reassess options for a passing lane.

CARRIED

OPPOSED: Helps, Taylor

MOVED by Director Helps, **SECONDED** by Director Windsor,

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

- 1. That Kirk & Co.'s recommended community options be approved and funded to a maximum of \$4 million from the 2023 Environmental Resource Management capital budget; and**
- 2. That staff work with the District of Saanich to finalize the identified intersection improvements prior to moving forward with the Willis Point Road parking lot.**

CARRIED

5. Adjournment

MOVED by Director Helps, **SECONDED** by Director Windsor,

That the September 28, 2022 Environmental Services Committee meeting be adjourned at 2:32 pm.

CARRIED

CHAIR

RECORDER

**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE
MEETING OF WEDNESDAY, JANUARY 18, 2023**

SUBJECT **2023 Environmental Services Committee Terms of Reference**

ISSUE SUMMARY

This report is to provide the 2023 Environmental Services Committee Terms of Reference for the Committee's review.

BACKGROUND

Under the *Local Government Act* and the Capital Regional District (CRD) Board Procedures Bylaw, the CRD Board Chair has the authority to establish standing committees and to appoint members to provide advice and recommendations to the Board.

On December 14, 2022, the Regional Board approved the 2023 Terms of Reference for standing committees. Terms of Reference (TOR) serve to clarify the mandate, responsibilities and procedures of standing committees and provide a point of reference and guidance for the Committees and members.

This year, there were no changes to the defined purpose of the Committee's TOR, attached as Appendix A.

The TOR are being provided for review by the Committee. Any proposed revisions to the TOR will require ratification by the Board.

CONCLUSION

Terms of Reference serve to clarify the mandate, responsibilities and procedures of committees and provide a point of reference and guidance for the committees and their members.

RECOMMENDATION

There is no recommendation. This report is for information only.

Submitted by:	Marlene Lagoa, MPA, Manager, Legislative Services & Deputy Corporate Officer
Concurrence:	Larisa Hutcheson, P. Eng., General Manager, Parks & Environmental Services
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENT

Appendix A: 2023 Environmental Services Committee Terms of Reference



ENVIRONMENTAL SERVICES COMMITTEE

PREAMBLE

The Capital Regional District (CRD) Environmental Services Committee is a standing committee established by the CRD Board and will oversee and make recommendations to the Board regarding waste management, resource recovery, climate change and other environmental matters.

The Committee's official name is to be:

Environmental Services Committee

1.0 PURPOSE

- a) The mandate of the Committee includes overseeing and making recommendations to the Board regarding the following functions:
 - i. Regional solid waste function
 - ii. Environmental protection, monitoring and compliance
 - iii. Community climate action
 - iv. Resource recovery opportunities
- b) The Committee will also:
 - i. Serve as the Plan Monitoring Advisory Committee for the current Solid Waste Management Plan (SWMP)
 - ii. Stand as the steering committee for the revised SWMP
- c) The following committees will report through the Environmental Services Committee:
 - i. Climate Action Inter-Municipal Task Force
 - ii. Solid Waste Advisory Committee (SWAC)

2.0 ESTABLISHMENT AND AUTHORITY

- a) The Committee will make recommendations to the Board for consideration; and
- b) The Board Chair will appoint the Committee Chair, Vice Chair and Committee members annually.

3.0 COMPOSITION

- a) Committee members will be appointed CRD Board Members;
- b) All Board members are permitted to participate in standing committee meetings, but not vote, in accordance with the CRD Board Procedures Bylaw; and
- c) First Nation members are permitted to participate in standing committee meetings at their pleasure, in accordance with the CRD Procedures Bylaw, where the Nation has an interest in matters being considered by the committee.

4.0 PROCEDURES

- a) The Committee shall meet on a monthly basis, except August and December, and have special meetings, as required
- b) The agenda will be finalized in consultation between staff and the Committee Chair and any Committee member may make a request to the Chair to place a matter on the agenda through the Notice of Motion process;
- c) With the approval of the Committee Chair and the Board Chair, Committee matters of an urgent or time sensitive nature may be forwarded directly to the Board for consideration; and
- d) A quorum is a majority of the Committee membership and is required to conduct Committee business.

5.0 RESOURCES AND SUPPORT

- a) The General Manager of Parks & Environmental Services will act as liaison to the Committee; and
- b) Minutes and agendas are prepared and distributed by the Corporate Services Department.

Approved by CRD Board December 14, 2022

**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE
MEETING OF WEDNESDAY, JANUARY 18, 2023**

SUBJECT Biosolids Short-term Contingency Beneficial Use Plan

ISSUE SUMMARY

To seek direction on short-term emergency contingency alternatives for biosolids beneficial use.

BACKGROUND

In 2019, the provincial government approved the Capital Regional District's (CRD) Biosolids Beneficial Use Strategy, with the condition that the CRD prepare a beneficial use contingency plan that did not include landfilling or long-term storage of biosolids. To comply with these regulatory requirements, the CRD Board moved to amend its land application policy on February 12, 2020, per below:

That the Capital Regional District Board partially rescind its policy to prohibit land application as a beneficial use of biosolids at Hartland landfill only; and 2. That land application of biosolids be approved as a contingency plan for beneficial use at Hartland landfill.

Throughout 2021 and 2022, the CRD was unable to consistently follow the CRD's approved short-term (2021-2025) Biosolids Beneficial Use Strategy (Definitive Plan), due to both planned shutdowns at the cement manufacturer, and unplanned operational issues. Consequently, the CRD required more than 300 days of contingency capacity in 2022, whereas the CRD's approved contingency plan contemplated only 35 days of contingency annually. Given the significant 2022 contingency requirements, the area available at Hartland Landfill for creation and storage of mixed biosolids engineered cover systems was exceeded, and the CRD was unable to follow the approved contingency plan and began landfilling biosolids. The CRD continues to keep the BC Ministry of Environment & Climate Change Strategy (ENV) informed of its actions and planning on a regular basis, and ENV is aware that the CRD is not following the approved contingency plan, as referenced in the CRD Board Chair's December 2022 letter to Minister Heyman (Appendix A). Staff continue to work with Lafarge to address operational challenges and resume delivery; however, the CRD urgently requires additional short-term contingency alternatives that meet the Province of BC regulatory requirement of beneficial use.

The CRD has hired GHD as a technical advisor to support short-term emergency contingency analysis and has worked with industry to understand and evaluate more than 30 emergency contingency alternatives, including thermal technologies and non-agricultural land application. This analysis found:

1. In the near-term (less than 24 months), there are no additional contingency alternatives (beyond beneficial use at Hartland Landfill) that are consistent with both ENV regulatory requirements and the CRD partial ban on land application of biosolids.
2. If the CRD Board policy were changed to allow non-agricultural land application as an approved emergency contingency alternative, there are available contingency alternatives on Vancouver Island that could accept CRD biosolids in the immediate near-term, and at

lower cost than the current approved contingency.

Concurrent with addressing the short-term biosolids management needs, the CRD continues planning for the long-term biosolids management strategy that will come into effect at the end of the CRD's 2021-2025 approved short-term plan, including undertaking three advanced thermal processing (pyrolysis and gasification) pilot projects. In March 2023, staff will bring the results of this analysis and seek direction on next steps towards consultation and planning for the long-term biosolids management plan.

ALTERNATIVES

Alternative 1

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

1. That the Capital Regional District (CRD) Board amend its policy to allow non-agricultural land application of biosolids as a short-term contingency alternative; and
2. That staff be directed to update the CRD's short-term biosolids contingency plan correspondingly.

Alternative 2

The Environmental Services Committee provides alternate direction to staff.

IMPLICATIONS

Intergovernmental Implications

In BC, the Organic Matter Recycling Regulation (OMRR) sets requirements for the production of biosolids. The CRD's current practice of landfilling biosolids is out of compliance with the CRD's approved short-term plans, and does not meet the provincial requirement for beneficial use of biosolids.

Social Implications

At the December 14, 2022 Board meeting, a delegation from the Peninsula Biosolids Coalition provided remarks calling for an immediate end to land application of biosolids at Hartland Landfill and requesting storage as a short-term measure (a transcript of these remarks is included as Appendix B). GHD's analysis identified that storage of CRD biosolids at Hartland Landfill for future beneficial use through thermal processing is not a viable contingency alternative in the short term. Appendix C provides the latest CRD Biosolids Production Report from the CRD website for reference. The Province also provides information on biosolids management and associated risks through their website, and through the enabling legislation of OMRR to provide public confidence in land application of biosolids.

Financial Implications

The cost to manage biosolids as engineered cover at Hartland Landfill (approved contingency) was approximately \$1,000/tonne in 2022 and, due to increased costs for sand, wood and labour, is expected to cost approximately \$1,300/tonne in 2023.

Regulatory and mobilization costs to develop non-agricultural land application plans and initiate delivery for the portfolio of emergency contingency alternatives is expected to cost \$65,000. The beneficial use cost per tonne varies by site and is dependent on the tonnage of material delivered, however remains lower (i.e., <\$650/tonne) than managing biosolids at Hartland Landfill as engineered cover. These costs can be managed within the existing budget for biosolids management, provided the proposed contingency land application options are prioritized above the current contingency plan.

Service Delivery Implications

The evaluation of short-term contingency alternatives has identified a portfolio of non-agricultural land application options located on Vancouver Island that together could address the CRD's contingency requirements, including:

- Silviculture: forest fertilization through standard land application at a site under an existing land application plan near Nanaimo, BC that is already accepting municipal biosolids;
- Mine Reclamation: generation of a blended growing medium used for reclamation of a gravel pit site near Nanaimo, BC under a new land application plan;
- Land Reclamation: fabrication of biosolids growing media to address topsoil nutrient deficiencies, and aid in reclamation of disturbed areas at a forestry site near Nanaimo, BC.

Any land application contingency alternative would include regular sampling to confirm compliance with OMRR criteria.

Due to the CRD's contingency volume requirements, site constraints and seasonal availability, the short-term contingency plan would include all three identified contingency alternatives. To keep options viable and available for when they are needed, the CRD may be required to guarantee a minimum or regular/monthly delivery; however, combustion of biosolids in cement production would remain the CRD's primary beneficial use strategy until development and approval of the long-term biosolids management plan is complete.

CONCLUSION

The CRD urgently requires an additional biosolids short-term contingency alternative that meets the Province of BC regulatory requirement of beneficial use. If the CRD Board policy were amended to allow limited land application as an approved emergency contingency alternative, there are available contingency alternatives on Vancouver Island that have capacity to meet the CRD's contingency needs and could accept CRD biosolids in the immediate near-term and at lower cost than the current approved contingency. If directed, staff will immediately work to secure additional biosolids contingency capacity and modify the approved short-term contingency plan.

RECOMMENDATION

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

1. That the Capital Regional District (CRD) Board amend its policy to allow non-agricultural land application of biosolids as a short-term contingency alternative; and
2. That staff be directed to update the CRD's short-term biosolids contingency plan correspondingly.

Submitted by:	Glenn Harris, Senior Manager, Environmental Protection
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: Letter to Minister Heyman - December 16, 2022

Appendix B: Hugh Stephens – Delegation on Biosolids – December 16, 2022 – CRD Board Meeting

Appendix C: Summary of Biosolids Production and End Use – 2022



Making a difference...together

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December 16, 2022

File: 5200-30
Biosolids

0620-20
Core Area Liquid Waste Management Plan
General

The Honourable George Heyman
Minister of Environment and Climate Change Strategy
PO Box 9047 Stn Prov Govt
Victoria, BC V8W 9E2
Via email: ENV.Minister@gov.bc.ca

Dear Minister Heyman:

RE: SHORT-TERM MANAGEMENT OF CRD BIOSOLIDS

As Chair of the Capital Regional District (CRD) Board, I would like to congratulate you on your reappointment as the Minister of Environment and Climate Change Strategy. We are looking forward to continuing to work with your ministry in the coming years to address the environmental challenges facing our region.

Beneficial use and sustainable management of biosolids generated from the CRD's Residual Treatment Facility remain a priority for the CRD. Ministry staff have been made aware of the challenges faced by the CRD this past year with consistently utilizing the biosolids as an alternative fuel, the primary use outlined in the CRD's [Biosolids Beneficial Use Strategy \(2019 Definitive Plan\)](#). Further to my letters of July 30, 2021 and December 17, 2021 (attached), the CRD Board continues to request that the ministry decision to prohibit landfilling of biosolids in a biocell at Hartland Landfill be reconsidered and that the Organic Matter Recycling Regulation be updated as soon as possible to reflect the current science, best practices and the state of knowledge on emerging contaminants of concern, in order to address concerns related to public health and environmental values.

The CRD Board would like the ministry to provide updated public information showing that land application of biosolids does not pose a risk to public health or the environment.



Once again, on behalf of the CRD Board, I would like to extend our congratulations on your reappointment as the Minister of Environment and Climate Change Strategy, and we look forward to hearing from you regarding these important issues.

Sincerely,



Colin Plant
Chair, Capital Regional District Board

Attachments

cc: The Honourable David Eby, Premier of British Columbia
The Honourable Lana Popham, MLA for Saanich South
The Honourable Murray Rankin, MLA for Oak Bay – Gordon Head
The Honourable Mitzi Dean, MLA for Esquimalt – Metchosin
The Honourable Grace Lore, MLA for Victoria – Beacon Hill
The Honourable Rob Fleming, MLA for Victoria – Swan Lake
John Horgan, MLA for Langford – Juan de Fuca
Adam Olsen, MLA for Saanich North and the Islands
CRD Board of Directors
Ted Robbins, Chief Administrative Officer, CRD
Larisa Hutcheson, General Manager, Parks & Environmental Services, CRD

From: [Hugh Stephens](#)
To: [CRD Chair](#); [CRDBoard](#)
Cc: [Dave Cowen](#)
Subject: Delegation Presentation on Biosolids
Date: Thursday, December 15, 2022 10:57:09 PM
Attachments: [Presentation to CRD Board Dec 14 2022 FINAL.docx](#)

CRD IT SECURITY WARNING: This Email is from an EXTERNAL source. Ensure you trust this sender before clicking on any links or attachments.

Deer Chair Plant and Members of the Board,

Thank you for listening to my oral presentation on behalf of the Peninsula Biosolids Coalition at yesterday's (Dec. 14) Board meeting outlining our concerns with the current policy on disposal of biosolids at the Hartland Landfill, and the need for comprehensive water testing, including testing for "contaminants of emerging concern", not covered by the OMRR.. Chair Plant asked if I would distribute a written copy of my remarks. I am happy to do so. Please find attached.

Thank you,

Hugh Stephens

on behalf of the Peninsula Biosolids Coalition

Presentation to the CRD Board, December 14, 2022

BIOSOLIDS

Thank you. I'm Hugh Stephens from the Society for the Protection of the Mount Work Region. Today I am representing Mr. Dave Cowen, CEO of Butchart Gardens in his capacity as Chair of the Peninsula Biosolids Coalition. Mr. Cowen sends his apologies. A last minute work commitment made his personal appearance impossible.

The Coalition is made up the following:

The Butchart Gardens;
Society for the Preservation of the Mount Work Region;
Friends of Tod Creek Watershed;
Saanich Inlet Protection Society;
Peninsula Streams Society, and
Biosolids Free BC

These groups share a common concern regarding the excessive and continual land application of biosolids at Hartland Landfill. We all depend on the long term health of our land and water resources. In the case of the Butchart Gardens, these resources sustain hundreds of family sustaining jobs and the Gardens wants reassurances that its water licences are safe. Pollution risk from biosolids is measured in nanograms. There is no room for error.

While some of the contents of biosolids are regulated by the Province, many dangerous, carcinogenic compounds found in biosolids are not regulated, including "contaminants of emerging concern", such as PFAs, PCBs and other toxic "forever chemicals".

As noted in the staff report, due to problems with the Lafarge disposal option literally hundreds of tonnes of biosolids are being spread on a daily basis at Hartland, in a manner that is non-compliant with the 'beneficial use' requirements of the Ministry, and in direct contradiction of the CRDs obligations as the environmental steward of our region.

The CRD has banned land application of biosolids since 2011. Hartland is the exception, not the rule. Chair Plant has written twice to Minister George Heyman to ask for assurances that spreading biosolids at Hartland is safe. No reply has been received in over a year. It appears the Province will not give that assurance; instead it is downloading the risk on to this Board.

We are very concerned that the continued heavy application of biosolids in the limited space available at Hartland will inevitably lead to dispersal via wind or rain erosion, and the pollution of waterways and aquifers with a risk to human health and the environment.

Therefore, we call for an immediate end to the land application of biosolids at Hartland, preferring safe storage as a short-term measure to protect the regions farms, forests and waterways. Additionally, we call for an expansion of water quality testing beyond the limited peripheral testing done by CRD, testing that would also include biosolid contaminants not captured by the OMRR.

Regarding testing, the RainCoast Conservation Foundation, an NGO that did extensive water testing last year during the Sumas flooding in the Fraser Valley, has offered to work with our group and the CRD to

develop and conduct a water quality testing program to determine if the spreading of biosolids at Hartland is resulting in any of the toxic forever chemicals leaching into the waters.

In summary, we urge the CRD to respect the will of local residents and businesses and immediately end the land application of biosolids at Hartland, to move towards better options for the disposal of biosolids, and to work with the RainCoast Foundation to develop and support a 3rd party water quality testing program that would ensure that our sewage strategy doesn't threaten the local environment, the health of current residents and future generations or the viability of local business.

SUMMARY OF BIOSOLIDS PRODUCTION AND END USE – 2022

CAPITAL REGIONAL DISTRICT

January 2023

Amount of Biosolids Produced

In 2022, a total of 3,173 tonnes (t) of Class A Biosolids were produced at the Residuals Treatment Facility (RTF). 470 t were provided to Lafarge per the Definitive Plan. 595 t were used to produce Biosolids Growing Medium (BGM) as part of the approved Contingency Plan. 2,108 t were deposited in Hartland Landfill, either incorporated into interim daily cover or landfilled directly. All biosolids produced by the RTF in 2022 met Class A standards.

Biosolids production and end use data for 2022 is as follows:

Biosolids Type	Produced	End Use		
		Definitive Plan ^b	Contingency Plan: BGM ^c	Hartland Landfill ^d
Dried ^a Class A	3,173 t	470 t	595 t	2,108 t

^a Greater than 90% solids.

^b Used as an alternative fuel at the Lafarge cement manufacturing facility in Richmond, BC.

^c Land applied within the leachate containment area of Hartland Landfill.

^d Class A Biosolids placed within leachate containment areas as a layer of interim cover or are directly landfilled.

Compliance Monitoring

The Capital Regional District's (CRD) contractor, Hartland Resource Management Group, tests biosolids produced at the RTF to ensure the biosolids are Class A, as defined by the BC Organic Matter Recycling Regulation (OMRR). Testing is performed by CARO Analytical Services. OMRR specifies that for Class A biosolids, metals concentrations must not exceed "those specified in Trade Memorandum T-4-93 (September 1997), Standards for Metals in Fertilizers and Supplements, as amended from time to time." The latest version of OMRR – <https://www2.gov.bc.ca/gov/content/environment/waste-management/food-and-organic-waste/regulations-guidelines> and the latest version of Trade Memorandum T-4-93 <https://inspection.canada.ca/plant-health/fertilizers/trade-memoranda/t-4-93/eng/1305611387327/1305611547479>.

In June 2022, the Ministry of Environment and Climate Change Strategy announced the intention to amend OMRR, including new standards for Class A biosolids. Regulatory amendments are targeted for 2023. The proposed OMRR Standards have been included in the table for reference. Values reported in the table below represent the average, minimum and maximum of the 32 samples taken between January and November 2022. Analytical results from December 2022 have not yet been received.

Substance	OMRR Limit ^a (mg/kg dry weight)	Proposed OMRR Standard ^b (mg/kg dry weight)	RTF Biosolids (mg/kg dry weight)		
			Average	Minimum	Maximum
Metals					
Arsenic (As)	666	41	2.12	1.40	2.68
Cadmium (Cd)	177	15	1.54	1.02	2.02
Chromium (Cr)	9,333	1000	35.6	23.9	45.1
Cobalt (Co)	1,333	150	2.87	1.89	3.71
Copper (Cu)	6,666	1500	555	404	711
Mercury (Hg)	44	4	0.544	0.419	0.729
Molybdenum (Mo)	177	20	7.80	5.89	10.30
Nickel (Ni)	1,600	180	17.3	11.8	20.8
Lead (Pb)	4,444	300	30.4	21.9	37.3
Selenium (Se)	124	25	4.20	1.01	5.21
Thallium (Tl)	44	ns	<0.10	<0.10	<0.10
Vanadium (V)	5,777	ns	14.7	8.4	23.9
Zinc (Zn)	16,444	1820	884	650	1100
Fecal Coliforms					
MPN	1,000	1000	<3.0	<3.0	<3.0

^a For metals, the maximum allowable concentrations for Class A biosolids are calculated based on a 500 kg/ha annual application rate; for fecal coliforms, the maximum allowable concentration is a fixed value.

^b Proposed OMRR standards are tabled for reference - standards subject to change once final OMRR amendment is published.

ns = no standard

For reference, the following CRD reports can be found in the links below:

1. Biosolids Beneficial Use Strategy – <https://www.crd.bc.ca/project/biosolids-beneficial-use-strategy>
2. Definitive Plan – <https://www.crd.bc.ca/docs/default-source/biosolids-pdf/appendix-a-biosolids-beneficial-use-definitive-plan---sylvis.pdf?sfvrsn=7105cfca>
3. Short-Term Biosolids Contingency Plan – https://www.crd.bc.ca/docs/default-source/biosolids-pdf/crd-biosolids-short-term-contingency-plan.pdf?sfvrsn=a2b023cc_2
4. Biosolids Production Reports – <https://www.crd.bc.ca/about/data/biosolids-production>

**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE
MEETING OF WEDNESDAY, JANUARY 18, 2023**

SUBJECT **Evaluation of Passing Lane on Willis Point Road**

ISSUE

To provide an overall evaluation of the proposed passing lane on Willis Point Road, as requested by the Environmental Services Committee (ESC) at its meeting of September 28, 2022.

BACKGROUND

The disposal of solid waste at the Hartland landfill has taken place in phase 2, cells 1, 2 and 3, since 1997. Following the master filling plan for the overall site, cell 3 is projected to be full in the next two years and operations will move to the north end of the site to start placement in the bottom of cell 4. The characteristics of the site dictate that the commercial traffic must then enter the landfill from the north, utilizing Willis Point Road to access the site via the north entrance. This change in traffic patterns has been analyzed through two engineering reports, one focused on traffic volumes and road characteristics, the other focused on the surrounding intersections.

In addition to a suite of infrastructure improvements valued at \$4M resulting from the Solid Waste Management Plan consultation process, the Willis Point Community Association has requested the construction of a passing lane on the climbing portion of Willis Point Road between the Wallace Drive intersection and the north entrance to the landfill. The ESC requested that staff revisit the issue of the passing lane and report back with a justification for the earlier recommendation to not proceed with the passing lane, which was supported by the ESC and the Capital Regional District Board in September and October 2020, respectively. The previous recommendation was based on an evaluation of several elements, as summarized below.

The Bunt Engineering report from 2020 provides a technical analysis to determine if a passing lane is justified. Both routes to the landfill (Willis Point Road and Hartland Avenue) have a significant elevation gain from West Saanich Road. Depending on specific circumstances, this could cause heavy vehicles accessing the landfill to travel below typical speeds, which could cause vehicles to queue behind the slower-moving trucks. Currently on those two roads, passing is allowed only on the 800-metre section of Willis Point Road closest to Wallace Drive, which includes the hill where the passing lane is being requested.

The Transportation Association of Canada suggests that a climbing lane should be considered when three criterion are met: two of those involve the volume of vehicles and trucks on the roads, which are met during several peak flow hours through the week. However, a third criterion that has several scenarios is not met under any circumstance. This criterion, which is considered to be the most important, is based on the motorist's experience being negatively impacted due to a decrease in their speed or level of service. The Bunt report states that on the flat and uphill sections of Willis Point Road, heavy trucks were observed travelling around the 60 km/hr speed limit and there was no noticeable reduction in truck speeds caused by the elevation gain.

Additional support for the overall trucking capabilities is shown by the majority of vehicles using Willis Point Road first travelling north on West Saanich Road, passing through traffic lights and climbing one hill with a moderate gradient. The District of Saanich is not aware of any complaints of regular slow-moving traffic along this route. Hence, it is reasonable to concur that heavy trucks currently using this route have the power to accelerate rapidly from the stopped condition and maintain acceptable speeds up the hill. This observation supports the statement in the Bunt report that there were no noticeable reductions in truck speeds caused by the elevation gain on Willis Point Road.

The landfill currently generates one commercial vehicle approximately every four minutes in each direction. Therefore, there is only a small probability of drivers encountering a commercial vehicle in front of them on weekdays and a minuscule probability on weekends. However, if that were to occur, the evidence shows that drivers still will be able to travel at the speed limit without an additional lane.

The portion of Willis Point Road in question lies within the boundaries of the District of Saanich and so the District is the authority that approves changes to that road. District staff reviewed the engineering reports as they became available and were fully informed of the results of the consultations with the community associations. Based on those reports, as well as their own traffic data, District of Saanich staff concluded that they do not support the addition of a passing lane on that portion of Willis Point Road. District of Saanich staff also noted that in addition to the passing lane not being warranted on technical merits, they also do not support the addition of a passing lane, as it would require significant tree loss and removal of valuable ecosystems.

The Bunt report refers to the typical driver behaviour that can be expected if a passing lane were to be added. The excerpt from the report is as follows:

In addition to the financial and environmental implications of constructing a climbing lane, it would also cause drivers to increase their speed due to the street appearing wider. There is a direct relationship between the width of a street and the speed in which drivers choose to travel. Adding a lane on Willis Point Road is anticipated to increase vehicle speeds higher than the existing design where the average speed is already above the speed limit.

Further to this general observation of driver behaviour, the District of Saanich provided actual traffic data from February 2020. This information illustrates the driving behaviours witnessed during that time on the straight stretch of Willis Point Road near the Wallace Drive intersection. The data shows that traffic moves through that section from East to West at speeds that are higher than typically observed. For reference, District of Saanich staff indicate that speed data for similar roads having a 50 km/hr limit shows that typical faster drivers travel 7-9 km/hr over the speed limit. The data on the relevant portion of Willis Point Road shows the typical faster drivers travelled 23 km/hr over the speed limit of 60 km/hr.

Based on the actual traffic data and the general acceptance that wider roads result in increased speeds, the addition of a passing lane in this area is anticipated to exacerbate the speeding behaviours currently observed on that portion of Willis Point Road.

CONCLUSION

At the request of the Environmental Services Committee, this report presents information regarding the previous recommendation to not construct a passing lane on Willis Point Road. Information from recent engineering studies and related data and observations provided by the District of Saanich have been reviewed and considered. An overall evaluation of the need, safety and general observations support the previous recommendation that a passing lane is not warranted, and the District of Saanich has reconfirmed its concurrence with this finding and does not support the addition of a passing lane.

RECOMMENDATION

There is no recommendation. This report is for information only.

Submitted by:	Stephen May, P.Eng., Senior Manager, Facilities Management & Engineering Services
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