Proposed Beneficial-Use of Biosolids
Capital Regional District

Public Engagement Summary Report

TAVOLA
STRATEGY GROUP

May 2019

Submitted May 14, 2019

Tavola Strategy Group
140 Meadow Park Lane
Victoria, BC, V9B 6N1

Proposed Beneficial-Use of Biosolids "What We Heard"

OVERVIEW

The Capital Regional District (CRD) is planning to procure services for the beneficial use of the biosolids produced at its Residuals Treatment Facility. These biosolids will be used as an alternative fuel for British Columbia' s lower mainland-based cement industry for up to five years, once the McLoughlin Point Wastewater Treatment Plant begins operating in 2020.

Public engagement is a key part of developing the CRD' s overall biosolids management strategy and. The CRD shared their draft definitive plan and welcomed feedback from residents on this proposed solution prior to submitting its plan to the Province by June 30, 2019.

Once the treatment plant is operating and the specific composition of our region' s biosolids are known, the CRD will explore a range of beneficial use options as it develops its long-term biosolids management strategy within the region' s Core Area Liquid Waste Management Plan. Public and First Nations consultation will occur as part of developing the long-term plan.

ENGAGEMENT PROCESS

The purpose of public engagement was to provide complete and quality information and provide opportunities for the public to provide feedback regarding the CRD' s intention to procure services to use biosolids an alternative fuel for British Columbia' s lower mainland-based cement industry.

Several engagement channels and methods were used to raise awareness of the opportunity to learn more and provide feedback between Friday, April 26 and Sunday, May 12, 2019.

Public Information and Awareness-Raising Tools:

Website information, including FAQ, open house event listings the CRD online Community Calendar, and a CRD front page feature topic	April 26 – May 12
Online survey launched	April 26
A media release was distributed to all Capital Region media	April 29
Social media content promoting survey and open houses (Twitter and Facebook)	April 30 – May 10
Paid print advertising to promote survey and open houses running in all Black Press papers (May 1) in the region and twice in the Times Colonist. (May 2 and May 5)	May 1 - May 5
Direct invitations made to stakeholder groups (i.e. neighbourhood associations)	May 1
Open House Display Boards	May 7 & 8

The communications tools utilized to support public information and awareness-raising are included as appendices to this report.

PUBLIC INPUT OPPORTUNITIES

Members of the public were invited to provide input in writing online or in-person at two open houses held Tuesday, May 7, and Wednesday, May 8, 2019. The Open Houses were held at:

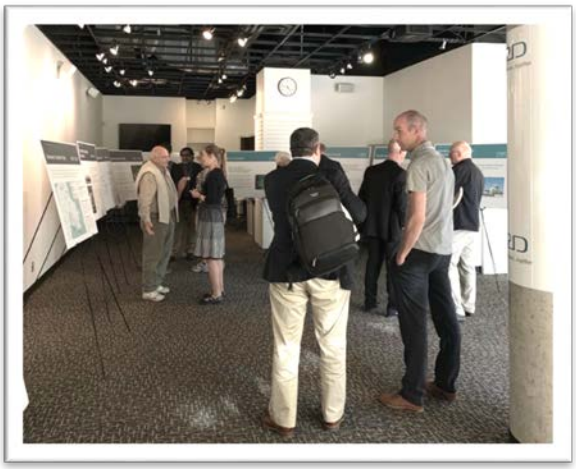
CRD Engagement Space
Tuesday, May 7, 2019
625 Fisgard Street, Victoria
4:30 p.m. – 6:30 p.m.

Hartland Learning Centre
Wednesday, May 8, 2019
1 Hartland Road, Saanich
5 p.m. – 7:30 p.m.

Two dates and locations were offered for the Open Houses to provide choice and options for residents and stakeholders. The first event occurred downtown and the second was held at the Hartland Landfill, near where the Residual Treatment Facility is located. Display boards outlined information about the wastewater treatment project, biosolids and biosolids quality, and the proposed beneficial use of biosolids.

Staff from the CRD Wastewater Treatment Project and CRD Engineering Services were present to answer questions of the public. In addition, representatives from Hartland Resource Management Group (HRMG), the operators of the residuals treatment facility, and a representative from the Cement Association of Canada were on hand. Samples of biosolids were available for attendees to view.

Open Houses – May 7 and May 8, 2019



Display board topics included:

1. Wastewater Treatment Project
2. Mcloughlin Point Wastewater Treatment Plant
3. Wastewater Treatment Process
4. Residuals Treatment Facility
5. What are Biosolids?
6. Beneficial use of Biosolids
7. Biosolids Quality
8. Biosolids as an Alternate Fuel in Cement Plants
9. Where to Next: Planning a Long-term Strategy for the Beneficial use of Biosolids

The display boards are outlined in Appendix B.

Public feedback was invited online throughout the engagement period and in-person via a print feedback form at the two open houses.

WHAT WE HEARD

Participation by the Numbers

Many participated in the public engagement through a variety of means. The most popular channel for providing input was the online survey.

Online surveys completed: 48
Number of attendees at open houses: 26
Feedback forms completed: 3
Number of unique webpage views: 272
Highest visitation to www.crd.bc.ca/biosolids: April 29 and 30, 2019
Facebook reach: 2,983 people, 13 comments
Twitter: 80 engagements and 4,461 impressions

PUBLIC INPUT

A number of questions were posed and themes emerged from the feedback received.

- Most respondents were silent on whether they supported or opposed the proposed option. Rather most of the comments focussed on long-term options and considerations overall that are important to them. Of the 51 respondents, six noted clear support for the proposed beneficial-use in cement plants, and one stated clear opposition.

- The most common comment received was that biosolids should not be applied to land. (22 of 51 respondents)

- Of those who noted opposition to applying biosolids on land for agricultural or fertilizer purposes, the majority of respondents expressed interest in seeing the beneficial elements of nitrogen, phosphorus and energy extracted for some other beneficial use.

- A range of other long-term beneficial-use of biosolids options were proposed by respondents, including: gasification, pyrolysis, burning, biochar, supporting reforestation, anaerobic digestion, energy generation, feeding the marine environment, landfilling and sealed storage.

- A number of considerations emerged from respondents, including the need for further environmental testing prior to determining the long-term use, concern for wildlife and water quality near the biosolids facility, concern about odours, and ensuring emissions standards are met.

- Two respondents and the President of the Willis Point Community Association noted the importance of safeguarding the freshwater well system and the Saanich Peninsula aquifers.

- Some respondents expressed concern about the energy and economic costs of transporting biosolids to the Lower Mainland and felt "closer to home" options were preferred. One respondent felt more information about the costing was needed.

- Two respondents indicated concern related to the public consultation process, one in terms of the timeline and the other in terms of the online consultation approach.

- Two respondents indicated overall concern related to the wastewater treatment process to date

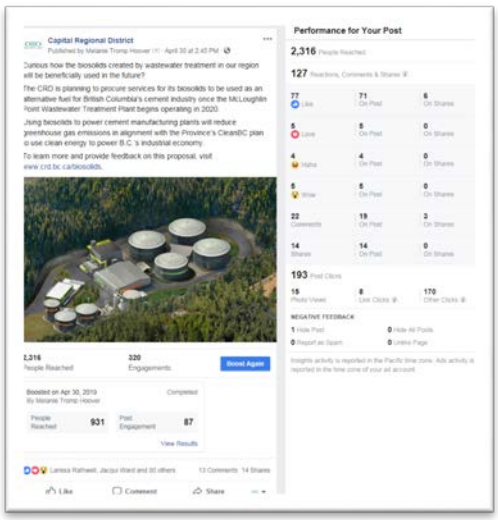
NEXT STEPS

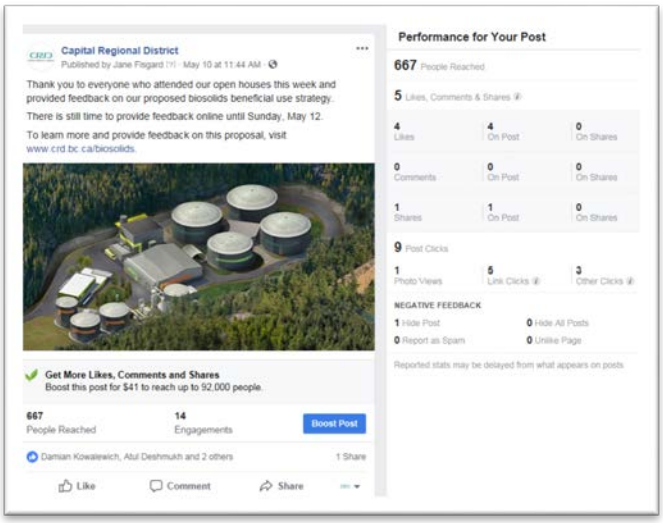
This report will be included as an appendix within the definitive plan submitted to the Province by June 30, 2019.

APPENDIX A: Public Information and Awareness-Raising Tools

Facebook April 29, 2019

Facebook – May 10, 2019


Capital Regional District
Performance for Your Post
2,316 People Reached
127 Reactions, Comments & Shares
193 Post Clicks
NEGATIVE FEEDBACK
Boost Again

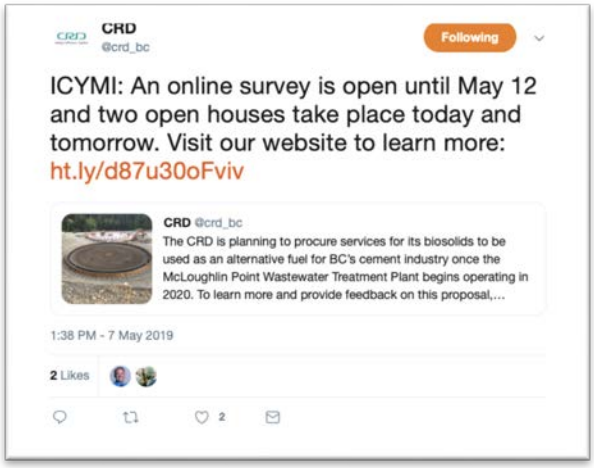

Capital Regional District
Published by Jane Fisgard · May 10 at 11:44 AM
Thank you to everyone who attended our open houses this week and provided feedback on our proposed biosolids beneficial use strategy.
There is still time to provide feedback online until Sunday, May 12.
To learn more and provide feedback on this proposal, visit www.crd.bc.ca/biosolids.
Performance for Your Post
667 People Reached
5 Likes, Comments & Shares
9 Post Clicks
NEGATIVE FEEDBACK
Get More Likes, Comments and Shares
Boost this post for $41 to reach up to 92,000 people.
667 People Reached
14 Engagements
Boost Post
Like
Comment
Share

Twitter


@crd_bc
Following
The CRD is planning for its biosolids to be used as an alternative fuel for BC's cement industry once the McLoughlin Point Wastewater Treatment Plant begins operating in 2020. To learn more and provide feedback on this proposal, visit crd.bc.ca/biosolids.
8:31 AM - 1 May 2019


CRD
@crd_bc
Following
CRD Seeks Feedback on Biosolids Beneficial Use Strategy
NEWS
CRD Seeks Feedback on Biosolids Beneficial Use Strategy
The Capital Regional District (CRD) is planning to procure services for the beneficial use of the biosolids produced at its Residuals Treatment Facility.
crd.bc.ca
10:01 AM - 29 Apr 2019
3 Retweets 2 Likes


@crd_bc
Following
The CRD is planning to procure services for its biosolids to be used as an alternative fuel for BC's cement industry once the McLoughlin Point Wastewater Treatment Plant begins operating in 2020. To learn more and provide feedback on this proposal, visit crd.bc.ca/biosolids.


CRD
@crd_bc
Following
ICYMI: An online survey is open until May 12 and two open houses take place today and tomorrow. Visit our website to learn more: ht.ly/d87u30oFviv
CRD @crd_bc
The CRD is planning to procure services for its biosolids to be used as an alternative fuel for BC's cement industry once the McLoughlin Point Wastewater Treatment Plant begins operating in 2020. To learn more and provide feedback on this proposal,...
1:38 PM - 7 May 2019
2 Likes
2


@crd_bc
Following
The CRD is planning for our region's biosolids to be used as an alternative fuel for BC's cement industry once the McLoughlin Point Wastewater Treatment Plant begins operating in 2020. To learn more and provide feedback on this proposal, visit crd.bc.ca/biosolids.
11:45 AM - 9 May 2019


CRD
@crd_bc
Following
Thank you to everyone who attended our open houses this week and provided feedback on our proposed biosolids beneficial use strategy. There is still time to provide feedback online until May 12. To learn more and provide feedback on this proposal, visit crd.bc.ca/biosolids.
11:45 AM
Launchpad

Making a difference...together

Information Bulletin

For Immediate Release
April 29 2019

CRD Seeks Feedback on Biosolids Beneficial Use Strategy

Victoria, BC — The Capital Regional District (CRD) is planning to procure services for the beneficial use of the biosolids produced at its Residuals Treatment Facility. These biosolids will be used as an alternative fuel for British Columbia's lower mainland-based cement industry once the McLoughlin Point Wastewater Treatment Plant begins operating in 2020.

Using biosolids to power cement manufacturing plants will reduce greenhouse gas emissions in alignment with the Province's CleanBC plan to use clean energy to power B.C.'s industrial economy.

Public engagement is a key part of developing the CRD's overall biosolids management strategy and, as a result, the CRD welcomes feedback from residents on this proposed solution ahead of submitting its plan to the Province by June 30.

There are two ways for capital region residents to learn more and provide feedback by Sunday, May 12:

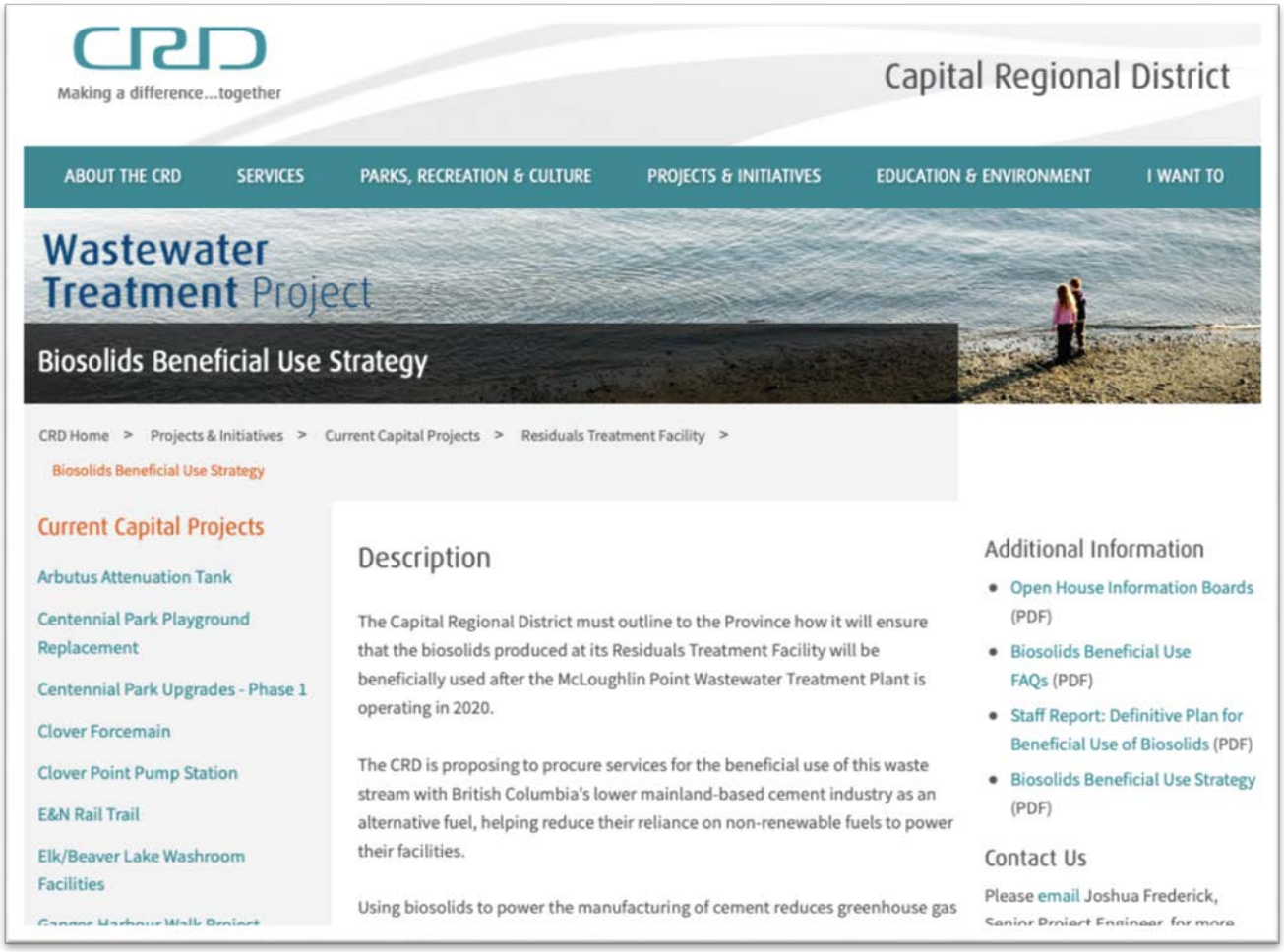
- Online at www.crd.bc.ca/biosolids
- In person at an open house event:
    - Tuesday, May 7 from 4:30 – 6:30 p.m. at the CRD's Centre for Engagement (625 Fisgard Street, accessed from Centennial Square)
    - Wednesday, May 8 from 5:00 – 7:30 p.m. at the Hartland Learning Centre (1 Hartland Avenue)

Once the treatment plant is operating and the specific composition of our region's biosolids are known, the CRD will explore a range of beneficial use options as it develops its long-term biosolids management strategy within the region's Core Area Liquid Waste Management Plan.

For more information, please visit www.crd.bc.ca/biosolids.

Proud to be recognized as one of BC's Top Employers and Canada's Greenest Employers, the CRD delivers regional, sub-regional and local services to 13 municipalities and three electoral areas on southern Vancouver Island and the Gulf Islands. Governed by a 24-member Board of Directors, the CRD works collaboratively with First Nations and all levels of government to enable sustainable growth, foster

Project webpage **www.crd.bc.ca/biosolids**



Print advertising – All Capital Region Blackpress newspapers - May 1, 2019 and Times Colonist - May 2 and May 5, 2019

Capital Regional District

CRD
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Public feedback opportunity

Beneficial Use of Biosolids

The CRD is planning to procure services for the beneficial use of the biosolids produced at its Residuals Treatment Facilty. These biosolids will be used as an alternative fuel for British Columbia's cement industry once the McLoughlin Point Wastewater Treatment Plant begins operating in 2020.

The CRD welcomes feedback from residents on this proposed solution.

There are two ways to learn more and provide feedback:

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To learn more, please visit:

www.crd.bc.ca/biosolids

Frequently Asked Questions (FAQ)

Biosolids Beneficial Use Strategy

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FREQUENTLY ASKED QUESTIONS

Capital Regional District | April 2019

1. What are biosolids?

Biosolids are a by-product of wastewater treatment and can be used for a number of beneficial purposes. After wastewater is treated at the McLoughlin Point Wastewater Treatment Plant, the residual solids are conveyed through a 19-kilometre pipe to the Residuals Treatment Facility at Hartland Landfill. The solids then undergo a treatment process where they are digested, heated and dried, resulting in biosolids.

Biosolids resemble dark, dry granular pellets. The final quality of the biosolids produced depends on the attributes of the sewage entering the treatment plant and the treatment process itself. The Residuals Treatment Facility is expected to produce approximately 7,000 tonnes of "Class A" biosolids each year, starting in 2021.

2. What is 'beneficial use'?

Beneficial use means that the biosolids produced from wastewater treatment will be used for environmental or community benefit. When treated, biosolids can be used for a number of beneficial purposes. The Ministry of Environment & Climate Change Strategy (ENV) establishes and enforces standards for wastewater treatment, and the beneficial use of biosolids.

3. What is being proposed and why?

The CRD is proposing that the biosolids produced from treated wastewater be transported to the Lower Mainland where they can be used as an alternate fuel source to power cement manufacturing plants. Two manufacturing plants were shortlisted through a Request for Qualifications and Request for Proposals process in late 2018. Using biosolids as an alternate fuel in cement kilns will reduce their reliance on other non-renewable fuels currently being used.

Once ENV approves this plan, the CRD would enter into a short-term beneficial use agreement for up to five years with the two companies. During this five year period, and once wastewater treatment is underway by the end of 2020, planning will begin to determine the long-term beneficial use strategy for utilizing biosolids.

4. What about air quality and emissions?

Metro Vancouver has high standards for air quality emissions that cement plants must meet. Any emissions produced from using CRD biosolids within the cement kiln must continue to meet those high standards.

Biosolids Beneficial Use Strategy

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FREQUENTLY ASKED QUESTIONS

Capital Regional District | April 2019

5. What about the greenhouse gas emissions associated with trucking this material to the Lower Mainland?

Near, or in-region, options that minimize greenhouse gas emissions and transportation costs are always desirable where feasible. As there are no cement plants on Vancouver Island where biosolids can be used in this way, this offers the greatest beneficial use at this time.

CRD staff are currently considering transportation options that use alternate fuels where possible. Transportation costs and greenhouse gas emissions will continue to be considered when developing the long-term biosolids management plan starting next year.

6. How will a long-term plan for beneficial use be determined?

Planning will begin to determine the long-term beneficial use strategy for utilizing biosolids once wastewater treatment is underway by the end of 2020.

Once the quality, volume and characteristics of what is being produced are known, the potential options will be confirmed and explored. Public consultation will also occur as part of that process.

7. Other communities use biosolids for agricultural and landscaping purposes—why can't that be done in this region?

Per the CRD Board's decisions in 2011 and 2013, land application of biosolids is banned in the capital region due to public health concerns about the accumulation and dispersal of hydrocarbons, heavy metals, pharmaceuticals and other compounds of concern on region land, in regionally-grown food and in the region's water table.

8. Are there other communities using biosolids in this way?

Biosolids are used as alternative fuel source in several communities across North America, including Montreal and several US locations. This is the first time in British Columbia that biosolids will be used within cement production.

APPENDIX B: Public Input Opportunities

Open House and Online Feedback Form

CRD

Biosolids Beneficial Use Strategy

We welcome your feedback on the proposed plan for the beneficial use of biosolids after the McLoughlin Point Wastewater Treatment Plant is operating in 2020.

We respect your privacy

Comments received will be summarized and shared with both the Capital Regional District Board and the Ministry of Environment & Climate Change Strategy as part of the Class A Biosolids Management Plan's approval process. Please do not provide any information that could identify yourself or others in your responses. No individuals will be identified and no comments will be attributed to any individual in any reports or communications resulting from this survey.

By choosing to provide your response, you provide the CRD with your expressed, written consent to use this information for the purposes of engaging and consulting with the public in association with this project. Any personal information collected by this form is in accordance with s.26 (c) and (d) of the Freedom of Information and Protection of Privacy Act. Inquiries about the collection and use of information in this form can be directed to Stephen May, Senior Manager, Facilities Management and Engineering Services, Capital Regional District, 625 Fisgard St., PO Box 1000 or 250.360.3064.

Comments:

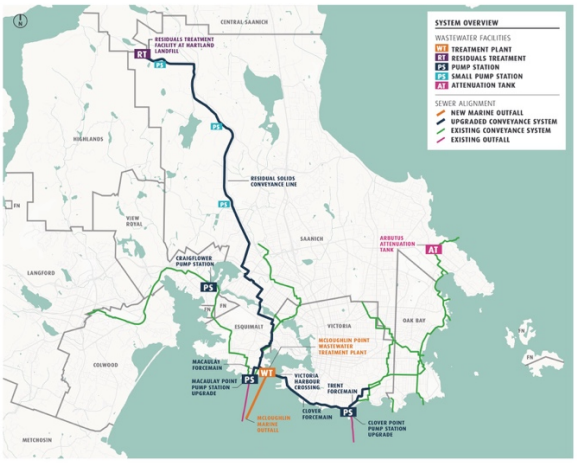
Open House Display Boards

COMMUNITY INFORMATION OPEN HOUSE

Wastewater Treatment Project

Wastewater Treatment Project
Treated for a cleaner future

The Wastewater Treatment Project will provide tertiary treatment for wastewater from the core area municipalities of Victoria, Esquimalt, Saanich, Oak Bay, View Royal, Langford and Colwood, and the Esquimalt and Songhees Nations. The Project is being built so we comply with federal regulations by the end of 2020.



THE PROJECT CONSISTS OF THREE MAIN COMPONENTS:

MCLOUGHLIN POINT WASTEWATER TREATMENT PLANT

Located at McLoughlin Point, the wastewater treatment plant will provide tertiary treatment to the core area's wastewater.

RESIDUALS TREATMENT FACILITY

Residual solids from the wastewater treatment plant will be piped to Hartland Landfill, where they will be turned into what are known as Class A biosolids. These biosolids are a high quality by-product treated such that it is safe for further use.

CONVEYANCE SYSTEM

The conveyance system refers to the "pumps and pipes" of the Wastewater Treatment Project. This system will carry wastewater from across the core area to the treatment plant, and carry residual solids from the wastewater treatment plant to the Residuals Treatment Facility.

COMMUNITY INFORMATION OPEN HOUSE

Wastewater Treatment Process

Wastewater Treatment Project
Treated for a cleaner future

1 CONVEYANCE SYSTEM

Collects wastewater from across the core area and conveys it to the Clover Point and Macaulay Point pump stations.

Screening
Wastewater is screened (6mm) to remove stones, paper, cloth, plastics and other debris.

Grit Removal
A vortex system uses centrifugal force to keep the organic material suspended while grit settles and is removed.

The grit and screenings are compacted and trucked to an approved landfill.

Pumping
Wastewater will be pumped to the new treatment plant.

Storm Outfalls
Currently, untreated wastewater is discharged out of the Clover Point and Macaulay Point outfalls. Once the Project is built, these outfalls will only be used to discharge storm flows associated with heavy-rain events. To reduce the need to discharge storm flows, a buried underground concrete tank (the Arbutus Attenuation Tank) will be built in Saanich to temporarily store flows during high volume storm events. In addition, core area municipalities have committed to an inflow and infiltration program that will reduce the volume of storm flows that need to be discharged.

2 MCLOUGHLIN POINT WASTEWATER TREATMENT PLANT

PRIMARY TREATMENT
is the physical separation of solids from wastewater.

Removing Solids
Heavier solids settle to the bottom and lighter 'scum' floats to the top.

SECONDARY TREATMENT
Is a biological process that removes dissolved and suspended organic compounds in the wastewater.

Fine Screening
Primary effluent will be finely screened (2mm) to remove smaller debris.

Biological Reactors
Wastewater flows through tanks where microorganisms grow. The microorganisms consume organic compounds in the wastewater and reproduce to form cells that result in residual biological solids. Solids are removed and sent to the Residuals Treatment Facility for further treatment. Treated secondary effluent is sent to tertiary treatment.

TERTIARY TREATMENT
is one of the highest levels of treatment, reducing contaminants that remain after the secondary treatment process.

Disc Filter
Wastewater will pass through a fabric disc filter (5-micron), reducing many pharmaceuticals, hormones, microplastics and other contaminants.

OUTFALL
The tertiary-treated effluent will flow to the outfall to be discharged into the ocean approximately 2km from shore and 60m deep.

3 RESIDUALS TREATMENT FACILITY

As wastewater moves through the treatment process, residual solids are removed. These solids will be pumped to the Residuals Treatment Facility for further treatment.

Residual Solids Conveyance Line
Will consist of two pipes and three small pump stations to transport all residual solids to the Residuals Treatment Facility. Liquid removed from the residual solids during the treatment process will be returned to the McLoughlin Point Wastewater Treatment Plant through the conveyance system.

Residuals Treatment Facility
The Residuals Treatment Facility will be built at the Hartland Landfill, to process residual solids produced by the McLoughlin Point Wastewater Treatment Plant into Class A biosolids – the highest level product suitable for beneficial use.

COMMUNITY INFORMATION OPEN HOUSE

McLoughlin Point Wastewater Treatment Plant

CRD Wastewater Treatment Project
Treated for a cleaner future

Artist rendering

Located at McLoughlin Point in Esquimalt, the McLoughlin Point Wastewater Treatment Plant will provide tertiary treatment to the core area's wastewater.

- The plant will treat up to 108 megalitres of wastewater per day, providing capacity to accommodate future population growth.
- Wastewater will go through primary, secondary and tertiary treatment and then be discharged into the ocean through a new outfall approximately 2km from shore and 60m deep.

ODOUR

The plant has been designed so there will be no detectable odour by residents. It will include the following:

- State-of-the-art odour control;
- 24-hour odour control monitoring system;
- Detailed procedures for responding to odour issues, in the unlikely event that one occurs; and,
- A CRD phone line to report any odour issues 24 hours a day.

NOISE

In accordance with the Township of Esquimalt's Zoning Bylaw, operational noise from the McLoughlin Point Wastewater Treatment Plant will not exceed 60 decibels (dBA) outside of the plant's property line.

COMMUNITY INFORMATION OPEN HOUSE

Residuals Treatment Facility

CRD Wastewater Treatment Project
Treated for a cleaner future

The Residuals Treatment Facility will process residual solids produced by the McLoughlin Point Wastewater Treatment Plant into Class A biosolids, a high quality by-product treated such that it is safe for further use.

The Residuals Treatment Facility is located within the footprint of the Hartland Landfill and all treatment processes will be completed within closed containers.

Hartland Resource Management Group (HRMG) has been selected to design, build, finance, operate and maintain the Residuals Treatment Facility over a 20-year term.

Odour control systems will ensure there is no discernible odour in the community from the facility. Noise from the facility will be minimal and will comply with District of Saanich bylaws.

Construction began in spring 2018 and will take approximately 2.5 years to complete.

Artist rendering of the Residuals Treatment Facility

CURRENT CONSTRUCTION ACTIVITIES

- Pouring concrete for building foundations, digester tanks, and storage tanks

UPCOMING CONSTRUCTION ACTIVITIES

- Construction of dryer building, residuals handling building and operations and maintenance building

COMMUNITY INFORMATION OPEN HOUSE

What are Biosolids?

Making a difference...together

Biosolids are a by-product of wastewater treatment and can be used for a number of beneficial purposes.

After wastewater is treated at the McLoughlin Point Wastewater Treatment Plant, the residual solids are conveyed through a 19km pipe to the Residuals Treatment Facility at Hartland Landfill.

The solids then undergo a treatment process where they are digested, heated and dried, resulting in "Class A" biosolids, the highest standard of biosolids, containing almost no detectable levels of pathogens.

Biosolids produced in our region will resemble dark, dry granular pellets. The final characteristics will depend on both the attributes of the sewage entering the treatment plant and the treatment process itself.

It is expected that approximately 7,000 tonnes of "Class A" biosolids will be produced each year, starting in 2021.

COMMUNITY INFORMATION OPEN HOUSE

Beneficial use of Biosolids

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"Beneficial use" means that the biosolids produced from wastewater treatment will be used for environmental or community benefit. When treated, biosolids can be used for a number of beneficial purposes, while ensuring health and environmental protection.

The Ministry of Environment & Climate Change Strategy establishes and enforces standards for wastewater treatment, and the beneficial use of biosolids.

Although some communities use biosolids for landscaping and agricultural purposes, in 2013 the CRD Board banned the land application of biosolids as a precautionary measure due to the potential impacts of pharmaceuticals and other evolving compounds of concern being applied to land.

Using these biosolids beneficially as an alternative fuel source aligns with the CRD's commitment to climate action and environmental stewardship.

COMMUNITY INFORMATION OPEN HOUSE

Biosolids Quality

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"Source Control" is a pollution prevention initiative aimed at reducing the amount of contaminants that industry, businesses, institutions and households discharge into the sanitary sewer systems. Source Control is a cost-effective way of protecting wastewater collection and treatment systems and the environment.

Controlling what goes into the sanitary sewer system reduces the type and concentration of contaminants entering the wastewater treatment plant. By limiting contaminants and pathogens entering the system, the greater the number of beneficial management options exist at the end of the sewage treatment process.

The CRD established a Regional Source Control Program in 1994 to augment the Sewer Use Bylaw. Several industry-specific Codes of Practice have been developed by the CRD, with the objective of improving the quality of industrial wastewater discharges into the municipal wastewater collection system.

The Dental Code of Practice requires the installation of amalgam separators in dental offices. Dental amalgam, used in mercury fillings, is a major source of mercury in wastewater and can account for up to 90% of mercury levels in wastewater.

Since implementation of the Dental Code of Practice in 2001, the CRD has observed a continual decline in mercury concentrations within biosolids produced by the Saanich Peninsula Wastewater Treatment Plant*

(Morrison Hershfield, 2010)

COMMUNITY INFORMATION OPEN HOUSE

Biosolids as an Alternate Fuel in Cement Plants

Making a difference...together

The CRD is proposing that the biosolids produced from treated wastewater be transported to the Lower Mainland where they can be used as an alternate fuel source in cement manufacturing plants.

Using biosolids as an alternate fuel in cement kilns will reduce their reliance on other non-renewable fuels currently being used.

Once the Province approves this plan, the CRD would enter into a beneficial use agreement for up to five years.

Biosolids are used as an alternative fuel source in several communities across North America, including Montreal and several US locations. This is the first time in BC that biosolids will be used in the production of cement.

COMMUNITY INFORMATION OPEN HOUSE

Where to Next: Planning Long-Term Strategy for Beneficial use of Biosolids

CRD
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Once wastewater treatment is underway by the end of 2020, planning will begin to determine the long-term beneficial use strategy for utilizing biosolids, including the potential for innovative and/or closer-to-home options as part of a diversified management program.

Public and First Nations consultation will be an important component of developing a long-term strategy.

Public and First Nations engagement APRIL - MAY 2019	→	**Submission of the Biosolids Management Plan to Province of B.C.** JUNE 30, 2019	→	**Financial close with the cement kilns** FALL 2019	→
Commissioning period JUNE 30, 2020 – DEC 31, 2020	→	**Public and First Nations consultation on the long-term Biosolids Management Plan** FALL 2022	→	**Long-Term Management Plan** ONGOING	

TAVOLA
STRATEGY GROUP