

REGIONAL DISTRICT OF BULKLEY-NECHAKO

WASTE MANAGEMENT COMMITTEE MEETING
(Committee Of The Whole)

Thursday, January 14, 2016

PRESENT: Chair Taylor Bachrach

Directors Eileen Benedict
Shane Brienen
Mark Fisher
Tom Greenaway
Dwayne Lindstrom
Thomas Liversidge
Rob MacDougall
Bill Miller
Rob Newell
Mark Parker
Jerry Petersen
Darcy Repen
Luke Strimbold
Gerry Thiessen

Staff Gail Chapman, Chief Administrative Officer
Cheryl Anderson, Manager of Administrative Services
Hans Berndorff, Financial Administrator
Janine Dougall, Director of Environmental Services
Jason Llewellyn, Director of Planning
Deborah Jones-Middleton, Manager of Protective Services -
arrived at 1:54 p.m., left at 1:56 p.m.
Wendy Wainwright, Executive Assistant

Other Bill Stewart, Alternate Director, Electoral Area "D" (Fraser Lake)

CALL TO ORDER

Chair Bachrach called the meeting to order at 12:22 p.m.

AGENDA &
SUPPLEMENTARY AGENDA

Moved by Director Miller
Seconded by Director MacDougall

WMC.2016-1-1

"That the Waste Management Committee receive the January 14, 2016 Waste Management Committee Agenda; and further that the Supplementary Agenda be received."

(All/Directors/Majority)

CARRIED UNANIMOUSLY

MINUTES

Waste Management
Committee Meeting Minutes
-December 10, 2015

Moved by Director Petersen
Seconded by Director Repen

WMC.2016-1-2

"That the Minutes of the Waste Management Committee for December 10, 2015 be received."

(All/Directors/Majority)

CARRIED UNANIMOUSLY

REPORT

Landfill Criteria for Municipal Solid Waste – Second Edition, Webinar – November 12, 2015 Moved by Director Repen
Seconded by Director Miller

WMC.2016-1-3 “That the Waste Management Committee receive the correspondence titled “Landfill Criteria for Municipal Solid Waste – Second Edition, Webinar – November 12, 2015”.”

(All/Directors/Majority)

CARRIED UNANIMOUSLY

Janine provided an overview of the Landfill Criteria for Municipal Solid Waste – Second Edition brought forward by the Ministry of Environment to replace the old landfill criteria that was developed in 1993. She noted that staff had provided comments in regard to the Landfill Criteria for Municipal Solid Waste – First Edition in regard to concerns with costs associated with the new guidelines and how the guidelines would be implemented. The guidelines are not a regulatory requirement but when they are included in the operation certificates (permits) from the Ministry of Environment on how landfills are operated they will need to be implemented. Also in the review and development of a new Solid Waste Management Plan the guidelines will need to be considered.

Frustrations were expressed in regard to the Landfill Criteria being excessive and not addressing that every landfill is unique and different. Discussion took place regarding RDBN Landfill operations being well within environmental standards and operated at very high standards. To make the changes outlined in the new Landfill Criteria it will be very costly and challenging to the tax base in a potentially short period of time.

Discussion took place regarding a natural attenuation system and an engineered facility. An engineered facility has a liner system where liquid is collected, treated and discharged. It is a very controlled environment wherein there is control of how and where the leachate is discharged. In a natural attenuation system hydro geotechnical work is required in order to determine the natural treatment capacity of the soils. There is less control in comparison to an engineered facility. Knockholt Landfill is an engineered system and Clearview Landfill is a natural attenuation system. Clearview was planned and designed to be a minimum 100 year landfill. Clearview has been in operation since 2005 and there has been continued evaluation of the natural attenuation capability to ensure that it continues to be an effective landfilling methodology moving forward.

Ms. Dougall provided a PowerPoint Presentation.

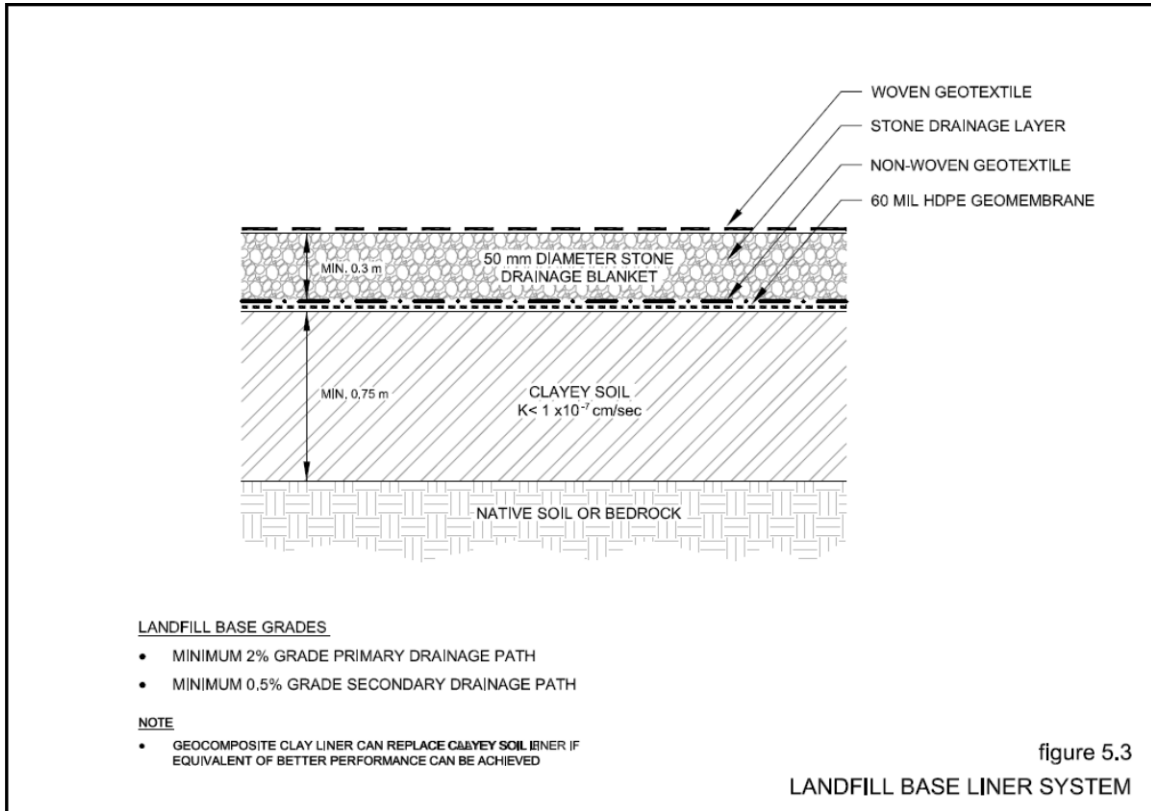
Knockholt Landfill Facility

- Phase 2C development completed in 2013;
- Built using a natural clay liner that is very impermeable;
- Ground water table is 1.2 – 1.5 metres below ground;
- Hydraulic gradient underneath the landfill;
 - o Sits on the side of a mountain;
 - o All run off travels down the mountain underneath the landfill creating hydraulic pressure;
 - o When test pits were drilled to determine ground water levels artesian conditions were found;
 - o If any water will leak into the landfill and not out due to the hydraulic water pressures;
 - o This is very good from an environmental perspective;
- The design also includes a perforated high density poly-ethaline (HDPE) pipe which is a leachate collection pipe;
- Goes through the middle of phase 2C to the main leachate collection pipe;
 - o The pipe is covered in drain rock;

REPORT (CONT'D)

- A herringbone drain rock collection system is built to direct liquid to the HDPE pipe;
- Under the drain rock is geosynthetic material which keeps the drain rock from migrating into the clay liner;
- Approved by the MoE;
- To build in 2012 phase 2C was approximately \$200,000 which equated to \$40 m².

Landfill Base Liner System under the new MoE Landfill Guidelines



New Guideline requirements;

- Clayey soils;
- 60 mil HDPE geomembrane that covers the entire site;
 - Requires thermal welding for seams;
 - Seams need to be tested for quality control;
- Non-woven material placed on top of the geomembrane;
- Stone drainage blanket (drain rock) over the entire footprint of the phase development;
- Woven geotextile on top of the drain rock;
- This liner design and quality control would cost approximately \$100 m².

Clearview Landfill

- Landfill developed and built in 2005;
- Currently landfilling in Phase 1
- Phase 1 has 5 sub-cells that will be utilized;
- 3 sub-cells have been built to date with MoE approval.

REPORT (CONT'D)

Cost Implications of New Landfill Criteria for Municipal Solid Waste – Landfill Development Knockholt Landfill

Original Phase 3 Development Plan

- **3A - \$350,000;**
 - o 2016 @ \$47/m²;
 - o \$6.29/\$100,000 assessed value (2016 completed roll).
- **3B - \$350,000;**
 - o 2021 @ \$47/m²;
 - o \$6.29/\$100,000 assessed value (2016 completed roll).
- **3C - \$350,000;**
 - o 2026 @ \$47/m²;
 - o \$6.29/\$100,000 assessed value (2016 completed roll).

Phase 3 Development Options

Option 1

- **3A - \$530,000;**
 - o 2016 @ \$47/m²;
 - o \$9.52/\$100,000 assessed value (2016 completed roll).
- **3B - \$1,125,000;**
 - o 2023 @ \$100/m²;
 - o \$20.22/\$100,000 assessed value (2016 completed roll).

Option 2

- **3A - \$350,000;**
 - o 2016 @ \$47/m²;
 - o \$6.29/\$100,000 assessed value (2016 completed roll).
- **3B - \$750,000;**
 - o 2021 @ \$100/m²;
 - o \$6.29/\$100,000 assessed value (2016 completed roll).
- **3C - \$750,000;**
 - o 2026 @ \$100/m²;
 - o \$13.48/\$100,000 assessed value (2016 completed roll).

Added costs for updating design operation closure plans and other reporting requirements have not been included in the above costs.

Knockholt Landfill

Currently staff is in the process of surveying the existing footprint of the landfill to determine the remaining capacity of Phase 1 and 2 and for future development requirements for Phase 3. Phase 3 has been designed to be developed in 3 stages.

Staff has requested written clarification and verification from the MoE to develop Phase 3A under the old landfill guidelines. Funding has not been allocated in the 2016 budget to complete the development of Phase 3 under the new Landfill Criteria for Municipal Solid Waste guidelines. Discussion took place regarding the MoE allowing the development of Phase 3 under the old guidelines and the potential to develop a third or half of the site. When building a landfill with a liner system the liner requires a cover of garbage of approximately one metre thick to protect it from freezing conditions. This needs to be considered in determining how much landfill footprint to develop.

Concerns were brought forward regarding the cost implications to tax payers in moving forward with the Phase 3 Development Options 1 and 2.

Discussion took place regarding the potential impacts to RDBN Solid Waste Management Facilities if there is future development of LNG pipelines in the region.

Ms. Dougall noted that the new landfill criteria has been implemented in operation certificates in some areas of B.C. The MoE has not provided information as to how the new guidelines will be implemented.

REPORT (CONT'D)

The cost implications of the new landfill criteria to waste reduction and diversion initiatives in the RDBN was discussed.

Discussion took place regarding the environmental risks associated with the old landfill criteria. Ms. Dougall noted that Clearview Landfill, a natural attenuation facility, has drilled wells within and outside the footprint of the landfill that are monitored four times per year and sent to a consultant for review and assessment. There is a very extensive environmental monitoring program in place. Discussion took place regarding the potential contaminations in leachate. Leachate characteristics are dependent on what goes into the ground, the life and age of a landfill facility.

Concerns were brought forward in regard to the ability for stakeholder feedback when the MoE developed the New Landfill Criteria for Municipal Solid Waste – Second Edition.

Landfill Criteria for Municipal Solid Waste – Second Edition Moved by Director Brien
be Brought Forward to the North Central Local Government Association
Seconded by Director Lindstrom

WMC.2016-1-4

“That the Waste Management Committee recommend that the Regional District of Bulkley-Nechako Board of Directors bring forward the issues associated with the New Landfill Criteria for Municipal Solid Waste – Second Edition to the North Central Local Government Association Annual General Meeting Agenda.”

(All/Directors/Majority)

CARRIED UNANIMOUSLY

Discussion took place regarding the impact waste reduction initiatives would have on the future need for further landfill development.

Knockholt Landfill Phase 3 Development Moved by Director Repen
Seconded by Director Miller

WMC.2016-1-5

“That the Waste Management Committee recommend that the Regional District of Bulkley-Nechako Board of Directors approve the Knockholt Landfill Original Phase 3A Development Plan; and further that staff move forward with the Original Phase 3A Development plan at \$350,000 for 2016.”

Moved by Director Greenaway
Seconded by Director Liversidge

WMC.2016-1-6

“That the Waste Management Committee defer Motion WMC.2016-1-5 until staff have completed the survey of Knockholt to determine capacity requirements for future development of Phase 3.”

(All/Directors/Majority)

DEFEATED

REPORT (CONT'D)

"That the question be called on Motion WMC.2016-1-5 as written."

Opposed: Director Fisher CARRIED
 Director Newell
 Director MacDougall
 Director Strimbold
 Director Thiessen

(All/Directors/Majority)

Discussion took place regarding the implications of the New Landfill Criteria for Municipal Solid Waste – Second Edition to the long term landfilling process.

ITEMS FOR DISCUSSION

Solid Waste Management Plan Review (SWMP)

Ms. Dougall spoke of the implications in regard to the New Landfill Criteria for Municipal Solid Waste – Second Edition in the Solid Waste Management Plan review. The three 'R's', recycling, reduce, reuse will be a large component of the SWMP review.

The Ministry of Environment is also reviewing and updating its guidelines in regard to solid waste management planning in B.C. The guidelines are proposed to be completed in the summer of 2016. The RDBN cannot formally initiate its SWMP review until the MoE guidelines come to fruition. The RDBN has currently reached capacity under its current SWMP in terms of capital based purchases.

The Draft 2016 Budget has monies allocated to hire a consultant to begin the review of the RDBN SWMP in 2016. Reduce and reuse programs will need to be a focus in developing the SWMP along with residual landfill operations.

Discussion took place regarding the Regional Board's resolution to complete the SWMP review in a staged approach.

Cardboard Ban

In July 1, 2016 cardboard will be banned from RDBN Facilities. Staff will be providing further public education initiatives in regard to the ban.

Chair Bachrach noted that he had spoken with the Town of Smithers District Chamber of Commerce and there is not a high level of awareness as to what a cardboard ban would mean to the ICI sector in Smithers. Discussion took place regarding potentially holding presentations in coordination with local community Chambers of Commerce.

The impacts of removing cardboard from the landfill was discussed and cardboard is approximately 10% of the weight deposited on the tipping floors. The long term savings in operations when removing cardboard from the waste stream was discussed.

Re-Use Sheds

Burns Lake and Area "D" (Fraser Lake Rural) are currently working on proposals and further discussion is required. Director Parker has noted that they are investigating signage options that are cost effective at the Area "D" Transfer Station re-use shed. Director Strimbold noted that in Burns Lake conversations have taken place with the local recycling depot and a draft proposal has been developed that requires review in regard to budget implications.

ITEMS FOR DISCUSSION (CONT'D)

Re-Use Sheds (Cont'd)

Director Benedict spoke to reopening the re-use shed at the Southside Transfer Station. Director Benedict will develop a proposal to bring forward for consultation with staff.

Director Liversidge spoke of the Village of Granisle requiring information in regard to compulsory guidelines that are required to reopen the re-use shed at the Granisle Transfer Station.

Discussion took place regarding the need for Municipal and Electoral Area Directors to determine area needs and bring them forward to the Regional Board for approval.

SUPPLEMENTARY AGENDA

Smithers – Telkwa Transfer Station Re-Use Shed Proposal

The challenges associated with the timelines and budget implications in regard to moving forward with the Smithers-Telkwa Transfer Station Re-Use Shed Proposal was discussed. Concerns were brought forward in regard to the re-use sheds across the region not potentially opening at the same time.

Smithers-Telkwa Transfer Station Re-Use Shed Proposal – Submitted by Mark Fisher,
Darcy Repen and Taylor Bachrach
Moved by Director Repen
Seconded by Director Fisher

WMC.2016-1-7

“That the Waste Management Committee recommend that the Regional District of Bulkley-Nechako Board of Directors authorize moving forward with the Smithers-Telkwa Transfer Station Re-Use Shed Proposal Process and Timeline contingent on Town of Smithers and Village of Telkwa Council’s approval as follows:

1. January, 2016: staff to develop RFP outlining expectations of contractor;
2. February, 2016:
 - a. Logistics and cost of infrastructure changes finalized, Gas Tax funds secured.
 - b. RFP reviewed and published (Feb 29 deadline).
3. March 2016:
 - a. Options for safety audit presented to Regional Board;
 - b. Develop site specific “safety protocol” if it does not exist;
 - c. Waste-based economic development project proposal finalized;
4. March 31, 2016: Re-use shed management contract awarded;
5. April, 2016: Infrastructure changes made to facility;
6. May 1, 2016: Re-use shed re-opened.”

(All/Directors/Majority)

CARRIED UNANIMOUSLY

SUPPLEMENTARY AGENDA (CONT'D)

Moved by Director Fisher
Seconded by Director Repen

WMC.2016-1-8

"That Motion WMC.2016-1-7 be amended to include consultation with staff, Chair Bachrach and Directors Fisher and Repen in moving forward with the Smithers-Telkwa Transfer Station Re-Use Shed Proposal Process and Timeline"

Smithers – Telkwa Transfer Station Re-Use Shed Proposal (Cont'd)

Moved by Director Benedict
Seconded by Director Newell

WMC.2016-1-9

"That the Waste Management Committee defer Motion WMC.2016-1-7 to the January 28, 2016 RDBN Board Meeting."

(All/Directors/Majority) DEFEATED

"That the question be called on Motion WMC.2016-1-7 as amended."

(All/Directors/Majority) CARRIED UNANIMOUSLY

ADJOURNMENT

Moved by Director Repen
Seconded by Director MacDougall

WMC.2016-1-10

"That the meeting be adjourned at 2:34 p.m."

(All/Directors/Majority) CARRIED UNANIMOUSLY

Taylor Bachrach, Chair

Wendy Wainwright, Executive Assistant