

**REGIONAL DISTRICT OF NANAIMO
SOLID WASTE MANAGEMENT SELECT COMMITTEE MEETING**

**TUESDAY, MAY 17, 2016, 12:00 PM - 2:00 PM
RDN Committee Room**

A G E N D A

PAGES

CALL TO ORDER

DELEGATIONS

MINUTES

2-4 Minutes of the Solid Waste Management Select Committee meeting held April 12, 2016.

BUSINESS ARISING FROM THE MINUTES

COMMUNICATIONS/CORRESPONDENCE

UNFINISHED BUSINESS

ADVISORY COMMITTEE

5-9 Minutes of the Regional Solid Waste Advisory Committee meeting held April 14, 2016.

REPORTS

10-12 North Berm Construction Project – Tender Award (L. Gardner)

13-16 Comox Valley Regional District Request for Asbestos Disposal (L.Gardner)

17-20 Review of Curbside Collection Scheduling. (L. Gardner)

PRESENTATION

Status of 2016 Capital Projects (Buildings, North Berm, Scale House).
(L. Gardner)

Status Update on SWMP Review Process. (L. Gardner)

ADDENDUM

BUSINESS ARISING FROM DELEGATIONS OR COMMUNICATIONS

NEW BUSINESS

ADJOURNMENT

REGIONAL DISTRICT OF NANAIMO

**MINUTES OF THE SOLID WASTE MANAGEMENT SELECT COMMITTEE
MEETING HELD ON TUESDAY, APRIL 12, 2016 AT 2:00 PM
RDN COMMITTEE ROOM**

Present:

Director A. McPherson	Chairperson
Director H. Houle	Electoral Area 'B'
Director M. Young	Electoral Area 'C'
Director J. Stanhope	Electoral Area 'G'
Director J. Hong	City of Nanaimo
Director B. McKay	City of Nanaimo
Director J. Kipp	City of Nanaimo
Director T. Westbrook	Town of Qualicum Beach

Also in Attendance:

D. Trudeau	CAO, RDN
L. Gardner	Manager of Solid Waste, RDN
S. Horsburgh	Senior Solid Waste Planner, RDN
R. Graves	Recording Secretary, RDN

Regrets:

Director M. Lefebvre	City of Parksville
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CALL TO ORDER

The meeting was called to order at 2:05pm by the Chairperson.

MINUTES

MOVED Director Westbrook SECONDED Director Houle that the minutes from the Solid Waste Select Committee meeting held March 10, 2016 be received. CARRIED

BUSINESS ARISING FROM THE MINUTES

COMMUNICATIONS/CORRESPONDENCE

UNFINISHED BUSINESS

ADVISORY COMMITTEE

MOVED Director Stanhope, SECONDED Director Young, that the minutes from the Regional Solid Waste Advisory Committee meeting held February 18, 2016 be received for information only.

CARRIED

It was confirmed by Director McKay that the question with respect to a polymer plant (3rd paragraph from the bottom of page 2) was intended to reference a facility such as MBA Polymers which utilizes recycled plastics.

MOVED Director Westbroek, SECONDED Director Houle, that the minutes from the Regional Solid Waste Advisory Committee meeting held March 17, 2016 be received for information only.

CARRIED

REPORTS

Comprehensive Engineering Tender Award

L. Gardner gave a brief update on the report and background information on XCG Consultants who currently are providing consulting engineering services at the Regional Landfill. A RFP for Consulting Engineering Services was recently advertised and six firms provided proposals. The proposals were evaluated by a committee and XCG provided the best value to the RDN with respect to technical merit and price competitiveness.

Staff were asked to have information available for the next Board meeting on the last 5 year's cost for consulting engineering services as well as the criteria used in evaluating the proposals.

MOVED Director Westbroek, SECONDED Director Stanhope, that XCG Consultants be awarded a contract to provide consulting engineering services at the Regional Landfill for a three-year term with the option of renewing for an additional two-years.

CARRIED

PRESENTATION

Status of 2016 Capital Projects.

L. Gardner presented on the current capital projects at the landfill, which include the construction of the north berm, the operations building and garage. The North berm needs to be built this summer to secure future landfill capacity. The construction will include a liner system and realignment of the drainage ditch that runs along Cedar Road. The scale will be replaced once the other projects are completed as we want to ensure we are within the projected budget. An Invitation to Tender is currently posted for the berm construction and the incumbent consulting engineer is currently on-site explaining what is involved with the project to the other proponents.

MOVED Director Westbroek, SECONDED Director Kipp, that the Status of 2016 Capital Projects report be received.

CARRIED

Status Update on SWMP Review Process.

L. Gardner provided an update on the SWMP Review Process. Options that are being evaluated in Stage 2 include:

- Non-deposit glass at curbside
- Yard and Garden Waste at Curbside
- Compliance and Enforcement at Curbside
- Share Sheds at Regional Facilities
- EPR Stewardship Depots at Regional Facilities
- Zero Waste Policy
- ICI and Multi-Family Diversion
- Residual Management Options
- Demolition and Land Clearing Debris

Further discussion in regards to additional authorities and enforcement and regulatory tools are to be reviewed.

MOVED Director Kipp, SECONDED Director Hong, that the Status Update on SWMP Review Process report be received.

CARRIED

NEW BUSINESS

Bruce Jolliffe, Chair, Comox Valley Regional District, Letter re Asbestos and Asbestos Containing Material (ACM).

In response to the letter a discussion occurred and concerns were raised with respect to the volume of material, staff safety, reduced landfill capacity, increased cover material and the terms of the proposed agreement. The letter is included as part of the April 12, 2016 Committee of the Whole agenda with a likely outcome that staff will be asked to prepare a report in regards to the request,

ADJOURNMENT

Moved Director Stanhope, SECONDED Director Westbroek, that the meeting be adjourned.

NEXT MEETING

Next SWMSC meeting to be held May 17, 2016.

CHAIRPERSON

**REGIONAL DISTRICT OF NANAIMO
REGIONAL SOLID WASTE ADVISORY COMMITTEE MEETING
HELD ON THURSDAY, APRIL 14, 2016
BOARD CHAMBERS**

Present:

Alec McPherson	Chair, RDN Director
Bill McKay	Deputy Chair, RDN Director
Jan Hastings	Non Profit Representative
Wally Wells	Business Representative
Dean Jones	Waste Management Industry
Derek Haarsma	Business Representative
Michael Tripp	Business Representative
Craig Evans	Member at Large
John Finnie	Member at Large
Ben Geselbracht	Member at Large
Michele Green	Member at Large
Gerald Johnson	Member at Large
Jim McTaggart-Cowan	Member at Large
Ellen Ross	Member at Large
Amanda Ticknor	Member at Large
Cam Purdon	Town of Qualicum Beach

Also in Attendance:

Director Young	Electoral Area 'C'
Larry Gardner	Manager of Solid Waste, RDN
Rebecca Graves	Recording Secretary, RDN
Sharon Horsburgh	Senior Solid Waste Planner, RDN
Meghan Larson	Special Projects Coordinator, RDN
Randy Alexander	General Manager, RCU, RDN

Regrets:

Stewart Young Jr.	Business Representative
Charlotte Davis	City of Nanaimo
Geoff Goodall	City of Nanaimo
Chief & Council	Nanoose First Nation
Chief & Council	Snuneymuxw First Nation
Michael Recalma	Qualicum First Nation
Glenn Gibson	Island Heath
Al Leuschen	Ministry of Environment
Karen Muttersbach	Environment Canada
Fred Spears	District of Lantzville

CALL TO ORDER

The Chairperson called the meeting to order at 5:07 PM and respectfully acknowledged the Coast Salish Nations on whose traditional territory the meeting took place.

Welcomed new member Cam Purdon, representing the Town of Qualicum Beach.

DELEGATES

MINUTES

MOVED J. McTaggart-Cowan, SECONDED G. Johnson, that the minutes from the meeting of the Regional Solid Waste Advisory Committee regular meeting held March 17, 2016, be adopted. CARRIED

BUSINESS ARISING FROM THE MINUTES

UNFINISHED BUSINESS

J. McTaggart-Cowan commented that he would like a discussion on the motions that were presented at the February 4, 2016, RSWAC meeting.

A. McPherson replied that issues that have been identified have been documented throughout the process. There will still be time to identify high priority options before the drafting of the SWMP.

J. Hastings questioned why as a committee are we not making a motion to adopt the Zero Waste International Alliance (ZWIA) definition and hierarchy?

L. Gardner commented that for the next meeting, a proposed zero waste definition or the ZWIA definition will be brought forward for discussion by the committee, as well as the guiding principles that are currently in the plan.

J. Finnie clarified his understanding and expectations of the process to draft the next plan that will come back to the committee for review. Our challenge will be arriving at consensus and assigning values and priorities before we advance the draft plan for public review.

R. Alexander highlighted that through this process the knowledge has been gained through the discussions. This has allowed us to identify a number of issues and options. The next step is to determine what the targets and principles and what we want to include in the plan and how we achieve those targets and principles.

J. McTaggart-Cowan questioned the progress of the proposal by Derek, Mike and Larry on options to address the challenges in the IC&I sector?

Derek responded that he would provide a report on the challenges that front end haulers have with multi-family units and offer suggestions.

COMMUNICATIONS/CORRESPONDENCE

REPORTS

Results of Last Meetings Exercise. (R. Alexander – Presentation)

R. Alexander gave feedback from the March 17, 2016 group exercise. Three questions were asked in that session which included;

- Are there topics where more research is required to make a recommendation to the Board?
- Are there topics that need more discussion in order to make a recommendation to the Board, and
- Are there topics where there is adequate information/discussion to advise the Board?

J. McTaggart-Cowan requested more dialogue be done with the IC&I sector before any further suggestions or decisions are made.

J. Finnie commented that a lot of the commercial operations have systems in place and when we talk about getting regulatory authority the concern is who's going to do that and with what? There are no resources to deliver on the systems that we already have in place.

W. Wells recalled in the Stage 1 Report that haulers had been consulted but not the generators in the IC&I sector. There needs to be a discussion with the generators while the plan is being developed.

L. Gardner commented the first step is to narrow down the preferred options and then consult with the business community about what is being considered to get their input.

G. Johnson remarked that he felt the committee should have had representation from the Chamber of Commerce.

Larry Gardner responded that the committee is made up of a range of representatives from different sectors and areas. It is already a fairly large group and it is impossible to cover off all groups.

D. Haarsma stated that on behalf of the business community he felt the haulers have a good understanding of the IC&I sector and what their customers are looking for in regards to waste and recycling removal services. Also, they are sensitive to the marketplace and what options their customers are willing to pay for.

B. Geselbracht commented that he recognizes we can tweak our infrastructure to reduce the waste but if Nanaimo doesn't stand up and advocate on certain waste streams or regulatory items at the Provincial level, waste exports will continually be subsidized.

R. Alexander replied that the advocacy role has been identified but was just not introduced in the presentation.

Levels of Service Matrix Review. (L. Gardner – Presentation)

L. Gardner presented the Level of Service Matrix which captures all the services discussed to date, the scope of service, the RSWAC level of interest in pursuing service levels that include; curbside glass and yard waste collection, curbside compliance & enforcement, share sheds, EPR stewardship programs, ICI & MFD diversion, Zero Waste plan, complementary drop off days, CD Waste, HHW collection, and residual management and landfill options.

M. Tripp remarked that while basic items are covered it's the difficult to recycle items that are challenging. Businesses have tried sorting materials themselves but recovery is low at 5-10%. You would have to create a market and fund it. New markets have to be developed with funding to help make them viable. He would like to see secondary industries and markets created for plastics. Until markets open up we can only do so much.

D. Jones commented that it comes down to customers themselves, there are multi-national clients that achieve 90% diversion rates but they are willing to pay, a lot of industries either can't or won't pay. Does that fall back on enforcement or education or is it the haulers job to fund or support it, who pays for it?

D. Haarsma commented that traditionally when a landfill ban is implemented the hauler notifies the business or property management companies. This puts the responsibility of enforcement on those

haulers that promote recycling services and makes it difficult to compete with haulers not promoting the same level of service, which makes it difficult to compete when it's not a level playing field. Regulation and enforcement has encouraged haulers to put garbage into trailers and ship across the border.

Complimentary Disposal Services at Regional District of Nanaimo Solid Waste Facilities. (S. Horsburgh)

S. Horsburgh gave an overview on Complimentary Disposal Services discussing history, challenges, diversion and financial impact. In the past, the program was popular due to convenience but concerns were raised in regards to traffic control and safety concerns. The service does not support reduce, reuse or the principles outlined in our current SWMP and could increase disposal and loss could potentially losses \$42,500 per day in revenue.

J. McTaggart-Cowan responded that if it's not equitable, what's the purpose of even thinking about it?

MOVED J. Finnie, SECONDED J. McTaggart-Cowan that this committee does not support the Complimentary Disposal Services initiative.

CARRIED

J. Hastings commented she would like to see local government fund a pickup day for items such as hazardous waste.

L. Gardner commented that a number of EPR programs cover a lot of that material and there are communities that provide that service so providing costs can be presented.

G. Johnson questioned if there is a document available that outlines how the Province calculates EPR rebates?

L. Gardner answered that each program provides their own annual reports but doesn't believe there is a single site to review.

M. Larson replied that separate EPR agencies set the price of rebates paid to collectors (i.e. depots). Their financials are audited by the MOE but MOE has no responsibility for setting those rebates.

S. Horsburgh commented that stewardship organizations are required to produce annual reports that include financial statements.

Solid Waste Management Education. (M. Larson)

M. Larson gave an overview of Solid Waste Management Education which included strategy for education, diversion & financial impact, regulatory authority and provided a summary.

M. Green questioned why not find out what the barriers are and address those through education and other programs?

M. Larson replied that cost is a barrier for many people and we do post what the costs are at RDN facilities for waste disposal. When waste is generated then they bear the cost. We advocate that residents reduce, reuse and recycle and all other free options to help relieve the costs of disposal.

Future Residual Disposal (L. Gardner)

Presentation postponed until next meeting.

ADDENDUM

NEW BUSINESS

ADJOURNMENT

MOVED J. McTaggart-Cowan, SECONDED G. Johnson, that this meeting be adjourned.

Time: 7:40 pm.

CHAIRPERSON

TO: Larry Gardner
Manager, Solid Waste Services

DATE: May 12, 2016

FROM: Jane MacIntosh
Superintendent, Landfill Operations

MEETING: SWMSC, May 17, 2016

FILE: 5330-20-RLNB2

SUBJECT: Contract Award – Regional Landfill North Berm Construction

RECOMMENDATION

That the Solid Waste Management Select Committee (SWMSC) recommend that the Regional Board approve the budget for the North Berm project as set out in Table 2 and to direct staff to proceed with tender award to Wacor Holdings Ltd. for the project construction.

PURPOSE

The purpose of the report to provide an overview of the North Berm project and to request the SWMSC endorse a tender award for the Regional Landfill North Berm Construction in the amount of \$1,813,082.23 (exc. GST).

BACKGROUND

In 2001 and 2002, Geotechnical Assessments were conducted by Golder Associates and Sperling Hansen Associates, respectively, to evaluate the stability of the landfill side-slopes under dynamic (earthquake) and static (settlement) loading conditions. The reports concluded that the potential exists for significant displacement of the waste mass in Cell Two in certain areas underlain by a smooth liner membrane that could result in damage to the final cover, landfill gas and leachate collection systems. The reports recommended the construction of a 2-7 meter high toe stabilization berm to provide stability to the north of the Cell Two smooth liner area.

This recommendation for a berm was included in the Design and Operations Plan (D&O Plan) completed by XCG Consultants Ltd. in 2008, which also identified the construction of this berm would extend the life of the landfill and referred to this expanded area as the North Berm. The completion of the North Berm adds approximately 10-years of operating life to the landfill. Preliminary cost estimates for the berm construction completed in the 2013 pre-design phase ranged between \$2.8M to \$5.3M.

The North Berm in conjunction with the last phase of landfill development, the South East Berm, is predicted to extend the operating life of the landfill to 2041. The D&O Plan identified the phased developments to achieve slope stability and maximize landfill operational capacity. Several phased developments have taken place since 2008 to allow the North Berm expansion with the most recent being relocation of storm-water infrastructure (2013) and realignment of the sanitary sewer along Cedar Road (2014). The final stage is relocation of the existing garage and operations building, currently underway, and construction of the berm itself, all scheduled for completion in 2016. This construction schedule coincides with the existing landfilling area being at capacity.

The regional landfill North Berm project was sent to five previously pre-qualified contractors for bid submissions with closing on April 29, 2016. The tender included two construction options: A) construction using rock; and B) construction using gravel. Two independent berm designs have been prepared based on the different type of aggregate. There is some constructability benefit in using the rock (e.g. quality assurance, placement, landscaping) and if pricing was comparable, rock would be preferred.

The North Berm construction tendering process was carried out by XCG Consultants Ltd. (XCG). One prequalified bidder was unable to deliver their submission within the required timeline. A summary of the results is provided below in Table 1.

Table 1 - Tender Summary (exc. GST)		
Prequalified Contractor	Total Evaluation Price A (Rock)	Total Evaluation Price B (Gravel)
Copcan Civil Ltd.	\$ 2,684,508	\$ 2,258,366
Knappett Industries Ltd.	\$ 3,302,543	\$ 2,469,683
Wacor Holdings Ltd.	\$ 2,313,172	\$ 1,813,082
Windley Contracting Ltd.	\$ 3,357,845	\$ 2,225,875

Our engineering consultant, XCG, reviewed the bids and has recommended award to Wacor Holdings Ltd. with the gravel option in the amount of \$1,813,082. The nature of large excavation projects is that they have a significant element of risk due to the variability of found conditions. Based on recommendations from the engineer, a contingency amount of \$500,000 is included to accommodate for unforeseen conditions such as the need to: 1) increase the size of the shear-key; 2) construct the shear-key out of rock; or 3) excavate additional unsuitable materials from within the berm footprint.

Table 2 below provides an overview of total project costs.

Table 2 - Total Project Cost		
Site Activity	% Complete	Projected Costs
Detailed Design, Tendering and Permitting Services	90%	\$150,000
Site Preparation (Tree and Fencing Removal)	20%	\$25,000
Environmental Assessment and Biological Monitoring	45%	\$45,000
Construction Contract Administration Services	0%	\$125,000
Construction Project	0%	\$1,813,082
Main Haul Road Realignment	0%	\$80,000
Storm Water Controls	0%	\$20,000
Reconfiguration of Bin Area	0%	\$90,000
Hydrogeological/Landfill Gas Reassessment	0%	\$30,000
Reinstatement of Gas-Probes and Monitoring Wells	0%	\$40,000
Tree and Landscape Restoration	0%	\$25,000
Project Contingency	0%	\$500,000
Total Project Cost		\$2,943,082

ALTERNATIVES

Alternatives in proceeding with the project are as follows:

- 1) Approve the total project budget and award the project construction project to Wacor Holdings Ltd.
- 2) Do not approve the project budget and do not award the construction project.
- 3) Alternate direction as provided by the Regional Board.

FINANCIAL IMPLICATIONS

The 2016 preliminary budget set a project cost of \$3.9M to construct the North Berm. Based on Table 2, total cost projection for the North Berm is approximately \$3M.

STRATEGIC PLAN IMPLICATIONS

This project is consistent with key priorities of the 2016-2020 Strategic Plan in the following areas:


- *Focus on service and organizational excellence.* The construction of the North Berm is a culmination more than a decade of planning and the maintenance and funding of our infrastructure.
- *Focus on the environment.* The driver for construction of the North Berm is ensure the landfill is stable and the integrity of the pollution control works are maintained should there be a significant seismic event.

SUMMARY/CONCLUSIONS

The North Berm is critical component of the landfill infrastructure to ensure seismic stability of the existing landfill and also adds about 10-years of landfill capacity. Construction of North Berm is a culmination of more than a decade of planning and infrastructure improvements (e.g. storm/sanitary) to realize these benefits.

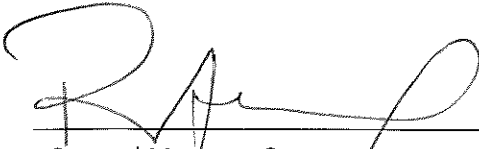
The construction project has been competitively tendered with the low bid being received from Wacor Holdings Ltd. XCG has reviewed all the submissions and is recommending award to Wacor. The aggregate costs of the North Berm construction is expected to be less than the forecast amount set out in the 2016 budget.

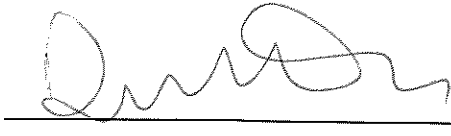
Subject to award, the North Berm construction is expected to commence in July and take approximately three months to complete.


FOR JANE MACINTOSH

Report Writer

Manager Concurrence


General Manager Concurrence


CAO Concurrence

TO: Randy Alexander
General Manager, Regional & Community Utilities

DATE: May 12, 2016

FROM: Larry Gardner
Manager, Solid Waste Services

MEETING: SWMSC – May 17, 2016

FILE: 5370-01

SUBJECT: Comox Valley Regional District Request to Dispose of Asbestos Waste

RECOMMENDATION

That the Solid Waste Management Select Committee (SWMSC) recommend that the Regional Board grant the request to accept asbestos and asbestos-containing materials from the Comox Strathcona Waste Management (CSWM) service area starting on completion of the North Berm project and continuing until December 31, 2017 with provision to extend the agreement for one year.

PURPOSE

At the Regional Board's regular meeting of April 26, 2016, staff were directed to bring a report to the SWMSC with recommendations on a response to the Comox Valley Regional District (CVRD) request.

BACKGROUND

The CSWM service is a function of the CVRD. The CSWM service is responsible for two regional waste management centres that serve the Comox Valley and Campbell River, as well as a range of transfer stations and smaller waste-handling and recycling facilities for the electoral areas of the both the Comox Valley and the Strathcona Regional Districts.

Bruce Jolliffe, Chair of the Board for the CVRD sent a letter dated March 22, 2016 addressed to the RDN Board requesting the establishment of an agreement whereby asbestos and asbestos-containing materials from the CSMW service area be accepted for disposal at the Nanaimo regional landfill. Further, they asked that such an agreement be until December 31, 2017 with provision to extend the agreement for one year.

The reasons for the request is outlined in a CVRD staff report that was attached to the letter and can be broadly summarized as:

1. There is no local disposal for this type of waste in the area and residents and commercial haulers have to travel to the Victoria Hartland landfill where out-of-region waste is accepted for disposal. There is dissatisfaction with having to transport the waste the substantial distance for disposal in Victoria.
2. Due to the complexity of managing this material, CVRD is looking for an interim solution that will allow time to develop a long term strategy. Complexities cited are landfill airspace consumption, health and safety requirements and additional facility staff and equipment needs.

Follow up conversations between RDN and CVRD provided additional insights to the request which are presented in the following sections.

Comox Strathcona Waste Landfilling

The CSMW operates two area landfills; one servicing the Comox Valley located near Cumberland, and one serving the Campbell River area.

Comox Valley

- Staff at this facility do not have the necessary training for the handling and disposal of the material.
- The active portion of the landfill has a remaining lifespan of 1½ - 2 years. Due to the limited remaining airspace in the landfill and the large volume of airspace required for asbestos disposal, there is insufficient space to accept asbestos for disposal.

Campbell River

- The estimated remaining lifespan at this facility is approximately 5-6 years. Due to the limited remaining airspace there is inadequate space available for the asbestos waste.
- Construction activities in 2013 and 2014 resulted in a complex filling plan and active face configuration at the landfill, making it difficult to establish a designated asbestos disposal area.
- Hauling of waste materials to the active face of the landfill is carried out through the use of a large walking floor trailer. Due to this material handling procedure, the separation of asbestos for disposal in a designated area of the landfill and/or the access to the active face of the landfill is logistically complicated and requires further consideration.
- Staff have appropriate training and it may be possible to designate a small portion of the active area for asbestos disposal.
- Construction of a new engineered landfill cell is expected to be complete in early 2017 and application has been made to the Ministry of Environment to allow asbestos disposal in this cell.

Upland Landfill

- There is also a privately run landfill in the area, the Upland Landfill. However, this facility does not accept asbestos or asbestos-containing waste for disposal.
- There may be potential to establish an agreement with this facility for asbestos disposal in the future.

RDN Landfilling Capability

Asbestos waste is specifically referenced in the *Hazardous Waste Regulation* due to the risk of serious health injury as a result of inhalation of the airborne fibers that can be released through handling of the material. The RDN has a rigorous exposure control plan to ensure workers are not at risk. Special handling includes:

- scheduling disposal appointments,
- completing manifests,
- preparing the disposal area with sufficient cover material,
- staff for monitoring disposal, and
- staff and heavy equipment for the burial of this hazardous waste.

The CVRD was not able to provide an estimate of the amount of asbestos material that might be directed to the RDN should their request be granted. Extrapolating amounts of asbestos waste generated in 2015 from the RDN, as well as out of district asbestos received from the CVRD suggest the amount would be in the order of 200 to 300 tonnes annually.

The RDN does have the capability to manage this waste; however, at the current time the active landfilling area on the top deck of the landfill is becoming very constrained. With the specialized handling required of asbestos waste, the receipt of additional material at this time will only serve to exacerbate current operational challenges. The North Berm is scheduled for construction this summer and includes the development of a new landfilling cell. Landfilling will commence in the new cell in the fall of 2016 at which time additional asbestos waste could readily be accommodated. In the event there is any delay in the North Berm construction, the ability to manage the RDN's own waste at the landfill will become extremely challenged.

Staff at the CVRD are aware of this operational constraint and in their staff report noted that if the RDN supported the request, asbestos disposal would not begin until completion of the North Berm project.

Impact on Landfill Capacity

The RDN saw a 40% increase in the amount of asbestos waste requiring landfilling between 2014 and 2015. There are several factors related to the increase in volume. There is greater community awareness that certain home renovation wastes may contain asbestos; demolition work requires a hazardous materials survey which will identify asbestos and require proper handling and disposal. Recently, the greatest influence has been the WorkSafe concerns with the potential for asbestos in drywall mud and, consequently, drywall recyclers being more stringent on their acceptance procedures. Unless the drywall is post 1990 or tested and confirmed to be asbestos free, the material is handled as asbestos waste.

The CVRD does not currently accept asbestos waste at least in part because of the landfill airspace the material consumes. Due to the hazardous nature and bulky packaging of the asbestos, the compaction rate is very low for this waste. The disposal area for asbestos waste requires approximately 4 to 6 times greater volume of airspace than garbage.

Based on the estimate of 200 to 300 tonnes of asbestos waste being received from the CVRD, this would consume the equivalent of 1½ week's worth of landfill airspace at current RDN landfilling rates. The landfill life projection was adjusted in 2016 to reflect current landfilling rates and the current projection remains at 25 years.

ALTERNATIVES

Alternatives to respond to the CVRD requests are as follows:

1. Grant the request to accept asbestos and asbestos-containing materials from the CSWM service area starting on completion of the North Berm project and continuing until December 31, 2017 with provision to extend the agreement for one year.
2. Refuse the request.
3. Alternate direction as provided by the RDN Board.

FINANCIAL IMPLICATIONS

The operational cost for managing asbestos waste is about 3 times that of managing garbage. Based on an equivalent value of the airspace consumed as compared to garbage, and the additional cost to manage the asbestos, asbestos landfilling cost is approximately \$475/tonne. The current tip rates for asbestos waste are \$500 per tonne for in-region asbestos waste and \$600 per tonne for out-of-region asbestos waste. Currently the RDN only authorizes out-of-region asbestos waste from the Cowichan Valley Regional District. Based on the estimated quantity of asbestos waste that is expected to be received from the CVRD, this would generate approximately \$120,000 to \$180,000 in tip fees over a one year period.

STRATEGIC PLAN IMPLICATIONS

A key priority of the Strategic Plan is the focus on relationships and more specifically looking for opportunities to partner with other branches of government/community groups to advance our region.

The CVRD staff report that accompanied the request noted that, *"This collaborative approach between CSWM and the RDN is in keeping with the Association of Vancouver Island and Coastal Communities' (AVICC) goal of working towards a cooperative long term sustainable strategy for solid waste management on Vancouver Island."*

The CVRD has stated their two landfills have capacities in the order of 2 and 6 years respectively. They are working on the development of a new cell at the Campbell River facility which will provide about 22 years of capacity. The site has additional land that has the potential for siting other waste management facilities and even potential future landfilling that could extend this period by an estimated 15 years.

This request possibly serves as a catalyst to broaden discussion on cooperation for future residual waste disposal that might benefit the RDN over the long term.

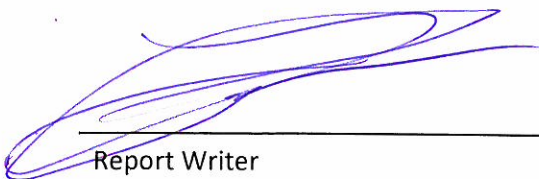
SUMMARY/CONCLUSIONS

The Chair of the CVRD has requested, on behalf of the CSWM service, that the RDN consider establishing an agreement whereby asbestos and asbestos-containing materials from the CSWM service area be accepted for disposal at the Nanaimo regional landfill through to December 31, 2017 with provision to extend the agreement for one year.

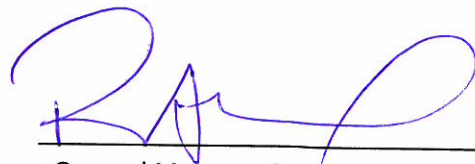
The RDN has the capability to manage asbestos waste from CSWM, however, it would be prudent to wait until the North Berm and new cell is constructed at the RDN landfill which is expected to be completed in the fall of 2016. Accepting the additional out-of-district waste prior to the new cell will exacerbate the existing operational challenges working in a constrained area.

The out-of-region tip fee of \$600 per tonne for asbestos waste offsets the air space value and cost to manage this waste. A one year contribution of asbestos waste is expected to consume approximately 1.5 week's worth of airspace based on current landfilling rates.


Staff considers this request may serve to broaden the discussion on cooperation for future residual waste disposal beyond the life of the existing landfill.



Report Writer



General Manager Concurrence



CAO Concurrence

TO: Larry Gardner
Manager, Solid Waste Services

DATE: May 10, 2016

FROM: Jeff Ainge,
Zero Waste Coordinator
Solid Waste Services

MEETING: SWMSC – May 17, 2016

FILE: 5370-01

SUBJECT: Review of Curbside Collection Scheduling

RECOMMENDATION

That the report on the Review of Curbside Collection Scheduling be received for information.

PURPOSE

To provide the SWMSC with information on curbside collection scheduling for Regional District of Nanaimo (RDN) residential customers.

BACKGROUND

The Director for Electoral Area ‘A’ requested staff provide an information report concerning the differences between Add-a-Day and Fixed Day curbside collection scheduling.

The RDN introduced region-wide curbside recycling and residential garbage collection service in 1991. Collection of food and kitchen waste was added to the curbside program in October 2010. The program serves 28,000 households in the area stretching from Cassidy to Gabriola Island to Deep Bay, and includes residents of Lantzville, Parksville and Qualicum Beach.

Add-a-Day Schedule

Under an Add-a-Day collection schedule the collection day advances by one day after each Statutory Holiday.

As can be seen in the example shown here, when the collection day leading up to the February 8 (BC Family Day) Statutory Holiday is Monday, no collection will be provided on the actual Statutory Holiday observance day. The collection day for residents on that route will advance to the next day – in this case Tuesday – where it stays until the next holiday non-collection day when it will advance again.

February						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29					

In this second example, when the collection day leading up to the February 8 (BC Family Day) Statutory Holiday is Thursday, the collection day for residents on that route will advance to the next day – in this case Friday – and stay on Friday until the next holiday non-collection day when it will advance again.

February						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29					

The collection scheduling for the RDN curbside program operates on an Add-a-Day system. This has been the case since the commencement of the collection program in 1991. However, the residents of the Town of Qualicum Beach receive recycling and food waste collection service on an Add-a-Day schedule but their garbage service is provided by the Town staff on a Fixed Day schedule.

Fixed Day Schedule

A Fixed Day schedule is as it sounds - collection is fixed on a set day and remains static for the most part.

Many Fixed Day collection programs, particularly smaller municipal collectors, operate on a four-day collection week to avoid the Statutory Holidays that have Monday as the fixed day-of-the-week observance (e.g., BC Family Day is observed on the second Monday in February).

FEBRUARY 2016						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8 ^H	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29					

Depending on the population being serviced by the collection program, some smaller Fixed Day collectors do in fact move the collection day to accommodate Statutory Holidays. In this example of Fixed Day Friday service in Qualicum Beach, collection for Good Friday was moved back a day to Thursday. This would require mobilizing extra resources (or longer hours) to service two days of collections in one day.

March						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Fixed Day programs on a Tuesday to Friday collection week typically have crews working four ten-hour days. In the case of Cowichan Valley with Fixed Day service, staff works ten-hour days with collection Monday to Friday. They have two full time drivers; one working Monday to Thursday and one working Tuesday to Friday. Their service collects on every statutory holiday except Christmas and New Year’s Day when pickup moves to the nearest Saturday.

Operational Considerations

A review of different local government curbside collection programs on Vancouver Island indicates that both schedules are in use. There does not seem to be any hard and fast correlation between who provides service (municipal staff or contracted staff), and the collection schedule in place (Add-a-Day or

Fixed Day). The majority of programs with Fixed Day collection do seem to be smaller than the RDN's 28,000 households, with the exception of the Capital Regional District (CRD) which provides recycling only service on a Fixed Day schedule. (Depending on where they reside, residents in the CRD receive garbage and food waste collection either from their municipality, or are required to arrange their own collection through private subscription services. Some of these are Fixed Day and some are Add-a-Day schedules neither of which meshes with the CRD recycling collection service.)

Considerations for Fixed Day scheduling include the operating hours of the disposal facilities. In the RDN's case, the Transfer Station and Landfill are closed on Statutory Holidays. If collection occurred on a Statutory Holiday the facilities would need to open for the curbside trucks, or the trucks would be required to overnight in their depot with full loads (assuming they could complete their routes without the need to dump partway through the collection day). Tipping at, or transferring through private facilities (such as Nanaimo Organic Waste or the Progressive Waste recycling facilities), would require those sites to have staff at work on Statutory Holidays to receive the trucks if holding the material overnight was not an option.

Servicing Implications

Given the size of the RDN collection program, if a change to a Fixed Day schedule was contemplated the schedule would likely be on a Monday to Friday five-day collection week. This would require collecting on Statutory Holidays. The contractor would need to have appropriate resources available to ensure compliance with employment standards and safe work regulations.

Collection on a Statutory Holiday (especially a holiday Monday) is likely to be inconvenient for a portion of the customer base, and result in missed collections when residents are out of town on a long weekend and not able to put material to the curb for pickup on a holiday.

Design and production of collection schedules would still be required to highlight the alternating garbage/food waste and recycling/food waste collection weeks, and to cover off any schedule changes for major holidays like Christmas Day.

Safety Implications

Staff sought information from the District Manager of Progressive Waste Services (PWS); the company contracted to provide curbside collection for the RDN who are one of North America's largest waste hauling companies, and recipients of industry safety accolades. Their North American safety manager reported they have no data or analysis to indicate any difference between Fixed Day collection programs and Add-a-Day collection programs in terms of public or driver safety.

Both of those managers indicated there is anecdotal evidence on a broader basis that the week following a three day weekend has a higher accident rate regardless of the scheduling system in place. This is somewhat corroborated by the local route supervisor who has worked with both types of schedules. He reported no noticeable difference in late set outs, or residents rushing out with garbage cans trying to get driver's attention, when comparing Fixed Day and Add-a-Day schedules. In his experience if someone is going to forget or lose track of their collection day, it is just as likely to happen on a Fixed Day schedule as an Add-a-Day schedule.

In researching safety considerations around curbside waste collection there is a substantial body of work that discusses measures to improve safety such as minimizing left hand turns, use of right hand drive vehicles, minimizing reversing, etc. No information was found that relates safety matters to collection day schedules.

ALTERNATIVES

The report is provided to the Solid Waste Management Select Committee for information only.

FINANCIAL IMPLICATIONS

Staff reviewed the annual curbside collection utility fees of 12 Vancouver Island municipal collection programs. The fees charged in 2015 ranged from \$83 to \$195, with the mean being \$137. The RDN rate was \$121.50 in 2015. Six of the collection programs are on a Fixed Day schedule, five of which had annual fees of \$136 or higher. Only one was less than the RDN fee, and that program did not include food waste collection.

In researching this report, staff asked the PWS District Manager if there would be a financial impact if a switch to a Fixed Day schedule was contemplated. Due to our size the program would require a five-day collection week, so the trucks would be collecting on statutory holidays. Without doing a full analysis, labour and fleet maintenance costs would add an estimated \$90,000 to the annual collection bill.

Providing staffing at the RDN disposal facilities on Statutory Holidays would also have cost implications if a switch to Fixed Day collection was contemplated.

STRATEGIC PLAN IMPLICATIONS

There are no strategic plan implications.

SUMMARY/CONCLUSIONS

The Electoral Area 'A' Director requested a report discussing the differences between Fixed Day and Add-a-Day curbside collection schedules. The RDN curbside program operates under an Add-a-Day schedule whereby collection does not occur on a Statutory Holiday. Collection days advance one day after these non-collection days, as opposed to Fixed Day schedules which see collection days mostly stay static although there may still be some movement to accommodate Statutory Holidays.

There appears to be no safety benefits to collection staff or the public when comparing the two scheduling systems. There could be a minor convenience benefit to some residents in recalling a fixed collection day, however if collection was scheduled on statutory holidays there may be frustration from those residents absent for a long weekend out of town. There would be operational and financial implications for both the collection provider and RDN if a switch to Fixed Day collection was contemplated. Ballpark costs to provide Fixed Day collection are estimated at an increase of approximately \$90,000 for the collection contract only, with more in depth analysis required to confirm those costs along with RDN facility staffing costs.


Report Writer


Manager Concurrence


General Manager Concurrence


CAO Concurrence