

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

**TUESDAY, MARCH 10, 2016, 12:00 PM - 2:00 PM
RDN Committee Room**

A G E N D A

PAGES

CALL TO ORDER

DELEGATIONS

MINUTES

2-4 Solid Waste Management Select Committee held February 9, 2016.

BUSINESS ARISING FROM THE MINUTES

COMMUNICATIONS/CORRESPONDENCE

UNFINISHED BUSINESS

ADVISORY COMMITTEE

5-7 Minutes; Regional Solid Waste Advisory Committee meeting held
February 4, 2016. (To be Amended)

REPORTS

8-12 Bylaw No. 1591.06 Solid Waste and Recycling Collection Service Bylaw Amendment
Report.

13-26 Solid Waste Management Regulation Bylaw No. 1531.06 Fees Report.

PRESENTATION

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, FEBRUARY 9, 2016 AT 12:00 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 B. Veenhof	Electoral Area 'H'
Director J. Hong	City of Nanaimo
Director B. McKay	City of Nanaimo
Director B. Luchtmeijer	Town of Qualicum Beach
Director S. Powell	City of Parksville

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 J. Kipp	City of Nanaimo
Director M. Lefebvre	City of Parksville
Director T. Westbrook	Town of Qualicum Beach

CALL TO ORDER

The meeting was called to order at 12:03pm by the Chairperson.

MINUTES

MOVED Director Stanhope SECONDED Director McKay that the minutes from the Solid Waste Select Committee meeting held December 2, 2015 be received. CARRIED

BUSINESS ARISING FROM THE MINUTES

Solid Waste Select Committee Revised Terms of Reference (January 27, 2016).

MOVED Director Houle, SECONDED Director Young, that the Solid Waste Select Committee approve the revised Terms of Reference (January 27, 2016) as presented with amendments. CARRIED

COMMUNICATIONS/CORRESPONDENCE

Progressive Waste Solutions Merger with Waste Connections.

MOVED Director Powell, SECONDED Director Houle, that the correspondence from Progressive Waste Solutions Merger with Waste Connections be received. CARRIED

UNFINISHED BUSINESS

ADVISORY COMMITTEE

MOVED Director Houle, SECONDED Director McKay, that the minutes from the Regional Solid Waste Advisory Committee meeting held November 26, 2015 be received for information only.

CARRIED

MOVED Director Houle, SECONDED Director Young, that the minutes from the Regional Solid Waste Advisory Committee meeting held January 14, 2016 be received for information only.

CARRIED

REPORTS

AVICC Special Committee on Solid Waste Management – Support for Priorities.

The Regional District of Nanaimo has been an active participant on the AVICC Special Committee on Solid Waste Management. The Committee was formed in 2015 with the objective of finding a long-term sustainable strategy for solid waste management on Vancouver Island and the coastal communities. A set of priorities to guide the ongoing work of the Committee has been identified. The Board's support for those priorities has been requested by the Special Committee's Chair.

MOVED Director Luchtmeijer, SECONDED Director McKay, that the Select Committee endorses the priority focus areas identified by the AVICC Special Committee on Solid Waste Management.

CARRIED

Curbside Recycling Collection – Resident Education and Outreach.

RDN staff have been actively promoting MMBC's residential curbside recycling Packaging and Printed Paper product stewardship program. A variety of outreach and education activities have been funded through monies received from MMBC. These activities commenced in advance of the May 2014 launch of the changes, and have continued through 2015.

MOVED Director Stanhope, SECONDED Director McKay, that the Curbside Recycling Collection – Resident Education and Outreach report be received for information only.

CARRIED

PRESENTATION

Status Update on SWMP Review Process.

L. Gardner provided an update on the Solid Waste Management Plan (SWMP) review process which included the SWMP timeline, options and multi-family and IC&I (industrial, commercial & institutional) sectors. The options evaluated included:

- 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

Multi-family recycling rates are currently at 16-18% compared to 30% for single-family and approximately 44% of garbage is compostable. Within the IC&I sector approximately 30% of the waste is recyclable and 42% compostable. Within these two sector there are two potential diversion strategies

for increasing diversion: Scenario 1 being increased education/enforcement at regional facilities with a diversion potential of 3%; and, Scenario 2 being additional regulatory authority with a diversion potential of 7.9-11%.

MOVED Director Stanhope, SECONDED Director Young, that the Status Update on SWMP Review Process be received.

CARRIED

NEW BUSINESS

ADJOURNMENT

Moved Director Houle SECONDED Director Young that the meeting be adjourned.

NEXT MEETING

Next SWMSC meeting to be announced.

CHAIRPERSON

**REGIONAL DISTRICT OF NANAIMO
REGIONAL SOLID WASTE ADVISORY COMMITTEE MEETING
HELD ON THURSDAY, FEBRUARY 4, 2016
BOARD CHAMBERS**

Present:

Alec McPherson	Chair, RDN Director
Bill McKay	Deputy Chair, RDN Director
Derek Haarsma	Business Representative
Wally Wells	Business Representative
Jan Hastings	Non Profit Representative
Michael Tripp	Business Representative
Jim McTaggart-Cowan	Member at Large
John Finnie	Member at Large
Ellen Ross	Member at Large
Gerald Johnson	Member at Large
Amanda Ticknor	Member at Large

Also in Attendance:

Randy Alexander	General Manager, RCU, RDN
Larry Gardner	Manager of Solid Waste, RDN
Rebecca Graves	Recording Secretary, RDN
Jeff Ainge	Zero Waste Coordinator, RDN
Sharon Horsburgh	Senior Solid Waste Planner, RDN
Dennis Trudeau	CAO, RDN

Regrets:

Chief & Council	Nanoose First Nation
Chief & Council	Snuneymuxw First Nation
Glenn Gibson	Island Heath
Al Leuschen	Ministry of Environment
Karen Muttersbach	Environment Canada
Michael Recalma	Qualicum First Nation
Fred Spears	District of Lantzville
John Marsh	Town of Qualicum Beach
Ed Walsh	Waste Management Industry
Charlotte Davis	City of Nanaimo
Geoff Goodall	City of Nanaimo
Frank Van Eynde	Member at Large
Michele Green	Member at Large
Craig Evans	Member at Large
Stewart Young Jr.	Business Representative
Meghan Larson	Special Projects Coordinator, RDN

CALL TO ORDER

The Chairperson called the meeting to order at 5:03 PM and respectfully acknowledged the Coast Salish Nations on whose traditional territory the meeting took place.

MINUTES

MOVED J. McTaggart-Cowan, SECONDED G. Johnson, that the minutes from the meeting of the Regional Solid Waste Advisory Committee regular meeting held January 14, 2016, be adopted. CARRIED

DELEGATES

Derek Haarsma, Haarsma Waste Innovations Inc. re Management of Solid Waste in the Multi-Family & IC&I Sector.

D. Haarsma gave a verbal presentation on region wide recycling options available to the multi-family & Industrial Commercial & Industrial Sector (IC&I). Multi-family recycling is not a mandatory program and there is the perception that by introducing recycling programs this will lower garbage fees. This has led to varying levels of recycling in the Multi Family and ICI sectors. In regards to IC&I, steel containers are made available for recyclables. Haarsma reduces contamination by sorting recycling into bags so when materials are received at the facility sorting is done much faster. Source separation requires haulers to run more trucks a week to service sites and this doesn't make sense due to the level of contamination in bins.

A discussion occurred in regards to the management of solid waste including topics concerning RDN making recycling mandatory region wide, rental buildings not complying with recycling, challenges around competing haulers taking waste to US landfills, commercial sector complying and MMBC not providing sufficient funding for education and the introduction of community grant programs.

BUSINESS ARISING FROM THE MINUTES

Technical Memorandum: Multi-Family & IC&I Recycling in the RDN. (L. Gardner – Presentation)

L. Gardner introduced a slide presentation summarizing Multi-Family & IC&I waste stream. There are two potential diversion strategy scenarios which would include Scenario 1: increased education/enforcement at regional facilities with a diversion potential of 3% and Scenario 2: additional regulatory authority with a diversion potential of 7.9-11%. Multi-family recycling rates are estimated to be between 16-18% compared to 30% for single-family and approximately 44% of the waste stream is compostable. L. Gardner provided an overview of the various Regulatory Authority Options which included Waste Source Regulation, Flow Management, Mandatory Waste Collection Service, Waste Hauler Franchise and Waste Haulers as Agents.

A discussion ensued regarding the regulatory authority options and if any should be included in the SWMP. Other topics discussed included targeting the paper and plastic that makes up 25% of the IC&I sector waste stream? Which regulatory authorities would be most effective; mandatory waste collection service for all waste generators? Authorities such as waste collection services has proved to be an effective mechanism in other jurisdictions, however consideration must be given to community implications of increased regulation.

UNFINISHED BUSINESS

COMMUNICATIONS/CORRESPONDENCE

Jan Hastings, re Zero Waste Definitions.

J. Hastings reviewed the zero waste definitions and principles from each of the below agencies:

- Zero Waste International Alliance
- National Zero Waste Council
- Zero Waste BC
- Recycling Council of BC
- BC Ministry of the Environment
- London Remade.

Jim McTaggart-Cowan, re RSWAC Motions & Questions.

A. McPherson introduced and suggested that the motions, as presented, will provide an opportunity for the Committee to discuss what options they wish to see in the SWMP.

J. McTaggart-Cowan commented that the purpose of the motions was to provide a structure and to focus on what information is needed to make decisions.

J. McTaggart-Cowan asked if D. Haarsma, M. Tripp and staff could provide information on what is needed to regulate and to create a level playing field.

REPORTS

ADDENDUM

NEW BUSINESS

ADJOURNMENT

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

Time: 7:29 pm.

CHAIRPERSON

TO: Larry Gardner
Manager, Solid Waste Services

DATE: February 24, 2016

FROM: Jeff Ainge
Zero Waste Coordinator,
Solid Waste Services

MEETING: SWMSC – March 10, 2016

FILE: 5370-00

**SUBJECT: Bylaw 1591.06 - Solid Waste and Recycling Collection Service
Rates and Regulations Amendment Bylaw**

RECOMMENDATIONS

1. That “Regional District of Nanaimo Solid Waste and Recycling Collection Service Rates and Regulations Amendment Bylaw No. 1591.06, 2016” be introduced and read three times.
2. That “Regional District of Nanaimo Solid Waste and Recycling Collection Service Rates and Regulations Amendment Bylaw No. 1591.06, 2016” be adopted.

PURPOSE

To introduce a bylaw to amend “Regional District of Nanaimo Solid Waste and Recycling Collection Service Rates and Regulations Bylaw No. 1591, 2010” to reflect the user fees in the 2016 – 2020 Financial Plan.

BACKGROUND

The Regional District of Nanaimo’s (RDN) residential garbage and recycling collection program is a compulsory service set up under Recycling and Compulsory Collection Local Service Establishment Bylaw No. 793, 1989, and applies to the entire region with the exception of the City of Nanaimo (CON). The program is funded entirely by user fees.

Attached to this report is the bylaw amendment to reflect the user fees applied in the 2016 Financial Plan.

The Collection Service

The RDN’s curbside service provides weekly collection to approximately 28,000 households throughout the region, excluding the CON. The collection service is contracted to Progressive Waste Solutions who operates from a facility in Parksville. Since 2010, single family households receiving curbside service have been sorting their household waste into three material streams: Food Waste which is collected weekly; Garbage which is collected every-other-week; and Recycling which is collected on the alternate week to Garbage.

Program Administration

In 2013, the Regional Board gave consideration to the changes made to the Provincial Recycling Regulation and the Board endorsed becoming a collector of Packaging and Printed Paper (PPP) under contract to the new stewardship group Multi-Material BC (MMBC). By signing on with MMBC, the RDN now receives financial incentives to offset the cost of the recycling collection. This relationship and the receipt of financial incentives took effect May 19, 2014.

Extra Garbage Tags

The curbside collection user fee includes disposal of one 100 litre container of household garbage per scheduled garbage collection day. Up to two additional containers can be set out for collection on garbage collection day provided the resident has purchased and affixed single use “extra garbage tags” to each extra container.

Over the course of 2015, 20,500 extra garbage tags were purchased. Based on sale volume, approximately 3% of total containers set out for collection in 2015 were extra containers with tags. This is roughly equivalent to each household on the RDN collection program using one tag once in the year.

Since the inception of the collection program in 1990, the cost for the tags has been unchanged at \$2.00 per tag. The cost of disposal has however increased in the ensuing 25 years from the \$50/tonne of 1990. At the current tipping fee of \$125/tonne, the equivalent cost of a 23kg bag of refuse is \$2.88. In keeping with the user-pay (cost recovery) basis for the curbside program, staff propose increasing the tag fee to \$3.00.

The \$2.00 tags already purchased by residents would of course be honoured. Assuming Board approval, the next reprinting of tags would reflect the price increase. The CON undertook this same price increase in 2015, where tag usage is more prevalent than in the RDN collection program.

ALTERNATIVES

1. Adopt “Regional District of Nanaimo Solid Waste and Recycling Collection Service Rates and Regulations Amendment Bylaw No. 1591.06”.
2. Do not amend the bylaw and amend the 2016 Financial Plan accordingly.

FINANCIAL IMPLICATIONS

The RDN curbside collection program is entirely funded by user fees. These fees are set each year and cover the expenses associated with collection (60%), disposal (21%), program communications (1%), and administration (18%).

Financial incentives from MMBC amount to \$37.25 per serviced household per year. This amount is made up of \$34.00 for the actual PPP collection, and \$3.25 to cover the additional administration and education/outreach obligations we incur by being under contract to MMBC. This administration and education/outreach funding is being used to finance a temporary staff position focused on the MMBC program. The estimated total value of the incentives to be received in 2016 is in excess of \$1 million.

The 2016 user rates in the attached bylaw amendment reflect the receipt of MMBC financial incentives, however the user rates also take into account anticipated increased costs associated with the contracted

collection, along with a contribution to build reserve funds dedicated for the eventual contract renewal by 2020 and the anticipated change to automated collection requiring new collection totes.

The proposed 2016 annual user fee for collecting the three material streams will increase from \$121.50 (2015 fee) to \$125.15 (discounted prompt payment rates shown). Over 90% of customers take advantage of the prompt payment rate which applies a 10% discount if paid by the due date. The discounted user fee for the service provided to the Town of Qualicum Beach (food waste and recycling collection – not garbage) will increase from \$80.10 (2015 fee) to \$82.50.

Increasing the cost of extra garbage tags will generate a nominal increase in revenue which will be used to offset the disposal costs.

STRATEGIC PLAN IMPLICATIONS

The user fees for the solid waste and recycling collection service reflect the costs associated with the contracted collection, disposal, program administration, and education and communications. The curbside program contributes to the region’s sustainability goals by encouraging residents to reduce the amount of waste they send to the landfill thereby saving expensive landfill capacity as well as reducing GHG emissions.

As a result of food waste collection, the approximate 28,000 households served by the RDN’s collection program have succeeded in limiting the amount of their household waste going to landfill. In 2015, each household on average sent 167 kg of garbage to the landfill, while 208 kg of food waste and recyclables were diverted from disposal.

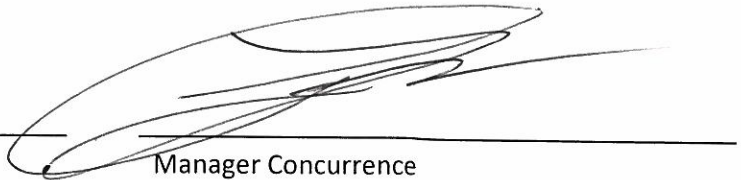
SUMMARY

The Solid Waste and Recycling Collection Service provides curbside collection to approximately 28,000 homes (excluding the City of Nanaimo) and is funded entirely by user fees. The proposed 2016 user fees cover contracted collection service fees, tipping fees at disposal facilities, administration and communications.

Staff recommends that the Solid Waste and Recycling Collection Service Rates and Regulations Bylaw No. 1591 be amended to reflect the user fees in the 2016 Financial Plan.



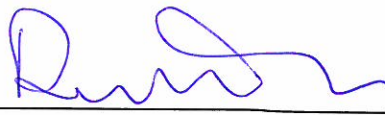
Report Writer



Manager Concurrence



General Manager Concurrence



CAO Concurrence

REGIONAL DISTRICT OF NANAIMO

BYLAW NO. 1591.06

**A BYLAW TO AMEND THE SOLID WASTE AND RECYCLING
COLLECTION SERVICE RATES AND REGULATIONS BYLAW**

WHEREAS the Regional District of Nanaimo established the Solid Waste and Recycling Collection Service pursuant to Bylaw No. 793, cited as "Recycling and Compulsory Collection Local Service Establishment Bylaw No. 793, 1989";

AND WHEREAS the Regional District of Nanaimo adopted a rates and regulations bylaw in relation to the Solid Waste and Recycling Collection Service, cited as "Regional District of Nanaimo Solid Waste and Recycling Collection Service Rates And Regulations Bylaw No. 1591, 2010";

AND WHEREAS the Board of the Regional District of Nanaimo wishes to update user rates;

NOW THEREFORE the Board of the Regional District of Nanaimo, in open meeting assembled, enacts as follows:

1. Amendments

"Regional District of Nanaimo Solid Waste and Recycling Collection Service Rates and Regulations Bylaw No. 1591, 2010" is amended as follows:

- (a) By deleting Schedule 'A' and replacing it with the Schedule 'A' attached to and forming part of this bylaw.

2. Citation

This bylaw may be cited as "Regional District of Nanaimo Solid Waste and Recycling Collection Service Rates and Regulations Amendment Bylaw No. 1591.06, 2016".

Introduced and read three times this ___ day of _____, 2016.

Adopted this ___ day of _____, 2016.

CHAIRPERSON

CORPORATE OFFICER

Schedule 'A' to accompany "Regional District of Nanaimo Solid Waste and Recycling Collection Service Rates and Regulations Bylaw No. 1591.06, 2016".

Chairperson

Corporate Officer

SCHEDULE 'A'

BYLAW NO. 1591

User Fees associated with Collection of Garbage, Food Waste and Recyclable Materials

The rates in this schedule apply to the jurisdictions as outlined in the body of this bylaw.

Service Area	Prompt Payment Rate (rates rounded for convenience)	Payment after Due Date	Other Charges
Electoral Areas ⁽¹⁾	\$125.15	\$139.05	
City of Parksville ⁽¹⁾	\$125.15	\$139.05	
District of Lantzville ⁽¹⁾	\$125.15	\$139.05	
Town of Qualicum Beach ⁽²⁾	\$82.50	\$91.67	
Recycling Only ⁽³⁾	\$23.20	\$25.75	
Tags for set out of additional Garbage Containers	-	-	\$3.00 per garbage container
Green Bin food waste containers			\$26.00 each

Explanation of Service Level Container Limits included in Basic Rate

(1) Service Level Basic Rates Container Limits =

The basic rate will include up to one container of Residential Garbage per collection period (one container per two weeks), one container of Residential Food Waste per collection period (one container per week), and unlimited Recyclable Materials per collection period.

(2) Service Level Basic Rates Recycling and Food Waste Collection for Town of Qualicum Beach =

The basic rate will include up to one container of Residential Food Waste per collection period (one container per week), and unlimited Recyclable Materials per collection period.

(3) Service Level Basic Rates Recycling Only Collection =

The basic rate includes unlimited Recyclable Materials only per collection period.

TO: Larry Gardner
Manager Solid Waste

DATE: February 23, 2016

FROM: Maggie Warren
Superintendent Scale & Transfer Service

MEETING: SWMSC – March 10, 2016

FILE: 5360-00

SUBJECT: Solid Waste Management Regulation Bylaw No. 1531.06

RECOMMENDATIONS

1. That “Regional District of Nanaimo Solid Waste Management Regulation Bylaw No. 1531.06, 2016” be introduced and read three times.
2. That “Regional District of Nanaimo Solid Waste Management Regulation Bylaw No. 1531.06, 2016” be adopted.

PURPOSE

To introduce a Bylaw to amend “Regional District of Nanaimo Solid Waste Management Regulation Bylaw No. 1531.05, 2014” regarding tipping fees on a few specific waste types and to revise some of the conditions of facility use. The proposed amendment Bylaw is appended to this report.

BACKGROUND

The Regional District of Nanaimo (RDN) provides sustainable solid waste management services to residents and businesses region-wide. The Regional Landfill on Cedar Road in south Nanaimo and the Church Road Transfer Station near Parksville will process approximately 47,000 tonnes of municipal solid waste and 9,500 tonnes of recyclables material in 2016. These two facilities are financed primarily through user fees that will generate an estimated \$7 million in revenue this year.

Prior to 2014 the amount of municipal solid waste processed at RDN facilities had declined due primarily to waste diversion policies and programs. Fee increases were required to adequately fund operating and capital requirements. Effective January 1, 2014 the solid waste management facilities tipping fee increased from \$120 to \$125 per tonne. Subsequently two local commercial waste haulers began shipping waste out of the region which further reduced the anticipated tonnage and related revenue.

Throughout 2014 and 2015, solid waste staff have focused on identifying areas to reduce costs and improve efficiency without an increase to tipping fees. The review of the landfill operation also determined that tipping fees for a number of waste types is insufficient to offset the costs of handling and disposing of this material. Specifically, the problematic waste materials include asbestos, mattresses and hide-a-beds; and prohibited waste that contains ozone depleting substance (ODS) as coolant in air conditioning and refrigeration units.

Recently, the RDN has received requests to dispose of non-compostable invasive plants and, at the Church Road Transfer Station (CRTS), deer carcasses. Acceptance of these materials requires amendments to Bylaw No. 1531.

DISCUSSION

Prohibited and Problematic Waste

Prohibited and problematic waste arriving at the RDN solid waste facilities pose challenges for handling and disposal. Bulky waste, such as mattresses, hide-a-beds and asbestos are considered problematic because they do not compact efficiently and require additional airspace in the landfill. Effective compaction of the solid waste is critical as it results higher densities maximizing air space, less differential settlement, reduced leachate, less cover material, limits vectors, limits fires, controls run off and run on, and reduces post-closure care implications.

Prohibited Waste

Prohibited wastes are listed in Schedule ‘C’ of the RDN solid waste management regulation Bylaw No. 1531. They include appliances that contain ozone depleting substances, such as chlorofluorocarbons (CFCs). CFCs, are used as a coolant in air conditioning and refrigeration (fridges, freezers and coolers). The Environmental Management Act requires that the ODS contained within these appliances be captured for disposal prior to the appliance being sent for metal salvage.

The RDN solid waste facilities accept fridges, freezers, coolers and air conditioners for recycling. These appliances are separated from other scrap metal and shipped to third party recyclers for ODS draining and then scrap metal salvage. The landfill ships approximately 725 fridges and freezers a year and the transfer station ships approximately 275 units per year for a total of approximately 1,000 units.

In order to ensure ODS is not released, the facilities designate an area for customers to unload the ODS containing appliances and staff reload them into bins for transfer to the recycling facility. This requires additional space at the facilities and careful handling by solid waste staff to ensure no ODS escapes while loading these appliances into a transfer bin. The current disposal charge at the solid waste facilities is \$6 for scrap metal up to 500 kg which could include multiple appliances or other scrap metal items. The RDN does not receive any scrap revenue for the appliances, and there is no charge to the RDN for the removal or disposal of the captured ODS.

Table 1 shows recycling costs for ODS containing appliances at regional facilities on Vancouver Island and a commercial scrap metal processor.

Table 1: 2015 Recycling costs of ODS containing appliances at locations on Vancouver Island

Facility	Fee	Surcharge	Total recycling cost
RDN – Regional Landfill & CRTS	\$6	\$0	\$6
CRD - Hartland Landfill	\$6	\$20	\$26
CVRD – Bings Creek transfer station	First unit free	\$15	Free (First unit)
Schnitzer Steel	\$15	\$0	\$15
CVRD – Comox Valley waste facility	\$15	\$0	\$15

Fees based on 2015 tipping fees.

An RDN surcharge of \$15 per unit would offset RDN handling costs, and increase revenue at the solid waste facilities by approximately \$15,000 per year.

Problematic Waste

Mattresses

Bulky items like mattresses and hide-a-beds require special handling for disposal. They are not compactable, resulting in poor waste density and higher air space consumption. Additional time and effort is required for disposal. Hide-a-beds must be broken apart so that metal frames can be recycled. Mattresses are not compactable and enter the landfill virtually unchanged in size and shape, and are very difficult to incorporate into the landfill. During the landfilling process the mattress and springs can get wrapped around the driveshaft of the equipment and cause damage and down time of equipment.

Table 2 shows the fee by facility for accepting mattresses at locations on Vancouver Island.

Table 2: Facility charges for mattresses on Vancouver Island

Facility	Fee	Surcharge
RDN – Regional Landfill & CRTS	\$6 for up to 50 kg	\$0
CRD - Hartland Landfill	\$107/tonne	\$10 transfer fee to recycling
CVRD - Bings Creek Transfer Station	\$5 for up to 25 kg	\$10 contamination charge may be applied per mattress
CVRD - Comox Valley Waste Facility	\$120/tonne	\$0

Fees based on 2015 tipping fees.

RDN costs can be offset with a surcharge of \$10 for approximately 5500 mattresses disposed per year will increase revenue approximately \$55,000. Currently there is no mattress recycling facility in the RDN, therefore, all mattresses received are landfilled. This surcharge has the potential to be the catalyst for mattress recycling in the region.

Asbestos

Waste asbestos, as described in RDN Bylaw No. 1531 and authorized by the *Hazardous Waste Regulation*, is accepted for disposal at the regional landfill. Disposal practices are closely regulated to ensure staff and the public are not exposed to asbestos dust. To minimize the risk of exposure, it is necessary for the material to be isolated from other refuse, packaged or treated to eliminate release to the air and disposed of carefully to ensure workers are not exposed to airborne fibres either at the time of disposal or later as a result of contamination of landfill equipment or disturbance of buried asbestos.

Asbestos disposal requires special handling by landfill staff, including: scheduling disposal appointments, completing manifests, preparing the disposal area with sufficient cover material, staff for monitoring disposal, as well as staff and heavy equipment for the burial of this hazardous waste. 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. Furthermore, the operational cost (staff, equipment, training, decontamination, etc.) is 3 times that of managing garbage. Based on the value of the airspace consumed and cost to manage the asbestos, the RDN cost for asbestos disposal is approximately \$475/tonne.

Table 3 shows the tonne rate for asbestos disposal on Vancouver Island. There are currently two facilities on Vancouver Island receiving asbestos waste for disposal, Hartland Landfill in the Capital

Regional District (CRD) and the RDN's Regional Landfill. The CRD acknowledges similar cost and space demands of managing asbestos waste as the RDN, and are currently reviewing their asbestos disposal rate with the likelihood of a significant increase. Conversations with CRD staff suggest they are valuing asbestos disposal at \$400/tonne.

Table 3: Asbestos Waste disposal rates on Vancouver Island

Facility	Rate	Out of District Rate
CRD - Hartland Landfill	\$152/tonne	\$302/tonne
RDN - Regional Landfill	\$250/tonne Minimum chg \$20	\$300/tonne Minimum chg \$20

In 2014, the Regional Landfill disposed 518 tonnes of asbestos waste in 2014 and 870 tonnes in 2015, an increase of 40%. 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 rising volume and low compaction of asbestos waste requires much greater airspace per tonne than regular waste. Staff recommends doubling the current asbestos fee to \$500 and the out of district rate to \$600. The increased revenue would be in line with the value of the airspace used for garbage and the cost of processing the waste.

If the tonne rates are doubled in 2016 and the tonnage remains the same, the revenue would increase to \$430,000. However, increased rates are also likely to result in higher level of screening/testing so that non-asbestos material is not handled as "asbestos waste" and a greater amount, particularly the drywall, is recycled. It is difficult to predict to what extent this would reduce the asbestos waste and associated revenue. Table 4 shows the asbestos tonnage for both in district and out of district asbestos at the current rates of \$250 and \$300 per tonne respectively for 2015 and applies these tonnages to the proposed 2016 rates.

Table 4: Tonnage and Related Revenue for Regional Landfill

2015			2016		
Rate/tonne	Tonnage	Revenue	Rate/tonne	Tonnage	Revenue
In District \$250	534	\$114,000	In District \$500	534	\$228,000
Out of District \$300	336	\$101,000	Out of District \$600	336	\$202,000
Total	870	\$215,000	Total	870	\$430,000

Controlled Wastes

1. Invasive Plant Species Disposal

Landfilling of certain types of wastes create potential health and safety concerns for staff or environmental concerns beyond those expected from regular household refuse and are managed as Controlled Waste at the Regional Landfill. Controlled waste includes regional invasive plant species and other plants or food identified by the Canadian Food Inspection Agency and is subject to special handling for disposal to ensure the waste is buried and appropriate cover material is applied.

The Cowichan Valley Regional District (CVRD) has requested the disposal of several non-compostable invasive plant species at the Regional Landfill. Several invasive plant species such as giant hogweed, spurge laurel and knotweed are not suitable for disposal through composting due to their risk to human health or their exceptional resilience. The CVRD waste export to the USA does not include these invasive plant species. The CVRD will collect the invasive plants at their Recycling Centres and provide transport to the Regional Landfill. The Regional Landfill has the capacity to accept these invasive plant species. It is proposed that Bylaw 1531 be amended to allow disposal of these plants as controlled waste at the Regional Landfill.

Deer Carcass Disposal

The RDN accepts dead animals at the Regional Landfill as Controlled Waste. Special handling includes extra excavation for placement of the carcass(es) and additional cover material to ensure birds and other vectors do not have access to this waste. The Church Road Transfer Station (CRTS) does not accept animal carcasses for transfer to the Regional Landfill however the City of Parksville has requested consideration for delivery of deer carcasses to CRTS, see Appendix 2.

Deer carcass disposal in the past, for City of Parksville staff, has been on Island Timberlands property. Recent access to Island Timberlands property during logging operations has created hazardous conditions for carcass disposal for City of Parksville staff. The RDN is willing to work with the City of Parksville and Town of Qualicum Beach to provide deer disposal access for their staff at the CRTS.

CRTS staff will make special disposal arrangements with the Town of Qualicum Beach and the City of Parksville for timely and appropriate disposal of carcasses as Controlled Waste at the CRTS. Further to this request the RDN, under Bylaw 1531, will allow deer carcasses from other government agencies, such as the City of Parksville and the Town of Qualicum Beach, to be accepted at the CRTS at the discretion of the General Manager.

Additional Bylaw Amendments

The following additional Bylaw amendments are recommended:

2.0 CONDITIONS OF USE

Remove Clause 2.4 which states:

1.4 Compactor bins of 19m³ and larger from the geographical area of School District No. 69 will not be accepted at the Church Road Transfer Station but will be accepted at the Regional Landfill at a reduced rate.

The provision for compactor bins originating in District 69 to be charged at a reduced tonne rate when hauling to the Regional Landfill originated due to the transfer station's inability to manage these wet loads. In 2010 the CRTS was expanded to accept residential and commercial food waste loads with the capability to wash down the tipping floor, treat the waste water and recirculate as wash down water. The compactor bins previously diverted to the Regional Landfill are now accepted at the CRTS. This rate has not been applied in the past five years and the removal of this part is strictly for purposes of housekeeping.

Remove Clause 2.17 which states:

2.17 No person shall deposit Municipal Solid Waste other than at a Solid Waste Management Facility or Licensed Facility. The bylaw that deals with Waste Stream Licensing (i.e. Bylaw 1386 - Regulate the Management of Municipal Solid Waste and Recyclable Material) sets out a very similar prohibition as follows:

6.2 Prohibition. No responsible person shall deliver, deposit, store, or abandon, cause or allow to be delivered, deposited, stored or abandoned, municipal solid waste or recyclable material on or within any lands or improvements except a facility that holds a valid and subsisting facility license within the area of the Regional District of Nanaimo unless the municipal solid waste or recyclable material:

- a) is placed in a receptacle for scheduled curbside collection by a hauler or a local government, or*
- b) is taken to a facility outside the boundaries of the Regional District of Nanaimo that complies with all applicable enactments, including without limitation, land use bylaws.*

Regional District's authority for this type of provision comes from the *Environmental Management Act* and bylaws taking advantage of the authority must also be approved by the Minister of the Environment. Removing clause 2.17 avoids the additional step of have ministerial approval of the bylaw and the requirement is only a duplication of a prohibition which already exists.

4.0 VIOLATIONS AND PENALTIES

Add Clause 4.4:

Any waste received in contravention of the bylaw or instructions provided by the RDN at the solid waste facilities may be subject to a cost recovery fee for contamination cleanup or proper disposal.

This provision allows the RDN to recover any additional costs related to the cleanup of prohibited materials that may result in spill management, fire control or the removal from the facility as hazardous waste.

SCHEDULE 'C' "PROHIBITED WASTE"

Add to the list of prohibited wastes 2. Church Road Transfer Station:

Burnt Demolition Waste

The waste transfer system requires top loading materials from the tipping floor into transfer trailers for hauling to the Regional Landfill. Material from a demolition of a burnt structure, commercial or residential, is not compatible with the current transfer system and could result in damage to transfer trailers. Any damage to equipment will disrupt the efficient operation of the CRTS as it requires the availability of processing, loading and transfer equipment. This prohibition only targets large dump truck size loads of demolition waste.

Bulk Loads of Demolition Waste

It is proposed that loads equivalent to that of a single axle dump truck (i.e. 5 m³) or larger of demolition waste not be accepted at the CRTS but will be accepted at the Regional Landfill. There is a higher risk of

damage to the transfer trailer due to the bulky nature of demolition waste. Furthermore, there is obvious inefficiency in depositing large loads at the transfer station only to be reloaded again for transport to the Regional Landfill.

ALTERNATIVES

1. Adopt Solid Waste Management Regulation Rates Amendment Bylaw No. 1531.06 as presented.
2. Do not amend the Bylaw.
3. Amend only portions of the Bylaw as directed by the Board.

FINANCIAL IMPLICATIONS

Alternative 1 proposes to recover costs associated with several specific waste types. The increases will help promote diversion and will also increase revenue. These increases could generate nearly \$500,000 in operating revenues annually. Increased revenues will continue supporting operations and reduce borrowing to fund long term capital plan projects as well as avoiding greater future reliance on taxation.

Alternative 2 continues with the status quo which leaves tipping fees at current rates.

Alternative 3 proposes to amend only portions of the Bylaw as directed by the Board. Increases in revenue, changes to materials acceptance and amendments to conditions of solid waste facility use will vary based on the recommendations that receive Board approval.

STRATEGIC PLAN IMPLICATIONS

Changes to tipping fee rates as discussed in this report are consistent with the “user pay” recovery of operating costs, are still at such a level that promotes waste reduction, and therefore, are consistent with the current Solid Waste Management Plan.

CITIZENS/PUBLIC RELATIONS IMPLICATIONS

Once approved, communications will be prepared to advise all customers of the fee increase or applicable surcharges, including letters to account holders, signage at solid waste facilities, flyers, advertisements and information on the RDN web page.

SUMMARY/CONCLUSIONS

Prohibited waste includes appliances that contain chlorofluorocarbons (CFCs). CFCs, the most widely used Ozone Depleting Substance (ODS), are used as a coolant in air conditioning and refrigeration (fridges, freezers and coolers). A surcharge per unit for additional handling and load preparation for transfer to the recycler is in line with other Vancouver Island disposal and recycling facilities.

Prohibited, bulky and problematic waste arriving at the RDN solid waste facilities pose challenges for handling and disposal. Compacting solid waste to achieve higher densities will allow greater capacity for waste placement. Bulky waste, such as mattresses, hide-a-beds and asbestos are considered problematic because of their poor compaction potential which leads to additional time and effort required for disposal and additional airspace in the landfill. Asbestos is a hazardous waste and requires special handling and immediate burial in a dedicated area. A surcharge for mattresses and hide-a-beds,

and an increased rate for asbestos waste, provides revenue to offset additional handling and loss of air space.

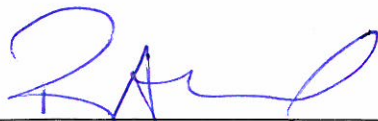
Additional out of district controlled waste disposal at the Regional Landfill for invasive plant species is requested by the CVRD. The Regional Landfill has the capacity to accept the out of district request for invasive plant species as Controlled Waste from the CVRD. Also to assist the Town of Qualicum Beach and City of Parksville, the RDN transfer facility will accept deer carcasses for disposal as Controlled Waste for transfer to the Regional Landfill at the discretion of the General Manager. Provisions are proposed for cost recovery for correcting when waste is disposed in contravention of the Bylaw. There is also a couple of minor housekeeping amendments proposed. The proposed amendment Bylaw is appended to this report; the consolidate amendments summarized in Table 5.

Table 5: Proposed Consolidate Amendment

Item	Current	Proposed
ODS Appliance	\$55/tonne; (min. \$6)	\$55/tonne + \$15/unit
Mattresses & Hide-a-beds	\$125/tonne; (min. \$6)	\$125/tonne + \$10/unit
Asbestos Waste	\$250/tonne; (min. \$20) In-district \$300/tonne; (min. \$20) Out of district	\$500/tonne; (min. \$30) In-district \$600/tonne; (min. \$30) Out of district
Invasive Plant Disposal	Out of district not accepted.	Accepted from CVRD at controlled waste rate of \$300/tonne
Animal Carcasses	Not accepted at Church Road Transfer Station (CRTS)	Accepted at CRTS from government subject to approval of General Manager
House Keeping	1) Reduced rate for compactor bins at CRTS; 2) Deposit of waste at licensed facility;	Provisions deleted.
Cost Recovery	No provision for cost recovery for cleanup of spills/improper disposal.	Provision for cost recovery by the RDN.
Prohibited Materials at CRTS	No restriction on burnt demolition waste or large loads of demolition waste at CRTS.	Restricting burnt or large loads of demolition waste so they are hauled directly to the landfill.

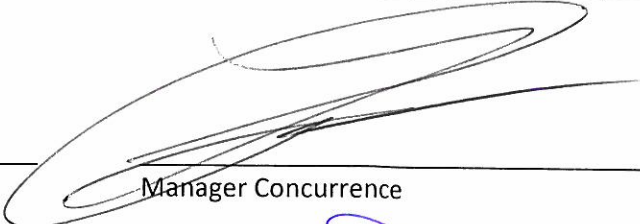
M. Wanner

Report Writer

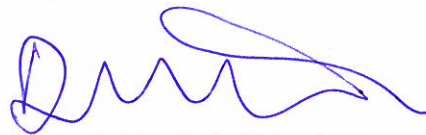


General Manager Concurrence

Manager Concurrence



CAO Concurrence



REGIONAL DISTRICT OF NANAIMO

BYLAW NO. 1531.06

**A BYLAW TO AMEND REGIONAL DISTRICT OF NANAIMO
SOLID WASTE MANAGEMENT REGULATION BYLAW 1531**

WHEREAS the “Regional District of Nanaimo Solid Waste Management Regulation Bylaw No. 1531.05, 2013” provided for the regulation of Solid Waste Management Facilities within the Regional District of Nanaimo;

AND WHEREAS the Board of the Regional District of Nanaimo wishes to amend the conditions of use; violations and penalties; and schedules established by Bylaw No. 1531;

NOW THEREFORE the Board of the Regional District of Nanaimo, in open meeting assembled, enacts as follows:

1. “Regional District of Nanaimo Solid Waste Management Regulatory Bylaw No. 1531, 2013 is amended as follows:
 - 1.1 Section 2.0, Conditions of Use, Clause 2.4 “Compactor bins of 19 cum and larger from the geographical area of School District No. 69 will not be accepted at the Church Road Transfer Station but will be accepted at the Regional Landfill at a reduced rate.” is deleted.
 - 1.2 Section 2.0, Conditions of Use, Clause 2.17 “No person shall deposit Municipal Solid Waste other than at a Solid Waste Management Facility or Licensed Facility.” is deleted.
 - 1.3 Section 4.0 Violations and Penalties, Addition of Clause 4.4 “Any waste received in contravention of the bylaw or instructions provided by the RDN at the solid waste facilities may be subject to a cost recovery fee for contamination cleanup or proper disposal.”
 - 1.4 Schedule ‘A’ of Bylaw No. 1531 is hereby repealed and replaced with Schedule ‘A’ attached to this bylaw.
 - 1.5 Schedule ‘C’ of Bylaw No. 1531 is hereby repealed and replaced with Schedule ‘C’ attached to this bylaw.
 - 1.6 Schedule ‘D’ of Bylaw No. 1531 is hereby repealed and replaced with Schedule ‘D’ attached to this bylaw.
2. This bylaw may be cited as “Regional District of Nanaimo Solid Waste Management Regulation Amendment Bylaw No. 1531.06, 2016.”

Introduced and read three times this ___ day of _____, 2016.

Adopted this ___ day of _____, 2016.

CHAIRPERSON

CORPORATE OFFICE

Chairperson

Corporate Officer

Schedule 'A'

Charges and Procedures for use of Solid Waste Management Facilities effective April 1, 2016.

1.	Solid Waste, excluding Controlled Waste	Flat Rate	51 kg or greater
a.	Municipal solid waste, construction/demolition waste, roofing waste (asphalt/tar/gravel), medical facility waste, or material recovery facility waste	\$6.00/0-50kg	\$125.00/tonne
b.	Municipal solid waste (containing recyclables) with offence	\$6.00/0-50kg	\$250.00/tonne
c.	Construction/Demolition waste (containing recyclables) with offence	\$6.00/0-50kg	\$360.00
d.	Weighing service	\$20.00 flat rate	
e.	Surcharge for improperly covered or secured loads	\$20.00 flat rate	
f.	Surcharge for mattresses and hide-a-beds	\$10.00 flat rate	

2.	Recyclables	Flat Rate	51 kg or greater
a.	Organic waste	\$6.00/0-50kg	\$110.00/tonne
b.	Organic waste (containing mixed solid waste or recyclables) with offence	\$6.00/0-50kg	\$250.00/tonne
c.	Garden waste	\$6.00/0-100kg	\$55.00/tonne
d.	Wood waste including wood roofing	\$6.00/0-50kg	\$250.00/tonne
e.	Gypsum (Church Road Transfer Station only)	\$6.00/0-50kg	\$250.00/tonne
f.	Metal recycling, metal appliances with ODS (ozone depleting substance)	\$6.00/0-500kg	\$55.00/tonne
g.	Corrugated cardboard	\$6.00/0-50kg	\$55.00/tonne
h.	Miscellaneous recyclables including: household plastics, metal food and beverage containers, vehicle batteries and oil filters	\$6.00 flat rate	
i.	Surcharge for ODS containing appliances	\$15.00 flat rate	

3.	Controlled Waste	Flat Rate	51 kg or greater
a.	Contaminated soil, grit and screenings and bio-solids	\$6.00/0-50 kg	\$125.00/tonne
b.	Controlled waste (misc.) including large dead animals	\$6.00/0-50 kg	\$250.00/tonne
c.	Food processing waste and treatment works		\$250.00/tonne
d.	Steel cable		\$500.00/tonne
e.	Asbestos waste	\$30.00/0-50 kg	\$500.00/tonne

Chairperson

Corporate Officer

4. Any load containing Prohibited Waste will be charged all costs associated with any special handling or removal of the Prohibited Waste in addition to the volume rates above.
5. Where the charge is based on weight, it shall be based on the difference in weight between loaded weight and the empty weight of the vehicle.
6. In the event that the scales provided are not operational, weight shall be estimated by the Scale Clerk employed by the Regional District of Nanaimo.
7. All charges payable under this bylaw shall be paid prior to leaving the site.
8. Surcharges are in addition to the per tonne rate posted for the material type.

Chairperson

Corporate Officer

Schedule 'C'

"Prohibited Waste"

The following gaseous liquids and municipal solid wastes are not acceptable for disposal at a Solid Waste Management Facility and include, but are not limited to:

1. At the Regional Landfill:
 - (i) Biomedical Waste;
 - (ii) Commercial Organic Waste;
 - (iii) Concrete or asphalt pieces, or rocks greater than 0.03m³ or 70 kg;
 - (iv) Corrugated Cardboard;
 - (v) Drums;
 - (vi) Garden Waste;
 - (vii) Gypsum;
 - (viii) Hazardous Waste;
 - (ix) Household Plastic Containers;
 - (x) Ignitable Wastes;
 - (xi) Land Clearing Waste;
 - (xii) Liquids, except as permitted herein;
 - (xiii) Metal;
 - (xiv) Motor vehicle bodies and farm implements;
 - (xv) Municipal Solid Waste that is on fire or smouldering;
 - (xvi) Radioactive Waste;
 - (xvii) Reactive Wastes;
 - (xviii) Recyclable Paper;
 - (xix) Stewardship Materials:
 - (xx) Special waste, as defined in the *Special Waste Regulation* (British Columbia) except asbestos ;
 - (xxi) Tires;

Chairperson

Corporate Officer

(xxii) Wood Waste

2. At Church Road Transfer Station:

- (i) Biomedical Waste;
- (ii) Bulk loads of Demolition Waste 5m³ or greater
- (iii) Burnt Demolition Waste;
- (iv) Commercial Organic Waste;
- (v) Concrete or asphalt pieces, or rocks greater than 0.03m³ or 70 kg;
- (vi) Controlled Waste; except as animal carcasses by a government agency with written authorization from the General Manager;
- (vii) Corrugated Cardboard;
- (vi) Garden Waste;
- (vii) Gypsum;
- (viii) Hazardous Waste;
- (ix) Household Plastic Containers;
- (x) Ignitable Wastes;
- (xi) Land Clearing Waste;
- (xii) Liquids, except as permitted herein;
- (xiii) Metal;
- (xiv) Motor vehicle bodies and farm implements;
- (xv) Municipal Solid Waste that is on fire or smouldering;
- (xvi) Radioactive Waste;
- (xvii) Reactive Wastes;
- (xviii) Recyclable Paper;
- (xix) Special waste, as defined in the *Special Waste Regulation* (British Columbia) except asbestos;
- (xx) Stewardship Materials;
- (xxi) Tires;
- (xxii) Wood Waste.

Chairperson

Corporate Officer

Schedule 'D'

The charges for disposing of Controlled Waste, which originates from the Cowichan Valley Regional District, at the Regional Landfill effective April 1, 2016, are:

1.	Controlled waste originating Cowichan Valley RD	Flat rate	51 kg or greater
a.	Waste asbestos	\$30.00/0-50 kg	\$600.00/tonne
b.	Large dead animals	\$20.00/0-50 kg	\$300.00/tonne
c.	Invasive plant species	\$20.00/0-50 kg	\$300.00/tonne