

REGIONAL DISTRICT OF NANAIMO  
REGIONAL SOLID WASTE ADVISORY COMMITTEE  
AGENDA

Thursday, July 13, 2017

5:00 P.M.

RDN Board Chambers

*This meeting will be recorded*

Pages

1. CALL TO ORDER
2. APPROVAL OF THE AGENDA
3. ADOPTION OF MINUTES
  - 3.1 **Regional Solid Waste Advisory Committee Meeting - May 25, 2017** 2  
That the minutes of the Regional Solid Waste Advisory Committee meeting held May 25, 2017, be adopted.
4. INVITED PRESENTATIONS
  - 4.1 **Draft SWMP** 4  
*Staff will provide presentation.*
  - 4.2 **SWMP Consultation Update**  
*Staff will provide update.*
5. CORRESPONDENCE
  - 5.1 **Matthew Louie, re Resignation Email** 93
  - 5.2 **Maura Walker & Associates, re Review of Stage 2 Solid Waste Management Plan Consultation Efforts** 94
6. UNFINISHED BUSINESS
  - 6.1 **Subsidizing of Social Enterprise/Zero Waste Recycling under the Solid Waste Management Plan.**
7. NEW BUSINESS
8. ADJOURNMENT

**REGIONAL DISTRICT OF NANAIMO  
REGIONAL SOLID WASTE ADVISORY COMMITTEE MEETING  
HELD ON THURSDAY, MAY 25, 2017  
BOARD CHAMBERS**

**Present:**

Alec McPherson	Chair, RDN Director
Bill McKay	Deputy Chair, RDN Director
Jan Hastings	Non Profit Representative
Jim McTaggart-Cowan	Member at Large
Craig Evans	Member at Large
John Finnie	Member at Large
Gerald Johnson	Member at Large
Ellen Ross	Member at Large
Amanda Ticknor	Member at Large
Charlotte Davis	City of Nanaimo
Wally Wells	Business Representative
Ben Geselbracht	Member at Large
Dean Jones	Waste Management Industry

**Also in Attendance:**

Phyllis Carlyle	CAO, RDN
Randy Alexander	General Manager, RCU, RDN
Larry Gardner	Manager of Solid Waste, RDN
Meghan Larson	Solid Waste Planner, RDN
Rebecca Graves	Recording Secretary, RDN

**Regrets:**

Matthew Louie	Member at Large
Stewart Young Jr.	Business Representative
Michele Green	Member at Large
Derek Haarsma	Business Representative
Michael Tripp	Business Representative
Cam Purdon	Town of Qualicum Beach
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 5:15 PM and respectfully acknowledged the Coast Salish First Nations on whose traditional territory the meeting took place.

**APPROVAL OF AGENDA**

It was moved and seconded that the agenda be approved as circulated.

CARRIED UNANIMOUSLY

**ADOPTION OF MINUTES**

It was moved and seconded that the minutes from the Regional Solid Waste Advisory Committee meeting held April 20, 2017, be adopted.

CARRIED UNANIMOUSLY

**PRESENTATION**

**SWMP Update.**

L. Gardner and M. Larson gave an outline on the SWMP Update which included an update on the timeline, Stage 2 Consultation Report, Stage 2 SWMP Report Adoption, Stage 3 SWMP Next Steps, Stage 3 Consultation and Financial Projections Update.

A discussion occurred in regards to any edits or additions that should be included in the Stage 2 SWMP report.

**CORRESPONDENCE**

**Jan Hastings, NRE, re Funding for Social Enterprise.**

**UNFINISHED BUSINESS**

**Subsidizing of Social Enterprise under the Solid Waste Management Plan.**

J. Hastings introduced and discussed the Income Summary for Zero Waste Recycling items that the NRE accepts.

It was moved and seconded that the discussion in regards to Subsidizing of Social Enterprise under the Solid Waste Management Plan be deferred to the next Regional Solid Waste Advisory Committee meeting.

Opposed J. McTaggart-Cowan. (1)

CARRIED

**REPORTS**

**Stage 2 Consultation Summary**

It was moved and seconded that the Regional Solid Waste Advisory Committee receives the Stage 2 Solid Waste Management Plan Consultation and Communications Summary for information.

CARRIED UNANIMOUSLY

**2017 SWMP Stage 2 Report Adoption**

It was moved and seconded that the Regional Board adopt the Stage 2 Solid Waste Management Plan report.

CARRIED UNANIMOUSLY

**ADJOURNMENT**

It was moved and seconded that this meeting be adjourned.

CARRIED UNANIMOUSLY

Time: 7:38pm.

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CHAIRPERSON



# Regional District of Nanaimo Solid Waste Management Plan

Draft for Review

Revised July 2017

## Executive Summary

The Regional District of Nanaimo (RDN) is updating the Solid Waste Management Plan (referred here after as the “Plan”) which sets out strategies for managing municipal solid waste within the Region. This will be the third update since the original Plan was developed in 1988.

The original Plan, and its subsequent updates, has been highly successful in guiding the RDN to achieve some of the highest waste diversion and lowest per capita disposal rates in the world. The RDN’s 2014 per capita disposal rate was 347 kg/person/year. Comparatively, the BC average for the same period was 520 kg/person/ year and the 2012 California average was 712 kg/person/year. The proposed target for the next plan amendment is 90% waste diversion with an unprecedented per capita disposal rate of 109kg/person/year.

This Plan update addresses both waste diversion and residual waste management and will serve to guide solid waste management related activities and policy development in the RDN over the coming years.

This updated Plan has two main components:

1. An update of the Zero Waste Plan including a redefined Zero Waste definition as part of the updated Zero Waste Plan and strengthening existing Zero Waste Programs particularly Zero Waste Education, Construction and Demolition, and Multi-Family and Industrial, Commercial and Institutional diversion;
2. Introduction of Waste Source Separation and Waste Haulers as Agents Regulatory Bylaws.

### Zero Waste Plan

In 2002 the RDN adopted “zero” as their waste diversion target, meaning that the RDN will continuously strive to reduce the amount of waste requiring disposal. The following is a list of the programs included in the Zero Waste Plan:

#### Ongoing Programs

- School Education Program
- Zero Waste Promotion and Education
- Illegal Dumping Program
- Yard Waste Composting
- Recycling at RDN Disposal Facilities
- Residential Curbside Garbage, Recycling and Organics
- Disposal Bans
- WSML Technical Assistance
- Construction Demolition Diversion

#### New Programs (Implementation 2018-2021)

- Expanded Zero Waste Education
- Expanded Multi-Family Diversion
- Expanded ICI Diversion
- Expanded Construction and Demolition Diversion
- Non-stewarded Household Hazardous Waste
- Waste Source Separation Regulatory Bylaw
- Waste Haulers as Agents Regulatory Bylaw

The cost to implement the Zero Waste Plan is estimated to range from 1.8 million in 2018 (primarily for ongoing programs to 3.4 million in 2022. The cost increase can be contributed chiefly to the addition of two new regulatory bylaws, waste source separation and waste haulers agents. As needed, research

studies and some services will be contracted out. Fully implemented, the Zero Waste Plan will increase the waste diversion rate to roughly 90%.

### **Residual Waste Management Plan**

The waste that cannot be eliminated or diverted through composting or recycling is referred to as “residual” waste”, and ultimately requires disposal. The Residual Waste Management Plan addresses the long-term disposal needs of the region and aims to minimize social, environmental and financial impacts and risks. The Residual Waste Management Plan contains the following major features:

- The existing residual waste collection system will be maintained in its current configuration;
- Continued use of the Church Road Transfer Station (CRTS) to service the northern portion of the RDN;
- Continued use of the Regional Landfill to service the southern portion of the RDN and receive waste from CRTS;
- Continued promotion of existing Provincial and private stewardship programs for the disposal of household hazardous wastes. Additionally, the RDN will encourage new stewardship programs for other hazardous components of the municipal solid waste stream;
- Researching new and emerging residual waste management technologies that could reduce the RDN’s reliance on landfilling or waste export;
- Continued dialogue with other Vancouver Island regional districts to establish cooperative strategies for the management of solid waste. It is anticipated that if any emerging residual waste management technology has merit for the RDN, it would likely be implemented in conjunction with other Vancouver Island regional districts; and
- Start to identify possible future sites for a new landfill as part of the long term residual management plan.

All of the elements of the Residual Waste Management Plan will be funded within the existing annual solid waste management budget and in accordance with the departmental asset management plan. As required, consultants and contractors will be hired to undertake research, studies and construction projects.

### **Waste Stream Management Licensing Bylaw**

This bylaw involves licensing private and non-government municipal solid waste management and recycling facilities within the district and penalties for contraventions to the bylaw. All facilities (operations or properties) that handle municipal solid waste such as transfer stations, recycling depots, composting facilities, and material recovery facilities are to be included in the licensing system.

## **Waste Source Separation Regulation**

The RDN will conduct further consultation on the introduction of waste source separation regulation as a potential tool to help ensure recyclables and compostables don't end up being landfilled. This proposed regulation would require all existing and new commercial, institutional and industrial businesses to have recycling collection. This regulation would also include multi-family apartments and condos as they are not currently included in the residential collection programs provided by the RDN or member municipalities.

## **Waste Haulers as Agents Bylaw**

Some commercial (including multi-family), construction and demolition waste gets hauled out of our region to less expensive landfills that don't require waste to be sorted for recycling or composting. In the future, without this revenue to operate our landfill, we may need to raise tipping fees or taxes to maintain our landfill and our zero waste programs.

Enlisting Waste Haulers as Licensed Partners would help ensure every business or multi-family building has a recycling and food waste composting program. This would not only prevent waste from being hauled out of region to less expensive private landfills, it would also help ensure we take responsibility for our own garbage by making sure we recycle or compost it locally. It could also offer an economic incentive for the private sector to provide more waste management services locally, improving convenience for recycling.

## **Plan Implementation and Approvals**

The implementation of the updated Plan will begin in 2018, with all elements of the Plan anticipated to be in place by 2021. Cost recovery mechanisms to fund the Plan's implementation include user rates, tipping fees, taxation, sponsorship and grants.

A draft of this Plan will be subject to public consultation in the summer and fall of 2017. Input from the consultation process will be incorporated into the final version of the Plan which will be presented to the Regional Board for their approval. Once approved by the Board, it will be submitted to the BC Ministry of Environment for final approval.

Any comments or questions regarding the Plan or the contents of this report should be directed by email to [zerowaste@rdn.bc.ca](mailto:zerowaste@rdn.bc.ca) or phone (250) 390-6560.

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- Terms of Reference
- Membership
- List of Meetings
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DRAFT

## 1. Introduction

In British Columbia, regional districts are mandated by the Provincial *Environmental Management Act* to develop a Plan that is a long term vision of how each regional district would like to manage their solid waste, including waste diversion and disposal activities. The RDN prepared their first Plan in 1988 and amended that Plan in 1996 and 2004. The Plan is again being updated with a 10-year planning horizon.

The process to update the Plan has occurred in three stages. The first stage involved a review of the current system and preparation of a report on the implementation status of the 2004 Plan. The second stage involved a review of options to address the region's future solid waste management needs and the selection of preferred management options. The third stage sets out the implementation schedule for the preferred options and forms this revised Plan.

This document serves to present the preferred options, costing and implementation schedule for public review and input. Following consultation, this draft Plan will be modified or adopted and presented to the Regional Board for adoption as well as final approval by the Minister of the Environment.

Once the Plan is approved by the Province (along with any approval conditions), it becomes a regulatory document for solid waste management and serves to guide solid waste management related activities and policy development in the RDN. In conjunction with regulations and operational certificates that may apply, the Plan regulates the operation of storage and disposal facilities that make up the region's waste management system.

### 1.1 Guiding Principles

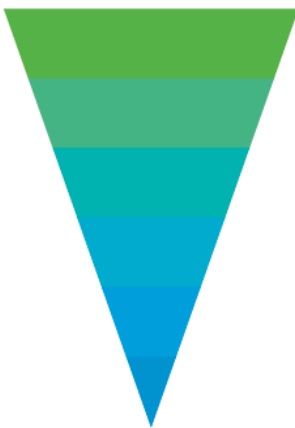
In line with BC Ministry of Environment's provincial standards, the principles guiding the development and implementation of the Plan are:

1. Promote the Zero Waste Hierarchy of highest and best uses and support a circular economy.
2. Maximize use of waste materials and manage residuals appropriately.
3. Support polluter and user-pay approaches and manage incentives to maximize behavior outcomes.
4. Prevent organics and recyclables from going in the garbage.
5. Collaborate with other regional districts wherever practical.
6. Develop collaborative partnerships with interested parties to achieve regional targets set in plans.
7. Level playing field within regions for both private and public solid waste management facilities.

### 1.2 Pollution Prevention Hierarchy and Targets

The future solid waste system will build on the existing framework of services and programs while seeking to improve the delivery of those services and continue to reduce the quantity of waste sent to

disposal. The proposed programs, infrastructure and policies for the Plan are outlined in Section 4 through 5 of this report and are presented in accordance with waste management hierarchy as shown in Figure 1.



### ZW Hierarchy of Highest & Best Uses

- Reduce, Refuse & Return
- End Subsidies for Wasting
- Product & Packaging Redesign
- Clean Production & Takebacks
- Reuse, Repair & Remanufacture
- Recycle, Compost & Digest
- Regulate (Bans, Biological energy recovery, landfills with pre-processing)
- Not OK: Incineration, Bioreactor Landfills

Figure 1 Waste Management Hierarchy adopted from the Zero Waste International Alliance

Implementation of these programs and policies over the Plan's 10-year timeframe is expected to contribute to continuing to exceed the provincial disposal rate target of 350kg per capita and result in achievement of the following regional targets.

1. The ultimate goal of Zero Waste, as defined by Zero Waste International Alliance and adopted by the RDN:  
*"Zero Waste is a goal that is ethical, economical, efficient and visionary, to guide people in changing their lifestyles and practices to emulate sustainable natural cycles, where all discarded materials are designed to become resources for others to use.  
Zero Waste means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them.  
Implementing Zero Waste will eliminate all discharges to land, water or air that are a threat to planetary, human, animal or plant health."*<sup>1</sup>
2. Introduce programs/strategies to move the RDN towards 90% diversion by 2027 and/or a per capita disposal of 109 kg/year.

## 2. Background

The Province approved the RDN's first Plan in 1988. The main elements of this Plan were a transfer station, a resource recovery facility and a sanitary landfill to manage the residuals from the facility (estimated to be 20% of the waste stream). The resource recovery plant was never built due to the inability of the facility's proponent to secure financing. Consequently, the RDN's new landfill was

<sup>1</sup> Adopted from the Zero Waste International Alliance

receiving 100% of the waste stream and was filling up much faster than anticipated at its inception. As a result, the RDN did a review of their Plan in 1992 to re-focus the Plan on the reduction of waste sent to the landfill. As a result of this review, user pay garbage collection, curbside recycling and a backyard composting program and a disposal ban on cardboard were implemented.

In 1994, a full Plan amendment began. This Plan amendment was done in two parts. The first was the development of a “3Rs plan” that was approved in 1996. This Plan contained programs and policy initiatives to reduce the RDN’s annual solid waste disposal needs by approximately 70%. The two major elements of the Plan were the development of a privately built and operated composting facility for source-separated organics and a privately built and operated construction and demolition waste recycling facility.

The second part was the development of a residual waste management plan to address the portion of the waste stream that would not be eliminated or diverted through composting or recycling. The residual waste planning process assessed a wide array of processing and disposal options and conducted detailed assessments of MSW composting (as a means of further reducing the amount of waste requiring disposal) and waste export (as an alternative to siting a new landfill in the RDN).

In 2004, second full Plan amendment began. This Plan amendment brought together: the 3Rs Plan (now called the “Zero Waste Plan” due to the RDN adopting “zero” as their new waste diversion target in 2002); the outcomes of the residual waste management planning process; and a bylaw to license private solid waste management facilities. The key components of the 2004 Solid Waste Management Plan were:

- **Banning commercial organic waste from disposal as garbage:** This initiative supported the newly opened, privately built and operated composting facility (an objective of the original 3Rs Plan).
- **Implementation of an organics collection program for single-family homes:** This service was fully implemented throughout the RDN, including all municipal areas, by 2011.
- **Implementation of the Waste Stream Management Licensing Regulatory Bylaw:** The bylaw was implemented in 2005.
- **The export of garbage received at Church Road Transfer Station to the Cache Creek Landfill:** The RDN exported garbage delivered to the Church Road Transfer Station through a contract with the Greater Vancouver Regional District (now called Metro Vancouver) from 1998 to 2005 as a means to preserve space at the Regional Landfill.
- **Expansion of the capacity of the Regional Landfill within the existing property boundary through the construction of a geogrid toe berm:** Construction of the first toe berm was completed in 2004. This expansion allowed for the cessation of waste export and for all RDN garbage to be disposed at the Regional Landfill.

## 2.1 Plan Area

The RDN covers an area of approximately 207,000 hectares on the southeast coast of Vancouver Island. The RDN includes four incorporated municipalities and eight unincorporated electoral areas. A map of the RDN is provided as Figure 2.



Figure 2 Electoral Areas in the RDN

Statistics Canada reports the 2016 population for the RDN as 155,698, including First Nations reserves. Of this number, 25% (39,097) lived in electoral areas, 1% (1,035) lived on reserves and the 74% (115,556) lived in municipalities. The four municipalities in the region are the City of Nanaimo, the District of Lantzville, the City of Parksville, and the Town of Qualicum Beach. The seven electoral areas in the region are:

- A: Cassidy, Cedar, Yellowpoint, South Wellington;
- B: Gabriola, Decourcey and Mudge Islands;
- C: Extension, Arrowsmith-Benson, East Wellington, Pleasant Valley;
- E: Nanoose Bay;
- F: Coombs, Hilliers, Errington;
- G: French Creek, Dashwood, Englishman River; and
- H: Shaw Hill, Qualicum Bay, Deep Bay, Bowser.

Four First Nations Indian Reserves are also located within the region:

- Nanaimo Town 1 & Nanaimo River (Snuneymuxw First Nation);
- Nanoose (Nanoose First Nation); and
- Qualicum (Qualicum First Nation).



Table 1 Population By Area

Area	Population 2016
Electoral Area A	7,058
Electoral Area B	4,033
Electoral Area C	2,808
Electoral Area E	6,125
Electoral Area F	7,724
Electoral Area G	7,465
Electoral Area H	3,884
<b>Sub-Total</b>	<b>39,097</b>
City of Nanaimo	90,504
District of Lantzville	3,605
City of Parksville	12,514
Town of Qualicum Beach	8,943
<b>Sub-Total</b>	<b>115,566</b>
Nanaimo Town 1 Indian Reserve	360
Nanaimo River Indian Reserve	371
Nanoose Indian Reserve	230
Qualicum Indian Reserve	74
<b>Sub-Total</b>	<b>1,035</b>
<b>Total Population (RDN)</b>	<b>155,698</b>

### Population Growth

The population of the region increased from 84,819 in 1986 to 146,574 in 2011. As of 2016 Census data the population of the region was 155,698. Forecasts predict the population will increase to 207,646 by 2026 and 231,184 by 2036.<sup>2</sup>

## 2.2 Waste generation and management

The base line figure for waste generation in the RDN is 1,084 kg/capita per year from 1980's disposal estimates. Over the past 36 years, the RDN waste disposal rate has been reduced by approximately 50%

<sup>2</sup> Regional District of Nanaimo, Regional Growth Strategy, November 22, 2011

to 550kg/capita/year in 1990 and, by 68% to 347 kg/capita/year in 2014. The target for the amended Plan is to further drive diversion to 90% and/or a per capita disposal rate of 109 kg/year by 2027. Appendix A has more information regarding projected waste generation in the region based on the Solid Waste Generation in British Columbia: 2010-2025 Forecast report. Table 2 provides some comparable waste disposal rates for reference regarding the RDN disposal target.

**Table 2 Jurisdictional Scan on Per Capita Disposal Rates<sup>3</sup>**

Location	Reporting Year	Per Capita Disposal kg/year	Comment
RDN	2027	109	Based on a 90% diversion target.
RDN	2014	347	Based on 68% diversion achievement.
BC Average	2014	520	Municipal Solid Waste Disposal in B.C. (1990-2014), Environmental Reporting BC.
California Average	2012	712	California's per capita disposal rates may not capture all waste and per capita disposal may be higher.
San Francisco	2012	482	Claim to have the highest waste diversion rate in the US.
Germany	2012	220	Highest reported diversion rate of European countries. Accounts for <u>municipal waste</u> only. The European Environmental Agency notes that municipal waste only accounts for around 10% of the waste stream.
Capannori, Italy	2012	146	Accounts for <u>household</u> waste only.

The jurisdictional scan of North American and Europe carried out by RDN staff has shown that there are two potential paths being taken by communities striving for high levels of diversion:

1. Lower priority on source separation with the emphasis on energy recovery of the waste. The City of Edmonton provides an example of this strategy and they are targeting a 90% diversion rate.
2. Maximizing source separation by moving beyond voluntary waste diversion and introducing regulatory instruments (e.g. mandatory waste separation and fines) or monetary incentives (e.g.

<sup>3</sup> RDN Staff Report: *Jurisdictional Scan Regarding Waste Diversion Program*, Sharon Horsburgh January 5, 2016

“pay as you throw”.) San Francisco and Capannori, Italy provide examples of communities using these strategies.

The RDN favors the second strategy, maximizing source separation. It is recognized that to achieve high levels of diversion it is necessary to move beyond the largely voluntary programs that currently exist in the RDN. For the RDN to introduce further economic or regulatory provisions to promote source separation, additional authorities are required from the province. Strategies involving additional authorities are discussed further in Section 4.7.

### 2.3 Waste Characterization

The most recent waste characterization study completed for the region in 2012 showed 17% of the volume is attributed to residential, 63% of the volume is attributed to the institutional, commercial, construction, renovation and demolition (including multi-family) and 20% of the volume attributed to self-haul customers

## RDN Waste Disposal by Sector 2012

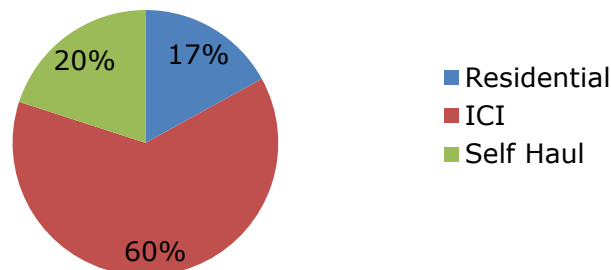


Figure 3 RDN Waste Disposal at Regional Landfill by Sector, 2012

It is estimated that approximately 6% or 3,300 tonnes of waste was moved out of the region in 2016 and can be attributed to the following three circumstances which includes both demolition and municipal solid waste.

1. It is believed a nominal amount of waste is transported in and out of region in areas near the regional boundaries as people look for the most convenient disposal location. For example, there are a few known occasions where Ladysmith residences have brought waste to the Regional Landfill in Cedar because of the close proximity. Similarly, anecdotal comments suggest that RDN residents in the Qualicum area on occasion hauled waste to the Comox Strathcona Regional District for disposal. Again, the amount of waste is considered minor.
2. It is known that there have been large demolition projects in recent years where waste has been hauled out of region for disposal. Two examples are: 1) 2015 City of Nanaimo Ferry Dock Demolition - 476 tonnes disposed of at a private landfill in the Capital Regional District; and, 2) 2015 Wellington School Demolition - approximately 250 tonnes disposed of at a private landfill in Chilliwack. The contractor advised that disposal cost was less than half of the cost of RDN disposal and they were not required to source separate recyclables. It is impossible to predict to what extent similar circumstances will exist in the future. However, the examples do

demonstrate the propensity to seek out the lowest cost option which is often contrary to waste diversion.

3. In 2013, there was a sudden reduction of approximately 25% of the commercial waste that had previously been shipped to the RDN landfill with the waste being shipped to the USA for disposal. The average reduction for 2013 and 2014, excluding the large demolition projects noted above, is estimated at 3,600 tonnes each year<sup>4</sup>. In 2015, there was a reduction in the amount of waste being exported for USA disposal. This was likely a consequence for the lower value of the Canadian dollar as compared to the USA dollar. No doubt future trends for export will fluctuate and will be influenced by the value of the Canadian/US dollar, transportation costs and business decisions.

## 2.4 Roles in Waste Management

In the RDN, the following organizations contribute to municipal solid waste management.

Who	Roles in Solid Waste Management
Federal Government	<ul style="list-style-type: none"> <li>• Regulates waste management facilities under federal jurisdiction.</li> <li>• Regulates the safety, labelling and sale of consumer products.</li> </ul>
Provincial Government	<ul style="list-style-type: none"> <li>• Various ministries have regulatory authority related to waste management.</li> <li>• Regulates product stewardship/extended producer responsibility in BC.</li> </ul>
RDN (Board and Staff)	<ul style="list-style-type: none"> <li>• Develops plan to provide big picture oversight of waste management in the region.</li> <li>• Through plans and plan implementation (including bylaws), works to meet waste disposal goals and targets and ensures that community has access to waste management services that are environmentally sound and cost effective.</li> <li>• Ensures that legislative and policy requirements are followed, including monitoring and reporting.</li> <li>• Chairs committees/ coordinates with municipalities in service delivery.</li> <li>• Operates the Regional Landfill and Church Road Transfer Station (CRTS).</li> <li>• Provides residential curbside collection of food waste, garbage and recycling in all Electoral Areas, District of Lantzville, City of Parksville and food waste and recycling in the Town of Qualicum Beach.</li> <li>• Supports Extended Producer Responsibility (EPR) programs in jurisdiction.</li> <li>• Incorporates the Zero Waste Hierarchy within operations and those of member municipalities.</li> </ul>

<sup>4</sup> RDN Waste Export Analysis, Prepared by Carey McIver & Associates Ltd., February 10, 2015

	<ul style="list-style-type: none"> <li>• Serves as a model for the ICI sector incorporating the latest strategies and approaches for achieving Zero Waste (e.g. purchasing policy, print material requirements).</li> <li>• Develops policies which promotes a level playing field within the waste management sector.</li> </ul>
Municipalities (council and staff)	<ul style="list-style-type: none"> <li>• May provide/ coordinate waste management service, or own/operate facilities.</li> <li>• May make bylaws dealing with waste collection.</li> <li>• Municipal enforcement officers part of enforcement team.</li> </ul>
First Nations	<ul style="list-style-type: none"> <li>• May provide waste management services or may participate in regional waste management system.</li> </ul>
Product Stewards	<ul style="list-style-type: none"> <li>• Collect/ process stewarded products.</li> <li>• Coordinate local government delivery of service where applicable.</li> <li>• Provide and/or fund education and marketing.</li> <li>• Provide deposit refunds to consumers (where applicable).</li> <li>• Monitor/ report on recovery rates.</li> </ul>
Private sector involved in waste management (e.g. haulers, facility operators, depot operators)	<ul style="list-style-type: none"> <li>• May provide recycling and waste management services and own/operate facilities.</li> <li>• May provide collection sites for residential, multi-family, and commercial recycling.</li> <li>• May provide collection sites for product stewardship items.</li> <li>• May provide zero waste recycling and marketing for hard to recycle products.</li> <li>• Generally, services multi-family residential buildings, commercial and institutional sources, and construction, demolition and land clearing sectors.</li> <li>• May provide zero waste education services.</li> <li>• May be regulated by local government through Waste Stream Management Licensing Bylaw.</li> </ul>
Neighbouring jurisdictions	<ul style="list-style-type: none"> <li>• May send waste to Regional Landfill or accept waste from the RDN.</li> <li>• Synergies, consistencies in waste management with neighbouring jurisdictions.</li> </ul>
Residents and businesses	<ul style="list-style-type: none"> <li>• Responsible for carrying out proper waste reduction, recycling and disposal activities.</li> </ul>

## 2.4 Waste Flows

There are many participants within the system providing a wide array of services. Figure 4 is a schematic diagram showing the breadth of activities and participants engaged with the current solid waste management system. There are a wide range of waste management activities underway that reflect both a relatively mature waste management system and significant economic activity based on secondary resources.

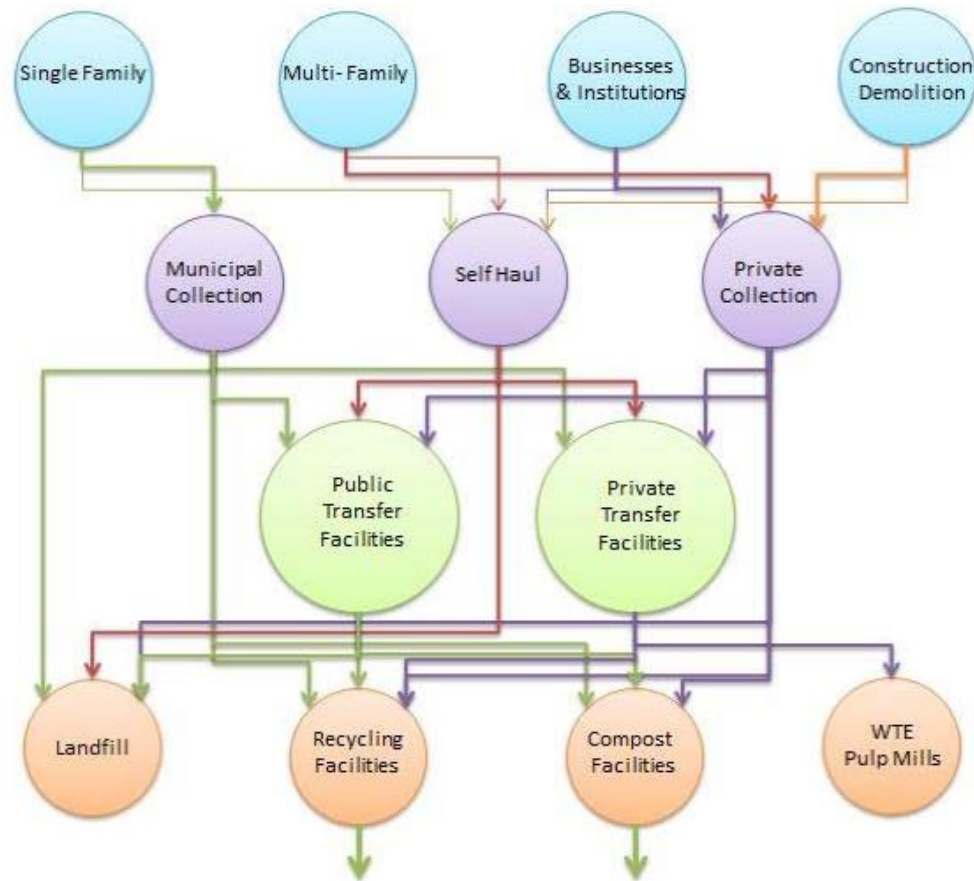


Figure 4 Components of the Waste Management System in the RDN

### 3. Existing Solid Waste Management System

This section provides an overview of the solid waste management system. A detailed description of the Existing Solid Waste Management System can be found in Stage 1: Existing System Report in Appendix B.

The RDN has a broad range of solid waste management programs and infrastructure. This section describes the major infrastructure, services, programs and policies.

The 2004 Plan introduced the Zero Waste Plan and expanded on policies and programs to increase diversion. This strategy has effectively increased recyclable commodities and transferred the management of those items to the private sector. Examples of this cross the waste stream spectrum and include wood waste, commercial/demolition waste, yard waste, food waste and EPR products.

This movement of waste to the private sector has resulted in reduced cost of government and growth in the waste management business sector. With the growth in business, the whole community benefits from this sector's increased employment opportunities and their contribution of taxes. These policies have created a robust waste management industry in the region and has resulted in world class waste diversion levels.

This model of transferring the waste management activities to the private sector ensures “user pay” where the full cost of waste management is born by the generator. Conversely, many other communities rely much more on taxation in providing waste management services and the true cost of waste management is hidden.

In May 2013, the report “Zero Waste Business Case, Draft for Expert Review”, by Innes Hood Consulting Inc., was prepared for the Ministry of the Environment.<sup>5</sup> The report concluded that there is a positive business case for implementing a Zero Waste Strategy for BC. Depending on how aggressively it is implemented (i.e., 62% vs 81% diversion), by 2025 a Zero Waste Strategy will produce between \$56 million and \$126 million of annual net economic benefit; will create between \$27 million and \$89 million in new annual GDP and generate between \$755,000 and \$2.5 million in new annual income tax revenue for BC. The report also states that the business case for Zero Waste is strengthened if supporting policies are developed that encourage the creation and retention of remanufacturing facilities within BC, and prevent leakage to other jurisdictions. The RDN’s current policies which move waste to the private sector are in harmony with the findings of this study. The preferred options for the amended Plan set out in Section 4 further strengthen this model. As a result, the RDN is expected to continue to see increased diversion coupled with further economic growth in the waste management sector.

### 3.1 Education and Outreach

Both the RDN and the City of Nanaimo undertake promotion and education related to solid waste management.

The RDN:

- Has information related to the solid waste management planning, bylaws and Zero Waste programs on the Solid Waste and Recycling pages of the RDN’s website (<http://www.rdn.bc.ca/>)
- Distributes a “Zero Waste” Newsletter to all homes two to three times per year.
- Has a searchable on-line recycling directory for users to find out where they can bring their reusable, recyclable and compostable items.
- Has a Zero Waste school education program which provides free classroom workshops to schools throughout the RDN.

The City of Nanaimo:

- Distributes their “Waste Lines” newsletter to all City addresses in the spring and fall of each year.
- Has a dedicated web page on the City’s website ([www.nanaimo.ca](http://www.nanaimo.ca)) that includes information related to the City’s residential collection services, and a list of reuse and recycling organizations operating in the City.

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<sup>5</sup> [http://www2.gov.bc.ca/assets/gov/environment/waste-management/zero-waste/zero-waste/zero\\_waste\\_business\\_case\\_draft.pdf](http://www2.gov.bc.ca/assets/gov/environment/waste-management/zero-waste/zero-waste/zero_waste_business_case_draft.pdf)

In the RDN, the current collection infrastructure for existing EPR programs consists of return-to-retail and take-back depots. The RDN and City of Nanaimo's "What Goes Where" feature can be used by residents to find the most convenient take back location for EPR products. The Recycling Council of BC (which the RDN is a member of) operates a similar service through their toll-free Recycling Hotline (1-800-667-4321) and their on-line searchable database and app "Recyclopedia". BC Stewards also recently rebranded their website which provides an online look up feature at [www.bcrecycles.ca](http://www.bcrecycles.ca).

### 3.2 Reduction and Reuse Activities

Both the RDN and the City of Nanaimo encourage residents to "reduce and reuse".

Both organizations promote backyard composting through providing information on their websites on how to backyard compost and grasscycle. The City of Nanaimo holds a reuse-focused event each spring called "Reuse Rendezvous". This event promotes reuse through a weekend long curbside swap meet for residents to put out items that they no longer want and that may be useful to others.

In addition to the RDN's and City's reduction and reuse activities, there are several other organizations involved in reuse in the RDN, including several private and non-profit retailers and many on-line classified services such as Craigslist and UsedNanaimo.com that are actively involved in the sale and purchase of used goods. The Repair Café Nanaimo holds repair workshops where residents can bring in their broken items and receive help from local repair experts.

### 3.3 Recycling

Curbside collection of recyclables is provided to single family homes to residents of all electoral areas, City of Nanaimo, City of Parksville, District of Lantzville and Town of Qualicum Beach.

Both regional facilities (Regional Landfill and CRTS) accept limited recyclable material including scrap metal, paper, cardboard, household plastic containers, metal food and beverage containers, vehicle batteries, oil filters, wood waste, and gypsum.

There are 3 material recycling facilities (referred to as MRFs) that are owned and operated by private waste management companies in the RDN: Progressive Waste, Emterra and Cascades. All 3 MRFs are located in Nanaimo.

Figure 5 shows the locations of both the private and not-for-profit recycling depots throughout the region which accept EPR material and other recyclables from private businesses and residents.



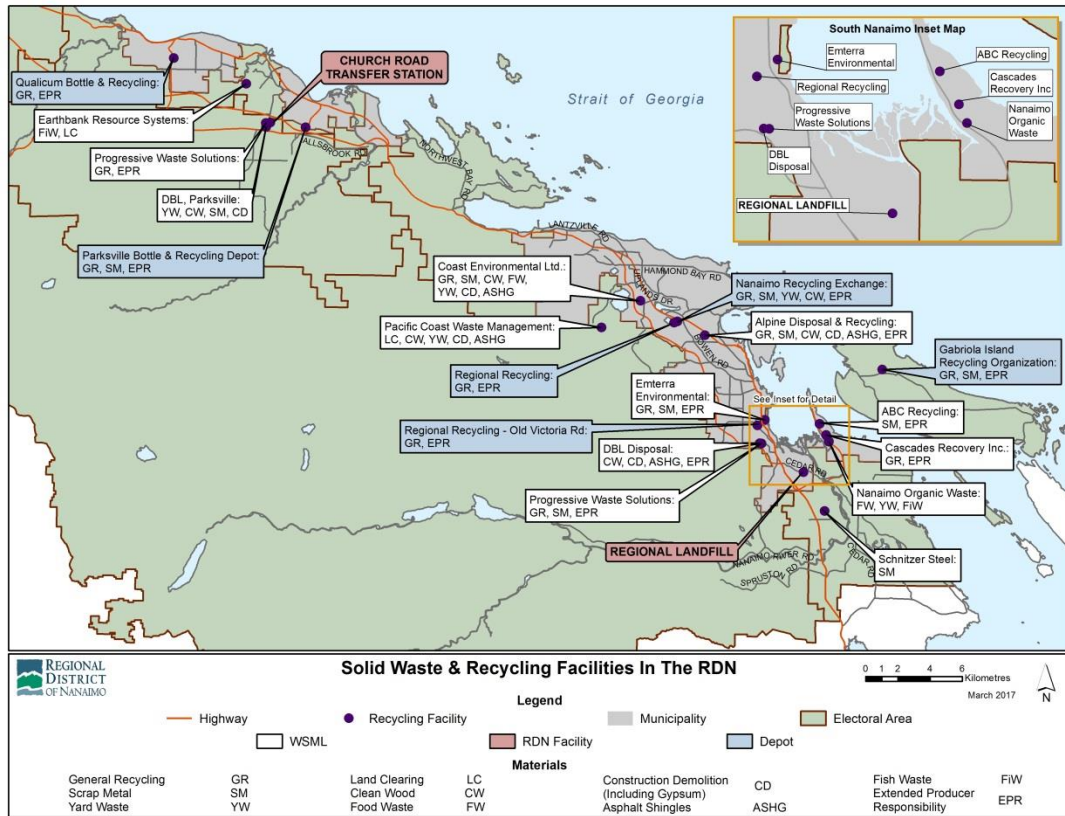


Figure 5 Solid Waste & Recycling Facilities in the RDN

### 3.4 Organics Management

In the RDN there is reuse of leftover and excess food through food banks and other food redistribution services. Additionally some food scraps are picked up by area farmers for use as animal feed. The majority of organics however, are sent to centralized composting facilities. There are two licensed composting facilities in the RDN: Nanaimo Organic Waste (formerly International Composting Corporation) and Earthbank Resource Systems. The following table lists the types of materials each of these facilities manages:

Nanaimo Organic Waste	<ul style="list-style-type: none"> <li>Residential “green bin” kitchen scraps and soiled paper</li> <li>Commercial food waste</li> <li>Yard waste</li> <li>Fish waste</li> <li>Clean wood</li> </ul>
Earthbank	<ul style="list-style-type: none"> <li>Farmed and wild fish offal</li> <li>Farmed salmon mortalities</li> <li>Ground up bark from the forestry industry</li> <li>Ground up land clearing debris (exclusively local forest materials)</li> </ul>

Nanaimo Organic Waste is the only facility processing food waste in the RDN. This facility opened in Nanaimo in 2004 with a drum-style in-vessel composting system. The compost product is sold as a bulk product for blending into soil mixes.

In 2005, the RDN introduced a commercial organics ban. Based on waste characterization studies carried out in before and after the ban, 2004 and 2012 respectively, the per capita tonnage of compostable organics in the waste stream only dropped from 95.5kg/capita to 91.2 kg/capita. These findings indicate that the current organics ban has only had modest success and there is significant opportunity for further diversion with organic waste.

In 2011, more than 52,000 single family homes in Nanaimo, Lantzville, Parksville, Qualicum Beach and the RDN Electoral Areas received weekly curbside food waste collection service.

### 3.5 Yard Waste Collection

Yard waste such as leaves and grass clippings are not collected as part of residential waste collection services in the RDN. Residents and businesses are encouraged to manage their yard waste in one of the following manners:

- Reduce the amount of yard waste through practices such as grasscycling and xeriscaping.
- Backyard or on-site composting.
- Self-hauling to one of several yard waste depots in the RDN. Currently, depots are located at:
  - Church Road Transfer Station
  - DBL Disposal
  - Nanaimo Recycling Exchange
  - Pacific Coast Waste Management
  - Regional Landfill
- Hiring a yard waste removal service.
- Include yard waste removal in landscaping contracts.

Use of these yard waste management practices and services is encouraged by a variety of policies including:

- A ban on yard waste disposed as garbage at the landfill site and transfer station.
- A ban on the inclusion of yard waste in the City of Nanaimo's<sup>6</sup> and RDN's residential garbage collection service.
- Not providing yard waste collection as part of the single-family residential curbside service.

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<sup>6</sup> The City of Nanaimo is currently changing over their residential curbside collection program to an automated system and will include yard waste as part of their curbside collection service.

- Promoting the yard waste management alternatives.

This approach to yard waste management has been successful at minimizing the amount of yard waste being landfilled. The 2012 waste composition study indicated that yard waste is roughly 2.5% of the residential waste sent to landfill and 5% of overall waste landfilled.

### **3.6 Waste Collection**

Residential curbside garbage, recycling and food waste collection service is provided to single family homes in all Electoral Areas of the RDN, City of Parksville and District of Lantzville by a private collection contractor. Town of Qualicum Beach staff provide garbage collection to some ICI buildings and all single family homes, while recycling and food waste collection is provided by the RDN through a contracted waste hauler for single family homes. City of Nanaimo staff provide garbage and food waste collection to single family homes while recycling is provided by a contracted waste hauler.

Throughout the RDN, for those in the multi-family and ICI sectors that desire a waste collection, there are a number of private waste haulers that provide this service.

### **3.7 Transfer Stations**

The CRTS is located on Church Road, in Electoral Area F, about four kilometres southwest of downtown Parksville. The facility opened in 1991, and is approximately two hectares in size. CRTS receives garbage, yard waste, wood waste, construction/demolition waste, and limited recyclables from communities in northern portion of the RDN: Parksville, Qualicum Beach, and Electoral Areas E, F, G, and H. In recent years, with the growth of Nanaimo, this facility has also started to receive waste generated in parts of Nanaimo. In 2012, approximately 30% of the region's garbage was delivered to CRTS.

Garbage brought to the CRTS is transferred to the Regional Landfill in Nanaimo. The limited recyclables such as cardboard and metal are transferred to various recycling processors, and food waste, kitchen waste, and yard waste are transferred to the Nanaimo Organic Waste Facility in South Nanaimo.

In 2010, the site was re-designed to accommodate population growth to 2030, include a food waste transfer area and to segregate large commercial-sized waste vehicles from small passenger-sized vehicles and trucks. The new transfer station was built in accordance with the RDN Green Building Policy, and has received LEED Gold® accreditation, the first in Canada for a transfer station.

### **3.8 Landfills and Other Disposal Facilities**

The Regional Landfill is located approximately 5 kilometres south of downtown Nanaimo and is owned and operated by the RDN. The landfill operates on a 21-hectare section of a 38-hectare property, approximately 2.7 hectares of which have been permanently closed. In accordance with Ministry of Environment-approved Design and Operations Plan, a North Berm Lateral Expansion currently underway and will add approximately 10 years of capacity to the site. One final expansion in the south east area of the site is planned when the North Berm area is filled. The site has been receiving municipal solid waste from the RDN since 1971 and given the current tonnages of wastes received, the operation life of the landfill is expected to continue until 2038.

There are two closed landfills in the RDN: the Parksville Landfill and the Qualicum Beach Landfill. These sites are the responsibility of their respective municipalities.

Waste disposal facilities on First Nations' land are regulated by the federal Indian Reserve Waste Disposal Regulations. Currently, there are no federally authorized waste management facilities on First Nations land within the RDN. The RDN's Waste Stream Management Licensing Bylaw does not apply to activities on First Nations' land.

### **3.9 Policies and Regulations**

Five main policies influence the RDN solid waste management system: the user-pay system; variable tipping fees; disposal and collection bans; private sector waste management and open burning restrictions. The first four policies fall within the scope of the Plan while burning restrictions are applied through a combination of provincial regulation (e.g. Open Burning Smoke Control Regulation) and augmented by RDN and municipal bylaws.

Provincial product stewardship programs that significantly influence the management of specific waste materials generated in the RDN. Each of these local and provincial policies is discussed below:

#### ***User Pay***

Both the RDN and the City of Nanaimo have user pay curbside garbage collection programs. All households have a one can limit (max. 50lbs) every other week. Separate tags that presently cost \$3.00 each are required to set out additional cans. The vast majority of homes set out one can of waste or less per week. The RDN curbside program is fully funded by user fees and is not augmented by taxation.

The RDN solid waste program, other than curbside waste collection discussed in the previous paragraph, is primarily funded by landfill tipping fees augmented by a small tax requisition. In 2016 the split was approximately 93% tipping fee revenue and 7% taxation. These revenues are applied to solid waste program costs including operation of the landfill and transfer station, organics waste management, illegal dumping mitigation, education, policy and regulatory work. Other revenues such as grants, sale of asbestos bags and licensing fees associated with the Waste Stream Licensing program are insignificant relative to the overall budget.

#### ***Variable Tipping Fees***

The RDN tipping fees vary depending upon the materials. The 2016 base tipping fee for municipal solid waste is \$125 per tonne. Fees for other materials are varied on the basis of cost to handle the material and/or to motivate diversion. For example, the 2016 tip fee for asbestos waste is \$500/tonne and is based on the landfill airspace consumption and the direct handling costs for management of the material. In the case of construction and demolition material containing recyclables, the 2016 tip fee is \$360/tonne and potential of imposition of a fine. The intention with this latter example is to provide an incentive to source separate and divert waste.

#### ***Material Disposal Bans***

The first material ban was introduced by the RDN in 1991 to encourage the recycling of drywall. Since that time, a number of other materials have been banned. A full list of banned material and the implementation date of the ban is provided in Section 3.2.10. Enforcement of the bans to date at the Regional Landfill and at the CRTS has been applied to the most egregious cases of contamination. Minor amounts of banned materials such as paper, food waste or recyclable plastic is not uncommon.

### ***Private Sector Waste Management***

As the RDN waste management system has matured, the trend has been away from government provided service to an increase in services provided by the private sector. The three policies described above, aided by burning bans and provincial initiatives discussed in the following section, have created a positive business climate for this trend.

Many communities have developed government run eco-depots that accept a wide range of recyclable items. For those residents located in close proximity, these facilities typically provide a high level of convenience as a “one-stop” drop off. Commonly, the cost of operating these facilities is augmented by taxation. As a result, there is typically a loss of private sector enterprise given the challenge to compete with a government subsidized facility.

In the case of the RDN, government services have been reduced where the private sector is providing the service. RDN facilities typically do not accept products covered under the provincial stewardship programs. Where materials are accepted, there is a drop off fee. In this way, consumers/generators are encouraged to use the private facilities. The net result has been robust private sector waste management in the region with diversion reaching 68% and reduced cost of government to directly provide these services. To move towards 90% diversion, recycling of low value and hard to recycle products may require financial subsidies or economic incentives to the private sector.

### ***Burning Bans***

Most developed areas of the RDN have burning restrictions for land clearing waste, construction/demolition debris and yard waste. In most developed areas, burning of these wastes is prohibited year-round, but in some areas yard waste can be burned only during a limited time frame annually (usually a small window of time is given in the spring and fall). In undeveloped areas, burning of land clearing waste and yard waste is generally allowed, provided any local fire restrictions and the BC Open Burning Smoke Control regulation are being met. With restrictions in place, generators of these materials must find alternative disposal options and are encouraged to select options such as composting, re-use (of construction/demolition materials) or recycling.

### ***Provincial Initiatives***

BC has implemented several product stewardship programs over the past decade. Product stewardship is defined as a management system based on industry and consumers taking life-cycle responsibility for the products they produce and use. As a result, the materials covered under a stewardship program are less likely to enter the RDN’s waste management system. There are province-wide stewardship programs currently in place for:

- Lead-acid batteries
- Used motor oil
- Paint
- Pesticides
- Solvents
- Tires
- Medications
- Fuel
- Cell Phones
- Outdoor Power Equipment
- Lighting Products
- Household Batteries
- Gasoline
- Antifreeze
- Thermostats
- Small Appliances
- Electronic Toys
- Beverage Containers
- Printed Paper and Packaging
- Electronics
- Large Appliances
- Smoke alarms
- Carbon monoxide alarms
- Beer Containers
- Power Tools

The RDN has actively encouraged the Province and product manufacturers to undertake stewardship initiatives and continues to promote the expansion of stewardship initiatives.

### 3.10 Regulatory Authorities

The requirement and authority for a Plan is set out in the Provincial statute, *Environmental Management Act*. On Ministerial approval of a Plan, regional districts are given additional tools that they do not otherwise have to assist with the management of solid waste within their boundaries. The *Environmental Management Act* also provides a number of optional authorities for regional districts to manage solid waste that may be granted through plan approval.

#### 3.10.1 Waste Stream Management Licensing

The RDN currently has authority under the existing 2004 Plan for waste stream licensing. Private facilities that manage municipal solid waste in the region are required to hold a license issued by the RDN.

RDN Bylaw No. 1386 requires most solid waste management facilities operating in the RDN to maintain a Waste Stream Management License (WSML). The authority to license and regulate solid waste facilities is given to regional districts through BC's Environmental Management Act and the RDN's licensing bylaw was enacted under the 2004 Plan.

The RDN's licensing bylaw (Bylaw No. 1386) was established to fulfill the following objectives:

1. Create a high standard of operation for waste management facilities located in the RDN;
2. Encourage and protect legitimate waste management operations within the RDN;
3. Establish a reporting system for the flow of waste materials within the RDN to assist in tracking our waste reduction rate;
4. Protect and enhance the waste reduction rate achieved in the RDN; and
5. To provide a level playing field for industry.

All facilities that handle municipal solid waste (MSW) in whole or part are included in the licensing system: with the exception of those facilities noted under "exclusions" below. This means that transfer stations, recycling depots, composting facilities, material recovery facilities and brokers are subject to the licensing system. Facilities that are excluded from obtaining a license are:

- Disposal facilities such as landfill and incinerators (these facilities will remain under the regulatory jurisdiction of the Province).
- Soil manufacturing facilities (unless they are composting MSW-based materials on-site).
- Private on-site depots (such as the centralized recycling areas used by office buildings and mall tenants).
- Stewardship program depots.

- Reuse businesses.
- Concrete and asphalt recycling operations and auto wreckers since the material handled by these operations has not traditionally been handled as MSW.
- Municipally owned facilities including the CRTS.

The updated plan should reconsider the wording of these exemptions to provide further clarity. For instance, the intent of not regulating disposal facilities under the regulatory jurisdiction of the Province is intended to avoid duplication of regulation. Consideration should be given to clarifying this exemption to apply to facilities operating under a Ministry of Environment Permit or Operational Certificate.

Currently there are 14 waste stream management licenses in place in the RDN and 1 application under review. A list of currently licensed facilities and facilities currently undergoing application review is provided in Table 3.

**Table 3 RDN Waste Stream Management License Holders**

<b>Waste Stream Management License Holders (as of July 2017)</b>
1. Schnitzer Steel Pacific
2. Parksville Bottle & Recycling Depot
3. International Composting Corporation
4. BFI Nanaimo Recycling Facility
5. Emterra Environmental
6. Earthbank Resource Systems
7. Alpine Disposal & Recycling
8. Pacific Coast Waste Management
9. DBL Disposal Service Ltd. – Church Road
10. DBL Disposal Service Ltd.
11. BFI Canada, Springhill
12. Cascades Recovery Inc.
13. Coast Environmental Ltd.
14. ABC Recycling
<b>Waste Stream Management Applications Under Review (as of July 2017)</b>
1. Nanaimo Recycling Exchange

### 3.11 Disposal Bans

The practice of banning the disposal of specific wastes from the landfill, when viable recycling alternatives are in place, has been used by the RDN since 1991. Current landfill bans on

recyclable/compostable materials include drywall (implemented in 1991), cardboard (1992), paper, metal and tires (1998), commercial food waste (2005), yard and garden waste (2007) wood waste (2007) and EPR materials designated under BC's recycling regulation (2007), household plastic containers (2009) and metal food and beverage containers (2009). Disposal bans are considered to be a critical policy mechanism to drive diversion activities, particularly in the ICI and construction/demolition sectors.

### **3.12 Illegal Dumping**

Illegal dumping on private and public lands has been a long-standing concern in the RDN. In 2016, approximately 35 tonnes of illegally dumped material was removed through clean-up initiatives and disposed of appropriately.

Although it represents less than 1% of the total solid waste generated in the region, illegally dumped material can have serious effects on the environment, wildlife habitats and the ability of others to use and enjoy outdoor recreational areas.

The RDN has implemented an Anti-Illegal Dumping program that includes:

- Prevention of illegal dumping through education;
- Funding the clean-up of illegal dump sites; and
- Illegal dumping surveillance and enforcement activities.

The RDN spends approximately \$60,000 annually combating illegal dumping. Pursuant to RDN Bylaw No. 1386, those who generate (own), deliver or abandon waste illegally can be subject to a fine of up to \$200,000.

### **3.13 Construction and Demolition Waste**

Construction and demolition and renovation projects (CD) generate a wide range of materials most of which are reusable or recyclable. These include concrete, asphalt, wood, gypsum wallboard, metal, cardboard, asphalt roofing and plastic.

The RDN promotes diversion of these materials through disposal bans on cardboard, gypsum (drywall), metal and wood, and high tipping fees on loads of CD waste arriving at the Regional Landfill (loads of CD waste cannot be delivered to the CRTS). However, there are examples of where the high tipping fees have failed to result in diversion with the material hauled out of region for disposal. Examples of this are the 2015 City of Nanaimo Ferry Dock Demolition where 476 tonnes of wood waste was disposed of at a private landfill in the Capital Regional District and the 2015 Wellington School Demolition where approximately 250 tonnes of demolition waste was disposed of at a private landfill in Chilliwack. In the latter example, the contractor advised that disposal costs was less than half of the cost of RDN disposal at the Regional Landfill and they were not required to source separate recyclables. The introduction of further economic or regulatory provisions (see Section 4.7) has the potential to minimize this type of occurrences in the future.



There are several facilities in the RDN that accept source-separated discarded CD materials for recycling, as listed in Table 4.

**Table 4 Construction/Demolition Waste Management Operations in the RDN**

<b>Material</b>	<b>Facility Name</b>	
Asphalt	<ul style="list-style-type: none"> <li>• Haylock Bros. Paving</li> <li>• Hub City Paving</li> <li>• DBL Disposal</li> </ul>	
Asphalt Shingles	<ul style="list-style-type: none"> <li>• Pacific Coast Waste Management</li> <li>• Alpine Disposal and Recycling</li> <li>• DBL Disposal</li> </ul>	
Concrete	<ul style="list-style-type: none"> <li>• DBL Disposal</li> <li>• DBL Recycling</li> <li>• Hub City Paving</li> <li>• Haylock Bros. Paving</li> </ul>	<ul style="list-style-type: none"> <li>• Alpine Disposal and Recycling</li> <li>• Pacific Coast Waste Management</li> <li>• Parksville Heavy Equipment</li> </ul>
Metal	<ul style="list-style-type: none"> <li>• Alpine Disposal &amp; Recycling</li> <li>• Annex Auto</li> <li>• Carl's Metal Salvage</li> <li>• DBL Disposal</li> <li>• DBL Recycling</li> <li>• Parksville Bottle and Recycling depot</li> </ul>	<ul style="list-style-type: none"> <li>• Nanaimo Recycling Exchange</li> <li>• Regional Recycling – Nanaimo</li> <li>• Regional Recycling - South</li> <li>• Schnitzer Steel</li> </ul>
Wood (lumber)	<ul style="list-style-type: none"> <li>• Alpine Disposal &amp; Recycling</li> <li>• DBL Disposal</li> <li>• DBL Recycling</li> <li>• Gabriola Island Recycling Organization</li> </ul>	<ul style="list-style-type: none"> <li>• Nanaimo Recycling Exchange</li> <li>• Pacific Coast Waste Management</li> </ul>

It is believed that a significant portion of CD waste is recycled or used as a fuel substitute, including:

- Wood waste is chipped and used as hog fuel at pulp mills on Vancouver Island and Washington State;
- Drywall (gypsum) is recycled;
- Metal is recycled;
- Concrete and asphalt are recycled; and

- Asphalt shingles are recycled on a limited basis.

There is also significant reuse of building materials and fixtures through salvage operations and retail stores such as Demxx and Habitat for Humanity's ReStore.

### 3.14 Multi-Family Waste

There are approximately 13,430 multi-family residential units in the RDN, with approximately 12,000 of these units located in the City of Nanaimo.<sup>7</sup> Collection services to multi-family buildings are privately managed throughout the RDN including the City of Nanaimo. Each building is responsible for hiring their own collection services for garbage and recycling.

Since 2008, the RDN has had a Multi-Family Diversion Strategy aimed at increasing the level of recycling activities available to multi-family residents living in townhouses, mobile homes, apartments and condominiums. In 2008, RDN staff estimated that 75% of multi-family buildings had recycling services on-site, but that those services were primarily for cardboard and paper collection. In 2012, the service levels were found to have significantly improved since 2008, with 94% of multi-family buildings reporting that they had recycling services for cardboard, paper and plastic and containers. The primary mechanism by which the RDN encourages recycling in multi-family buildings is through landfill bans that prohibit the landfilling of residential recyclables such as household plastic containers, recyclable paper, cardboard and metal.

Because garbage and recyclables generated at multi-family buildings are generally collected by trucks servicing businesses and institutions, no data is available on the specific quantities disposed or recycled by the multi-family building sector. Research done in other jurisdictions indicates that recycling rates in multi-family buildings are typically much lower than those associated with single-family recycling programs. For example, Metro Vancouver reports that only 16% of waste from multi-family homes is recycled and the City of Toronto reports an 18% recycling rate.<sup>8</sup> Comparatively, single-family homes in the RDN recycle 30% of their discards through the curbside recycling program (not including kitchen scraps collection).

During the RDN's 2012 waste composition study, a load of garbage from multi-family buildings was sampled to provide a rough estimate of the composition of the waste being discarded by multi-family buildings. The composition data suggests that the majority of waste disposed as garbage in multi-family buildings is recyclable (26%) or compostable (44%).

Challenges to achieving a high degree of source separation in the multi-family sector include inconvenience, cost, available space for separation and often a lack of a site champion to promote diversion.

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<sup>7</sup> Multi-Family Housing Diversion Strategy Progress Report; RDN staff memorandum by S. Horsburgh to C. McIver; February 2, 2012.

<sup>8</sup> <http://www.metrovancouver.org/region/dialogues/Reports%20and%20Issue%20Summary%20Notes/Multi-FamilyWaste-NS-Summary20110419.pdf> and <http://www.toronto.ca/garbage/pdf/2010-graph.pdf>

RDN multi-family residences are serviced by private haulers. The service is typically provided in conjunction with, and using the same equipment as used to serve the industrial, commercial and institutional sector (ICI).

### **3.15 Industrial, Commercial and Institutional (ICI) Waste**

The RDN encourages recycling by the ICI sector through variable tipping fees and landfill bans which prohibit the landfilling of recyclables, food waste and yard waste. An assessment of the garbage disposed by the ICI sector was done as part of the RDN's 2012 waste composition study. The data estimates that approximately 42% of the garbage disposed is compostable, including food scraps (28%), yard waste (8%) and compostable paper products (6%). An estimated 16% is considered recyclable and consists primarily of paper and cardboard (12%) with metal, pallet wrap and drywall making up the remainder of the recyclable portion of the ICI garbage.

To increase diversion from the ICI and multi-family sectors there are essentially two distinct paths available to the RDN. The first is to continue with, and increase education and awareness and/or increased enforcement of current disposal bans at the landfill and transfer station. Increased enforcement and education of existing disposal bans and a relaunch of Commercial Organics Diversion Strategy and Multi-Family Diversion Strategy are predicted to achieve up to 3.1% diversion.

The second path is to target maximizing source separation and introduce further economic or regulatory provisions to promote the desired behavior. To do this, additional authorities are required from the province and may be gained through Ministerial approval of the Plan. The diversion potential of invoking such authorities is predicted to be up to 11%. The RDN proposes to include such strategies in the Plan which are discussed in Section 4.7.

If the RDN continues to work within the current regulatory authorities under the existing Plan to improve ICI organics and recycling diversion which may include increased education and awareness and/or increased enforcement of current landfill bans at the landfill and transfer station would require 1 new FTE or equivalent at \$80,000/year including benefits to oversee the new ICI diversion strategy plus \$20,000/year in administrative costs to run the program and \$100,000/year for increased enforcement.

### **3.16 Household Hazardous Waste**

Household hazardous waste (HHW) is managed, to a large extent, through BC product stewardship programs which have set up collection programs for the majority of household hazardous waste products, such as paint, pesticides, solvents and used motor oil.

The RDN will continue to promote the use of existing Provincial and private stewardship programs for the disposal of household hazardous wastes. Additionally, the RDN will encourage new stewardship programs for other hazardous components of the municipal solid waste stream.

### **3.17 Advocacy**

The RDN continues to advocate for greater waste diversion in the region by engaging with federal, provincial and local government agencies as well as BC stewardship groups such as Multi-Material British Columbia. The costs and responsibilities of waste management have historically been borne by local governments and taxpayers. The responsibility for the costs and risk to manage end-of-life

products should progressively transfer to the manufacturers of goods and the consumers that use them to provide the appropriate market mechanism to encourage more sustainable manufacturing and consumer choices.

Costs associated with the RDN's current activities regarding advocacy are difficult to determine given the broad range of activities carried out by political and staff representatives. These range from support for organizations such as the Recycling Council BC, active participation in organizations such as the Coast Waste Management Association, to engaging with the Province on policy and regulation development. The continued role of advocacy will remain variable depending on level of participation and costs related to the engagement opportunities (e.g. association dues, travel expenses).

Advocacy role may include:

- Petition Provincial/Federal Government to act on matters outside local jurisdiction in an effort to minimize waste
  - Petition senior governments on an on-going basis, and in a variety of ways, including: writing letters, arranging meetings at a senior staff and political level and alerting the media.
  - Consider partnerships with other organizations for joint advocacy initiatives.
- Encourage, demonstrate and advocate for consumers and producers to move towards a closed loop (cradle to cradle) system.
  - Educate the public on the Zero Waste Hierarchy.
  - Support and promote local re-use and repair programs
  - Demonstrate how to build a closed loop system.
  - Advocate for producers to ensure their products and their products packaging end of life is consistent with the Zero Waste Hierarchy.
- Petition Provincial/Federal Government for the expansion/addition of EPR programs
  - Petition senior governments and other related influential organizations, including the Union of BC Municipalities, Federation of Canadian Municipalities and the Local Government Management Association, on an on-going basis, and in a variety of ways, including: writing letters, arranging meetings at a senior staff and political level and alerting the media.
  - Insist that new EPR programs must meet or exceed current recycling collection programs and offer consistency of services.
  - Collaborate with the BC Product Stewardship Council, EPR Stewards, the Canadian Council of Ministers of the Environment and the Recycling Council of BC.
  - Partner with neighbouring regional districts and other organizations to ensure a broader, more unified message is expressed when shared concerns are brought forward.

### 3.18 RDN Purchasing Policy

Using existing municipal models, develop an internal Purchasing Policy to ensure that the environmental impact of RDN purchasing and operations of the RDN is minimized. Environmental purchasing policies developed by other municipalities, such as the City of Richmond, will be used as a template.

The development and implementation of an RDN Purchasing Policy will require staff time to write and present the new policy to the Regional Board. The 2004 Plan budgeted \$4,000 for this task however; it was not completed during the term of the plan.

An RDN Purchasing Policy will have a minimal waste diversion impact however; it demonstrates leadership and is consistent with the RDN Board's strategic goals.

## 4. Zero Waste Plan

In 2002, the RDN committed to "Zero Waste" as its long-term waste reduction and diversion target. Zero Waste focuses on reducing the region's environmental footprint by minimizing the amount of waste that must be landfilled through reduction, reuse, recycling, redesign, composting, and other actions. The RDN was the first jurisdiction on Vancouver Island and one of several forward looking local governments in Canada and around the world to move beyond recycling and adopt a Zero Waste approach to eliminating waste.

In addition, the RDN Regional Growth Strategy (adopted November 2011) states that the RDN will:

- Pursue an approach to solid waste management that focuses on waste reduction, with the ultimate goal of eliminating the need for waste disposal (i.e. a "Zero Waste" approach).
- Ensure that all new high density developments are designed to support full recycling that includes food waste collection and materials prohibited from entering the RDN landfill.

The RDN and its member municipalities, residents and businesses have led the way in innovative approaches to reducing the amount of garbage that must be landfilled. In 1991, the RDN introduced Canada's first user pay residential garbage collection system. Since then, the RDN and its partners have expanded curbside recycling programs, banned paper, metal, commercial food waste, clean wood waste and other recyclable materials from the landfill, and successfully promoted composting throughout the region. The Zero Waste Plan outlines how the RDN plans to continue reducing the quantity of waste disposed.

The Zero Waste Plan was developed by undertaking the following steps:

1. Review the existing Zero Waste Plan to identify what elements of that plan should be retained and carried forward to become part of the updated Zero Waste Plan;
2. Identify new waste reduction opportunities by:
  - Reviewing waste diversion initiatives undertaken in other North American jurisdictions that are considered "leading edge";
  - Interviewing waste management coordinators in BC and across Canada; and
  - Brainstorming RDN-unique ideas.

3. Develop a menu of options for possible inclusion in the Zero Waste Plan using initiatives identified in the first two steps;
4. Present the menu of possible options to the Regional Solid Waste Advisory Committee (RSWAC) to obtain their feedback; and
5. Develop a draft Stage 2 SWMP report based upon RSWAC's and staff input.

This section briefly describes each component of the Zero Waste Plan. The components are organized into two sections:

- **Ongoing Programs** – programs that were part of the 2004 Zero Waste plan, were implemented and continue to operate, including programs identified in the annual budget for 2017;
- **New Programs** – programs that have new diversion potential that will be implemented in 2018 to 2021 upon adoption of this Solid Waste Management Plan.

## 4.1 Ongoing Programs 2017

### **School Education Program**

Continue contracting out design and delivery of a primary school program that focuses on the concept of zero waste.

### **Illegal Dumping Program**

The Illegal Dumping Program includes surveillance and enforcement activities as well as on-going clean-up of illegal dumping sites and free disposal (tipping fees are waived) for community clean-up events.

The RDN currently waives landfill tip fees for waste received from a few select charitable organizations operating in the RDN.

### **Disposal Bans**

The practice of banning the disposal of specific wastes from the landfill, when viable recycling alternatives are in place, has been used by the RDN since 1991. Current landfill bans on recyclable/compostable materials include drywall, cardboard, paper, metal and tires, commercial food waste, yard and garden waste, wood waste and EPR materials designated under BC's recycling regulation, household plastic containers and metal food and beverage containers. Disposal bans are considered to be a critical policy mechanism to drive diversion activities, particularly in the ICI and construction/demolition sectors.

### **Zero Waste Promotion**

The Zero Waste Promotion and Education program contains the following elements:

- Continue and enhance current zero waste information initiatives including the website, newsletters and participation in community events.
- Maintain funding to the Recycling Council of BC for operation of the hotline

- Promote use of the RDN Curbside “What Goes Where” feature and reuse awareness, particularly with customers that bring reusable goods to RDN facilities.

Promote to all sectors the availability of Zero Waste tools, particularly those available on the web such as the “What Goes Where” feature on the website and RDN Curbside App, Zero Waste Business Tool Kit, and RDN and City of Nanaimo Organic Waste in Multi-Family Buildings Guide. Additional tools will be accessed from other jurisdictions and, with permission, modified for use in the RDN.

### **Recycling at RDN Facilities**

The RDN provides the opportunity for self-haul customers at the disposal facilities to recycle items such as appliances, propane tanks, scrap metal, gypsum (at CRTS), cardboard, paper, glass, and metal and plastic food and beverage containers. Self-haul and commercial customers can also compost food waste, yard waste and wood waste at these facilities.

### **Waste Stream Management Licensing Technical Assistance**

To support the maintenance of the Waste Stream Management Licensing Bylaw, technical assistance will be required on an annual basis to review site specific operating plans and requirements for new applications and review monthly tonnages and site inspections from existing licensed facilities.

### **Residential Curbside Garbage and Recycling Collection**

Continue with residential garbage, recycling and food waste collection programs including strict can limits. Provide service to approximately 28,445 households.

### **Food Waste and Yard Waste Collection at RDN Facilities**

To ensure an on-going opportunity to dispose of food waste, commercial organics and yard waste, the RDN will continue to accept source-separated yard waste, food waste and commercial organics at the transfer station and landfill (yard waste only). Food waste and yard waste is transferred to private composting facility. The tipping fee at the RDN facilities is based on the market cost of composting. Drop-off opportunities are promoted by the RDN and municipalities. (Note: The cost associated with this program is directly related to volumes received at the RDN’s facilities.)

The RDN provides funding to the NRE for hauling and tipping fees of source-separated yard waste received at their depot location and transferred to a private composting facility.

### **Advocacy**

The RDN continues to advocate for greater waste diversion in the region by engaging with federal, provincial and local government agencies as well as BC stewardship groups such as RecycleBC. The costs and responsibilities of waste management have historically been borne by local governments and taxpayers. The responsibility for the costs and risk to manage end-of-life products should progressively transfer to the manufacturers of goods and the consumers that use them to provide the appropriate market mechanism to encourage more sustainable manufacturing and consumer choices.

Costs associated with the RDN’s current activities regarding advocacy are difficult to determine given the broad range of activities carried out by political and staff representatives. These range from support for organizations such as the Recycling Council of BC, active participation in organizations such as the

Coast Waste Management Association, to engaging with the Province on policy and regulation development. The continued role of advocacy will remain variable depending on the level of participation and costs related to the engagement opportunities (e.g. association dues, travel expenses).

## 4.2 New Programs 2018-2021

The future solid waste system will build on the existing framework of services and programs while seeking to improve the delivery of those services and continue to reduce the quantity of waste sent to disposal.

### **Expanded Zero Waste Education**

The RDN and the City of Nanaimo produce most of the solid waste management promotion and education materials provided in the Regional District.

The objectives of the RDN program are to:

- Increase waste diversion;
- Educate all generators about the solid waste management priorities of the Regional District;
- Promote participation in waste diversion programs;
- Promote the “Zero Waste” concept;
- Encourage proper participation in garbage and recycling collection programs; and
- Encourage compliance with Regional District material bans.

Education activities include: staffing at public events and speaking engagements; mall displays; articles in the Regional newsletter “Regional Perspectives”; the region-wide “Zero Waste” newsletter; a Zero Waste school education program; garbage and recycling program brochure (for RDN contract areas); brochures for various waste diversion programs (backyard composting, grasscycling, disposal bans, etc.); and a web site featuring a recycling database, Zero Waste tool kit and program information.

A greater emphasis is proposed to be targeted at adult audiences through traditional and social media, as well as being more active in a variety of public events.

### **Expanded Industrial, Commercial and Institutional Waste Management**

The RDN encourages recycling by the ICI sector through variable tipping fees and landfill bans which prohibit the landfilling of recyclables, food waste and yard waste. An assessment of the garbage disposed by the ICI sector was done as part of the RDN’s 2012 waste composition study. The data estimates that approximately 42% of the garbage disposed is compostable, including food scraps (28%), yard waste (8%) and compostable paper products (6%). An estimated 16% is considered recyclable and consists primarily of paper and cardboard (12%) with metal, pallet wrap and drywall making up the remainder of the recyclable portion of the ICI garbage.

To increase diversion from the ICI and multi-family sectors there are essentially two distinct paths available to the RDN. The first is to continue with, and increase education and awareness and/or increased enforcement of current disposal bans at the landfill and transfer station. Increased



enforcement and education of existing disposal bans and a relaunch of Commercial Organics Diversion Strategy and Multi-Family Diversion Strategy are predicted to achieve up to 3.1% diversion.

### **Introduction of New Solid Waste Regulations**

The requirement and authority for a Plan is set out in the Provincial statute, *Environmental Management Act*. On Ministerial approval of a Plan, regional districts are given additional tools that they do not otherwise have to assist with the management of solid waste within their boundaries. The *Environmental Management Act* also provides a number of optional authorities for regional districts to manage solid waste that may be granted through plan approval.

## **The RDN proposes to request that the province grant additional authorities, as Waste Haulers as Agents Bylaw and Section**

6.3 Waste Source Separation Bylaw, for managing solid waste. Should the Province grant such an authority at the concept level, further review and consultation is necessary to develop the program, determine costs and harmonize the strategy with potentially affected stakeholders. Furthermore, it is recognized that any associated Bylaw would require approval of the Minister of the Environment before adoption.

### **Expanded Construction and Demolition Waste Management**

Construction and demolition and renovation projects (CD) generate a wide range of materials most of which are reusable or recyclable. These include concrete, asphalt, wood, gypsum wallboard, metal, cardboard, asphalt roofing and plastic.

The RDN promotes diversion of these materials through disposal bans on cardboard, gypsum (drywall), metal and wood, and high tipping fees on loads of CD waste arriving at the Regional Landfill (loads of CD waste cannot be delivered to the CRTS). However, there are examples of where the high tipping fees have failed to result in diversion with the material hauled out of region for disposal.

The RDN will improve and reintroduce education and communications regarding CD waste in the region.

### **Household Hazardous Waste**

Household hazardous waste (HHW) is managed, to a large extent, through BC product stewardship programs which have set up collection programs for the majority of household hazardous waste products, such as paint, pesticides, solvents and used motor oil. The RDN will explore options for further expanding collection of non-stewarded residential household hazardous waste which may include sponsor and/or run residential drop-off events.

### **Zero Waste Recycling**

The 2012 waste composition study shows that there are still a number of waste types that can be recycled; however, they are not part of a stewardship program or there are no established commercial markets and these materials end up in the residual waste stream. The RDN proposes to promote *zero waste recycling* by making funding available to target these materials with the objectives of:

- 1) maximizing waste diversion;
- 2) encouraging non-profit and private sector innovation to develop markets and processes; and
- 3) improving convenience for recycling materials.

It is envisioned that the RDN would target recycling of specific materials (e.g. textiles) or processes (e.g. recycled glass) that do not have local commercial markets. Funding would be allocated through a competitive process of quotes, tenders or request for proposals. Projects would be time bound and may be of several months for a pilot program or a few years which may be necessary to develop processes and markets.

The diversion potential of zero waste recycling is difficult to determine at this time and would depend on the material(s) selected.

### 4.3 Zero Waste Plan Summary

Table 5 Summary Costs of Zero Waste Plan

Ongoing Zero Waste Programs	Budget
School Education Program	\$30,000
Illegal Dumping Program	\$25,000
Charitable Organizations Tipping and/or Hauling Fees	\$76,200
Disposal Bans	N/A
Zero Waste Promotion	\$77,000
Recycling at RDN Facilities	\$161,000
Waste Stream Management Licensing Technical Assistance	\$10,000
Residential Curbside Garbage and Recycling Collection	\$4,623,000
Food Waste and Yard Waste Collection at RDN Facilities	\$1,165,000
NRE for hauling and tipping fees of source-separated yard waste	\$269,000
Advocacy	\$20,000
<b>Total</b>	<b>\$1,832,000</b>
New Zero Waste Programs	Budget
Expanded Zero Waste Education	\$40,000
Household Hazardous Waste	\$100,000
<b>Expanded Industrial, Commercial and Institutional (ICI) Waste Management Diversion</b>	
Increased education of existing landfill bans and a relaunch of Commercial Organics Diversion Strategy and Multi-Family Diversion Strategy	\$100,000
Increased enforcement of existing landfill bans targeted at the ICI sector	\$100,000
<b>Expanded Construction and Demolition (C&amp;D) Waste Diversion</b>	
Improve and reintroduce education and communication regarding C&D waste in the region	\$20,000
Enhanced enforcement of landfill bans related to C&D materials	\$20,000
Waste Haulers as Agents <sup>9</sup>	\$469,000
Waste Source Separation <sup>9</sup>	\$373,000
Solid Waste Emergency/Disaster Response Plan	N/A
Zero Waste Recycling	\$300,000
<b>Total</b>	<b>\$1,538,000</b>

<sup>9</sup> Based on Full Implementation in 2020

All costs are presented in 2017 dollars and rounded to the nearest 1,000. Does not account for current solid waste staffing levels and other administrative expenses.

#### 4.3.1 Diversion Potential

Many of the programs listed in the plan do not contribute directly to diversion, they are believed to be essential to supporting existing and planned zero waste initiatives and without them the diversion potential of the other programs could not be realized. Upon full implementation, the RDN could achieve an overall diversion rate of 90%.

Table 6 Zero Waste Plan New Diversion Potential

New Programs	Diversion Potential (%)
Expanded Zero Waste Education	Not quantifiable
Household Hazardous Waste	<1%
Expanded ICI Waste Management Diversion	3%
Expanded C&D Waste Diversion	3%
Waste Haulers as Agents	10%
Waste Source Separation	
Solid Waste Emergency/Disaster Response Plan	Not quantifiable
Zero Waste Recycling	TBD
New Diversion (based on 2016 baseline)	18%
Total Cumulative Diversion (based on 2016 baseline of 68%)	90%

## 5. Residual Management

The Regional Landfill has capacity until 2040 based on current landfilling rates. Depending on the speed and success of further diversion initiatives, the life of the landfill could be extended for an additional 10 to 15 years. The long term goal of the RDN is Zero Waste. Nevertheless, the RDN recognizes that there will be some necessary landfilling capacity for the foreseeable future. During the time frame of this Plan, technologies will be advanced and the economic viability of residual waste processing and disposal may change. The RDN will continue to review and consider alternative technologies that are consistent with the Zero Waste Hierarchy and Zero Waste commitment.

Discussions with adjacent regional districts to identify potential cooperative strategies for waste management system improvements have been on-going for a number of years and will continue. The RDN is currently a partner in the Association of Vancouver Island Coastal Communities (AVICC) that is actively looking into cooperative strategies for managing solid waste across regional district boundaries. Future options for residual management could include such as collaboration with other local governments, siting a landfill and/or considering export on or off the island.

## 5.1 Disposal

The disposal system involves:

- Continued use of the Church Road Transfer Station (CRTS) to service the northern portion of the RDN;
- Transfer of waste received at CRTS to the Regional Landfill; and
- Continued use of the Regional Landfill to service the southern portion of the RDN.

This system includes all of the necessary elements to effectively manage the RDN's municipal solid waste for the next 10 years. Additional municipal solid waste facilities are not required.

## 5.2 Church Road Transfer Station

CRTS will continue to receive municipal solid waste generated in the northern municipalities of Parksville, Qualicum Beach and Lantzville, and Electoral Areas E, F, G and H. Special wastes such as contaminated soil and asbestos cannot be delivered to CRTS and must be delivered directly to the Regional Landfill.

All waste received at the facility, with the exception of recyclables and yard waste, will be transferred to the Regional Landfill. Recyclables and yard waste will be picked up and recycled/composted by local contractors.

CRTS charges variable tipping fees based on a regional charge rate and enforces regional disposal bans.

## 5.3 Regional Landfill

Municipal solid waste generated in the City of Nanaimo and Electoral Areas A, B and C will be delivered directly to the Regional Landfill. The landfill will also receive recyclable materials, yard waste, CD waste and some types of "special" wastes that require specific handling procedures (contaminated soil, asbestos, animal carcasses, etc.). The landfill will continue to receive waste from CRTS that cannot be exported, such as CD waste. The operating details of the landfill are included in the Landfill Operational Certificate which is issued to the RDN by the Provincial government (Ministry of Environment). A copy of the Landfill Operational Certificate can be found in Appendix C.

Recyclables and yard waste will be picked up and recycled/composted by local contractors. CD waste will be ground and reused on site or landfilled.

The landfill charges variable tipping fees based on regional charge rate and enforces regional disposal bans.

## Closure and Maintenance

The RDN is responsible for operating and maintaining the environmental control infrastructure at the landfill site for a minimum post-closure period of 25 years. This is because the landfill does not stop producing leachate and landfill gas once the site is closed. Staff have begun a closure plan to address the long-term operation and maintenance of the leachate and landfill gas collection systems and the on-going monitoring of groundwater, surface water, landfill gas, erosion, slope stability and settlement. This plan will be completed by December 2004 and reviewed regularly as part of the updating of the Solid Waste Management Plan.

## 5.4 Long Term Residual Waste Management

The Regional Landfill has capacity until 2040 based on current landfilling rates. Depending on the speed and success of further diversion initiatives, the life of the landfill could be extended for an additional 10 to 15 years. The long term goal of the RDN is Zero Waste. Nevertheless, the RDN recognizes that there will be some necessary landfilling capacity for the foreseeable future. During the time frame of this Plan, technologies will be advanced and the economic viability of residual waste processing and disposal may change. The RDN will continue to review and consider alternative technologies that are consistent with the Zero Waste Hierarchy and Zero Waste commitment.

Discussions with adjacent regional districts to identify potential cooperative strategies for waste management system improvements have been on-going for a number of years and will continue. The RDN is currently a partner in the Association of Vancouver Island Coastal Communities (AVICC) that are actively looking into cooperative strategies for managing solid waste across regional district boundaries. Future options for residual management could include such as collaboration with other local governments, siting a landfill and/or considering export on or off the island.

## 5.7 Residual Waste Management Plan Summary

The quantity of residual waste generated over the life of the Plan is primarily dependent on the growth of the population and the success of the Zero Waste Plan's implementation. Figure 6 Projection of Residual Waste in the RDN shows the difference in residual waste quantities if there is no additional waste diversion (status quo) and if the Zero Waste Plan is fully implemented.

**Figure 6 Projection of Residual Waste in the RDN**

*Insert graph of projection of residual waste*

The future quantities of residual waste are also influenced by economic growth in the Region, new product stewardship programs, and the unanticipated development of private waste management facilities in the area. Therefore the residual waste projections should be considered rough estimates.

## 6. Bylaws

### 6.1 Waste Stream Management Licensing

The RDN has implemented a Waste Stream Management Licensing bylaw that:

- Sets a high standard of operation for the local waste management industry;
- Creates a level playing field for industry (to protect the good operators from low standard, “fly by night” operators);
- Minimize risk and costs to the taxpayers for clean-up of poorly operated facilities, abandoned facilities and abandoned municipal solid waste and recyclable material (illegal dumping);
- Assist in waste tracking and progress of the Solid Waste Management Plan and waste diversion;
- Protect and enhance the existing waste diversion rate; and
- Set a consistent level of environmental and community protection throughout the RDN to reduce the incentive to move to less regulated areas of the RDN and outside the RDN.

This bylaw involves licensing private and non-government municipal solid waste management and recycling facilities within the district and penalties for contraventions to the bylaw, including illegal dumping. All facilities (operations or properties) that handle municipal solid waste in whole or part are to be included in the licensing system with the exception of those below:

- Disposal facilities such as landfills and incinerators (these facilities will remain under the regulatory jurisdiction of the Province);
- Soil manufacturing facilities (unless they are composting MSW-based materials on-site);
- Private on-site depots (such as centralized recycling areas used by office buildings and mall tenants);
- Stewardship program depots;
- Reuse businesses;
- Concrete and asphalt recycling operations and auto wreckers since the material handled by these operations has not traditionally been handled as MSW; and
- Municipally owned facilities including the Church Road Transfer Station.

There are license application and annual administration fees associated with the licensing system. These fees are intended to cover most of the staff costs associated with maintaining the licensing system. In addition, a licensee must provide the RDN with a performance security that can be utilized in the case of

default of the license's requirements or abandonment of facility and materials. The amount of security to be posted by the licensee is dependent of the type and quantity of material to be handled at the facility.

A copy of the existing RDN bylaw is included in Schedule C.

## 6.2 Waste Haulers as Agents Bylaw

The RDN proposes to request authority to establish a licensing process for waste haulers to act as waste collection agents of the RDN. The intention is to promote industry innovation to achieve the lowest cost with highest diversion. Under an agents model it would be possible to require waste haulers to collect and remit a fee to the RDN where a customer's waste is not separated or where a recycling or organics collection service is not provided. Such a system provides an economic driver to encourage waste diversion efforts and removes the enticement of low cost disposal.

Under an agents model, other economic strategies could be pursued to further promote diversion such as a "waste collection fee" applied to licensed haulers (agents) coupled with a reduced tipping rate for licensed haulers (agents) at the landfill. This would provide incentive for waste to flow through the private sector, and increase the diversion of waste through reduction, recycling or recovery through private sector enterprise.

RDN administration costs of such a strategy are expected to be moderate with and a minor enforcement burden. Waste haulers would have some increased administration through the collection and remittance of fees as well as reporting. There would be a minor level of enforcement to ensure haulers are complying but very little enforcement activity at the waste source.

Should the Province grant such an authority at the concept level, further work is necessary to develop the program, determine costs and harmonize the strategy with potentially affected stakeholders.

Some commercial (including multi-family), construction and demolition waste gets hauled out of our region to less expensive landfills that don't require waste to be sorted for recycling or composting. In the future, without this revenue to operate our landfill, we may need to raise tipping fees or taxes to maintain our landfill and our zero waste programs.

Enlisting Waste Haulers as Licensed Partners would help ensure every business or multi-family building has a recycling and food waste composting program. This would not only prevent waste from being hauled out of region to less expensive private landfills, it would also help ensure we take responsibility for our own garbage by making sure we recycle or compost it locally. It could also offer an economic incentive for the private sector to provide more waste management services locally, improving convenience for recycling.

## 6.3 Waste Source Separation Bylaw

Waste Source Regulation provides the ability to impose requirements on waste generators. Two examples of this concept are:

1. the City of Vancouver’s Green Demolition bylaw which requires 75% recycling of materials on demolition of pre-1940 homes and 90% on pre-1940 character homes.
2. Comox Strathcona Waste Management proposes to require mandatory recycling of the ICI sector such as by requiring all ICI buildings to implement a recycling collection service by a defined date. They also propose the development of a model bylaw for space allocation for the placement for waste and recycling containers. These intentions are set out in Comox Strathcona’s Solid Waste Management Plan approved by the Minister of Environment in 2013.

Depending on the level of enforcement, waste source regulation has the potential to result in high waste diversion. Substantial program cost increases are commensurate with increased enforcement.

Should the Province grant such an authority at the concept level, further work is necessary to develop the program, determine costs and harmonize the strategy with potentially affected stakeholders.

The RDN will conduct further consultation on the introduction of waste source separation regulation as a potential tool to help ensure recyclables and compostables don’t end up being landfilled. This proposed regulation would require all existing and new commercial, institutional and industrial businesses to have recycling collection. This regulation would also include multi-family apartments and condos as they are not currently included in the residential collection programs provided by the RDN or member municipalities.

## 7. Solid Waste Management Plan Implementation

### 7.1 Implementation schedule

The implementation of the Plan will begin in 2018, with all elements of the Plan anticipated to be in place by 2021. The implementation schedule is as follows:

<b>2018</b>	<ul style="list-style-type: none"> <li>● On-going programs</li> <li>● Expanded Zero Waste Education</li> <li>● Household Hazardous Waste</li> <li>● Expanded ICI Waste Management</li> <li>● Expanded CD Waste Management</li> <li>● Consult on Waste Haulers as Agents Bylaw               <ul style="list-style-type: none"> <li>○ Introduction of 0.5 FTE at Zero Waste Coordinator level</li> </ul> </li> </ul>
<b>2019</b>	<ul style="list-style-type: none"> <li>● On-going programs</li> <li>● Waste Haulers as Agents               <ul style="list-style-type: none"> <li>○ Bylaw Development and Legal Counsel</li> <li>○ Develop Outreach Material</li> </ul> </li> </ul>



	<ul style="list-style-type: none"> <li>○ 1 FTE at Zero Waste Coordinator level</li> </ul>
<b>2020</b>	<ul style="list-style-type: none"> <li>● On-going programs</li> <li>● Waste Haulers as Agents <ul style="list-style-type: none"> <li>○ 2 FTE at Zero Waste Compliance Officer level</li> <li>○ 1 new vehicle</li> </ul> </li> </ul>
<b>2021</b>	<ul style="list-style-type: none"> <li>● On-going programs</li> <li>● Waste Haulers as Agents <ul style="list-style-type: none"> <li>○ 1 new vehicle</li> </ul> </li> </ul>
<b>2022</b>	<ul style="list-style-type: none"> <li>● On-going programs</li> </ul>

## 7.2 Plan Financing and Staffing

Cost recovery mechanisms that will be utilized to fund the Plan’s implementation include user rates, tipping fees, taxation, sponsorship and grants.

The RDN generally funds waste management programs on a user pay basis to the greatest extent possible. In this manner, the users of the service are responsible for paying for the true costs of the service and costs are typically recovered through a fee-for-service. For many programs listed in this Plan, the whole of the RDN benefits and there is no identifiable user – this includes programs such as the Illegal Dumping Program. For programs of universal benefit, costs may be covered through a more general mechanism such as a tax requisition.

Where appropriate, opportunities for sponsorship and grants will be utilized to assist in the funding of programs. Table 7 Solid Waste Services Projected Budget 2017-2022 shows a projected budget for the entire solid waste services department for the next five years.

*This section to be further expanded dependent on the outcomes of the discussion on Zero Waste Recycling by the RSWAC.*

Table 7 Solid Waste Services Projected Budget 2017-2022

<b>Operating Revenues</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Property Taxes	\$722,610	\$1,289,632	\$1,941,508	\$2,682,643	\$2,831,185	\$2,869,640
Operations	\$1,224,129	\$1,231,581	\$1,239,081	\$1,246,632	\$1,254,233	\$1,261,887
Landfill Tipping Fees	\$7,600,000	\$7,600,000	\$7,676,000	\$7,676,000	\$7,752,760	\$7,752,760
Utility User Fees	\$3,422,696	\$3,491,149	\$3,560,972	\$3,560,972	\$3,704,836	\$3,815,981
Grants in lieu of taxes	\$6,800	\$6,800	\$6,800	\$6,800	\$6,800	\$6,800
Interdepartmental recoveries	\$103,007	\$103,007	\$103,007	\$103,007	\$103,007	\$103,007
Miscellaneous	\$498,944	\$508,523	\$518,293	\$518,259	\$538,424	\$548,793
<b>Total Operating Revenue</b>	<b>\$13,578,186</b>	<b>\$14,230,692</b>	<b>\$15,045,661</b>	<b>\$15,794,313</b>	<b>\$16,191,245</b>	<b>\$16,358,868</b>

<b>Operating Expenditures</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Administration	\$909,463	\$924,329	\$939,460	\$954,859	\$970,533	\$986,486
Professional Fees	\$440,510	\$449,195	\$458,053	\$467,087	\$476,300	\$485,695
Building Ops	\$205,283	\$209,362	\$213,523	\$217,765	\$222,093	\$226,507
Veh & Equip Ops	\$587,389	\$599,121	\$611,090	\$623,296	\$635,746	\$648,447
Operating Costs	\$6,790,266	\$6,876,072	\$7,024,969	\$7,154,092	\$7,299,676	\$7,443,167
Wages & Benefits	\$3,429,448	\$3,498,038	\$3,567,999	\$3,639,359	\$3,675,752	\$3,749,268
Contributions to Reserve Fund	\$692,300	\$717,300	\$1,017,300	\$1,317,300	\$1,067,300	\$1,167,300
Debt Interest	\$1,532	\$123	-	-	-	-
New Zero Waste Plan Programs	-	\$422,500	\$900,950	\$1,538,029	\$1,572,110	\$1,572,792
<b>Total Operating Expenditures</b>	<b>\$13,056,191</b>	<b>\$13,696,040</b>	<b>\$14,733,344</b>	<b>\$15,911,787</b>	<b>\$15,919,510</b>	<b>\$16,279,662</b>
<b>% Increase in Operating Expenditures</b>		<b>5%</b>	<b>7%</b>	<b>7%</b>	<b>0%</b>	<b>2%</b>
<b>Total Operating surplus/deficit</b>	<b>\$521,995</b>	<b>\$534,652</b>	<b>\$312,317</b>	<b>-\$117,474</b>	<b>\$271,736</b>	<b>\$79,206</b>

<b>Capital Asset Expenditures</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Capital Expenditures	\$2,478,159	\$1,666,125	\$1,265,950	\$1,265,950	\$459,625	\$55,125
Transfer from Reserves	\$1,835,909	\$1,205,000	\$970,000	\$1,125,000	\$110,000	-
<b>Net Capital funded from Operations</b>	<b>\$642,250</b>	<b>\$461,125</b>	<b>\$295,950</b>	<b>\$140,950</b>	<b>\$349,625</b>	<b>\$55,125</b>

<b>Capital Financing Charges</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Existing debt (principal)	\$125,967	\$43,070	-	-	-	-
<b>Total Capital Financing Charges</b>	<b>\$125,967</b>	<b>\$43,070</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

<b>Net Surplus/deficit for the year</b>	<b>-\$246,222</b>	<b>\$30,457</b>	<b>\$16,367</b>	<b>-\$258,424</b>	<b>-\$77,889</b>	<b>\$24,081</b>
<b>Ad: Prior year surplus/deficit</b>	<b>\$843,576</b>	<b>\$597,354</b>	<b>\$627,811</b>	<b>\$644,178</b>	<b>\$385,755</b>	<b>\$307,865</b>
<b>Surplus applied to future years</b>	<b>\$597,354</b>	<b>\$627,811</b>	<b>\$644,178</b>	<b>\$385,755</b>	<b>\$307,865</b>	<b>\$331,946</b>

Schedule G: Financial Information provides a full breakdown of the tax levies by electoral area and municipal partners for contribution to the Zero Waste Plan.

3.5 new FTEs will be required in order to fully implement the Plan. Some components of the plan will continue to be contracted out, such as the curbside garbage, recycling and food waste collection and the school education program.

### **7.3 Asset Management**

*To be completed at a later date.*

### **7.4 Plan Monitoring and Evaluation**

#### **7.4.1 Plan Monitoring**

The Regional Solid Waste Monitoring Committee (RSWMC) will monitor the implementation of the plan and make recommendations to increase its effectiveness. A description of the plan monitoring advisory committee task and make up are include in the terms of reference which can be found in Schedule D.

#### **7.4.2 Annual Reporting**

Reporting is important because it helps keep the plan current, and focuses attention on whether the plan is achieving its goals and targets.

The RDN will provide annual reporting to the ministry of waste disposal information via the ministry's municipal solid waste disposal calculator.

In addition, the RDN will prepare an annual report to the Board and provide links on the RDN website to reports provided to the Board in relation to the plan. Topics that will be included in the report include:

- Programs delivered each year and how they support the waste management hierarchy;
- Economic development related to solid waste management in the RDN;
- Challenges or opportunities identified by the RSWMC;
- Monitoring data for closed sites;
- Compliance activities;
- Landfill gas capture and reuses;
- Spills, leaks and leachate collected at facilities; and
- Wildlife interactions and control measures.

### 7.4.3 Five-year Effectiveness Review

The RDN will carry out a review and report on the plan's implementation and effectiveness in 2023. A link to the report will be provided on the RDN's website. The review may be conducted in-house or by a third party and will include:

- Overview of all programs undertaken in the first five years to support the plan goals and objectives – status (started, progress, complete); actual budget for each;
- Description of all programs not yet started and reason (delayed start and why, initiation planned for next five years, circumstances or decisions affecting the need for or feasibility of undertaking the actions at all); budget allocated for each;
- Five-year trend information for waste disposal per person;
- Five-year summary of economic development related to plan implementation;
- Five-year trend of landfill gas capture and reuse;
- Summary of any compliance activities taken, spills, leaks and leachate collected at facilities, and wildlife incidences over the past five years;
- Any significant changes related to the regional growth strategy or changes to large industry and businesses operating in the area that might impact the solid waste management system over the next five years;
- Based on the plan data from the first five years, an analysis of what's working well (strengths) and challenges to meeting plan goals and targets; and
- Based on the analysis, any recommended changes that the RDN would like to make to the plan and next steps regarding seeking those changes (consultation and minister approval for changes).

### 7.4.4 Plan Amendments

This plan represents the current understanding and approach to the solid waste management challenges being faced by the RDN. The plan is a "living document" that may be amended to reflect new considerations, technologies and issues as they arise.

Due to changing circumstances and priorities that may evolve over time, and with the input of the RSWMC and interested parties, all major actions identified in the plan will be review for appropriateness before implementation. This will generally occur on an annual basis. The plan's implementation schedule will be flexible enough to reflect the availability of technologies that may arise over time, as well as the potential changes in regional issues and priorities. In addition, it will also take into account the financial priorities of the RDN, its member municipalities and other partners, the availability of funding to undertake plan activities and the availability of contractors and service providers.

The plan amendment procures applies to major changes to the solid waste management system which would include:

- a) The opening (or changing the location) of a site or facility not already identified in the plan for the management or processing of municipal solid waste, such as:
  - New landfills, landfill expansion, landfill closure;
  - Any organics processing facility;
  - Mixed waste material recovery facilities;
  - Any new waste-to-energy facility located within the region;
  - Any new waste-to-energy facility located outside the region; and
  - Any other facility that could have an adverse impact to human health or the environment.
- b) Waste import/export options which would significantly impact the RDN's or neighbouring solid waste systems, or not conform to provincial legislation, goals and/or targets;
- c) Changing disposal targets or reductions in programs supporting the Zero Waste hierarchy;
- d) A change in the boundary of the plan, which would significantly change the amount of solid waste to be managed under the plan or significantly change the population of the plan area;
- e) The addition, deletion or revision of policies or strategies related to the conditions outlined in the minister's approval letter; and
- f) Major financial changes that warrant seeking elector assent.

When a plan amendment becomes necessary, the RDN will undergo a public consultation process and submit a revised plan to the Minister of Environment for approval, along with a detailed consultation report.

The schedules to the plan contain information that is not considered a major change listed above but could change during the 10-year lifespan of the plan. Each schedule includes a process for engaging the public, ranging from notification to a robust public consultation process. Schedule updates may require approval from the minister but may not require submission of the entire plan for review and approval.

## 8. Approvals

This Plan will be subject to public consultation in advance of its approval by the Regional Board. Upon receiving Board approval, it will be submitted to the BC Ministry of Environment for approval.

DRAFT

## Schedules

### Schedule A: Facilities

The following transfer station, regional landfill and licensed WSML facilities shown on Figure 5 are an integral part of the regional waste management system:

- Church Road Transfer Station, 860 Church Road, Parksville, BC
- Regional Landfill, 1105 Cedar Road, Nanaimo, BC
- Schnitzer Steel Pacific, 13271 Trans Canada Hwy, Cassidy, BC
- Parksville Bottle & Recycling Depot, 611A Alberni Hwy, Parksville, BC
- Nanaimo Organic Waste Ltd, 981 Maughan Rd, Nanaimo, BC
- Waste Connections Canada Nanaimo Recycling Facility, 333 Tenth St, Nanaimo, BC
- Emterra Environmental, 255 Eaton St, Nanaimo, BC
- Earthbank Resource Systems, 1424 Hodges Road, Parksville, BC
- Alpine Disposal & Recycling, 2250 McGarrigle Rd, Nanaimo, BC
- Pacific Coast Waste Management, Biggs Pit Road, Nanaimo, BC
- DBL Disposal Services Ltd, 4145 Jingle Pot Road, Nanaimo, BC
- DBL Disposal Services Ltd, 911 Church Road, Parksville, BC
- Waste Connections Canada Springhill, 1429 Springhill Road, Parksville, BC
- Cascades Recovery Inc., 800 Maughan Rd, Nanaimo, BC
- ABC Recycling Ltd., 750 Jackson Rd, Nanaimo, BC

Extended Producer Responsibility (EPR) programs and facilities in the area are listed in the table below:

Stewardship Program	Depots
<b>BC Used Oil Management Association</b>	Arrowsmith Automotive; Canadian Tire; Great Canadian Oil Change; Harris Mazda; Highway 4 Auto Salvage; Mr. Lube; Nanaimo Recycling Exchange; Parksville Safety & Auto Centre; Surfside Automotive; Terrapure Environmental; Top - Lite Car Services
<b>Call2Recycle</b>	Best Buy; Canadian Tire; Gabriola Island Recycling Organization (GIRO); Home Depot; Home Hardware - Parksville; Home Hardware - Qualicum; London Drugs (North Town Centre); London Drugs (Port Place Nanaimo); Nanaimo Recycling Exchange; Regional Recycling - Nanaimo; Regional Recycling - South; Staples - Nanaimo Island Highway; Staples - Nanaimo Parkway
<b>Alarm Recycle</b>	Gabriola Island Recycling Organization (GIRO); London Drugs (North Town Centre); London Drugs (Port Place Nanaimo); Nanaimo Recycling Exchange; Parksville Bottle & Recycling Depot; Qualicum Bottle & Recycling Depot; Regional Recycling - Nanaimo; Regional Recycling - South
<b>Canadian Batteries Association</b>	Kal Tire - Nanaimo, Edwards Tire Services, Kal Tire - Long lake, Canadian Tire (Nanaimo), Kal Tire - Island Hwy, Canadian Tire (Parksville),

<b>MARR</b>	Alpine Disposal and Recycling; DBL Disposal; DBL Recycling; Gabriola Island Recycling Organization (GIRO); Nanaimo Community Kitchens Society; Nanaimo Recycling Exchange; Regional Recycling - Nanaimo; Regional Recycling - South; Schnitzer Steel; Second Hand Sandys
<b>Electro Recycle</b>	Nanaimo Recycling Exchange; Gabriola Island Recycling Organization (GIRO); London Drugs (North Town Centre); London Drugs (Port Place Nanaimo); Parksville Bottle & Recycling Depot; Regional Recycling - Nanaimo; Regional Recycling - South;
<b>Recycle My Cell</b>	Gabriola Island Recycling Organization (GIRO); Nanaimo Recycling Exchange; Regional Recycling - Nanaimo; Regional Recycling - South; Staples - Nanaimo Island Highway; Staples - Nanaimo Parkway; Bell (all locations); The Source (all locations); Virgin Mobile (all locations);
<b>Recycle BC</b>	Alpine Disposal and Recycling; Nanaimo Recycling Exchange; Parksville Bottle & Recycling Depot; Regional Recycling - South; London Drugs (North Town Centre); London Drugs (Port Place Nanaimo)
<b>OPEIC</b>	Alpine Disposal and Recycling; Highway 4 Auto Salvage; Nanaimo Recycling Exchange; Regional Recycling - Nanaimo; Regional Recycling - South; Schnitzer Steel
<b>TRP</b>	Nanaimo Recycling Exchange; Terrapure Environmental; Unilog Medical Solutions
<b>ElectroRecycle</b>	Nanaimo Recycling Exchange; Parksville Bottle & Recycling Depot; Regional Recycling - Nanaimo; Regional Recycling - South
<b>Encorp Return-It Beverage</b>	Parksville Bottle & Recycling Depot; Qualicum Bottle & Recycling Depot; Regional Recycling - Nanaimo; Regional Recycling - South
<b>Encorp Return-It Electronics</b>	Best Buy; Nanaimo Recycling Exchange; Parksville Bottle & Recycling Depot; Regional Recycling - Nanaimo; Regional Recycling - South; Staples - Nanaimo Island Highway; Staples - Nanaimo Parkway
<b>Health Products Stewardship Association</b>	Save On Foods - Brooks Landing; Save On Foods - Country Club; Save On Foods - Near Woodgrove Mall; Save On Foods - Parksville; Most Pharmacies
<b>LightRecycle</b>	Albertson's Home Centre; Canadian Tire; Gabriola Island Recycling Organization (GIRO); Habitat ReStore; Highway 4 Auto Salvage; Home Hardware - Parksville; Home Hardware - Qualicum; London Drugs (North Town Centre); London Drugs (Port Place Nanaimo); Nanaimo Recycling Exchange; Parksville Bottle & Recycling Depot; Regional Recycling - Nanaimo; Regional Recycling - South
<b>ReGeneration</b>	Nanaimo Recycling Exchange; Parksville Bottle & Recycling Depot; Qualicum Bottle & Recycling Depot
<b>Tire Stewardship BC</b>	Annex Auto Parts; BC Auto Wrecking; Canadian Tire; Eco-Tire and Auto Parts; Highway 4 Auto Salvage; Nanaimo Recycling Exchange; OK Tire



## Schedule B: Implementation Schedule

Proposed implementation dates will be contingent upon the timing of the plan’s approval by the Ministry of Environment and the amount of resources available for the implementation of the strategies. The implementation schedule will be reviewed in line with the RDN’s annual budget cycle. The RSWMC will provide input into any updates to this schedule.

YEAR	Programs Implementation
<b>2018</b>	<ul style="list-style-type: none"> <li>• On-going programs</li> <li>• Expanded Zero Waste Education</li> <li>• Household Hazardous Waste</li> <li>• Expanded ICI Waste Management</li> <li>• Expanded CD Waste Management</li> <li>• Consult on Waste Haulers as Agents Bylaw               <ul style="list-style-type: none"> <li>○ Introduction of 0.5 FTE at Zero Waste Coordinator level</li> </ul> </li> </ul>
<b>2019</b>	<ul style="list-style-type: none"> <li>• On-going programs</li> <li>• Waste Haulers as Agents               <ul style="list-style-type: none"> <li>○ Bylaw Development and Legal Counsel</li> <li>○ Develop Outreach Material</li> <li>○ 1 FTE at Zero Waste Coordinator level</li> </ul> </li> </ul>
<b>2020</b>	<ul style="list-style-type: none"> <li>• On-going programs</li> <li>• Waste Haulers as Agents               <ul style="list-style-type: none"> <li>○ 2 FTE at Zero Waste Compliance Officer level</li> <li>○ 1 new vehicle</li> </ul> </li> </ul>
<b>2021</b>	<ul style="list-style-type: none"> <li>• On-going programs</li> <li>• Waste Haulers as Agents               <ul style="list-style-type: none"> <li>○ 1 new vehicle</li> </ul> </li> </ul>
<b>2022</b>	<ul style="list-style-type: none"> <li>• On-going programs</li> </ul>

## Schedule C: Bylaws

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REGIONAL DISTRICT OF NANAIMO

BYLAW NO. 1386

(consolidated for convenience to include up to 1386.01)

**A BYLAW OF THE REGIONAL DISTRICT OF NANAIMO TO REGULATE THE MANAGEMENT OF MUNICIPAL SOLID WASTE AND RECYCLABLE MATERIAL**

WHEREAS:

- A. The Regional District of Nanaimo and the Province of British Columbia are jointly committed to the regulation and management of municipal solid waste and recyclable material within the district so as to encourage waste reduction and recycling and ensure that residual materials are disposed of in a manner consistent with the Solid Waste Management Plan approved by the Minister of Water, Land and Air Protection;
- B. The Regional District of Nanaimo is authorized pursuant to the *Environmental Management Act* to regulate with respect to municipal solid waste and recyclable material;
- C. The Regional District of Nanaimo is operating under a Solid Waste Management Plan which defines a regulatory system for the management of all privately operated municipal solid waste and recyclable material operations. The goal of the regulatory system is to ensure proper management of privately operated facilities by specifying operating requirements so as to protect the environment, to ensure that regional and municipal facilities and private facilities operate to equivalent standards, and to achieve the objectives of the Solid Waste Management Plan.

NOW THEREFORE the board of the Regional District of Nanaimo in open meeting duly assembled enacts as follows:

**ARTICLE 1**

1. INTERPRETATION

- 1.1 Definitions.** In this bylaw, terms defined in the *Environmental Management Act* shall have the meaning set out therein for the purpose of this bylaw unless otherwise defined in this bylaw. In this bylaw:

**“biosolids”** means stabilized municipal sewage sludge resulting from a municipal waste water treatment process or septage treatment process which has been sufficiently treated to reduce pathogen densities and vector attraction to allow the sludge to be beneficially recycled in accordance with the requirements of the Province of BC Organic Matter Recycling Regulation.

**“board”** means the Regional board of the Regional District of Nanaimo.

**“charitable organization”** is an organization as defined in the *Income Tax Act* (Canada) as a registered charity.

**“composting facility”** means a facility that processes organic matter that may include biosolids to produce compost.

**“depot”** means an operation, facility or retail premises, or an association of operations, facilities or retail premises, identified by or operating under or in fulfillment of a *Environmental Management Act* Stewardship Program.

**“district”** means the Regional District of Nanaimo.

**“Environmental Management Act”** means the Province of BC *Environmental Management Act*, SBC 2004 c.30, as amended or replaced and any successor legislation and any regulations thereunder.

**“facility license”** means a waste stream management license or a recycler license issued by the district.

**“General Manager”** means a person appointed to the position of General Manager of the Regional District of Nanaimo.

**“leachate”** means:

- a) effluent originating from municipal solid waste and/or recyclable material being received, processed, composted, cured or stored at a facility,
- b) effluent originating from municipal solid waste and/or recyclable material being stored, or
- c) precipitation, storm water, equipment wash water or other water which has come into contact with, or mixed with, municipal solid waste and/or recyclable material being received, processed, composted, cured or stored.

**“licensee”** means the owner or operator to whom a valid and subsisting facility license has been issued.

**“litter”** means loose refuse deposited, discarded or stored in an open place other than in a container.

**“non-profit organization”** is an organization as defined in the *Income Tax Act* (Canada) as a non-profit organization.

**“odour”** means smells which are ill-smelling, unpleasant, disgusting, offensive, nauseous or obnoxious as reported to and considered as such by the General Manager.

**“process”** or **“processing”** means sorting, baling, repackaging, grinding, crushing or any other management activity that requires hauled recyclable material or municipal solid waste to be unloaded from the delivery vehicle.

**“qualified professional”** means a person who:

- a) is registered in British Columbia with his or her appropriate professional association,

acts under that professional association's code of ethics, and is subject to disciplinary action by that professional association, and

- b) through suitable education, experience, accreditation and knowledge may be reasonably relied on to provide advice within his or her area of expertise as it relates to this bylaw.

**“recycle”** or any variation thereof, means any process by which municipal solid waste or recyclable material is transformed into new products or a feedstock to manufacture or process products that meet internationally or other approved specifications and standards using current available technology.

**“reprocessing”** means conversion of recyclable materials or municipal solid waste into a form suitable for transportation or manufacture into new products.

**“resale”** refers to selling of a material that has been purchased but not processed.

**“residue”** or **“residual”** means the portion of municipal solid waste or recyclable material that remains unusable after the manager of the municipal solid waste or recyclable material has no further use for it.

**“runoff”** means any rainwater, leachate, or other liquid which drains over land from any part of a facility.

**“sludge”** means an unstabilized, semi-solid by product of wastewater treatment.

**“Solid Waste Management Plan”** means the district’s Solid Waste Management Plan, as amended from time to time.

**“store”** and **“storage”** means to keep on land or water, whether or not open to the air, covered, in a structure or container.

**“transfer station”** means any land and related improvements or buildings and related improvements at which municipal solid waste from collection vehicles is received, compacted, or rearranged for subsequent transport.

**“vector”** means a carrier organism that is capable of transmitting a pathogen from one facility, waste source, product or organism to another facility, waste source, product or organism.

- 1.2 Schedules.** The schedules listed below and annexed hereto, shall be deemed to be an integral part of this bylaw,

Schedule “A” - Exemptions from Licensing Requirements

Schedule “B” - Plan Facilities (Public)

Schedule “C” - Fees – Facilities

Schedule “D” - Publishing and Billboard Posting Requirements

- 1.3 No Conflict with Municipal Requirements.** The requirements under this bylaw are distinct and separate from the requirements of a municipality. For greater clarity, municipalities may impose further restrictions or require further conditions than those imposed under this bylaw by the district.

- 1.4 Compliance with Other Laws.** Nothing in this bylaw, including, *inter alia*, a license, excuses any person from complying with all other applicable enactments.
- 1.5 Purpose of Bylaw.** This bylaw is enacted for the purposes of regulating waste management facilities within the regional district in the general public interest. It is not contemplated nor intended, nor does the purpose of this bylaw extend:
- (1) to the protection of any person from economic loss;
  - (2) to the assumption by the regional district or any employee of any responsibility for ensuring the compliance by a facility operator, his or her representatives or any employees, retained by him or her, with the requirements of this bylaw or any other applicable codes, enactments or standards;
  - (3) to providing to any person a warranty with respect to any facility for which a License is issued under this bylaw;
  - (4) to providing to any person a warranty that a facility operation is in compliance with this bylaw or any other applicable enactment.
- 1.6 Licensees to Comply.** Neither the issuance of a license under this bylaw nor the acceptance or review of plans or specifications or supporting documents, nor any inspections made by or on behalf of the district shall in any way relieve the owner, operator or licensee from full and sole responsibility to operate in accordance with this bylaw and all other applicable enactments, codes and standards.

## ARTICLE 2

### 2 FACILITIES REQUIRING FACILITY LICENSES

- 2.1 Prohibition.** Subject to Section 2.2, no person or organization shall own or operate within the area of the Regional District of Nanaimo a site, facility or premises where municipal solid waste or recyclable material is managed unless that person holds with respect thereto and strictly complies with a valid and subsisting facility license.
- 2.2 Exclusions.** Notwithstanding Section 2.1, no facility license is required for:
- a) facilities owned and operated by the district or its member municipalities,
  - b) those facilities set out in Schedules “A” and “B” to this bylaw,
  - c) a facility or operation that is registered under and that is fully in compliance with a code of practice under Article 5,
  - d) those facilities otherwise exempted under this bylaw.

- 2.3 Type of Facility License.** Type I facility licenses are required for all facilities except any facility which is owned or operated by a charitable organization or non-profit organization which requires a Type II facility license.

### ARTICLE 3

#### 3 FACILITY LICENSE APPLICATION

- 3.1 Form of Application.** A facility license application under this bylaw shall be filed at the district's office in the form prescribed by the district. Applications must be accompanied by:

- a) the application fee specified in Schedule "C",
- b) a written statement from the owner (if other than the applicant) of the property on which the facility is located or is to be located acknowledging and approving of the proposed use of the property,
- c) a written statement from the senior manager of the land use planning department of the municipality or electoral area in which the facility is located or is to be located stating that the applied for use is a permitted use under the municipality's or district's zoning bylaws or under Section 911 of the *Local Government Act*, and
- d) a proposed operating plan for the facility as provided in Section 9.1.

- 3.2 Procedure on Application for all Facilities.** The following application requirements must be met by all operations requiring a facility license:

- a) The applicant must publish, not more than 30 days from the date of submission of the application, at the applicant's expense, a notice that has been reviewed and approved by the General Manager, in a local newspaper that is distributed at least weekly in the area where the facility is located or proposed to be located, in accordance with Section 1 of Schedule "D", and within 30 days after the date of publication provide to the General Manager a copy of the full page tear sheet as proof of publication.
- b) The applicant must post a clearly legible copy of the details of application as described in Schedule "D", protected from the weather, to the satisfaction of the General Manager, in a conspicuous place at all entrances to the land fronting on a public road on which the facility is located or proposed to be located within 15 days after the date of the application and keep the copy posted for a period of not less than 30 days.
- c) The General Manager may give written notice of an application to any person that the General Manager considers may be affected by the application or full details of the application to any authority the General Manager deems necessary to assist with regulatory requirements.

- d) Persons who consider themselves adversely affected by the granting of a facility license, may within 45 days of the date of the first posting, publishing, service or display required by this bylaw, notify the General Manager in writing setting out the reasons why they consider themselves adversely affected, and the General Manager will provide a copy of the written reasons submitted by the persons who consider themselves adversely affected to the applicant and allow the applicant to respond.
- e) The General Manager may take into consideration any information received after the 45-day period prescribed by Subsection 3.2(d) if the General Manager has not made a decision on the facility license within that time period.

**3.3 Adequate Notice.** Despite Subsection 3.2, if, in the opinion of the General Manager, any method of giving notice set out in Subsection 3.2 is not adequate or practical, the General Manager may, within 30 days of receipt of the application, require an applicant to give notice of the application by another method that is, in the opinion of the General Manager, more effective.

**3.4 Evaluation of a Facility License Application.** The General Manager will consider the following matters with respect to the facility proposed in the application:

- a) the potential risk posed to the environment and/or public health,
- b) the protection of the environment,
- c) comments from the host municipality relating to compliance with the local zoning or other bylaws that may affect a facility design and/or operating plan,
- d) comments from persons who consider themselves adversely affected,
- e) information received as a result of the fulfillment of the requirements set out in Sections 3.2 and 3.3,
- f) compliance with the Solid Waste Management Plan,
- g) any operating plan submitted to the General Manager under Article 9, and
- h) compliance by the applicant with the requirements to pay fees and report as required under this bylaw.

**3.5 Issuance of a Facility License.** After receipt of a facility license application and completion of requirements in this Article 3 to the satisfaction of the General Manager, the General Manager may issue a facility license on such terms and conditions set out in Section 4.1 and 4.2 as the General Manager considers necessary to protect the environment and to achieve the objectives of this bylaw and the Solid Waste Management Plan.



ARTICLE 4

4 FACILITY OPERATING REQUIREMENTS

**4.1 Operating Conditions for Facilities.** All owners and operators of facilities that are required under this bylaw to obtain a facility license must comply with the following operating conditions:

- a) install and maintain locking gates on all access roads into the facility to prevent unauthorized access and ensure that the gates are locked at all times when the facility is unattended,
- b) construct access roads to and through the facility from suitable material satisfactory to the General Manager and capable of providing all weather access for all emergency vehicles,
- c) install and maintain, as required by the General Manager, barriers to limit access to the facility except by the access roads (in the form of fencing, trees, shrubbery, natural features or other barriers),
- d) ensure that at all times the facility has telephone service or other functioning communication equipment with which to immediately summon fire, police or other emergency service personnel in the event of an emergency,
- e) prevent the escape of litter, mud or debris from the facility site to adjoining roads or adjacent lands,
- f) prevent the escape of any leachate from the facility to a surface not covered by an impermeable barrier and not equipped with a leachate containment system,
- g) ensure that an employee is present at all times that the facility is open for business or accepting municipal solid waste or recyclable material,
- h) inspect every load received before mixing with any other loads,
- i) maintain a record of all rejected loads including date, time, type of material, hauler's name, generator's name and vehicle license number,
- j) ensure that any municipal solid waste or recyclable material that is removed from the facility is taken to a site or facility that complies with all applicable provincial, state or federal regulations and with zoning and any other applicable enactments and hold any license, permit or approval required by the local government(s) of the jurisdiction in which the facility is located and be able to produce documentary evidence confirming the above,
- k) ensure that there is no burning of municipal solid waste or recyclable material at the facility, and take all precautionary measures possible required by the General Manager to reduce the potential risk of ignition of such materials,
- l) produce and comply with an operating plan acceptable to the General Manager under

Article 9,

- m) require the licensee to provide and maintain security in such amount and in a form satisfactory to the General Manager under Section 8.1,
- n) ensure access to, and provide and maintain necessary related works associated with an adequate water supply or other suitable fire suppressant on site for extinguishing fires on site, and
- o) if there is a fire, immediately notify the local fire department and the General Manager and take all measures necessary to extinguish the fire.

**4.2 Terms and Conditions for Facility Licenses.** In addition to and without limiting the requirements set out in Section 4.1 or otherwise, where sufficient cause exists, as determined by the General Manager, the General Manager may do the following in a facility license:

- a) specify, prohibit, or restrict the type, quality, or quantity of municipal solid waste or recyclable material that may be brought onto or removed from a facility,
- b) require the licensee to contain the municipal solid waste or recyclable material within a height or heights and spatial area or areas specified by the General Manager,
- c) require the licensee, at its sole cost, to submit to the General Manager a quantity survey or a land survey of the municipal solid waste or recyclable material at the facility, prepared by a British Columbia Land Surveyor,
- d) require the licensee to recover, for the purpose of recycling, any recyclable materials which are subject to material bans imposed by bylaw or by resolution of the district,
- e) require the licensee to construct, install, repair, alter, remove, or maintain works, and provide plans and specifications prepared by a registered professional engineer (or any other qualified professional as appropriate and recognized as such by the General Manager) prior to the commencement of any construction, installation, repair, alteration, removal or maintenance of such works,
- f) require the licensee to submit plans, procedures, and specifications prepared by a registered professional engineer (or any other qualified professional as appropriate and recognized as such by the General Manager), for or relating to the handling of spills, fires, floods, earthquakes, and other emergencies at the facility,
- g) require the licensee to provide and maintain risk insurance in such amount and in a form satisfactory to the General Manager under Section 8.12,
- h) require the licensee, at such times and in such manner as is acceptable to the General Manager, to measure, record, and submit information to the General Manager relating to:
  - (i) the type, quality, and quantity of municipal solid waste and recyclable material brought onto and removed from the facility,

- (ii) the handling of municipal solid waste and recyclable material at the facility,
  - (iii) the quantity and characteristics of leachate, runoff, and odour generated by the facility,
  - (iv) the characteristics of the surface water, groundwater and soil at the facility to assess for existing degradation or contamination,
  - (v) the characteristics of surface water and groundwater in the surrounding area which may be affected by leachate or other runoff from the facility,
  - (vi) the condition of roads and public utilities located at or adjacent to the facility insofar as the condition of the roads and public utilities affects or are affected by the operation of the facility,
  - (vii) slope stability, settlement, and erosion at the facility, and
  - (viii) the operation and maintenance of equipment and works at the facility, including leachate collection and treatment systems, runoff, water management systems, and air quality and air quality control systems,
- i) require that any or all of the information required in Subsection 4.2 (h) be prepared by a registered professional engineer (or any other qualified professional as appropriate and recognized as such by the General Manager), and
  - j) provide for implementing terms and conditions of a facility license in phases or provide for varying dates for compliance with the terms and conditions of a facility license.

## **ARTICLE 5**

### **5 CODES OF PRACTICE**

**5.1 Establishment of Codes of Practice.** The board may, from time to time, establish codes of practice setting out different prohibitions, regulations, conditions, requirements, exemptions, and rates or levels of fees for different classes of persons, facilities, operations, activities, trades, businesses, municipal solid waste, or recyclable material for the purpose of prohibiting, regulating, or controlling the handling of municipal solid waste and recyclable material. Codes of practice will be established by way of adoption of a code of practice as an amendment to this bylaw.

**5.2 Conditions of a Code of Practice.** A code of practice may set such terms and conditions and specify such requirements as the district considers advisable and, without limiting in any way the generality of the foregoing, the district may in a code of practice:

- a) require that facilities or operations, to be as specified by the district, register with the district in order to qualify under a code of practice,
- b) include any of the requirements set out in Article 4, and

- c) require security in an amount and form and subject to conditions set out in Article 8, or as defined in the code of practice itself.

**5.3 Registration Fee.** An application to register under a code of practice under this bylaw must be filed at the district's office in the prescribed form accompanied by the applicable registration fee set out in column 2 of Schedule "C" to this bylaw.

## ARTICLE 6

### 6 ILLEGAL DUMPING

**6.1 Definitions.** In this article:

**"responsible person"** means one or more of the following:

- a) a person who generated municipal solid waste or recyclable material that has been delivered, deposited, stored, or abandoned, and/or
- b) a person who hauled municipal solid waste or recyclable material that has been delivered, deposited, stored, or abandoned, and/or
- c) a person who had or has charge or control of the land or buildings on which municipal solid waste or recyclable material has been deposited, stored, or abandoned or to which municipal solid waste or recyclable material has been delivered.

**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.

**6.3 Liability for Illegal Dumping.** In addition to any other penalty imposed under this bylaw, the General Manager may require, by written notice, a responsible person to remove to a licensed facility any municipal solid waste or recyclable material that has been deposited in contravention of Section 6.2. Such removal shall be at the responsible person's cost. If a responsible person fails to remove the municipal solid waste or recyclable material within the time period specified in the notice, the General Manager may cause the municipal solid waste or recyclable material to be disposed at a licensed facility, and the responsible person shall pay all of the costs associated with the disposal.

- 6.4 Proof of Compliance** The General Manager may require a responsible person who wishes to manage municipal solid waste or recyclable material in accordance with paragraph 6.2 b) to provide to the district documents evidencing that the facility complies with the enactments referred to in that paragraph.

## ARTICLE 7

### 7 AMENDMENTS

- 7.1 Amendment of a Facility License.** The General Manager may amend the terms and conditions of a facility license either in whole or in part:

- a) on its own initiative where it considers necessary due to changes in the facility's practices, or
- b) on application in writing by a licensee,
- c) on its own initiative where it considers necessary due to changes external to the operations of the facility

- 7.2 Major and Minor Amendment.** For the purposes of this article:

- a) **"major amendment"** to a facility license means any amendment which is not a minor amendment, and
- b) **"minor amendment"** to a facility license means:
  - (i) a change of ownership, control, or name,
  - (ii) a change of legal address or mailing address,
  - (iii) a change to the hours of operation,
  - (iv) a decrease in the authorized quantity of municipal solid waste or recyclable material, accepted or stored,
  - (v) an increase in the authorized quantity of municipal solid waste or recyclable material accepted or stored that does not exceed 10% of the authorized quantity specified in the license first received by the facility,
  - (vi) a change in the authorized quantity of municipal solid waste or recyclable material accepted or stored such that, in the opinion of the General Manager, the change has or will have less impact on the environment,
  - (vii) a change in a requirement to record and submit information, or

- (viii) a change to the works, method of treatment, or any other condition in a facility license such that, in the opinion of the General Manager, the change has or will have less impact on the environment.

**7.3 Procedure on Amendment Application.**

- a) For all applications for major amendments, the provisions set out in Sections 3.1 to 3.5 shall apply subject to necessary modification as deemed appropriate by the General Manager.
- b) For all applications for minor amendments, the General Manager may, at his discretion, require that any of the provisions set out in Sections 3.1 to 3.5 also apply, subject to necessary modification as considered appropriate by the General Manager.

**ARTICLE 8**

**8 SECURITY AND RISK INSURANCE**

**8.1 Requirement for Security.** The General Manager, as a precondition to issuing a facility license, or as a term or condition of a facility license or by written notice at any time prior to or after the issuance of the facility license, requires an owner, operator or licensee of a facility to provide and maintain security in an amount and form satisfactory to the General Manager and for such period as may be required, to ensure:

- a) compliance with this bylaw or a facility license, and
- b) that sufficient funding is available for facility operations and maintenance, remediation of the facility, facility closure, and post-closure monitoring of the facility, in accordance with the terms and conditions of the license.

**8.2 Form of Security.** The security held by the district under Section 8.1 may be in the following form, provided that the particular form of security is satisfactory to the district, acting reasonably:

- a) cash,
- b) certified cheque,
- c) an irrevocable standby letter of credit issued by a Canadian Schedule I chartered bank.

**8.3 Amount of Security.** The security held by the district under Section 8.1 in respect of a facility shall be in such amounts as may be reasonably satisfactory to the General Manager and be based primarily on the maximum tonnage of pre-processed material allowed at the facility at one time, multiplied by the current per tonne cost to haul and dispose of the material. This shall be done for each material type allowed at the facility. Calculations for material types that may result in a positive value shall also be shown when determining the amount of security required, but these values cannot be used to offset the total security required. In addition, the security may, without limitation, vary depending on any or all of the following:

- a) the type of facility,

- b) the type of operations and maintenance activities performed or to be performed at the facility,
- c) the anticipated or actual activities required for closure and post-closure monitoring of the facility,
- d) the types of discharges that could have the potential to result from the operation, remediation, closure, and post-closure monitoring of the facility, including, without limitation, leachate, storm water, odours, dust, litter, and erosion, and the cost of installing, operating, repairing, and maintaining works that may be required to control such discharges at the facility,
- e) the geotechnical and other physical characteristics of the facility site,
- f) possible administrative or contingency fees for site clean-up activities coordinated by the General Manager, and
- g) such other factors as the General Manager may reasonably determine.

Without limiting the generality of the foregoing, the General Manager may, in an amendment to a facility license under Section 7.1, amend the amount of security required under Section 8.1 for the facility.

**8.4 Conditions for Drawing on Security.** Where a licensee, owner or operator defaults under this bylaw or a facility license, the General Manager may, by written notice to the licensee, require the default to be remedied within a period specified by the district and if the default is not remedied within the specified time, the district may draw down in whole or in part on the security for purposes as described in Section 8.5.

**8.5 Use of Security.** The security drawn down by the district, under Section 8.4, may be used to ensure compliance with the provisions of this bylaw and the facility license, including without limitation funding for the following:

- a) the handling of municipal solid waste, recyclable material, or any other materials at the facility,
- b) the carrying out of operations and maintenance activities at the facility in compliance with an operating plan accepted by the General Manager under Section 9.3,
- c) the control, abatement or prevention of leachate or contaminants escaping from the facility,
- d) the expenses incurred by the district, including legal expenses, in
  - (i) carrying out or causing to be carried out any of the activities described in this section, and
  - (ii) complying with any laws or enactments of the federal, provincial or any local government, including the district.

**8.6 Additional Conditions for Drawing on Security.** Notwithstanding Section 8.4, the district shall be entitled to draw down, in whole or in part, on any security it holds under Section 8.1, where:

- a) such security is not renewed, replaced, or extended at least 30 days in advance of its scheduled expiry date, or
- b) the General Manager is satisfied on reasonable grounds that the value and utility of the security may otherwise be compromised.

In this event, the district shall hold and deal with the proceeds thereof as security in the same manner as the district is entitled to hold and deal with the original security.

**8.7 Replenishment of Security.** If the district draws down in whole or in part on the security under this article, the owner, operator or licensee of a facility must replenish the security drawn down within 30 days if required to do so in writing by the General Manager and the provisions of this article, with the necessary changes, shall apply to such replenished security.

**8.8 Survival.** Notwithstanding any suspension, cancellation, expiration, or other termination of a facility license, all owners, operators, or licensees of a facility shall continue to be bound by the requirements in a facility license to provide and maintain security, which requirements shall survive any such suspension, cancellation, expiration, or other termination until otherwise notified by the General Manager.

**8.9 Return of Security.** Provided the owner, operator or licensee of a facility is in full compliance with this bylaw and a facility license, the district may return to the owner, operator or licensee of a facility the security held by it:

- (a) upon completion, to the reasonable satisfaction of the General Manager, of all activities required for the closure or post-closure of the facility,
- (b) upon receipt by the district of substitute or replacement security satisfactory to the General Manager, or
- (c) where the General Manager otherwise deems expedient.

**8.10 Unclaimed Security.** If after making reasonable efforts the district is unable to effect return of the security under Section 8.9, title of the security shall vest absolutely in the district after the fifth anniversary of the initial attempt to return the security.

**8.11 Interest on Cash Security.** If the security or any portion thereof provided under Section 8.1 is in the form of cash, the interest earned thereon at the rate referred to below will be added to and form part of the principle amount of the security, and may be used under Section 8.4. Any portion of the principle amount of the security and accrued interest not utilized will be returned pursuant to Section 8.9. The interest rate for the security will be the prime rate charged by the Canadian Imperial Bank of Commerce for Canadian dollar loans, from time to time, less two percentage points.

**8.12 Security in the Form of Insurance.** Notwithstanding Section 8.2, the General Manager may require that an owner, operator, or licensee obtain environmental risk insurance from an insurance broker approved by the General Manager, that covers risks associated with such events as floods, earthquakes, toxic spills, fires, leachate breakouts, and water, sewer, and gas pipe breaks.



ARTICLE 9

9 OPERATING PLANS

**9.1 Operating Plan Requirements.** Every person who submits an application for a facility license under Section 3.1 must include with the application a proposed operating plan for the facility described in the application. Proposed operating plans must provide full and complete details on all of the following:

- a) the site and location of all works within the facility,
- b) the types, quantity, and quality of municipal solid waste and recyclable material that will be managed within the facility,
- c) the methods for handling municipal solid waste and recyclable material within the facility,
- d) the measures that will be taken to protect the environment, the site, and the lands adjacent to the facility,
- e) a monitoring program to assess the measures in paragraph (d) above,
- f) the methods for complying with regional disposal bans and recycling requirements,
- g) the methods for dust, odour, vector, mud, and litter control and prevention,
- h) the methods for handling any waste delivered to the facility which is not authorized by the license,
- i) the procedures for weigh scale operation at the facility, or other site where municipal solid waste and recyclable material is weighed for acceptance at the facility or removal from the facility,
- j) the frequency and method of facility inspection to be carried out by facility staff,
- k) measures to protect the site and adjacent lands in case of fire, seismic disturbance, or flood,
- l) the methods for containment and treatment of runoff at the facility and the prevention of runoff from the facility to adjacent lands,
- m) the actions that will be taken if ground or surface water becomes contaminated as a result of operations at the facility, and
- n) any other matter specified by the General Manager regarding the management of municipal solid waste and recyclable material at the facility.

**9.2 Professional Engineering Involvement.** The General Manager, at his sole discretion may require any or all of the information required in Subsections 9.1 (a) through (n) inclusive to be prepared

by a registered professional engineer (or any other qualified professional as appropriate and recognized as such by the district).

- 9.3 Review and Acceptance of Operating Plans.** The General Manager will review all proposed operating plans submitted under Section 9.1, and may require amendments.
- 9.4 Further Amendments to Operating Plans.** Following the acceptance of an operating plan under Section 9.3, the General Manager may require the terms, conditions or other aspects of the operating plan to be amended:
- a) on the General Manager’s own initiative where the General Manager considers it necessary and after consultation with the licensee, or
  - b) on request in writing by the licensee, subject to approval by the General Manager.

**ARTICLE 10**

**10 FEES AND MONTHLY STATEMENTS**

- 10.1 Application Fees.** Every person who requires an amendment as described in Section 7.1 (a) or applies for a facility license or any amendment as described in Section 7.1 (b) shall pay to the district, on application or commencement of amendment process, for a facility set out in column 1 of Schedule “C” to this bylaw, the corresponding license application fee or amendment application fee as set out in columns 2, 3 or 4, respectively, as applicable. An application fee will not be refunded if a license is not issued or amended.
- 10.2 Payment of Security.** Applications for a facility license for facilities not established prior to enactment of the bylaw must provide the amount of security required under Section 8.2 with the submission of the application. For a facility license for facilities existing at the time of enactment of the bylaw, up to 50% of the amount of security may be deferred for a period of one year from the date of submission of the application.
- 10.3 Annual Administration Fee.** Every licensee shall pay to the district upon the date of issuance of a facility license and thereafter annually on the anniversary date of the issuance of the license, the annual administration fee set out in column 5 of Schedule “C”. The district will provide to all licensees annual invoices setting out the annual administration fee due and payable in accordance with Schedule “C”.
- 10.4 Monthly Statement.** Unless requested at greater frequency by the General Manager, every licensee shall deliver to the district, a monthly (twelve times per year) written statement signed by an officer or a principal of the owner or operator of the facility setting out either the amount or quantity in metric tonnes of all municipal solid waste and recyclable materials received, shipped from, and the maximum net tonnage on site at any one time during the month at the facility as measured in the delivery vehicle. The statement shall be delivered monthly to the district within 21 days after the last day of the previous month.

- 10.5 District Invoices.** All invoices rendered by the district shall be due and payable 30 days from the date of the invoice. Late payments will accrue interest computed at the rate of one and one quarter percent (1.25%) per month on the outstanding balance, calculated and compounded monthly, from the date such amounts become due and payable until the date they are paid in full.
- 10.6 Records.** Every licensee must make and maintain for a period of seven years from the date when they were made, accurate records, books of account, copies of the monthly statements referred to in Section 10.4, and copies of all electronic and hard copy information and data upon which those statements were prepared (for the purposes of this article called "records"). The records must identify either:
- a) the amount or quantity in metric tonnes (or cubic metres) of municipal solid waste and recyclable materials received, shipped from, and the maximum net tonnage on site at any one time during the month at the facility, or
  - b) the number of container and vehicle loads and the size or capacity of the containers and vehicles carrying municipal solid waste received, shipped from, and the maximum net tonnage on site at any one time during the month at the facility.
- 10.7 Inspection and Copying of Records.** The General Manager may inspect, make copies and take away such copies of any records referred to in Section 10.6 maintained by and for any person who is required to provide a monthly statement under Section 10.4 during normal hours of business, at any business premises where the records are maintained. The General Manager may take with them to the business premises such other persons and equipment as may be necessary.
- 10.8 Proof of Identity.** An employee or agent of the district inspecting records under Section 10.7 must, when requested, provide proof of identity to any person present at the location where the records are maintained.
- 10.9 Audit.** A person who is required to provide a monthly statement under Section 10.4, if requested in writing by the General Manager, shall at that person's expense provide to the General Manager within 45 days of such request, an audited statement of the total amount of fees payable under Sections 10.1, 10.2, and 10.3, for a specified period of time. This statement must be prepared by a Chartered Accountant or Certified General Accountant in accordance with Generally Accepted Auditing Principles.

## ARTICLE 11

### 11 DUTY TO REPORT

- 11.1 Discharge of Waste at Facility.** Where, out of the normal course of events, there occurs at a facility a discharge of waste to the environment or a serious and imminent danger thereof by reason of any condition, and where any damage or danger to land, water or air may reasonably be expected to result therefrom, any person who at any material time:

(a) owns the waste or has the charge, management or control of the waste, or

(b) causes or contributes to the discharge or danger of discharge

shall verbally report such occurrence to the General Manager as soon as practicably possible and shall report such occurrence to the General Manager in writing within 48 hours.

**11.2 Deviation from Normal Operating Practices.** Where, during the normal course of operations, there occurs at a facility a situation or combination of events that is a deviation from the approved operating practices as set out by the terms and conditions set out in the license, operating plan, code of practice, or this bylaw, the facility operator shall verbally report such occurrence to the General Manager as soon as practicably possible and shall report such occurrence to the General Manager in writing within 48 hours.

**11.3 Duty to take all Reasonable Measures.** A person who is referred to in Section 11.1 shall, as soon as possible in the circumstances, take all reasonable measures consistent with safety, protection of the environment, and compliance with the terms and conditions of the license, operating plan, code of practice, or this bylaw, and thereby counteract, mitigate or remedy any adverse effects that result or may reasonably be expected to result from the occurrences referred to in Section 11.1 or 11.2.

**11.4 Compliance.** Compliance with Article 11 and Article 12 of this bylaw does not signify compliance with any other requirements found within the bylaw. The district retains the right to pursue any actions available to remedy non-compliance with any other section of this bylaw, notwithstanding compliance with Article 11 and Article 12.

## ARTICLE 12

### 12 INVESTIGATION, INSPECTION AND RECORDS

**12.1 Powers of the District.** The powers of the district under this article may be exercised in relation to any site, facility, or premises which is, or which the General Manager upon reasonable grounds believes to be, among those described in Article 2.1 of this bylaw, and any site, facility, or premises associated therewith.

**12.2 Residential Structures.** Nothing in this section authorizes the entry of any structure used primarily as a residence, or any residential accommodation in any other structure.

**12.3 Investigation.** A bylaw enforcement officer or other employee or agent of the regional district may at any reasonable time enter any facility, site or premises and investigate any works, process or activity that is related to, used for or capable of being used for the production or handling of municipal solid waste or recyclable material.

**12.4 Additional Powers.** The powers of a district under Section 12.3 include the following powers:

a) to examine, take away and make copies of records relating to:

(i) the causing or the potential to cause pollution by municipal solid waste or recyclable material,

- (ii) the production and managing of municipal solid waste or recyclable material,
  - (iii) the characteristics of the municipal solid waste or recyclable material produced or managed, and
  - (iv) a potential contravention,
- b) to carry out inspections, observations, measurements, tests and sampling and to otherwise ascertain whether the terms of this bylaw or a facility license have been or are being complied with and take away samples of leachate, runoff, groundwater, soil, articles, substances, municipal solid waste or recyclable material as they consider appropriate.
- 12.5 Return of Documents.** Where the district has taken away original records from a facility, site or premises under Subsection 12.4(a), the district, upon written request from the owner or operator of the facility, will return copies of the records to the owner or operator within 24 hours of the inspection or if that is not possible, as soon thereafter as is practicable.
- 12.6 Assistance.** The employee or representative of the district may take with him or her onto any facility, site, or premises such other persons and equipment as may be necessary to carry out the actions authorized in Section 12.4.
- 12.7 Identification.** The employee or representative of the district shall, forthwith upon arrival at a facility, site, or premises, provide proof of identity to a person present at the facility, site, or premises.
- 12.8 Records.** Notwithstanding Sections 2.2, 4.1, and 10.4, the General Manager may require the owner or operator of a facility, site, or premises at which municipal solid waste or recyclable material is managed to keep records of volumes, weights, types, amounts, quantities, and composition of municipal solid waste or recyclable material originating from within the Regional District of Nanaimo that is brought onto or removed from the facility, site, or premises and to submit, on request annually, the records to the district.

## ARTICLE 13

### 13 SUSPENSION AND CANCELLATION

- 13.1 Suspension and Cancellation of Facility Licenses.** Without limiting any other provision of this bylaw, the General Manager, after giving notice to a licensee, may suspend for any period or cancel a facility license in whole or in part where the following has occurred or is occurring:
- a) the licensee fails to comply with any term, condition, or requirement of the facility license or any provision of this bylaw,
  - b) the licensee has made a material misstatement or material misrepresentation in the application for the facility license,
  - c) the licensee has failed to:

- (i) provide the monthly statement of quantities in accordance with Section 10.4, or
  - (ii) make payment of fees in accordance with Article 10,
- d) the licensee does not exercise any rights under the facility license for a period of 3 years,
  - e) the facility license is no longer necessary by reason of a code of practice under this bylaw,
  - f) the licensee is an individual who has died,
  - g) the licensee is a corporation that is struck off the register or is dissolved under its incorporating enactment,
  - h) the licensee is a partnership that is dissolved,
  - i) the licensee requests that the facility license be cancelled, or
  - j) the land and related improvements or buildings and related improvements licensed under this bylaw are no longer a facility.

**13.2 Notice.** A notice served under Section 13.1 must state the time at and the date on which the suspension or cancellation is to take effect.

**13.3 Suspended or Cancelled License Not Valid.** A facility license that is suspended or cancelled is not a valid and subsisting license. Notwithstanding the foregoing, the provisions in a facility license relating to security continue to survive as set out in Section 8.5.

## ARTICLE 14

### 14 OFFENCES AND PENALTIES

**14.1 Offence.** Any person who contravenes a provision of this bylaw, a facility license, an order, a code of practice, or a requirement made or imposed under this bylaw commits an offence and is liable to a fine not exceeding \$200,000.

**14.2 Separate Offences.** Where there is contravention that continues for more than one day, each day or part of a day on which the contravention occurs is a separate offence.

**14.3 Offences by Employees, Officers, Directors or Agents.** If a corporation commits an offence under this bylaw, an employee, officer, director, or agent of the corporation who authorized, permitted or acquiesces in the offence commits the offence even though the corporation is convicted.

**14.4 Remedies Cumulative.** The rights and remedies available to the district under this bylaw shall be cumulative and not alternative and shall be in addition to and not a limitation of any other rights and remedies that would otherwise be available to the district at law.

**ARTICLE 15**

15 APPEALS

- 15.1 Appeals to Board.** An applicant or licensee affected by a decision of the General Manager under Section 3.5, 4.2, 7.1, 8.1, 8.3 or 8.12 to this bylaw may appeal the decision to the board by advising the board in writing of the order or requirement being appealed from and setting out the reason for the appeal and attaching any relevant documents.
- 15.2 Time Limit for Commencing Appeal.** The written notice of appeal under Section 15.1 must be delivered to the board within 30 days of the decision from which the appeal is made.
- 15.3 Review by the Board.** The matter will be reviewed by the board pursuant to Section 15.4.
- 15.4 Power of the Board.** Upon considering the matter under appeal, the board may:
- a) confirm, reverse or vary the decision under appeal, and
  - b) make any decision that the board considers appropriate.
- 15.5 Appeal Does Not Operate as Stay.** An appeal under this section does not operate as a stay or suspend the operation of the decision being reviewed unless the board orders otherwise.

**ARTICLE 16**

16 GENERAL

- 16.1 Notification of Change in Control.** A licensee shall notify the district in writing of a change in ownership or control of the license within 10 days after such a change.
- 16.2 Delivery of Notices.** Any notice required to be given to an owner or operator of a facility or a licensee shall be deemed to have been delivered if such notice is delivered personally to an owner or operator of a facility or a licensee or is mailed by double registered mail to the registered or records office of an owner or operator of a facility or a licensee or to the address for service set out in a license. If delivery of a notice is unable to be effected by double registered mail then delivery may be affected by any of the following:
- a) personal delivery to the registered or records office of an owner or operator of a facility or a licensee,
  - b) personal delivery to a director, officer, liquidator, trustee in bankruptcy or receiver manager of an owner or operator of a facility or a licensee,
  - c) personal delivery to an adult individual at the facility who appears to be an employee of an owner or operator of a facility or a licensee or appears to be in control of the facility, and

- d) posting on the door or gate of the facility, when no one is present at the facility or the facility appears to be abandoned.

**16.3 No Transfer or Assignment.** A transfer or assignment of a facility license is without effect without the prior written approval of the General Manager. Approval will be given if all license requirements are being fulfilled and no license or license amendment fees are owed to the district.

**16.4 Headings.** The headings in this bylaw are for convenience only and shall not limit, enlarge or affect the scope of any of the provisions in this bylaw.

**16.5 Severability.** If any portion of this bylaw is deemed *ultra vires*, illegal, invalid or unenforceable in any way in whole or in part by any court of competent jurisdiction, such decision shall not invalidate or void the remainder of this bylaw. The parts so held to be *ultra vires*, illegal, invalid or unenforceable shall be deemed to have been stricken from this bylaw with the same force and effect as if such parts had never been included in this bylaw or revised and reduced in scope so as to be valid and enforceable.

## ARTICLE 17

### 17 TITLE

This bylaw may be cited for all purposes as the “Regional District of Nanaimo Waste Stream Management Licensing Bylaw No. 1386, 2004”.

Read three times the 10th day of August, 2004.

Received approval from the Ministry of Water, Land and Air Protection this 6th day of April, 2005.

Adopted this 26th day of April, 2005.

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Chairperson

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Deputy Administrator



**SCHEDULE "A"**

**EXEMPTIONS FROM LICENSING REQUIREMENTS**

For greater certainty and without limiting the generality of Section 2.1 of the bylaw, the following facilities, or any portion of a facility managing recyclable material or municipal solid waste in accordance with the following specifications, shall be exempt from the licensing requirements under Section 2.1:

1. any facility which accepts exclusively asphalt and concrete for the purposes of reprocessing, resale and reuse;
2. any retail food, grocery, beverage or drug establishment that accepts recyclable products on a return-to-retail basis;
3. any depot operating under or in fulfillment of the *Environmental Management Act Beverage Container Stewardship Program Regulation, 1997*; and
4. any facility operating under or in fulfillment of a *Environmental Management Act Stewardship Program*.

A facility that manages recyclable material or municipal solid waste in accordance with the above and also manages recyclable material or municipal solid waste in a manner not specified above will be required to be licensed within the provisions of this bylaw for the portion(s) of the operation not specified as exemptions in this Schedule A.

**SCHEDULE "B"**

**PLAN FACILITIES (PUBLIC)**

<b>FACILITY</b>	<b>LOCATION</b>
Regional District of Nanaimo Landfill	1105 Cedar Rd, Nanaimo
RDN Church Road Transfer Station	860 Church Rd, Parksville

**SCHEDULE "C"**

**FEES - FACILITIES**

The fees payable to the district by owners or operators of facilities under this bylaw shall be as follows:

**1. Application, Amendment, Annual Administration and Other Fees**

Column 1	Column 2	Column 3	Column 4	Column 5
	License Application Fee	Major Amendment Application Fee	Minor Amendment Application Fee	Annual Administration Fee
Facility license Type I	\$1,000	\$500	\$100	\$500
Facility license Type II	\$100	\$100	\$50	\$100
Code of Practice Registration	\$100	-	-	\$100

**SCHEDULE "D"**

**PUBLISHING AND BILLBOARD POSTING REQUIREMENTS**

**1. Publishing Notice Details for all Applications**

A published notice in a newspaper must:

- (i) be at least 8 centimetres in width,
- (ii) be at least 100 square centimetres in area,
- (iii) be entitled "FACILITY LICENSE APPLICATION NOTICE" in a minimum type size of 12 points,

**Bylaw 1386 Schedule D**

- (iv) have the text of the license application in a minimum type size of 8 points,
- (v) include the civic address of the proposed facility,
- (vi) include the name of the owner of the land on which the facility is proposed to be located,
- (vii) include the full name and address of the operator of the proposed facility,
- (viii) include a complete description of the activity to be carried out and the types and quantities of municipal solid waste or recyclable material to be managed at the facility, and
- (ix) include such other information as the General Manager considers necessary.

# Schedule D: Regional Solid Waste Monitoring Committee Terms of Reference

## REGIONAL DISTRICT OF NANAIMO SOLID WASTE MANAGEMENT PLAN MONITORING COMMITTEE

### TERMS OF REFERENCE

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#### 1. PURPOSE AND SCOPE

The purpose of the committee is to provide input, from a variety of perspectives, on the development and updating of the solid waste management plan (plan). In accordance with the Ministry of Environment's *Guide to the Preparation of Regional Solid Waste Management Plans* a single public and technical advisory committee will act as a "sounding board" of community interests and will provide advice to the Regional Board through the Solid Waste Management Select Committee.

#### 2. ROLES AND RESPONSIBILITIES

The role of the SWMP Monitoring Committee is to advise the RDN Board and staff on the implementation of the plan:

- Reviewing information related to implementation of the plan, including waste quantities, populations, and diversion rates for each plan component
- Advising on each major plan review which will occur every five years
- Providing recommendations regarding disputes arising during implementation of the plan that pertain to:
  - Interpretation of a statement or provision in the plan, or
  - Any other matter not related to a proposed change to the actual wording of the plan or operational certificate
- Ensuring adequate public consultation in matters affecting the public, such as landfill siting and transfer station siting
- Reviewing new facility applications and making recommendations to the Board

Recommendations of the SWMP Monitoring Committee are directed to the Solid Waste Management Select Committee.

#### 3. COMPOSITION AND CHAIR

Chair and Vice Chair to be appointed by the Chairperson of the Board.

Voting Members:

- One representative from the Select Committee (or alternate);
- Up to 15 members representing a diversity of community interests such as from the following groups:
  - Private sector waste management industry service providers
  - Private sector solid waste facility representatives

- Non-profit group with an interest in solid waste management (e.g. reuse organization)
- Large institutional solid waste generator
- Business representatives, including one focused on the 3Rs
- Members at large for the community (community association, youth, senior)
- Regional Landfill area representative
- Urban/rural geographic mix

Non-Voting Technical Advisors:

- Up to 12 members representing agencies including:
  - Regional District Staff – 3 members
  - Municipal Staff – 4 members
  - First Nations – 3 members
  - Provincial Agencies – 1 member
  - Federal Agencies – 1 member

#### **4. RULES OF PROCEDURE**

The Committee will act in accordance with the RDN Board Procedure Bylaw.

#### **5. ADMINISTRATION**

Administrative matters related to the SWMP Monitoring Committee will be conducted by RDN staff acting through the Chair.

#### **6. TERM**

The term of appointment is two years or until new members are appointed. Lack of attendance may result in members having their membership revoked at the discretion of the committee. If a member resigns from the committee, their position will be filled through the application process or by appointment, as appropriate.

#### **7. MEETINGS**

The SWMP Monitoring Committee will meet at least two times per year with a provision for workshops or other presentations at the SWMP Monitoring Committee’s discretion. Meetings will generally be held in the evenings. Meals will be provided when committee activities coincide with meal times.

There is no remuneration for participation on the committee but the RDN will reimburse mileage expenses according to Volunteer Mileage Reimbursement Policy A2.19.

#### **8. DECISION MAKING**

Committee decisions will be made by consensus whenever possible. If necessary, votes may be taken and, when making recommendations to the Board, minority opinions may be submitted in addition to the majority opinion.

Committee meetings are open to the public; however only committee members have speaking and voting privileges. Delegations that wish to address the committee must seek approval from the committee through a written request.

## Schedule E: Plan Dispute Resolution Procedures

The Regional Solid Waste Advisory Committee, Solid Waste Management Select Committee and Regional Board all considered dispute resolution options and passed the same motion on April 20<sup>th</sup>, May 30<sup>th</sup> and June 27<sup>th</sup> 2017 respectively with both committees passing the following motion:

*Solid Waste Management Plan disputes be directed to the Board for decision; and that the Board consider mediation for non-regulatory or legislative decisions.*

Procedure:

Disputes that might arise in regards to the Solid Waste Management Plan that are not suitably resolved by RDN staff, shall be directed to the RDN Regional Board for resolution. Disputes could include administrative decisions related to licensing, interpretation to a statement or provision in the plan, or any other matter not related to a proposed change to the actual wording of the plan or an operational certificate.

The initiating party shall address their dispute in writing to the Chair of the Regional Board and shall state the details of the dispute and the remedy requested. The Regional Board shall consider the dispute and may undertake one or a combination of the following:

1. Grant the remedy requested by the initiating party;
2. Deny the remedy being requested by the initiating party;
3. Confirm, reverse or vary an RDN policy or decision;
4. Direct staff or seek additional information or recommendation from staff;
5. Seek a recommendation from the Plan Monitoring Committee;
6. Seek additional information or recommendation from a consultant; or,
7. Direct mediation for not for non-regulatory or legislative decisions.

Parties aggrieved by a Regional Board directed or concluded dispute resolution may apply for judicial review by the Supreme Court of BC.

## Schedule F: Plan Alignment

The following key initiatives are supported by the plan. This list will be updated when the RDN is made aware of changes to these initiatives and the RDN will update the RSWMC and the Board:

- Climate Leadership Plan
- BC Energy Plan
- BC Bioenergy Strategy
- BC air quality objectives
- EPR programs under the Recycling Regulation (EMA)
- Organic Matter Recycling Regulation (EMA)
- Reviewable Projects Regulations (Environmental Assessment Act)
- Landfill Gas Management Regulation (EMA)
- Landfill Criteria
- Integrated Resource Recovery
- Develop with Care
- A Guide to Green Choices – Ideas and Practical Advice for Land Use Decisions in BC Communities

### Federal Alignment

- Canadian Council of Ministers of Environment Canada-wide Action Plan for EPR

### Regional Plans

- Regional Growth Strategy – Regional District of Nanaimo
- Regional District of Nanaimo Strategic Plan 2016-2020



## Schedule G: Financial Information

The current tipping fees at Church Road and the Regional Landfill sites authorized under this plan are contained in Schedule A and Schedule D of RDN Bylaw No. 1531 Regulation of Solid Waste Management Facilities.

Any changes to the tipping fee rates will follow the requirement for a bylaw amendment approved by the RDN Board.

### Schedule 'A'

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

<b>1.</b>	<b>Solid Waste, excluding Controlled Waste</b>	<b>Flat Rate</b>	<b>51 kg or greater</b>
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	

<b>2.</b>	<b>Recyclables</b>	<b>Flat Rate</b>	<b>51 kg or greater</b>
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	

<b>3.</b>	<b>Controlled Waste</b>	<b>Flat Rate</b>	<b>51 kg or greater</b>
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

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.

#### Schedule 'D'

Charges and procedures for use of Regional Landfill for disposing of Controlled Waste and Municipal Solid Waste which originates from the Cowichan Valley Regional District, effective April 1, 2017, are:

<b>1.</b>	<b>Controlled waste originating Cowichan Valley RD</b>	<b>Flat rate</b>	<b>51 kg or greater</b>
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
<b>2.</b>	<b>Solid waste under the direct control of the Cowichan Valley Regional District *</b>	<b>Tonne Rate</b>	
a.	Municipal solid waste	Tonne rate includes a 20% premium over the current Schedule 'A' rates	

\*Solid waste acceptance is contingent upon:

- 1) Prior written notice from Cowichan Valley Regional District to the General Manager explaining the reasons for, and the anticipated duration, of contingency landfilling;
- 2) The General Manager's acknowledgement of acceptance; and,
- 3) Any conditions the General Manager may specify with respect to the duration, requirements regarding acceptance or reporting.

*Insert Member Municipality and Electoral Area Tax Rate Table pending further discussions with RSWAC*

## **Schedule H: Emergency Debris Management**

When natural events, like floods, earthquakes or anthropogenic (human-caused) events hit a community, solid waste management is usually the last thing on anyone's mind. Safe, proper and timely management of debris is an essential but often overlooked component of an emergency response or disaster incident. Debris management is also one of many competing priorities governments must manage during such events. It is important that disaster debris be properly managed so as to protect human health, comply with regulations, conserve disposal capacity, reduce injuries, and minimize or prevent environmental impacts. It involves advance thought, planning and coordination among individuals at various levels of government and the private sector with experience and expertise in waste management. A disaster debris management plan can help a community identify options for collecting, recycling and disposing of debris. Not only does a plan identify management options and sources for help, but it also can save valuable time and resources if it is needed.

Links to current disaster debris management plans will be updated in this schedule as required.

**From:** [Matthew Louie](#)  
**To:** [Graves, Rebecca](#); [Alec Mc Pherson \(alecmcpherson@gmail.com\)](#); [Bill McKay](#); ["Haarsma Waste Innovations Inc"](#); [Jan Hastings](#); [Dean Jones](#); [Dr. Jim McTaggart-Cowan \(mctaco2@telus.net\)](#); [Ben Geselbracht](#); [Michele Green](#); [Ellen Ross](#); [Amanda Ticknor](#)  
**Subject:** Re: RSWAC Meeting July 13, 2017  
**Date:** Wednesday, July 05, 2017 1:26:01 PM

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I am submitting my resignation via this email message.

I have accepted a job working in the National Chief's Office at the Assembly of First Nations in Ottawa, ON.

It was a pleasure meeting everyone and thank you for inviting me to join this work. I wish you all well.

Kwut hwum qun - Matthew Louie

[Sent from Yahoo Mail on Android](#)

On Wed, Jul 5, 2017 at 1:57 PM, Graves, Rebecca <[RGraves@rdn.bc.ca](mailto:RGraves@rdn.bc.ca)> wrote:

Good Morning,

I have not heard back from you as to whether or not you can attend next week's meeting and if you will be joining us for dinner.

Thursday, July 13, 2017, 5:00-7:00pm (Dinner to be served at 4:30pm)

Please RSVP at your earliest convenience.

Thank you.

Rebecca Graves | RDN Regional & Community Utilities | Senior Secretary

T: 250.390.6551 | F: 250.390.1542 | email: [rgraves@rdn.bc.ca](mailto:rgraves@rdn.bc.ca)



**Maura Walker & Associates**  
ENVIRONMENTAL CONSULTANTS

June 2, 2017

Meghan Larson, Solid Waste Planner  
Regional & Community Utilities & Solid Waste  
Regional District of Nanaimo  
6300 Hammond Bay Road  
Nanaimo, BC  
V9T 6N2

Dear Meghan,

**Re: Review of Stage 2 Solid Waste Management Plan Consultation Efforts**

Thank you for the opportunity to review and comment on the consultation efforts undertaken to date as part of the process to update the RDN's Solid Waste Management Plan (Plan).

The planning process has completed 2 major stages:

1. An assessment of the existing solid waste management system and review of the implementation status of the current solid waste management plan, and
2. A review of options for the future, including identification of the preferred options.

According to the Ministry of Environment's Guide to Solid Waste Management Planning, the planning process should also include *"a process for comprehensive review and consultation with the public respecting all aspects of the development, amendment and final content of a waste management plan."*

The RDN has certainly responded to this direction and has engaged with the community and stakeholders in a comprehensive manner since the process to update the plan began.

In summary, the RDN continues to undertake an exceptional level of consultation by providing the general public and affected stakeholders with a range of opportunities to learn about the options under consideration. A memo prepared by RDN staff in October 2015 and another in June 2017 detail the consultation activities completed to date, which include:

- A multi-stakeholder advisory committee
- Newsletters to all households
- Meetings with affected stakeholder groups
- Presentations to community groups
- Presentations to municipal councils

- Engagement with First Nations.

I understand that additional consultation activities will be happening in the future associated with the draft version of the updated Plan. The above listed activities and those planned should easily meet the Ministry's expectation that the regional district "provide ample opportunity for the public to provide input into the proposed options, and to identify their support (or not) for each of these" (excerpt from the Guide).

In preparation for the final phase of consultation and submission of the updated Plan and Consultation Report, I'd like to draw your attention to 3 items that are part of the Ministry's plan approval checklist that may need additional attention from the RDN:

1. **Consultation Report should show how public consultation was used to influence the plan:**  
Although advisory committee minutes that reflect the discussions and decisions of this committee are posted on the web, the current consultation reports lack a clear line between input received through consultation efforts and how this input influenced the selection of recommendations for inclusion in the draft plan. The final consultation report should incorporate a section that summarizes the relevant feedback and how this feedback was used (to affirm, modify or eliminate options).
2. **Clearly identify implementation provisions in sufficient detail to enable those affected by the provisions to determine their impact:** The current version of the draft plan is vague on what "waste source regulation" and "haulers as agents" are and how they would work. Since these recommendations could have significant impact on external stakeholders, it's recommended that additional details be added to these sections. Graphic images used during stakeholder consultation could be added to the draft Plan to enhance how these recommendations could work. Additional details on how a private sector mixed waste MRF will be pursued could also be added to the draft Plan.
3. **Include a process for adequate public review (and minister's approval) of the implementing bylaws, licences and other authorizing provisions:** The current version of the draft Plan lacks detail on the process to implement some of the more ambitious elements of the Plan, including those new regulatory authorities noted above. It's recommended that the draft Plan include details on the RDN's intended implementation steps, including stakeholder consultation.

I congratulate the RDN on their impressive consultation efforts to date. On-going engagement with the public and stakeholders at this level will ensure an updated Solid Waste Management Plan that is both comprehensive and supportable.

Sincerely,



Maura Walker  
President