# REGIONAL DISTRICT OF NANAIMO REGIONAL SOLID WASTE ADVISORY COMMITTEE MEETING

# THURSDAY, APRIL 16, 2015, 5:00 PM - 7:30 PM RDN Board Chambers

AGENDA			
PAGES			
	CALL TO ORDER		
	DELEGATIONS		
	MINUTES		
3-5	Minutes of the Regional Solid Waste Advisory Committee meeting held February 19, 2015.		
	BUSINESS ARISING FROM THE MINUTES  Update on Consultation (S. Horsburgh)		
	COMMUNICATIONS/CORRESPONDENCE		
	UNFINISHED BUSINESS		
C 12	REPORTS  2 P/a Padvice Pavice & EDD (M. Largery) (to be girevleted)		
6-12	2 R's - Reduce, Reuse & EPR (M. Larson) (to be circulated)		
13-21	3 <sup>rd</sup> R - Recycling & End Uses (S. Horsburgh) (to be circulated)		
	Residential Curbside Collection Program Overview (C. Davies/J. Ainge) (presentation)		
	ADDENDUM		
22-23	SOLID WASTE MANAGEMENT SELECT COMMITTEE MEETING MINUTES  Minutes of the Solid Waste Management Select Committee meeting held Wednesday, March 11, 2015 (for information).		
24-25	Minutes of the Solid Waste Management Select Committee meeting held Thursday, April 2, 2015 (for information).		

# **BUSINESS ARISING FROM DELEGATIONS OR COMMUNICATIONS**

# **NEW BUSINESS**

Update from Regional Solid Waste Management Select Committee. (L. Gardner)

# **ADJOURNMENT**

#### Distribution:

Alec McPherson Chair, RDN Director Michael Recalma Qualicum First Nation Jim Kipp **Deputy Chair** Frank Van Eynde Member at Large Chief & Council Nanoose First Nation Jeremy Jones **Business Representative** Chief & Council Snuneymuxw First Nation Ed Walsh Waste Management Industry Al Metcalf City of Parksville Wally Wells **Business Representative** Al Cameron Town of Qualicum Beach Jan Hastings Non Profit Representative Fred Spears District of Lantzville Jim McTaggart-Cowan Member at Large Charlotte Davis City of Nanaimo Al Leuschen Ministry of Environment John Finnie Member at Large Member at Large Craig Evans Karen Muttersbach **Environment Canada** Ellen Ross Member at Large Glenn Gibson Island Health Brian Dietrich Member at Large Gerald Johnson Member at Large Michele Green Member at Large

Member at Large

Larry Gardner Manager, Solid Waste Services, RDN Sharon Horsburgh Senior Solid Waste Planner, RDN

Daniel Pearce A/GM Transportation & Solid Waste Services, RDN

Institutional Waste Generator

Jeff Ainge Zero Waste Coordinator, RDN Shelleen Schultz Recording Secretary, RDN

#### For information only:

Amanda Ticknor

Rod Mayo

Regional Board Members: CAO's: Paul Thorkelsson (RDN), Twyla Graff (District of Lantzville), Fred Manson (City of Parksville), Daniel Sailland (Town of Qualicum Beach), Ted Swabey (City of Nanaimo)

# REGIONAL DISTRICT OF NANAIMO REGIONAL SOLID WASTE ADVISORY COMMITTEE MEETING HELD ON THURSDAY, FEBRUARY 19, 2015 BOARD CHAMBERS

#### Present:

Alec McPherson Chair, RDN Director Michael Recalma Qualicum First Nation Frank Van Eynde Member at Large Al Cameron Town of Qualicum Beach Jan Hastings Non Profit Charlotte Davis City of Nanaimo Representative Wally Wells **Business** Glenn Gibson Island Heath Representative Gerald Johnson Member at Large Michele Green Member at Large John Finnie Member at Large Amanda Ticknor Member at Large Craig Evans Member at Large Ellen Ross Member at Large

#### Also in Attendance:

Larry Gardner Manager of Solid Waste, RDN
Sharon Horsburgh Senior Solid Waste Planner, RDN

Daniel Pearce A/GM Transportation & Solid Waste Services, RDN

Rebecca Graves Recording Secretary, RDN

Paul Thorkelsson CAO, RDN

Teunis Westbroek Mayor, Town of Qualicum

Paul Thompson Manager, Long Range Planning, RDN

# Regrets:

Chief & Council Nanoose First Nation Chief & Council Snuneymuxw First Nation Jeremy Jones **Business Representative** Rod Mavo Institutional Waste Generator Ed Walsh Waste Management Industry Fred Spears District of Lantzville Al Leuschen Ministry of Environment Karen Muttersbach **Environment Canada** 

Al Metcalf

Jim McTaggart-Cowan

Brian Dietrich

Environment Canad

City of Parksville

Member at Large

Member at Large

#### **CALL TO ORDER**

The Chairperson called the meeting to order at 5:20 pm.

#### **MINUTES**

MOVED F. Van Eyde, SECONDED G. Johnson, that the minutes from the meeting of the Regional Solid Waste Advisory Committee regular meeting held December 11, 2014, be amended and adopted as per discussion.

# **REPORTS**

# Future Population and Demographics (P. Thompson)

- P. Thompson presented the Future Population and Demographics presentation for the RDN. Other areas were referenced which included City of Parksville, Town of Qualicum, City of Nanaimo and 7 Electoral areas. The presentation included population growth, profile, distribution and housing comparisons within the RDN and City of Nanaimo. The projected stats are compiled from Census Canada and BC Stats.
- F. Van Eynde questioned if there were any studies done for survival rates for the 40-50 year olds?
- C. Davies asked if there was any information of the number of households that are receiving collection services from other municipalities?
- G. Johnson questioned if there any statistics available to come up with assessed value by housing type?
- P. Thompson commented that he could look into this and get back to Committee.
- C. Evans questioned if there is any historical data that goes back 35 years that could show what occurred and then translate what the diversion rates were.
- P. Thompson replied that it would be difficult to obtain those records as BC Stats do not date back that far.

## Finalize Consultation Plan (L. Gardner)

L. Gardner informed the Committee that following the presentation by Maura Walker in December 2014, the Consultation and Communications Plan has been revised and submitted to the Ministry of Environment for comment. This Plan is our commitment to do consultation and how we will move forward.

MOVED G. Johnson, SECONDED J. Finnie, that the Consultation Plan be adopted.

The motion was amended to include a request by the Committee that public consultation should occur in Stage 2 as well as Stage 3.

**CARRIED** 

# Stage One Review & Update (S. Horsburgh)

S. Horsburgh gave an overview of the Stage One Report and discussed how it was presented at several public forums which included a Hauler's and Recycling Roundtable meeting, RDN Board Members Workshop, Zero Waste Community Workshop and two RSWAC meetings. Current system includes key programs, policies and infrastructure. A discussion occurred in regards to the Stage 1 process and to review issues and opportunities moving forward. The next step is to present the Stage One report and issues to the Select Committee and then to the RDN Board for approval.

# Finalize the Issues (S. Horsburgh)

S. Horsburgh discussed the Issues and Work plan document that Committee members had received. The document outlines the issues captured from the results of the findings in the Stage One Existing System report and stakeholder meetings. The work plan reflects the issues identified to date.

# Region Wide Newsletter & Survey Questions (S. Horsburgh)

S. Horburgh gave a demonstration of the web based Solid Waste Management Plan survey and invited feedback on the newsletter & survey questions.

## Future Waste Generation Projections (L. Gardner)

L. Gardner briefly outlined the presentation on why future waste generation projections were important. Forecasting future waste generation is effected by a number of variables such as regional growth, stewardship programs, waste export and consumerism.

#### **ADJOURNMENT**

MOVED J. Hastings that the meeting be adjourned.

**CARRIED** 

CHAIRPERSON			





TO: Larry Gardner

Manager, Solid Waste Services

**DATE**: April 10, 2015

MEETING: RSWAC, April 16, 2015

FROM: Meghan Larson

Special Projects Assistant

**FILE**: 5365-00

**SUBJECT**: Reduce, Reuse and Extended Producer Responsibility Options

### RECOMMENDATION

That the Regional Solid Waste Advisory Committee receive this report for information as part of the 2015 Solid Waste Management Review Process.

#### **PURPOSE**

The following is a presentation of options related to waste reduction and reuse, as well as extended producer responsibility (EPR). The options are related to reducing the amount of waste that requires management by local governments.

These options are presented for consideration by the Regional Solid Waste Advisory Committee (RSWAC). This memo is intended to stimulate discussion on future options for consideration during the Solid Waste Management Plan Review Process.

#### **BACKGROUND**

## **Reduce and Reuse**

As described in the Stage 1: Existing System report, the Regional District of Nanaimo (RDN) and its member municipalities already use a number of strategies to encourage residents to "reduce and reuse" as part of their zero waste goal. The RDN promotes the use of EPR programs through its Zero Waste Newsletters and online via the Regional Recycling Directory. The RDN promotes backyard composting through providing information on their websites on how to backyard compost and grasscycle. Between 1993 and 2001, the RDN has sold approximately 16,500 subsidized backyard composters to residents. With reasonably priced compost units becoming more available for purchase, the RDN has stopped distributing composters and instead encourages residents to build their own or purchase one from a local retailer. Backyard composting is believed to have a significant impact on reducing the waste that requires collection and subsequent management. A typical backyard composter is estimated to divert 361kg per year. Assuming that only the RDN-distributed composters are being used, an estimated 4,000 tonnes of organic waste materials is being diverted each year.

The RDN supports a zero waste school education program that is delivered to local primary schools through contract. The two waste management non-profit organizations in the RDN, Gabriola Island Recycling Organization (GIRO) and the Nanaimo Recycling Exchange (NRE), provide a significant level of

<sup>&</sup>lt;sup>1</sup> Based on North Shore Recycling Program Report *Backyard Composting Undervalued,* May 2011

reduce and reuse education and outreach. There are also many reuse operations including thrift and reuse stores operated by private businesses and charities in the RDN. These operations provide a large degree of waste diversion and serve to decrease the per-capita waste generation within the RDN.

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 2014, the City of Nanaimo introduced the Zero Waste Challenge during National Waste Reduction Week encouraging residents to "slim their bin".

In addition to the Regional District'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, UsedNanaimo and FreeCycle networks that are actively involved in the sale and purchase of used goods. The Repair Café Nanaimo holds regular repair workshops where residents can bring in their broken items and receive help from local repair experts. Nanaimo Science and Sustainability Society hosts a Trash to Treasure school program for grade 6 students.

# **Reduce and Reuse Options**

Reduction and reuse prevent waste from entering the waste management system. Waste reduction and reuse are at the top of the waste management hierarchy but are often given the least amount of attention as part of solid waste management system because the impact of programs targeting reduction and reuse are difficult to measure compared to waste diversion programs such as recycling and composting.

The RDN's reduction efforts have focused on public education as well as financial support for the Nanaimo Recycling Exchange (NRE) education programs. The RDN also promotes the "make memories, not garbage" message through the Zero Waste Newsletter during the holiday season.

The top challenges related to waste reduction and reuse are:

- How can to encourage waste reduction?
- How to encourage behaviours that move "up the hierarchy" from recycling to reduction and reuse?
- How to move towards Sustainable product design and manufacturing?
- Is the per capita waste generation rate increasing or decreasing?
- What is local government's role in the above?

The RDN has limited power to change the dominant culture or directly impact the design and manufacture of consumer goods. However, the RDN can lead by example and promote desired behaviours. The following list provides examples of actions to encourage waste reduction and reuse.

# **Options: Reduce**

- 1. Promote the practice of renting or sharing instead of purchasing infrequently used equipment either by educating residents about existing sharing networks or by establishing a Sharing Economy Working Group, following the example of San Francisco.
- 2. Provide support for the establishment of a tool library (see: <a href="http://vancouvertoollibrary.com/">http://vancouvertoollibrary.com/</a>)
- 3. Conduct a "repair café" or sponsor the local Repair Café Nanaimo (<a href="http://www.repaircafenanaimo.ca">http://www.repaircafenanaimo.ca</a>)
- 4. Promote the practice of repairing durable goods instead of replacing them.

5. Develop campaigns that promote "reduce" as key part of a green lifestyle, connected to other green behaviours such as reducing energy or water use, active transportation, etc... similar to the Team WaterSmart concept.

- 6. Promote the make memories not garbage campaign.
- 7. Deliver a food waste reduction campaign see UK's Love Food Hate Waste.

  (<a href="http://www.lovefoodhatewaste.com/">http://www.lovefoodhatewaste.com/</a>) or the US EPA Food: Too Good to Waste campaign (<a href="http://westcoastclimateforum.com/food">http://westcoastclimateforum.com/food</a>)
- 8. Continue to support grasscycling and xeriscaping in connection with Team WaterSmart.
- 9. Continue to carry out, or provide financial support, for waste reduction education.

# **Options: Reuse**

- 1. Provide financial support for non-profit agencies carrying out reuse activities. This could include the waiving tipping fees for non-saleable goods that need to be disposed.
- 2. Investigate recovery of materials at the Cedar Landfill (e.g. scrap metal, appliances, wood). (Note that other strategies related to construction and demolition waste will be provided in a subsequent memo).
- 3. Establish a building material reuse centre such as Urban Ore (<a href="http://urbanore.com/">http://urbanore.com/</a>) or the RE stores in Bellingham and Seattle (<a href="http://www.re-store.org">http://www.re-store.org</a>). (Note that other strategies related to construction and demolition waste will be provided in a subsequent memo).
- 4. Support or promote established construction re-use stores in the region like Demxx in Coombs and the ReStore in Nanaimo.
- 5. Promote reuse by coordinating region-wide reuse events e.g. Reuse Rendezvous in the City of Nanaimo or community-wide garage sales.
- 6. Promote an annual art contest and display using reused/salvaged materials.

# **Extended Producer Responsibility**

In British Columbia, Extended Producer Responsibility (EPR) is an environmental policy approach in which the producer's responsibility for reducing environmental impact and managing the product is extended across the whole life cycle of the product, from selection of materials and design to its end-of-life<sup>2</sup>. In terms of solid waste management, EPR puts the onus of end-of-life product management on the producer and consumers of a product rather than the general tax payer or local government.

EPR programs play an integral and increasingly significant role in the management of municipal solid waste in BC. Most existing EPR programs have been established by producers and brand owners of products in accordance with requirements set out in the BC Recycling Regulation (part of the Environmental Management Act). The Ministry of Environment develops the legislation and regulations that product stewards must follow and oversees approving stewardship plans, monitoring the stewards' performance and enforcing compliance where necessary. Other programs have been set up voluntarily by individual companies and industries. Appendix 1 shows a list of current regulated and voluntary EPR programs in BC. The term "product steward" refers to the agency responsible for operating the EPR program on behalf of producers and brand owners.

In the RDN, the current collection infrastructure for existing EPR programs consists of return-to-retail and take-back depots. The RDN's Recycling Directory 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-fee 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.

<sup>&</sup>lt;sup>2</sup> As defined by BC Ministry of Environment

In accordance with the BC Recycling Regulation, the costs of collection and management of EPR programs are to be borne by producers and consumers, not by local governments or their tax payers. Many stewardship programs charge separate fees at the point of purchase to cover the costs of managing the discarded product, and the fee is shown on the sales receipt as an "eco-fee". These fees are applied by producers/brand owners as part of the price of the product; they are not government applied taxes. The stewardship agencies are responsible for educating consumers regarding their programs, for providing information about collection options, fees, and handling practices and the operation of take-back locations.

The latest addition to the list of materials regulated under the Recycling Regulation is residential packaging and printed paper (PPP). This EPR program began in May 2014. In this region, both the City of Nanaimo and the RDN act as collectors of residential PPP from their curbside service customers. A financial incentive to collect PPP on their behalf is paid by MMBC. The MMBC partnership has resulted in a reduction in the cost of curbside collection services through funding to the RDN, an increase in the types of packaging that can be recycled in the curbside collection program, and an increase in the types of packaging that can be recycled through recycling depots operated by private companies and non-profit recycling organizations.

Challenges related to EPR in the RDN are:

- Lack of public awareness for some products (what products are covered, how and where to properly manage covered products);
- Uncertainty regarding the types of materials that will be included in future EPR programs, the timing of those future programs, and the impact that those programs will have on cost recovery and landfill life expectancy;
- Accessibility of EPR take-back programs due to location in the RDN or lack of mobility for residents without access to a personal vehicle;
- Level of involvement by local government what role should local government play in EPR programs.

## **Options: EPR**

Since one purpose of EPR is to reduce the effort expended by local governments on the management of the materials covered by the EPR programs, the options presented below do not focus on implementation of the EPR programs, but rather on advocacy and facilitation.

- 1. Include information about EPR programs (what products are covered, how and where to properly manage those products) with other educational information produced by the RDN.
- 2. Work with product stewards and the Ministry of Environment to ensure that services are well sited and meet the needs of the communities (address access issues).
- 3. Advocate having more products covered under EPR under the BC Recycling Regulation.
- 4. Advocate for minimum post-consumer recycled content requirements for consumer goods.
- 5. Advocate senior governments to prohibit the manufacture and distribution of non-recyclable packaging.
- 6. Encourage design for environmental principles and circular economy among producers,
- 7. Maintain landfill bans on EPR-managed materials and update disposal ban list as new EPR programs are launched.

File: Date: 5365-00 April 10, 2015

Page:

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- 8. Establish a preferred service delivery approach:
  - a. Full EPR:
    - i. Maintain existing RDN/municipal services.
    - ii. Require stewards to bear full costs.
    - iii. Promote existing private services and provide specific messages to residents and businesses about why the RDN is opting not to start new services.
  - b. Hybrid Service:
    - i. Develop "one-stop" facilities and/or expand existing facilities (i.e. Regional Landfill and Church Road Transfer Station).
    - ii. Negotiate agreements with stewards to more fully compensate for the costs, while providing supplementary funding as necessary.
    - iii. Promote RDN and private return facilities.
  - c. High Service:
    - i. Develop multiple "one-stop drop" facilities in addition to expanding existing facilities.
    - ii. Negotiate agreements with stewards to more fully compensate for the costs, while providing supplementary funding as necessary.
    - iii. Promote RDN and private return facilities.
  - d. Discontinue collection of stewardship items at regional facilities.

#### **ALTERNATIVES**

There are no alternatives for this report.

#### FINANCIAL IMPLICATIONS

This report is presented for information only therefore has no financial implications.

# STRATEGIC PLAN IMPLICATIONS

This report was prepared to provide information to Regional Solid Waste Advisory Committee as part of the Regional District's Solid Waste Management Review Process.

## SUMMARY/CONCLUSIONS

This technical memorandum is intended to provide options for the RDN to continue supporting Reduce, Reuse and EPR programs in the region based on current programs and trends in other Regional Districts in BC and Canada and not intended to be an extensive list of all options available. This memorandum is intended to stimulate discussion by the RSWAC for the purposes of the RDN SWMP review.

Report Writer

Manager Concurrence

A/General Manager Concurrence

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Appendix 1: Current Regulated and Voluntary EPR programs in BC

Product Category	Product Details	Product Steward	Program Status
Antifreeze and Oil	Antifreeze, used lubricating oil, filters and containers	BC Used Oil Management Association (BCUOMA)	Ongoing since 1992 (oil) and 2011 (antifreeze)
Batteries	Rechargeable batteries weighing <5kg, Alkaline, lithium primary and carbon-zinc batteries	Rechargeable Battery Recycling Corporation (RBRC)	Ongoing since 2010
Beer Containers	Beer cans, standard brown beer bottles and certain clear refillable beer bottles	Brewers Distributor Ltd. (BDL)	Ongoing since 1997
Beverage Containers	Non-Alcohol – soft drinks, juice, water and sports drinks Alcohol – wine, spirits, import beers/coolers sold in non-refillable containers	Encorp Pacific (Canada)	Ongoing since 1994
Cell Phones	Cell phones, smart phones, wireless PDAs, external aircards, pagers and accessories (chargers etc.)	Canadian Wireless Telecommunications Association (CWTA)	Ongoing since 2009
Electrical Outdoor Power	Lawn tractor, and hand- held walk behind and free-standing OPE	Outdoor Power Equipment Institute of Canada (OPEIC)	Ongoing since July 2012
Electronics	Portable and non- portable electronics	Electronic Products Recycling Association (EPRA)	Ongoing since 2007
Large Appliances	Major appliances designed for use in homes including refrigeration, laundry and cooking appliances	Major Appliance Recycling Roundtable (MARR)	Ongoing since August 2012
Lighting Equipment	All residential-use lighting products (lights, lamps and fixtures)	ReGeneration	Ongoing since 2010 (CFL, fluorescent tubes) and July 2012 (all lamps). ICI sources and ballasts since 2012
Lead-Acid Batteries	All consumer and industrial lead-acid batteries	Canadian Battery Association (CBA)	Ongoing since 2011
Packaging and Printed Paper	Residential packaging and printed paper with text or graphics (news papers, flyers etc. with the exception of bound books)	Multi-Material BC (MMBC)	Ongoing since May 2014

Mandated EPR Programs			
Product Category	Product Details	Stewardship	Program Status
Packaging and Printed Paper	Residential packaging and printed paper with text or graphics (news papers, flyers etc. with the exception of bound books)	Organization  Multi-Material BC (MMBC)	Ongoing since May 2014
Paint, Flammable Liquids, Solvents, Pesticides, Gasoline	Paint, fuels, solvents, pesticides	ReGeneration	Ongoing since 1994 (paint), 1997 (flammables) and 1998 (aerosols)
Medication	Prescription drugs, non-prescription medicine, mineral and vitamin supplements, throat lozenges	Health Products Stewardship Association (HPSA)	Ongoing since 1997
Small Appliances and Electrical Power Tools	Portable electrical appliances and power tools designed for use in homes	Canadian Electrical Stewardship Association (CESA)	Ongoing since 2011 (small appliances) and July 2012 (electrical tools)
Smoke Alarms	Commercial and residential smoke and carbon monoxide alarms	ReGeneration	Ongoing since 2011
Thermostats	Electromechanical (mercury containing) and electronic thermostats	Switch the Stat	Ongoing since 2010
Tires – Automobile	Most passenger, commercial and agricultural equipment tires	Tire Stewardship BC (TSBC)	Ongoing (industry- led) since 2007
Toys	Electronic or electrical toys	Encorp Pacific (Canada)	Ongoing since August 2012
	Voluntary EF	PR Programs	
Tires - Bicycle	All types of bike tires and tubes, with the exception of tubular tires	Tire Stewardship BC (TSBC)	Ongoing since 2011



# **STAFF REPORT**

**TO**: Larry Gardner

Manager, Solid Waste Services

**DATE**: April 10, 2015

MEETING: RSWAC April 16, 2015

FROM: Sharon Horsburgh

Senior Solid Waste Planner

**FILE**: 5365-00

**SUBJECT**: The 3R – Recycling and End Uses

## RECOMMENDATION

That the Regional Solid Waste Advisory Committee (RSWAC) receive this report for information as part of the 2015 Solid Waste Management Review Process.

# **PURPOSE**

The following presentation of options related to recycling and end uses is intended to stimulate discussion on future options for consideration during the Solid Waste Management Plan Review Process. These options are presented for consideration by the RSWAC.

# **BACKGROUND**

The options presented address the 3 R in the hierarchy: Recycling. An overview of collection services that are available to residents and businesses follow the three main material streams: Garbage, Recyclables; and Organics (food waste and yard waste).

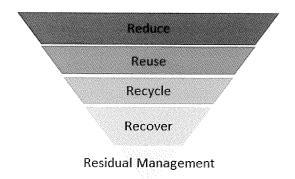


Figure 1: Waste Management Hierarchy

File: Date:

5365-00 April 10, 2015

Page:

7

All single-family homes in the Regional District of Nanaimo (RDN) (approximately 53,500 homes) receive curbside collection of garbage, recyclables and kitchen scraps (food waste and compostable paper). Within the City of Nanaimo, the City's in-house staff collects garbage and food waste scraps and a contractor collects the recyclables. In the RDN service area, which include the Electoral Areas plus the municipalities of Lantzville, Parksville and Qualicum Beach curbside collection services are provided through a contractor, with the exception of the Town of Qualicum Beach where garbage is collected by the Town.

Curbside garbage and recycling for all single-family homes has been in place since 1989; the collection of kitchen scraps was fully implemented by 2011. In 2012, each household set out an average of 400 kg of discards, of which roughly 60% were diverted to recycling or composting.

Strategies and practices related to collection and end uses of garbage, recyclables and organic waste are well established in the region and are believed to be well accepted. The RSWAC will be asked to review the information presented in this memo, and to provide input on the general direction and options

# **GARBAGE**

# **Current Residential Garbage Collection Practices**

Garbage collection services in the RDN are provided by both public and private sector service providers. Collection of residential waste at the curb is a mandatory service provided to single family type homes throughout the region. The RDN under contract to Progressive Waste Solutions collects waste from residential customers in the Electoral Areas, and the municipalities of Lantzville and Parksville. The Town of Qualicum Beach conducts garbage collection services for their residential customers. City of Nanaimo residents receive collection from City staff.

Municipal collection programs limit the quantity of garbage that can be set out for collection to one can limit every two weeks. Additional cans are only collected if residents attach a garbage tag that can be purchased for \$2 in the RDN and \$3 in the City of Nanaimo. An additional garbage tag purchase supports the RDN's user pay collection system. Municipal collection programs also prohibit the inclusion of materials banned from disposal at the Regional Landfill.

Residential curbside collection is funded through Utility Fees, not property taxes.

# **Private Sector collection**

The provision of garbage collection to the commercial sector is conducted by private sector haulers.

The RDN and member municipalities typically do not provide collection services to multi-family buildings, with the exception of townhouse small multi-family dwellings that can be serviced with the same equipment as single-family residences in the RDN. For the purposes of this memo, those small multi-family dwellings are considered to be single-family residences. Large multi-family buildings, such as apartments and strata housing (particularly in the City of Nanaimo) are considered to be part of the Institutional Commercial and Industrial (ICI) sector.

The ICI sector contracts privately for collection of garbage. A number of private service providers offer a range of services.

# Current End Uses for Garbage

Municipal garbage collection, self-haul residential and commercial customers primarily bring their garbage to a local disposal facility (either the CRTS or the Regional Landfill).

Most of the municipal solid waste generated in the RDN is disposed of at the Regional Landfill. Some waste from construction, demolition and other activities is processed as hog fuel at private locally managed facilities. Residue materials are disposed of either at the Regional Landfill or shipped out of region. The operation of private facilities will be discussed in greater detail in a future memo on residuals management options.

# Garbage Issues and Challenges

The Stage 1 Issues Memo did not identify any issues related to garbage collection or any issues related to the disposal (end use) of municipal solid waste. Anecdotally, residents moving from areas outside of the RDN have reported confusion regarding different types of services offered (e.g backyard composting versus curbside pick-up, food waste collection and no yard waste collection, and quantity limitations).

# Potential Garbage Collection Options

- 1. Maintain the utility payment model that is part of the regional user pay model. This option would see no change to how the curbside food waste, recycling and garbage fees are collected from single-family residences.
- 2. Continue to have multi-family and ICI sectors serviced by private sector collectors (inherently user pay at a building/customer scale). No change from current practice.
- 3. Encourage municipalities to offer garbage collection services to multi-family buildings and commercial generators. This is the practice in the District of North Vancouver; the District effectively competes with the private sector.

#### Potential Garbage End Use Options

For the timeframe of the SWMP review, the RDN does not plan to change current disposal practices for municipal solid waste. The Regional Landfill and private licensed facilities are expected to continue to provide disposal services within the region. The RDN is continually looking at ways to maximize efficiencies and the life of the landfill as well as investigating innovative approaches to waste management, such as waste segregation facilities, waste to energy processes or other resource recovery methods. These will be the topics of future memos.

#### RECYCLING

## **Current Recycling Collection Practices**

## Public sector collection

Since 1989, the RDN and the City of Nanaimo have been the service providers for single-family residential curbside recycling. Approximately 6,500 tonnes of recyclable material is collected through the curbside collection program each year. In 2014, recycling services for the single-family residential sector was transferred to Multi Materials BC (MMBC) in response to the new provincially legislated, producer/consumer funded, product stewardship program for packaging and printed paper. Both the RDN and City of Nanaimo continue to provide curbside collection of recycling but under new contractual relationships with MMBC.

# Private sector collection

As with residential garbage collection, recycling collection from multi-family and the ICI sector is not provided through municipal services. The RDN works collaboratively with the private hauling community and multi-family building owners to assist to provide recycling collection educational support in the form of brochures and decals. The RDN's other activities that support multi-family recycling includes bans on the disposal of recyclable materials at Regional facilities, and education on the Zero Waste programs

# Collection Recyclables

Curbside blue box materials are collected in a vehicle with two compartments, keeping recyclables separate from Green Bin materials.

# Processing and Consolidation

Recyclable materials collected from the Regional curbside recycling programs and the commercial sector are sorted and processed at local Multi Material recycling facilities. These products are sold on global commodity markets.

The Stage 1 Issues Memo identified the following issues related to the end use of recyclables:

- Film Plastic Contamination. There is a limited market for post-consumer film plastic due to high levels of contamination, such as food waste left inside bags and biodegradable and compostable plastic shopping bags which are not recyclable and are very difficult to visually distinguish from recyclable plastic.
- ii. Limited Market for Post-Consumer Glass. There is a limited market for post-consumer glass in BC. On Vancouver Island, most glass collected in recycling depots and through curbside programs (where provided) is crushed and stockpiled for use as aggregate.

The top challenges identified in the Stage 1 Issues Memo as they relate to residential recycling collection are:

- i. No single service provider of recycling collection services to the multi-family housing sector. This can create confusion or frustration for Multi Family residents regarding whom to contact regarding collection services, and also limits opportunities for standardized waste management education.
- ii. Unknown effectiveness of waste reduction and diversion efforts in the multi-family sector as there is minimal data available on the quantity of garbage and recycling generated by residents living in multi-family buildings, so it is unclear how effective current recycling initiatives are for this sector.
- iii. Need for increased diversion of ICI waste. An estimated 15% of waste from the ICI sector is recyclable paper even though paper and cardboard are banned from disposal. The challenge is the need to improve diversion of ICI waste to maximize diversion from this sector.

# Recycling Collection Options

In 2011, the British Columbia Recycling Regulation was amended to include packaging and printed paper (PPP) in a province-wide stewardship program. Since May 2014, Multi-Material British Columbia (MMBC), the not-for-profit agency representing a large number of the producers of these materials, is responsible for collection and end of life management of PPP materials. The majority of these materials are collected in the RDN curbside program, with additional recyclables accepted at depots only. Both the City of Nanaimo and RDN receive financial incentives to collect PPP on behalf of MMBC; the funds receive are used to offset the costs to provide respective collection programs.

To support the Multi Family recycling efforts the RDN may wish to continue monitoring multi-family recycling services to determine service levels and review the potential to introduce the following items:

- 1. Draft model policies and bylaws that would facilitate increased recycling in multi-family buildings and businesses:
  - a. Require new multi-family buildings to allocate space for recycling, both in suite and centralized (needs municipal involvement). Example: Bellevue (WA), Richmond (BC), Metro Vancouver (model bylaw:
    - http://www.metrovancouver.org/services/solidwaste/planing/Engagement/Pages/MFC.aspx).
  - b. Develop a model bylaw and enforcement model to require recycling in multi-family buildings. Implementation would be at the municipal level. Examples: Metro Vancouver, Metro Portland.
  - c. Require solid waste management reporting by each multi-family and ICI building once waste services are in place to facilitate data tracking.

#### FOOD WASTE COLLECTION PROGRAM

Organic wastes in the realm of Municipal Solid Waste are typically made up of pre and post-consumer food scraps, and yard and garden waste. In 2005, the RDN introduced a ban to prohibit pre-consumer commercial food waste and the disposal of yard waste.

There is no public sector curbside collection for yard and garden waste within the region. However, there are private collection services, and City of Parksville and the Town of Qualicum Beach offer seasonal chipping programs for their residents. For those needing to self-haul yard waste for disposal the Regional Landfill and Church Road Transfer Station accept it for recycling. Currently, the RDN funds the processing of the yard waste drop off at the Nanaimo Recycling Exchange. In addition, there are several private yard waste drop-off locations within the RDN. (Please see Appendix 1)

# Public sector collection

Following a successful pilot program which commenced in 2007, the region-wide Green Bin program was introduced in 2010 for the collection of residential food waste. This material is collected weekly at the curb.

### Private sector collection

As with residential garbage and recycling collection, food waste collection from multi-family sector is not provided through municipal services. The expansion of the single-family curbside program to include

food waste collection has driven some within the multi-family sector to subscribe to private sector food waste collection services. The RDN works collaboratively with the private hauling community and multi-family building owners to assist to provide food waste collection educational support in the form of brochures and decals.

In June 2005, the Regional District of Nanaimo banned food and organic waste from commercial and institutional sources from disposal at the Regional Landfill. The Commercial Food Waste Disposal Ban is contained in Bylaw 1531.

This ban applies to any commercial or institutional operation that sells or produces food, such as restaurants, grocery retailers, grocery wholesalers, and educational and health care facilities, is prohibited from disposing of food waste in their regular waste stream.

## Current Organic Waste End Uses

Food waste and other acceptable household compostable waste collected in the RDN are taken to Nanaimo Organic Waste's processing facility, located at Duke Point in Nanaimo. The fully enclosed plant uses organic material including yard and garden waste, and household and commercial food waste. These materials are mixed and composted using an aerobic, in-vessel process that generates sufficient heat to kill pathogens. The finished products include compost, fertilizers, and soil amendments, all of which meet the BC Organic Matter Recycling Regulation.

In terms of organic waste processing, the RDN has a five year contract with Nanaimo Organic Waste. The RDN's goal is to create conditions favorable for the growth of organics diversion. Organics management at Nanaimo Organic Waste (NOW) located in Duke Point takes the form of in-vessel aerobic composting. There are numerous studies that have been conducted evaluating the economic, environmental and social impacts of composting and the RDN has worked collaboratively with member municipalities and the commercial sector to facilitate development organics diversion programs. The RDN's commercial organics ban has furthered the market development of composting as a waste management treatment.

The RDN's main role with respect to handling and processing organic waste currently is to regulate private facilities, rather than operating or contracting operations. As a measure to support the commercial organics ban on pre consumer food waste, the RDN accepts loads of organics at the Church Road transfer station. This material is transferred to NOW, which is the only licensed in-vessel composting facility that can accept food waste for composting in the RDN.

In 2005, the Province approved the RDN's Waste Stream Management Licensing (WSML) Bylaw that regulates facilities managing Municipal Solid Waste and this includes Composting Facilities. The purpose of the WSML Bylaw is to ensure that composting operations do not contaminate ground or surface water, or generate unacceptable levels of nuisance odour, vectors, litter or dust, and to protect the public from composting operations, in the event they violate the requirements of the bylaw. The bylaw supplements existing provincial regulations under the Organic Matter Recycling Regulation (OMRR). The bylaw also deals with issues related to inspection, enforcement, storage and abandonment of materials.

#### Food Waste Issues and Challenges

There are a number of challenges identified in the Stage 1 Issues Memo related to organic waste. The organics strategy was developed in 2004 and it should be updated to reflect new challenges.

During stakeholders meetings and from the survey feedback indicates a high level of satisfaction with the curbside food waste collection service. However, there are more challenges in the commercial sector where the RDN has limited influence. Challenges include:

- 1. Implications of the commercial food waste ban is presenting enforcement challenges for RDN staff that is due to high turnover of staff in the food sector.
- 2. Difficult to enforce bans when there is the threat of waste export. Enforcement may cause haulers to use facilities that have the capacity to export waste out of district.
- 3. Bans are a challenge in areas without public sector regulation of private collection programs.
- 4. Implementing food waste collection in the multi-family sector is a challenge without some form Regional flow management. Flow management would allow the RDN to enforce material bans.
- 5. A flow management strategy would assist in maintaining private Sector recycling infrastructure as this could minimize financial risk to operators and potentially ensure recyclable materials stay in the region.
- 6. Due to decreasing enforcement the anticipated increase in the amount of food waste collected from the commercial sector has diminished.

Food Waste Collection – Future Considerations for Review

In 2011, the roll out of the Region-wide residential food waste collection program was completed. What has been identified through consultation are the following items for consideration as part of the Solid Waste Plan review:

- 1. Increasing the material bans at the Regional landfill to include food waste from the residential sector & the multi family sector
- 2. Increasing enforcement of the pre-consumer commercial organics
- 3. Expanding the scope of the current commercial organics ban to include commercial postconsumer organics
- 4. Review the use of compostable bags in the residential program
- 5. Offer drop off of organics at the Regional landfill
- 6. Continue to encourage and support multi-family buildings to implement food waste collection
- 7. Facilitate the development of food waste drop off locations for multi-family generators (e.g. food scraps drop spots in Vancouver <a href="http://foodcrapsdropspot.tumblr.com/">http://foodcrapsdropspot.tumblr.com/</a>)
- 8. Facilitate the distribution of onsite digesters for MF buildings
- 9. Consider mandating private food waste services for multi-family and ICI buildings this will facilitate data tracking and increased diversion options
- 10. Continue to ban disposal of yard and garden waste. No change to current policy
- 11. Continue to operate yard and garden waste drop-off service at Regional facilities
- 12. Work with Electoral Areas to enact standardized bylaws banning the burning of yard waste and develop bylaws for electoral areas
- 13. Evaluate feasibility of curbside collection of yard waste region wide and/or in urban areas

# **ALTERNATIVES**

There are no alternatives for this report.

File: Date:

5365-00 April 10, 2015

Page:

10, 2013

# FINANCIAL IMPLICATIONS

This report is presented for information only therefore has no financial implications.

# STRATEGIC PLAN IMPLICATIONS

This report was prepared to provide information to Regional Solid Waste Advisory Committee as part of the Regional District's Solid Waste Management Review Process.

# **SUMMARY/CONCLUSIONS**

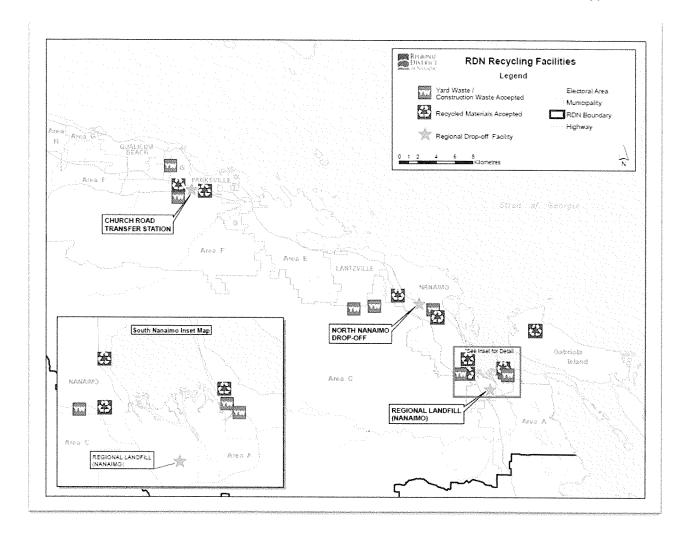
This technical memorandum is intended to provide a an overview of how the RDN supports recycling and area for future consideration that will continue to support recycling initiatives in the region. New programs will depend on future trends and global commodity markets. This memorandum is intended to stimulate discussion by the RSWAC for the purposes of the RDN SWMP review.

Report Writer

A/General Manager Concurrence

Manager Concurrence

# Appendix 1



#### **DISTRICT OF NANAIMO**

# MINUTES OF THE SOLID WASTE MANAGEMENT SELECT COMMITTEE MEETING HELD ON WEDNESDAY, MARCH 11, 2015 AT 1:30 PM IN THE RDN COMMITTEE ROOM

Present:

Director A. McPherson Chairperson

Director H. Houle Electoral Area 'B'

Director M. Young Electoral Area 'C'

Director B. McKay City of Nanaimo

Director J. Kipp City of Nanaimo

Alternate

Councillor B. Avis Town Of Qualicum Beach

Also in Attendance:

D. Pearce A/Gen. Mgr., Transportation & Solid Waste Services, RDN

L. Gardner Manager of Solid Waste, RDNS. Horsburgh Senior Solid Waste Planner, RDN

P. Thorkelsson CAO, RDN

R. Graves Recording Secretary, RDN

Director B. Rogers Electoral Area 'E'

Regrets:

Director T. Westbroek Town of Qualicum Beach

Director J. Stanhope Electoral Area 'G'

#### **CALL TO ORDER**

The meeting was called to order at 1:33pm by the Chairperson.

# **MINUTES**

#### **CORRESPONDENCE**

## **REPORTS**

# Review of Stage One.

S. Horsburgh gave a presentation to provide the committee with an update of the current Solid Waste Management Plan (SWMP). S. Horsburgh reviewed some of the key policy drivers which include "Zero Waste" diversion targets, ensuring that the landfill is designed and operated to maximize environmental protection, banning waste materials from disposal in the landfill, organics diversion strategy, waste stream management licensing and user pay. Discussion ensued with respect to Extended Producer Responsibility (EPR), MMBC and NOW organics.

# Approval of Consultation and Communications Plan - Survey.

L. Gardner updated the Committee of the SWMP consultation objectives. This included ensuring the plan is collaborative and reflects a broad range of perspectives, opportunities to educate the public about the SWMP and gather input future options for managing waste and meet the Ministry of the Environment consultation expectations.

The SWMP includes the public consultation objectives and includes opportunities to educate the public about the SWMP and the role of the public and technical advisory committee(s), stakeholder consultation, municipal consultation and First Nations consultation. Currently we are at the information stage and later in the Plan we will engage the public in more dialogue.

## Review of Solid Waste Issues and Work Plan.

S. Horsburgh reviewed the Issues and Work Plan handout. This plan is a condensed version which outlines the information that we are going to be bringing forward to our Advisory Committee and will guide them to develop and understand what the issues are and give the sense of what we are currently doing to address each issue.

This table identifies emerging issues that came from a variety of meetings that were held to date. A Solid Waste Haulers and Recyclers meeting held September 2013, a Solid Waste Planning workshop held for RDN Board members in May 2014, a Zero Waste community day workshop held in October 2014 and, two meetings of the Regional Solid Waste Advisory Committee held in October and December 2014.

S. Horsburgh reviewed the Work Plan with topic areas that are based on the Stage 1 report. The Work Plan is being developed and an Issues Memorandum will be going forward to the Board.

# **Future Waste Generation Projections.**

L. Gardner gave an overview of the presentation with topics that included why waste projection is important, provincial and local forecasting of waste generation and limitations.

Some factors that will play a role in future waste generation and the type of service that may be considered will include:

- Regional Growth aging population, increased densification in some areas
- Industry Product Stewardship programs rate of successful diversion
- Waste Export where is the waste in our region being disposed of
- Consumerism are individual buying habits staying the same or are individuals buying more or less.

The RDN has a mature waste management system and has all of the elements to promote higher levels of diversion.

[3:40pm Director McKay left the meeting.]

# **NEW BUSINESS**

Director Kipp requested bringing forward a resolution to start the process of reviewing post future closure of the Landfill.

P. Thorkelsson requested that Committee support AVICC initiative to create a working group to review Vancouver Island/Sunshine Coast solid waste issues.

# **ADJOURNMENT**

MOVED Director Houle that the meeting be adjourned.

**CARRIED** 

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## **REGIONAL DISTRICT OF NANAIMO**

# MINUTES OF THE SOLID WASTE MANAGEMENT SELECT COMMITTEE MEETING HELD ON THURSDAY, APRIL 2, 2015 AT 1:30 PM IN THE RDN COMMITTEE ROOM

#### Present:

Director J. Stanhope
Director A. McPherson
Director H. Houle
Director M. Young
Director B. McKay
Director J. Kipp

Chairperson
Electoral Area 'A'
Electoral Area 'B'
City of Nanaimo
City of Nanaimo

Director T. Westbroek Town of Qualicum Beach

Director M. Lefebvre City of Parksville

#### Also in Attendance:

D. Pearce A/Gen. Mgr., Transportation & Solid Waste Services, RDN

L. Gardner Manager of Solid Waste, RDNS. Horsburgh Senior Solid Waste Planner, RDN

P. Thorkelsson CAO, RDN

R. Graves Recording Secretary, RDN

Regrets:

Director B. Yochim City of Nanaimo

#### **CALL TO ORDER**

The meeting was called to order at 1:32pm by the Chairperson.

#### **MINUTES**

MOVED Director Lefebvre SECONDED Director Westbroek that the minutes from the Solid Waste Select Committee meeting held March 11, 2015 be received.

**CARRIED** 

#### **CORRESPONDENCE**

# **ADVISORY COMMITTEE**

MOVED Director Lefebvre SECONDED Director McKay that the minutes from the Solid Waste Advisory Committee meeting held December 11, 2014 be received for information only.

**CARRIED** 

MOVED Director Lefebvre SECONDED Director Westbroek that the draft minutes from the Solid Waste Advisory Committee meeting held February 19, 2015 be received for information only.

**CARRIED** 

## **REPORTS**

# Authority to Regulate Municipal Solid Waste.

S. Horsburgh introduced the report on information regarding flow management as a measure to regulate Municipal Solid Waste generated in the Region. The Regional District of Nanaimo is proposing to review waste flow management options as part of the SWMP process to require that waste residue generated in the RDN is disposed of at a regional facility.

MOVED Director Lefebvre SECONDED Director Westbroek that the Authority to Regulate Municipal Solid Waste report be received.

**CARRIED** 

# Disposal Facility Future Cost Projections.

L. Gardner introduced a staff report for 25 year landfill cost projections under three different senarios as follows: 1) Waste Volume Decrease – 22,000 tonnes (no flow management); 2) 80% Waste Diversion with no flow management; 3) 80% Waste Diversion with flow management in place.

MOVED Director Kipp SECONDED Director McPherson that the Disposal Facility Future Cost Projections report be received.

**CARRIED** 

# Solid Waste Tipping Fee Analysis.

L. Gardner introduced a staff report presenting an altrernate tip fee structure based on a tiered per tonne fee and the introduction of a transaction fee. The objective of the alternate fee structure is to stabilize revenue while the SWMP is under review.

MOVED Director Westbroek SECONDED Director Lefebvre that the Solid Waste Tipping Fee Analysis report be received.

**CARRIED** 

#### **NEW BUSINESS**

Chair Stanhope commented that Energizer is introducing a new campaign that 40% of their batteries will be recyclable. The Chair questioned if the RDN will start accepting batteries for recycling? L.Gardner commented that if private recycling industries are providing that service the RDN would not compete with industry.

Director Westbroek displayed a garbage can lid that a Grade 4 class designed for Qualicum's Town Hall square elaborated and on recycling efforts within the school community.

Director Kipp enquired if the Committee should take a tour of local recycling facilities? Staff was directed to arrange a tour.

#### **ADJOURNMENT**

Moved Director Lefebvre SECONDED Director Westbroek that the meeting be adjourned.

**CARRIED** 

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