

Canadian Battery Association Annual Report to the Director

2014 Calendar Year

Submitted to: Cameron Lewis
Director, Waste Management
PO Box 9341, STN PROV GOVT
Victoria, BC V8W 9M1

Prepared by: Colin McKean
Canadian Battery Association
Suite 1570 - 5140 Yonge Street,
Toronto, M2N 6L7
250-216-3664

October 3, 2015

Table of Contents

1. Executive Summary	3
2. Program Outline	5
3. Public Education Materials and Strategies	7
4. Collection System and Facilities	8
5. Product Environmental Impact Reduction, Reusability and Recyclability	9
6. Pollution Prevention Hierarchy and Product / Component Management	10
7. Product Sold and Collected and Recovery Rate	11
8. Summary of Deposits, Refunds, Revenues and Expenditures	12
9. Plan Performance	12
Appendices / Additional Information and Third Party Assurance	Error! Bookmark not defined.

1. Executive Summary

Products within plan	All “Aftermarket” lead-acid batteries sold in BC for automotive, motive or stationary applications
Program website	www.canadianbatteryassociation.ca and www.recyclemybattery.ca

Recycling Regulation Reference	Topic	Summary (5-bullet maximum)
Part 2, section 8(2)(a)	Public Education Materials and Strategies	<ul style="list-style-type: none"> • Phone and web based recycling information through www.recyclemybattery.ca and RCBC’s Recycling Hotline, Recyclepedia and Recyclepedia for Smart Phones; • Participated in BCRecycles Ambassador Program in 2014; • Participated in SABC’s Consumer Awareness study in 2014; • Initiated MoU with Call2Recycle to create common battery-recycling message for both the public and IC&I sectors; • Direct outreach and communication with First Nation communities in partnership with Aboriginal Affairs and the Automotive Recyclers Environmental Association.
Part 2, section 8(2)(b)	Collection System and Facilities	<ul style="list-style-type: none"> • CBA members visit thousands of retailers and IC&I customers on a weekly to monthly basis as part of their reverse distribution system of dropping off new and collecting used lead-acid batteries (LABs); • Distributor core charge of \$15 on most automotive batteries to promote the recovery of LABs from the retailer; • 178 Return Collection Facilities for the public and 21 warehouse operations for recycling of IC&I batteries; • Created table of RCFs by Regional District and Community to identify gaps in recycling options for the public – see Appendix 1; • MoU with Call2Recycle to expand the use the reverse distribution network used by CBA members.
Part 2, section 8(2)(c)	Product Environmental Impact Reduction, Reusability and Recyclability	<ul style="list-style-type: none"> • Implemented <i>The Management of Recyclable Lead-Acid Batteries - Collection, Storage & Transportation in Canada</i> in BC’s 21 warehouse locations; • revised MoE definition of “hazardous waste” to ensure that reuse options for used LABs are available to CBA members; • started a program designed to recover LABs from BC’s remote and First Nations communities in partnership with Aboriginal Affairs and the Automotive Recyclers Environmental Association.

Canadian Battery Association 2015 Report to Director, Waste Management

Recycling Regulation Reference	Topic	Summary (5-bullet maximum)
Part 2, section 8(2)(d)	Pollution Prevention Hierarchy and Product / Component Management	<ul style="list-style-type: none"> all LABs collected by CBA members were sent to permitted smelters for recycling – 100% compliance with Basel Convention regarding the shipment of hazardous waste to non-OECD countries; 99% of lead in LABs recovered in smelting process. 1% of dross is privately landfilled; 100% of electrolyte (H2SO4) is reused in other production processes; 30% of plastic battery casings used for energy recovery and creating anoxic conditions during the smelting process; 70% of plastic LAB casings recycled into new LAB casings.
Part 2, section 8(2)(e)	Product Sold and Collected and Recovery Rate	<ul style="list-style-type: none"> 23.3M kg of LABs sold in BC in 2014; 16.8M kg of LABs sold in BC by CBA members – 72% market share; 90.3% of automotive batteries; 58.7% of motive batteries and 1.3% of stationary batteries sold by CBA members in 2014 were recovered by CBA members reverse distribution system; 13.4M kg of LABs recovered by CBA members for overall recovery rate of 79.7% of CBA sales; 30% of LABs sold in BC are recovered by recyclers outside a stewardship program.
Part 2, section 8(2)(e.1)		<ul style="list-style-type: none"> 2.705kg per capital recovery of LABs by CBA members
Part 2, section 8(2)(f)	Summary of Deposits, Refunds, Revenues and Expenses	No eco-fee by CBA members

Comparison of Key Performance Targets		
Part 2 section 8(2)(g); See full list of targets in Plan Performance		
Priority Stewardship Plan Targets (as agreed with ministry file lead)	Performance	Strategies for Improvement
1. Awareness: Long Term Target of 75%	69%	<p><i>Continue with BCRecycles' 2015 Ambassador Program.</i></p> <p><i>Continue to use RBC's Hotline and Recyclepedia to provide the consumer outreach and information.</i></p> <p><i>Partner with Call2Recycle to create a common message to the Public and IC&I sectors</i></p>

Canadian Battery Association 2015 Report to Director, Waste Management

Comparison of Key Performance Targets		
Part 2 section 8(2)(g); See full list of targets in Plan Performance		
Priority Stewardship Plan Targets (as agreed with ministry file lead)	Performance	Strategies for Improvement
2. Accessibility: - 150 RCFs; - 30 minutes in urban - 45 minutes in rural	- 178 RCF for public drop off – an increase of 8 new locations - see www.recyclemybattery.ca - 21 warehouse operations for IC&I sector	Identify underserved communities and establish additional RCFs for those communities.
3. Recovery Rates: 95%	- 79.7% recovery for all CBA sales; - 90.3% recovery for automotive type batteries sold by CBA members; - 101.7% recovery for both stewardship programs combined	- continue to determine the recovery data for the private recycling sector using data from smelters.
4. Generation, Storage and Transportation – 100% compliance with Federal and Provincial laws.	- developed compliance and emergency response manual	- work with CBA members and get licenses and approvals up to date.

2. Program Outline

About the Canadian Battery Association

The Canadian Battery Association (CBA) was established in 1970 by the Canadian Manufacturers of lead-acid batteries (LABs). Since its inception, the CBA has worked on a variety of issues and now one of the Association’s focuses is on the establishment of a National Stewardship Program for end-of-life LABs.

The CBA is the primary Steward in Canada for LABs and the Association has approved Stewardship Programs in Manitoba and British Columbia since 2011. Interstate Battery Systems of America and Call2Recycle also have stewardship programs for lead-acid batteries in British Columbia.

Membership

The signatories to the CBA’s Stewardship Program in Manitoba and BC are summarized on the CBA’s website <http://canadianbatteryassociation.ca/index.php/members>. The Manufacturers and National Distributors that are signatories to the CBA’s stewardship plan have assumed the stewardship obligations on behalf of the thousands of wholesalers and retailers that sell lead-acid batteries in BC.

Canadian Battery Association 2015 Report to Director, Waste Management

Stewarded Products

The CBA focuses exclusively on three types of LAB. The Starting, Lighting and Ignition (SLI) batteries are the most common LAB sold in Canada representing 85% of sales. An automotive battery is a typical SLI battery. The motive and stationary batteries are used in commercial applications such as forklifts and UPS systems for energy storage and emergency electronic and lighting applications.

Collection Approach

There are three factors that influence how LABs are recovered and recycled. First and foremost, LABs have a value at the end-of-life due the inherent value of the lead. Secondly, most consumer and all commercial LABs are replaced at a commercial facility by a licensed technician. Thirdly, the many CBA members have core charges on retailers and contracts with smelters that require a constant supply of recyclable LABs. As such, the CBA members utilizes a 'reverse distribution' system where distributors drop off new batteries at retail and repair facilities and pick up the used batteries for return to the smelters.

Accomplishments in 2014

The CBA was an active participant with the implementation of the Stewardship Agencies in BC's (SABC) Action Plan. Key accomplishments in 2014 were:

- Overseeing SABC's development of the Waste Characterization Tool and the first Waste Characterization Study in partnership with the Sunshine Coast Regional District;
- Initiating a MoU with Call2Recycle to create and coordinate a common recycling message for the public and IC&I sectors;
- Revising the definition of when a LAB becomes a Hazardous Waste as defined by BC's Hazardous Waste Regulation thus promoting the refurbishment and reuse of LABs;
- Determining the number of Return Collection Facilities by Regional District and Community to identify gaps in RCFs for the public;
- Participation in RCBC public outreach through the Hotline and Recyclepedia;
- Participation in BCRecycles Ambassador program that targeted retailers and automotive repair facilities;
- Participation in SABC's 2014 Consumer Awareness Study for recyclable products;
- Development of policies, procedures and inventory for the recovery of LABs from remote and First Nation Communities;
- Reduce the number of non-compliances and start a compliance program for dealers of new products that have a LAB embedded in the product.

3. Public Education Materials and Strategies

The CBA supports the comprehensive communication programs developed by the Stewardship Agencies of BC and the consumer outreach offered by the Recycling Council of BC (RCBC). The CBA's communication strategies need to recognize that the majority of end-of-life lead-acid batteries (LABs) are installed, maintained and eventually removed by qualified technicians. Consequently, the education materials and strategies are different than "consumer" products become end-of-life in the household.

The CBA has three strategies that target consumers, the IC&I sector and Automotive Repair Technicians:

- 1) Consumers. The CBA operates and maintains its website www.recyclemybattery.ca that lists the retail locations that will take LABs from the public. In 2014, the CBA's website had just over 3500 visits from BC. In addition, the CBA is a strong supporter of RCBC and its interface with the public through the Hotline, Recyclepedia and Recyclepedia for Smart Phones. In 2014, RCBC fielded approximately 450 calls and 1500 web searches related to the recycling of lead-acid batteries from the public.
- 2) IC&I Sector: the CBA has prepared technical and recycling information that can be used by its members to educate their staff and their IC&I customers on the safe collection, storage and transportation of LABs;
- 3) Automotive Repair Technicians. Because the majority of LABs are removed from automobiles by qualified Auto Repair Technicians, the CBA participates in the BC Recycles Ambassador Program that targets the retail and recycler facilities in BC. The BC Recycles Ambassador Program visited 137 Municipalities, 1710 retailers and recyclers and attended 24 public events. The 2014 program achieved over 30 earned media interviews, 17 government interviews and 425,000 media impressions. In total, the 2014 program reached approximately 300,000 citizens with the CBA's message.

The CBA and the other members of the Stewardship Agencies of BC included LABs in a comprehensive Consumer Awareness Study in 2014. The results are:

- | | |
|---|-----|
| ○ Awareness Program Exists to Take Care of LABs: | 69% |
| ○ Participation in the Program: | 51% |
| ○ Know Where to Get Information About Recycling and Safe Disposal of LABs | 68% |
| ○ Know Location to take Unwanted LABs: | 54% |
| ○ Know Where to Get Information about | 65% |

Canadian Battery Association 2015 Report to Director, Waste Management

Return Collection Facilities for LABs:

- Perception Program for LABs is Convenient: 75%
- Trust Program will Safely Recycle / Dispose of LABs: 84%

There are three important conclusions to draw from the 2014 Consumer Awareness Study:

- 1) Approximately 50% of consumers surveyed have not needed to dispose of LABs in the past confirming the assertion that a high percentage of consumers replace their LABs at a repair shop by a licensed auto technician;
- 2) 75% and 84% of consumers that were aware of the LAB Stewardship Program thought it was convenient and consumers had a high level of trust that the LABs would be safely recycled;
- 3) the Consumer Awareness results for LABs were similar to the results for the Used Oil and Tires Stewardship Programs confirming the assertion that for the most part, consumers have their vehicles serviced at a repair shop by a licensed technician.

The CBA will repeat the Consumer Awareness Study in 2016 and compare the results.

Finally, in 2014 the CBA developed a Memorandum of Understanding with Call2Recycle to harmonize the message to the public and the IC&I sector regarding the recycling of batteries. The goal is to have one message promoted by both programs on the importance of recycling batteries of all types.

4. Collection System and Facilities

Virtually all of the lead-acid batteries recovered and reported by the CBA were collected in a reverse distribution system between the CBA member and their retail and IC&I customers. CBA members deliver new lead-acid batteries to retail and IC&I customers and pick up the used lead-acid batteries at the same time.

The CBA has identified 178 Return Collection Facilities (RCFs) for the public and 21 return locations for the IC&I sector. The public and IC&I locations are listed on www.recyclemybattery.ca and all public RCFs are listed with RCBC's Hotline, Recyclepedia, and Recyclepedia for Smart Phones. See Appendix 1 for list of public RCFs by Regional District and Community.

Note that not all retailers participate as a public RCF; however, most retailers will recycle their batteries through the CBA network because it is convenient and most CBA members have implemented a \$15 "core charge" to ensure the retailers return the battery

to the distributor. In addition, because of the positive value lead, there is a strong recycling sector that recovers approximately 30% of the LABs sold in BC and these recycling locations for the public are not identified as an RCF.

5. Product Environmental Impact Reduction, Reusability and Recyclability

In 2014, the CBA has implemented *The Management of Recyclable Lead-Acid Batteries - Collection, Storage & Transportation in Canada* in BC's 21 warehouse locations. The program is designed to provide education and communication information to CBA members so that they are in compliance of all Provincial and Federal laws and they have an appropriate Contingency Plan to respond to spills and emergencies.

In addition, the CBA worked with BC Environment's Hazardous Waste group to clearly define when a "used" lead-acid battery becomes a "waste". The new definition will allow CBA members to refurbish used lead-acid batteries rather than declaring lead-acid batteries a "hazardous waste" at the end of the battery's "primary use". Approximately 10 to 15% of lead-acid batteries can be refurbished and resold.

The CBA lead the development of the Waste Characterization Tool and lead the SABC participation in the Waste Characterization Study at the Sunshine Coast Regional District (SCRD). The study focused on the occurrence of lead-acid batteries and other stewarded recyclables in the Municipal waste stream that was coming from household curb-side collection. The study was conducted on the waste stream from Gibsons and Sechelt and no lead-acid batteries were recovered in the study on the Sunshine Coast.

Lastly, the CBA has taken on the issue of recovering lead-acid batteries in BC's remote communities – the majority of the remote communities are First Nation communities. The CBA has partnered with the Automotive Recyclers Environmental Association (AREA) and Aboriginal Affairs and Northern Development Canada to develop:

- Policies regarding the shared responsibility for the recovery of lead-acid batteries in remote communities. This document details the roles and responsibilities of the community, Aboriginal Affairs and the Stewardship Agency;
- Inventory of LABs in the remote communities;
- Contacts in remote communities that can support the CBA in removing LABs from these communities.

In 2014, the CBA has participated in three remote community projects. The first was in Bella Bella – a remote First Nations community on the west coast with no road access. The second was in Dease Lake – a remote community along Hwy 37 near the Yukon boarder and

the third was at St Theresa Point in Manitoba – a First Nations Community with winter road access only. The learnings in these three projects have supported the development of a program for LABs in partnership with the Automotive Recyclers Environmental Association (AREA) for end-of-life vehicles, LABs and other stewardship programs.

6. Pollution Prevention Hierarchy and Product / Component Management

All recovered LABs collected by CBA members are sent to recycling and smelting facilities that have valid permits and/or approvals. The recycling requirements and emission levels for recyclers and smelters are set by Provincial or State governments as part of their permit/approval processes for the recycling and smelting facilities. Battery Council International provides the following information on how a battery is recycled.

Material	Description	Fate
Metals	99% of lead is recovered during the smelting process	Lead ingots are sold as a Commodity on the open market.
	1% of lead from the smelting process is not recovered and is contained in dross – a waste from the smelting process	Private Landfill
	Antimony and Calcium are used to provide strength within the lead plates	Remain as an alloy of the lead after smelting.
Electrolytes	Sulphuric Acid is recovered and sold as an input to another manufacturing process.	Recycled and sold as a commodity.
Plastics	<p>The Polypropylene Case that provides structure to most batteries.</p> <p>Stationary batteries have a clear casing made of Acrylic.</p> <p>Within each battery, Plastic Separators are used to Isolate the Positive and Negative plates in a cell.</p>	<p>About 70% of the plastic is recycled and used to make new battery casings.</p> <p>Acrylic casings are not recyclable and are burned for energy recovery.</p> <p>The Plastic Separators are burned at the smelters for energy recovery and creating an oxygen free environment during the smelting process.</p>

7. Product Sold and Collected and Recovery Rate

The members of the CBA account for about 72% of the lead-acid batteries sold in BC. Interstate Battery Systems of American (Interstate) account for 9% of sales and dealers that sell new products containing a LAB (primarily vehicles) account for about the remaining 19%. In total, there were about 23,295,900kg of LABs sold in BC in 2014 in the three product categories:

2014 Lead-Acid Sales Data for British Columbia

	CBA Members (kg)	Interstate* (kg)	Unaccounted Sales (kg)	Total (kg)
Starting, Lighting, Ignition (SLI)	13,875,000	2,040,900	4,300,000	20,215,900
Motive (e.g., forklift)	1,440,000	0	100,000	1,540,000
Stationary (e.g., UPS)	1,490,000	0	50,000	1,540,000
Totals	16,800,000	2,040,900	4,450,000	23,295,900

* Sales from one CBA member were estimated from previous 2013 data - the estimates involved were sales of 3M kgs.

CBA members reported just under 13,400,000kg of lead-acid batteries recovered in 2014 for an overall recovery rate of 79.7% of CBA sales. The CBA recovery rate for the three battery types was 90.3%; 58.7% and 1.3% of CBA sales for SLI, Motive and Stationary batteries respectively.

2014 Lead-Acid Recovery Data for British Columbia

	CBA Members (kg)	Interstate* (kg)	Total** (kg)
Starting, Lighting, Ignition (SLI)	12,530,000	3,660,400	16,190,400
Motive (e.g., forklift)	845,000	Not estimated	845,000
Stationary (e.g., UPS)	20,000	Not estimated	20,000
Totals	13,395,000	3,660,400	17,055,400

* Recovery for Interstate based on 2014 Annual Report minus waste batteries sold to Interstate by CBA members.

All waste LABs recovered by CBA members were shipped to smelters in Canada or the USA. No waste batteries were shipped to brokers in the USA that could then ship to a non-OECD country and violate the Basel Agreement.

Because LABs are recovered by the CBA through a mobile reverse distribution collection system, the recovery volumes cannot be reported on a Regional District basis. However,

Canadian Battery Association 2015 Report to Director, Waste Management

Regional Districts can estimate the recovery of LABs by the CBA members using the 2014 per capita recycling rate of 2.705kg/person.

8. Summary of Deposits, Refunds, Revenues and Expenditures

The Canadian Battery Association does not charge eco-fees at the point of sale and does not report under this section of the Recycling Regulation.

9. Plan Performance

Plan Target	2014 Results	Strategies for Improvement
1. Awareness: Long Term Target of 75%	69%	<i>Continue with BCRecycles' 2015 Ambassador Program to increase awareness on generators.</i> <i>Continue to use RCBC and their consumer outreach as the primary method of consumer awareness.</i> <i>Partner with Call2Recycle to create a common message to the Public and IC&I sectors on the importance and methods available to recycle lead-acid batteries.</i> <i>Prepare additional information for CBA members to distribute to for retailers and IC&I customers.</i>

Canadian Battery Association 2015 Report to Director, Waste Management

Plan Target	2014 Results	Strategies for Improvement
<p>2. Accessibility:</p> <ul style="list-style-type: none"> • 150 Return Collection Facilities; • 30 minutes in Urban Areas; • 45 minutes in Rural Areas* 	<ul style="list-style-type: none"> • 178 Return Collection Facilities (RCF) – an increase from 170 in 2013 – see www.recyclemybattery.ca; • 21 warehouse operations that link to the IC&I sector; • Summary of RCFs in each Regional District and Community – See Appendix 1 	<p><i>Contact Regional Districts with under serviced communities to add additional RCFs</i></p>
<p>3. Recovery Rates:</p> <ul style="list-style-type: none"> • 95% 	<ul style="list-style-type: none"> • 79.7% for CBA sales of all LABs; • 90.3% recovery for SLI (automotive) type batteries; • 101.7% recovery for SLI (automotive) type batteries when combined with recovery from Interstate Battery Systems of America. 	<p><i>The 2014, the CBA estimates that private LAB recyclers collected an additional 30% of LABs resulting in an estimated industry recovery rate of 100%.</i></p> <p><i>The CBA will continue to estimate overall recovery rate by calculating unaccounted sales and recycling data from smelters.</i></p> <p><i>CBA will also participate in the MetroVancouver Waste Characterization Study to determine if LABs are present in the municipal waste stream.</i></p>
<p>4. Generation, Storage and Transportation</p> <ul style="list-style-type: none"> • 100% compliance to Federal and Provincial laws for the management of dangerous goods and hazardous waste. 	<ul style="list-style-type: none"> • <i>CBA has prepared compliance materials for the Management of Lead-Acid Batteries and the MoE has clarified policies with regard to the definition of when recovered LABs are deemed to be a “waste” and the application of the Hazardous Waste Regulation to CBA member warehouses.</i> 	<p><i>Continued implementation in 2014 along with new Hazardous Waste policies developed in partnership with the BC Ministry of Environment that promote the refurbishment and reuse of lead-acid batteries</i></p>

Appendix 1: List of CBA Consumer Return Collection Facilities by Regional District and Community

Regional District / Community	Population	RCFs
Alberni-Clayoquot	31,542	
Port Alberni	17,741	2

Canadian Battery Association 2015 Report to Director, Waste Management

	Tofino	1,829	0
	Ucluelet	1,591	0
	Unincorporated Areas	10,381	0
Bulkley-Nechako		38,860	
	Burns Lake	2,114	1
	Fort St. James	1,322	1
	Fraser Lake	1,122	
	Granisle	396	
	Houston	2,958	1
	Smithers	5,321	2
	Telkwa	1,357	
	Vanderhoof	4,143	1
	Unincorporated Areas	20,127	
Capital		367,572	
	Central Saanich	16,170	1
	Colwood	16,174	
	Esquimalt	17,682	1
	Highlands	2,175	1
	Langford	27,328	2
	Metchosin	5,133	
	North Saanich	11,021	
	Oak Bay	18,012	
	Saanich	113,516	2
	Sidney	11,578	
	Sooke	10,540	1
	Victoria	82,785	2
	View Royal	9,583	1
	Unincorporated Areas	25,875	
Cariboo		65,047	
	100 Mile House	1,941	1
	Quesnel	9,710	2
	Wells	257	
	Williams Lake	11,090	2
	Unincorporated Areas	42,049	
Central Coast		3,118	
Central Kootenay		59,756	
	Castlegar	7,871	2
	Creston	5,246	1
	Kaslo	1,184	
	Nakusp	1,530	1
	Nelson	9,938	1
	New Denver	516	
	Salmo	1,060	
	Silverton	202	
	Slocan	391	
	Unincorporated Areas	31,818	

Canadian Battery Association 2015 Report to Director, Waste Management

Central Okanagan		184,411	
	Kelowna	120,812	7
	Lake Country	11,409	
	Peachland	5,244	
	West Kelowna	27,303	3
	Unincorporated Areas	19,643	
Columbia-Shuswap		53,713	
	Golden	3,959	2
	Revelstoke	7,267	1
	Salmon Arm	17,220	2
	Sicamous	2,950	1
	Unincorporated Areas	22,317	
Comox Valley		64,084	
	Comox	13,444	
	Courtenay	24,216	2
	Cumberland	3,163	
	Unincorporated Areas	23,261	
Cowichan Valley RD		81,689	
	Duncan	5,008	2
	Ladysmith	8,118	
	Lake Cowichan	3,182	
	North Cowichan	29,493	
	Unincorporated Areas	35,888	
East Kootenay		59,954	
	Canal Flats	817	
	Cranbrook	19,161	2
	Elkford	2,591	
	Fernie	4,415	1
	Invermere	3,668	1
	Kimberley	6,705	
	Radium Hot Springs	1,005	
	Sparwood	3,804	1
	Unincorporated Areas	17,788	1
Fraser Valley		280,210	
	Abbotsford	135,866	4
	Chilliwack	76,106	3
	Harrison Hot Springs	1,594	
	Hope	6,269	
	Kent	5,515	
	Mission	37,167	1
	Unincorporated Areas	17,693	1
Fraser-Fort George		95,652	
	Mackenzie	3,827	1
	McBride	674	
	Prince George	74,547	5
	Valemount	1,044	

Canadian Battery Association 2015 Report to Director, Waste Management

	Unincorporated Areas	15,560	
Metro		2,318,526	
	Anmore	2,160	
	Belcarra	681	
	Bowen Island	3,608	
	Burnaby	222,802	6
	Coquitlam	123,213	4
	Delta	99,862	4
	Langley, Township of	103,267	4
	Langley	25,526	3
	Lions Bay	1,398	
	Maple Ridge	75,051	2
	New Westminster	65,016	
	North Vancouver	48,881	3
	North Vancouver	86,725	
	Pitt Meadows	17,915	
	Port Coquitlam	56,446	1
	Port Moody	32,998	
	Richmond	193,255	7
	Surrey	446,561	10
	Vancouver	628,621	6
	West Vancouver	43,307	
	White Rock	19,102	1
	Unincorporated Areas	22,131	
Kitimat-Stikine		39,380	
	Hazelton	304	
	Kitimat	9,226	1
	New Hazelton	604	
	Stewart	444	
	Terrace	11,675	2
	Unincorporated Areas	17,127	
Kootenay-Boundary		32,111	
	Fruitvale	2,031	
	Grand Forks	4,150	1
	Greenwood	676	
	Midway	658	
	Montrose	1,043	
	Rossland	3,532	
	Trail	7,353	1
	Warfield	1,811	
	Unincorporated Areas	10,857	
Mount Waddington		12,042	
	Alert Bay	478	
	Port Alice	842	
	Port Hardy	3,986	
	Port McNeill	2,618	1
	Unincorporated Areas	4,118	

Canadian Battery Association 2015 Report to Director, Waste Management

Nanaimo		147,866	
	Lantzville	3,701	
	Nanaimo	84,228	5
	Parksville	11,783	
	Qualicum Beach	8,766	
	Unincorporated Areas	39,388	
North Okanagan		83,179	
	Armstrong	4,533	2
	Coldstream	10,388	2
	Enderby	2,906	2
	Lumby	1,804	2
	Spallumcheen	5,128	
	Vernon	38,968	3
	Unincorporated Areas	19,452	
	Cherryville	930	
Northern Rockies		6,003	
	Fort Nelson	na	1
Northern Rockies Regional Municipality		5,558	
	Unincorporated Areas	445	
Okanagan-Similkameen		83,337	
	Keremeos	1,479	
	Oliver	4,783	1
	Osoyoos	5,189	
	Penticton	33,250	2
	Princeton	2,757	1
	Summerland	11,243	
	Unincorporated Areas	24,636	
Peace River		62,244	
	Chetwynd	2,676	1
	Dawson Creek	11,514	2
	Fort St. John	19,457	2
	Hudson's Hope	1,051	
	Pouce Coupe	746	
	Taylor	1,480	
	Tumbler Ridge	2,450	
	Unincorporated Areas	22,870	
Powell River		20,207	
	Powell River	13,338	2
	Sechelt Ind Gov Dist (Part)	18	
	Unincorporated Areas	6,851	
Skeena-Queen Charlotte		19,438	
	Masset	929	
	Port Clements	453	
	Port Edward	570	
	Prince Rupert	12,846	1

Canadian Battery Association 2015 Report to Director, Waste Management

Village of Queen Charlotte	961	
Unincorporated Areas	3,679	
Squamish-Lillooet	39,209	
Lillooet	2,367	1
Pemberton	2,416	
Squamish	17,181	2
Whistler	10,228	
Unincorporated Areas	7,017	
Strathcona	44,189	
Campbell River	31,328	2
Gold River	1,425	
Sayward	331	
Tahsis	381	
Zeballos	161	
Unincorporated Areas	10,563	
Sunshine Coast	29,551	
Gibsons	4,448	
Sechelt	9,164	2
Sechelt Ind Gov Dist (Part)	831	
Unincorporated Areas	15,108	
Pender Harbour	3,000	
Thompson-Nicola	131,675	
Ashcroft	1,740	
Barriere	1,722	
Cache Creek	1,083	1
Chase	2,478	
Clearwater	2,348	1
Clinton	597	
Kamloops	87,017	7
Logan Lake	2,189	
Lytton	226	
Merritt	7,450	2
Unincorporated Areas	24,825	
British Columbia	4,455,207	178

Source: Demographic Analysis Section, BC Stats, Ministry of Citizen's Services