

Canadian Battery Association

Annual Report to the Director

2017 Calendar Year

Submitted to: Director, Extended Producer Responsibility Programs
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Victoria, BC V8W 9M1

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2017 Annual Report Summary

Products within plan	All lead-acid batteries sold in British Columbia
Program website	www.canadianbatteryassociation.ca and www.recyclemybattery.ca

Recycling Regulation Reference	Topic	Summary
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; RCBC's Recycling Hotline; Recyclepedia and the National Recyclepedia for Smart Phones.
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). This is the principle mechanism of the collection of lead-acid batteries; • Distributor core charge of \$18 on most automotive batteries to promote the recovery of LABs by the distributor; • An increase of 53 Return Collection Facilities (RCFs) to 238 for consumers (Appendix 1) and there are 34 Return Collection Facilities that can take industrial batteries (Appendix 2). • Calculated average distance to RCFs for different sized communities: <ul style="list-style-type: none"> ○ 2.1km for Communities - >30,000 ○ 3.0km for Communities - 4,000 to 30,000 ○ 18.1km for Communities - 1,000 to 4,000
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 most of BC's 32 warehouse locations although the implementation is hampered by the need for the Ministry of Environment to make decisions on the implementation of the Hazardous Waste Regulation to those distribution warehouses; • Ongoing work with BC Ministry of Environment to develop a policy that eliminates the restrictions of the Hazardous Waste Regulation on the refurbishing of lead-acid batteries; • Ongoing work with other Stewardship Agencies to implement a program to recover LABs from BC's remote and First Nations communities.

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Recycling Regulation Reference	Topic	Summary
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 – information from smelter; • 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"> • 26,011,760*kg of new and used LABs sold in BC in 2017 by CBA members– >95% market share. • 22,746,498 kg of LABs recovered by CBA members. • The audited 2017 CBA Program Recovery Rate is: <ul style="list-style-type: none"> ○ 89.5% of automotive lead-acid battery sales; ○ 75.7% of industrial lead-acid battery sales; ○ 87.4% recovery of all lead-acid battery sales • Product Recovery Rate was also calculated in 2017 using additional reliable data that was not subject to the Non-Financial Audit. The 2017 Product Recovery Rates are: <ul style="list-style-type: none"> ○ 91.6% of automotive lead-acid battery sales; ○ 69.7% of industrial lead-acid battery sales; ○ 88.3% recovery of all lead-acid battery sales. • Preliminary unaudited data from Landfill studies was used to calculate Diversion Rates. Diversion Rates were calculated to corroborate the 2017 Recovery Rates. The BC Diversion Rates for lead-acid batteries are: <ul style="list-style-type: none"> - Household Diversion Rate: 100% (n=306) - IC&I Diversion Rate: 99.93% (n=184) - Overall Diversion Rate: 99.97% (n=490) <p>* Sales from one CBA member were estimated from previous data – the estimate involved were sales of 2M kgs.</p>

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Recycling Regulation Reference	Topic	Summary		
Part 2, section 8(2)(e.1)	Program Recovery by Regional District	Name	Population	kg
		Alberni-Clayoquot	30,456	143,812
		Bulkley-Nechako	45,536	15,020
		Capital	392,046	1,851,229
		Cariboo	63,364	299,203
		Central Coast	3,215	15,181
		Central Kootenay	60,803	287,110
		Central Okanagan	199,103	940,158
		Columbia-Shuswap	53,028	250,397
		Comox Valley	66,166	312,434
		Cowichan Valley RD	85,459	403,535
		East Kootenay	58,154	274,601
		Fraser Valley	303,701	1,434,067
		Fraser-Fort George	90,121	425,549
		Metro Vancouver	2,592,227	12,240,418
		Kitimat-Stikine	36,270	171,266
		Kootenay-Boundary	29,205	137,905
		Mount Waddington	11,127	52,541
		Nanaimo	160,942	759,963
		North Coast	16,842	79,527
		North Okanagan	86,451	408,219
		Northern Rockies	5,879	27,760
		Okanagan-Similkameen	87,161	411,572
Peace River	62,231	293,853		
Powell River	20,014	94,506		
Squamish-Lillooet	43,274	204,339		
Strathcona	46,572	219,912		
Sunshine Coast	29,390	138,779		
Thompson-Nicola	138,423	653,629		
Part 2, section 8(2)(f)	Summary of Deposits, Refunds, Revenues and Expenses	The CBA does not charge an Eco-Fee to the consumer.		

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Comparison of Key Performance Targets		
Priority Stewardship Plan Targets	Performance	Strategies for Improvement
<p>Section 1: Awareness: No Target</p>	<p>69% of All Respondents*</p> <p>78% of Respondents that have Lead-Acid Batteries*</p> <p>80% of Respondents that have Unwanted Lead-Acid Batteries*</p> <p>*2016 Survey by Insights West</p>	<p>Continue to use RBC's Hotline and Recyclepedia as the primary tool for consumer outreach and information.</p> <p>Developed National Phone App for consumers.</p> <p>Will continue to participate in the SABC Consumer Awareness Study. The next study is scheduled for 2018.</p>
<p>Section 2: Accessibility Target - 150 RCFs;</p> <p>Accessibility Guideline</p> <ul style="list-style-type: none"> - 30 min. in urban* - 45 min. in rural** - No guideline for small communities*** <p>* Urban: >30,000 pop. ** Rural: <30,000 - >4,000 ***Small: <4,000 - >1,000</p>	<ul style="list-style-type: none"> - 238 RCF for public drop off (Appendix 1) – an increase of 53 see recyclemybattery.ca - Time to RCF based on Average Distance and estimated driving speeds: <ul style="list-style-type: none"> Urban: 4.2 min - 30km/hr; Rural: 6.7 min - 45km/hr; Small: 18.1 min - 60km/hr. - 34 Return Collection Facilities for industrial lead-acid batteries (Appendix 2). 	<p>Serviced and underserved communities were identified in 2016.</p> <p>Add new RCFs in rural underserved communities in 2018. Ongoing discussions with the BC MoE regarding the application of the Hazardous Waste Regulation will dictate how these communities will be serviced in the future.</p> <p>Continue to work with other Stewardship Agencies to develop recycling programs for small and remote communities.</p>

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Comparison of Key Performance Targets		
Priority Stewardship Plan Targets	Performance	Strategies for Improvement
<p>Section 3: Recovery Rate:</p> <p>Target: 95%</p>	<ul style="list-style-type: none"> - 87.4% Program Recovery Rate for all CBA LAB sales broken down by type: <ul style="list-style-type: none"> - 89.5% recovery for automotive type batteries sold; - 75.7% recovery of industrial batteries (motive plus stationary) - 88.3% Product Recovery Rate* for all CBA LAB sales broken down by type: <ul style="list-style-type: none"> - 91.6% recovery for automotive type batteries sold; - 69.7% recovery of industrial batteries (motive plus stationary) - Calculated Diversion Rates using Landfill Studies: <ul style="list-style-type: none"> Household Diversion Rate: 100% (n=306) IC&I Diversion Rate: 99.93% (n=184) Combined Diversion Rate: 99.97% (n=490) - Diversion Rates are preliminary results only due to a high Standard Deviation caused by small sample sizes and non-normal distributions. * Product Recovery Rate contains reliable data from Private Recyclers that could not be used in the Non-Financial Audit. 	<ul style="list-style-type: none"> - Motive and Stationary batteries are combined into the industrial battery category because the different batteries can be hard to tell apart and that results in problems reporting. - Continue to expand the CBA's data to the private recycling network. One private battery recycler was added to the CBA's 2017 data base and the data base is becoming very comprehensive and robust. - Increase number of samples from landfill studies to improve accuracy of Diversion Rate for lead-acid batteries.

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Comparison of Key Performance Targets		
Priority Stewardship Plan Targets	Performance	Strategies for Improvement
<p>Section 4: Generation, Storage and Transportation – 100% compliance with Federal and Provincial laws.</p>	<ul style="list-style-type: none"> - developed compliance and emergency response manual and training programs to ensure compliance with Provincial Hazardous Waste Regulations and Federal Transportation of Dangerous Goods Regulations. - 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. 	<ul style="list-style-type: none"> - CBA members now have up to date BC Generator Numbers (BCG#); - the MoE has clarified when the lead-acid battery becomes a waste hazardous waste promoting the refurbishing of used lead-acid batteries and that information has been circulated to CBA Members. - Development of Online training courses for the management of hazardous waste and emergency response.

Appendix 1: Return Collection Facilities for Household-Type Lead-Acid Batteries

	Return Collection Facility	Address	#	City	Telephone
1	Kal Tire	360 Taylor Avenue		100 Mile House	250-395-2496
2	Authentic Triple C	1685 Riverside Road		Abbotsford	604-861-0731
3	Canadian Tire	32513 South Fraser Way		Abbotsford	604-870-4132
4	CCON Recon Ltd	2707 Progressive Way	108	Abbotsford	604-859-2855
5	Edmonds Batteries	33177 South Fraser Way		Abbotsford	604.852.8774
6	Kal Tire	975 Coutts Way		Abbotsford	604-853-5981
7	Kal Tire	31716 South Fraser Way		Abbotsford	604-850-6772
8	Armstrong Spallumcheen Bottle	3730 Pleasant Valley Boul.		Armstrong	250-546-2466
9	Armstrong Spallumcheen RDF	3367 Powerhouse Road		Armstrong	250-546-6474
10	Gilbert Parts Depot	3155 Smith Drive		Armstrong	250-546-3167
11	Armstrong Auto Recycling	1665 Whitaker Road		Armstrong	250-546-3809
12	Barriere Auto Parts	573 Barkley Road		Barriere	250-672-9422
13	Blackpoint Auto Recyclers	2151 McLean Road		Black Point	604-487-1299
14	Kal Tire	48075 Trans Canada Hwy		Boston Bar	604-867-9614
15	Bowen Island Recycling	1065 Mount Gardner Road		Bowen Island	604-947-2255
16	ABC Recycling	8081 Meadow Avenue		Burnaby	604-522-9727
17	Canadian Energy	114 - 4238 Lozells Avenue		Burnaby	604-420-7737
18	Canadian Tire	7200 Market Crossing		Burnaby	604-451-5888
19	Edmonds Batteries	7471 Edmonds Street		Burnaby	604-525-8144
20	Kal Tire	4860 Bennett Street		Burnaby	604-433-6928
21	Kal Tire Truck Centre	1390 Boundary Road		Burnaby	604-291-2804

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22	Polar Battery	1258 Boundary Road		Burnaby	604-294-1891
23	Burns Lake Auto	98 Francois Lake Drive		Burns Lake	250-692-7565
24	Kal Tire	774 Highway #16 West		Burns Lake	250-692-7542
25	Kal Tire	1330 Cariboo Highway		Cache Creek	250-457-9333
26	Canadian Tire	1444 Island Highway		Campbell River	250-286-0188
27	Kal Tire	1581 - 15th Avenue		Campbell River	250-287-8489
28	Schnitzer Steel	5551 Duncan Bay Road		Campbell River	250-287-8748
29	Schnitzer Steel	13271 Trans Canada Hwy		Cassidy	250-245-5051
30	Canadian Tire	2000 Columbia Avenue		Castlegar	250-365-7737
31	Kal Tire	4280 Minto Road		Castlegar	250-365-3311
32	Kal Tire	2107 Keating X Road		Central Saanich	250-652-6641
33	Napa Auto Parts	621 - 1st Avenue		Chase	250-649-8811
34	Cherryville Transfer Station	205 Aumond Road		Cherryville	250-550-3700
35	Kal Tire	4809 South Access Road		Chetwynd	250-788-2067
36	Canadian Tire	7560 Vedder Road		Chilliwack	604-858-9055
37	Kal Tire	44408 Yale Road West		Chilliwack	604-795-3388
38	Kal Tire	45585 Luckakuck Way		Chilliwack	604-824-2859
39	Kal Tire	511 East Yellowhead Hwy		Clearwater	250-674-3388
40	Jim Walch Repairs	60 Boyd Pit Road		Clinton	250-459-2434
41	Kal Tire	5621 180th Street		Cloverdale	604-576-8255
42	Fisher Road Recycling	1355 Fisher Road		Cobble Hill	250-733-2108
43	Gilbert Parts Depot	1220A Waddington Drive		Coldstream	250-545-9440
44	Kal Tire	1460 Kal Lake Road		Coldstream	250-545-2729
45	Bumper to Bumper	895 Goldstream Avenue		Colwood	250-478-5538
46	Interstate Batteries	1651 Old Island Hwy		Colwood	250-391-9748
47	Canadian Tire	1200 Seguin Avenue		Coquitlam	604-527-8828
48	Kal Tire	641 Loughheed Hwy		Coquitlam	604-931-6241
49	Kal Tire	1851 Loughheed Highway		Coquitlam	604-524-1166
50	Kal Tire	2573 Runnel Drive		Coquitlam	604-464-7752
51	Canadian Tire	2801 Cliffe Avenue		Courtenay	250-338-0101
52	Kal Tire	2215 Cliffe Avenue		Courtenay	250-338-5411
53	Canadian Tire	1100 Victoria Avenue N.		Cranbrook	250-489-3300
54	Kal Tire	1396 Theatre Road		Cranbrook	250-426-4258
55	Kal Tire	1816 Canyon Street		Creston	250-428-5396
56	Powerhouse Auto Recycling	4620 Cumberland Road		Cumberland	250-336-2229
57	Canadian Tire	11628 - 8th Street		Dawson Creek	250-782-5451
58	Kal Tire	800 - 107 Avenue		Dawson Creek	250-782-5544
59	Kal Tire	969 Cliveden Avenue		Delta North	604-526-1854
60	Magnacharge Batteries	1279 Derwent Way		Delta North	604-525-0391
61	All Battery Powered	5311 Trans-Canada Hwy		Duncan	250-597-1959
62	Bings Creek Recycling	3900 Drinkwater Road		Duncan	250-746-2540
63	Canadian Tire	2724 Beverley Street		Duncan	250-748-0161
64	Kal Tire	5295 Trans Canada Hwy	1	Duncan	250-746-9815
65	Kal Tire - Elko Tire	5385B Highway 3		Elko	250-529-7433
66	Gilbert Parts Depot	513 Hubert Avenue		Enderby	250-838-6820
67	Kal Tire - Tony's Tire Ltd	606 Old Vernon Road		Enderby	250-838-7226
68	Bumper to Bumper	624 Admirals Road		Esquimalt	250-386-8877
69	Canadian Energy	791 Cave Street		Esquimalt	250-361-3933
70	CSRD - Transfer Station	2830 Dump Rd		Falkland	

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71	Canadian Tire	1791A 9th Avenue		Fernie	250-423-4222
72	Kal Tire	4504 - 55 Street		Fort Nelson	250-774-7030
73	Kal Tire	206 Douglas Avenue		Fort St. James	250-996-8266
74	Canadian Tire	9820 93rd Avenue		Fort St. John	250-787-1142
75	Kal Tire	10107 116th Street		Fort St. John	250-785-5626
76	Burns Lake Auto (Fraser Lake)	Highway 16 Fraser Lake		Fraser Lake	250-699-8990
77	Bumper to Bumper	106 Jackson Avenue		Ganges	250-537-5507
78	By-Pass Auto Recycling	1178 Stewart Road		Gibsons	604-886-3880
79	CSRD - Transfer Station	3125 McTavish Road		Glenemma	
80	Gold River Auto Parts	512 Industrial Pk Place		Gold River	250-283-2611
81	CSRD - Landfill	350 Golden-Donald Upper Rd		Golden	
82	Kal Tire	1002 10 Avenue North		Golden	250-344-5213
83	Kal Tire	2691 Highway 3		Grand Forks	250-442-2141
84	Kal Tire	2420 Millstream Road		Highlands	250-391-6132
85	Kal Tire	595 Raab Street		Hope	604-869-2426
86	Kal Tire	2289 Tweedie		Houston	250-845-7341
87	Canadian Tire	4862 Athalmer Road		Invermere	250-342-4433
88	Canadian Energy	1440 Battle Street		Kamloops	250-374-8914
89	Canadian Tire	944 8th Street		Kamloops	250-376-4134
90	Canadian Tire	1441 Hillside Drive		Kamloops	250-374-9747
91	Kal Tire	825 Notre Dame Drive		Kamloops	250-372-3302
92	Kal Tire Auto Centre	1032 Victoria Street		Kamloops	250-374-6248
93	Kal Tire Truck Centre	788 Mount Paul Way		Kamloops	250-374-6258
94	Mike's Transmission	2630 Tranquille Road		Kamloops	250-36-1040
95	Polar Battery	150 Victoria Street W		Kamloops	250-434-5790
96	Canadian Energy	1891 Springfield	190	Kelowna	250-765-6120
97	Canadian Tire	1655 Leckie Road		Kelowna	250-860-5744
98	East Penn Batteries	1505 Hardy Street		Kelowna	604-455-0355
99	Interstate Batteries	311 Banks Road		Kelowna	250-860-3444
100	Kal Tire	2233 Leckie Road		Kelowna	250-860-5977
101	Kal Tire	3482 Highway 97 North		Kelowna	250-765-7181
102	Kal Tire	1997 Kirschner Road		Kelowna	250-861-4558
103	The Battery Doctors	1972 Windsor Road		Kelowna	250-860-2866
104	Columbia Recycle	330 - 317th Avenue		Kimberly	250-427-2994
105	Anchor Tire Sales Ltd.	236 Enterprise Avenue		Kitimat	250-632-2151
106	Kal Tire	4826 Elliot Street		Ladner	604-946-6133
107	Peerless Road Recycling	10830 Westdowne Road		Ladysmith	250-746-2540
108	Bumper to Bumper	1146 Rocky Creek Road		Ladysmith	250-245-9922
109	BC Teen Challenge	4550 Glenmore Road		Lake Country	250-808-5490
110	Meade Creek Recycling	8800 North Shore Road		Lake Cowichan	250-746-2540
111	Canadian Tire	855 Attree Avenue		Langford	250-474-2291
112	Kal Tire - Sooke Road	2681 Sooke Road		Langford	250-474-6333
113	Canadian Tire	6312 200th Street		Langley	604-532-4411
114	East Penn Batteries	26988 56th Ave	110	Langley	604-455-0355
115	Edmonds Batteries	20131 Industrial Ave	101	Langley	604-534-7995
116	Edmonds Batteries	20583 Langley Bypass	101	Langley	604-530-9235
117	Interstate Batteries	20148 102nd Ave		Langley	604-888-3446
118	Kal Tire	20520 Langley By-Pass		Langley	604-533-3905
119	Kal Tire	19705 Fraser Highway		Langley	604-530-7571

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120	Infinity Trading Company	6249 205th St	102	Langley Township	604-530-9992
121	Kal Tire	20140 98 Avenue		Langley Township	604-882-3911
122	Kal Tire	249 Main Street		Lillooet	250-256-4131
123	Gilbert Parts Depot	2111 Shuswap Avenue		Lumby	250-547-2363
124	Kal Tire	1931 Shuswap Avenue		Lumby	250-547-9251
125	Lumby Transfer Station	221 Trinity Valley Road		Lumby	250-547-6298
126	Kingfisher Transfer Station	150 Beattie Road		Mable Lake	250-838-9847
127	Kal Tire	1107 Mill Road		Mackenzie	250-997-6521
128	Kal Tire	20803 Lougheed Highway		Maple Ridge	604-466-9694
129	Canadian Tire	11969 200th Street		Maple Ridge	604-460-4664
130	Canadian Tire	2761 Forksdale Avenue		Merritt	250-378-1818
131	Kal Tire	2601 Nicola Avenue		Merritt	250-378-5141
132	Pourboys Mechanical	805 Murray Street		Midway	250-449-2764
133	Canadian Tire	32545 London Avenue		Mission	604-826-5840
134	Kal Tire	95 6th Avenue NW		Nakusp	250-265-4155
135	Canadian Tire	4585 Uplands Drive		Nanaimo	250-585-8045
136	Kal Tire	2294 McCullough Road		Nanaimo	250-756-3611
137	Kal Tire - Edwards Tire Service	837 Old Victoria Road		Nanaimo	250-754-4456
138	Kal Tire	6590 Island Highway N		Nanaimo	250-390-4211
139	Kal Tire	2800 Norwell Drive		Nanaimo	250-758-9128
140	Kal Tire	76 Baker Street		Nelson	250-354-4494
141	Geraco Industrial Supplies	3377 Laurier Street		New Hazelton	250-842-6717
142	Island Return It	6476 Norcross Road		North Cowichan	250-748-2066
143	Canadian Tire	1350 Main Street		North Vancouver	604-982-9100
144	Kal Tire	440 Brooksbank Avenue		North Vancouver	604-985-4221
145	Kal Tire	1830 Marine Drive		North Vancouver	604-985-8294
146	Canadian Tire	34017 Highway 97		Oliver	250-498-8473
147	Bowtie Tech Corp	15210 Highway 97		Osoyoos	250-495-6640
148	Canadian Tire	822 Island Highway		Parksville	250-248-1085
149	RND Auto Industrial	7456 Prospect Road		Pemberton	604-894-6375
150	Canadian Tire	960 Railway Street		Penticton	250-492-3576
151	Kal Tire	1780 Dartmouth Road		Penticton	250-493-0414
152	Canadian Tire	3550 Johnston Road		Port Alberni	250-720-0085
153	Kal Tire - Pearson Tire Ltd.	4938 Dunbar Street		Port Alberni	250-724-4465
154	Canadian Tire	2850 Shaughnessy Street		Port Coquitlam	604-468-6951
155	Boris Mobile Mechanic	7050 Byng Road		Port Hardy	250-949-6416
156	Kal Tire	1680 Campbell Way		Port McNeill	250-956-4407
157	Canadian Tire	4720 Joyce Avenue		Powell River	604-485-4649
158	Kal Tire - Aero Powell River Service	7327 Duncan Street		Powell River	604-485-2711
159	Canadian Energy	541 1st Avenue		Prince George	250-564-1551
160	Interstate Batteries	3584 Massey Drive		Prince George	250-765-3477
161	Canadian Tire	5008 Domano Blvd.		Prince George	250-964-8258
162	Kal Tire	1073 West Central Street		Prince George	250-562-2105
163	Kal Tire	750 Boundary Road		Prince George	250-561-1525
164	Seaport Tire Ltd	943 Chamberlin Avenue		Prince Rupert	250-624-8550
165	Kal Tire	307 Culbertson Way		Princeton	250-295-7171
166	Canadian Tire	570 Newman Road		Quesnel	250-747-5274
167	Kal Tire	1949 Cariboo Hwy 97 N.		Quesnel	250-992-6534
168	CSRD - Landfill	330 Westside Road		Revelstoke	

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169	Canadian Tire	35010 No. 3 Road		Richmond	604-273-2939
170	Canadian Tire	11388 Steveston Highway		Richmond	604-271-6651
171	Exide Technologies	14480 Knox Way	115	Richmond	604-273-9779
172	Kal Tire	2633 No. 5 Road		Richmond	604-278-9181
173	Kal Tire - No 3 Rd	6551 No. 3 Road		Richmond	604-207-1203
174	RME Energy Ltd	3155 21331 Gordon Way		Richmond	604-241-4470
175	Sota Battery Canada Ltd	1137 11871 Horseshow W		Richmond	604-271-9727
176	Canadian Tire	801 Royal Oak Drive		Saanich	250-727-6561
177	Canadian Tire	3993 Cedar Hill Road		Saanich	250-721-1125
178	Bumper to Bumper	6777 Kirkpatrick Cres		Saanichton	250-652-5277
179	Scrap King Autowreckers	1660 Airport Road		Salmo	888-357-2091
180	Canadian Tire	2090 10th Street S.W.		Salmon Arm	250-832-9600
181	Kal Tire	1160 Trans Canada Hwy 1		Salmon Arm	250-832-6077
182	CSRD - Transfer Station	3508 Squilax-Anglemont Rd		Scotch Creek	
183	Canadian Tire	4380 Sunshine Coast Hwy		Sechelt	604-885-6611
184	Kal Tire - Wharf Tire & Mechanical	5633 Wharf Road		Sechelt	604-885-7927
185	CSRD - Transfer Station	950 2 Mile Road		Sicamous	
186	East Penn Batteries	2050 Mills Road		Sidney	250-812-1219
187	CSRD - Transfer Station	2281 Skimikin Lake Road		Skimikin	
188	Canadian Tire	3221 Highway #16 & 15th Av		Smithers	250-847-3117
189	Kal Tire	4320 Highway #16 West	2	Smithers	250-847-2665
190	RCU Auto Parts	2374 Sooke River Road		Sooke	250-642-1524
191	Sooke Total Auto Recycling	6228 Sooke Road		Sooke	250-642-4206
192	Kal Tire	601 Sparwood Drive		Sparwood	250-425-2562
193	Canadian Tire	1851 Mamquam Road		Squamish	604-898-2227
194	Kal Tire	1117 Industrial Way		Squamish	604-892-1070
195	Valley West Auto Recyclers	9203 James Avenue		Summerland	250-494-0010
196	Canadian Tire	7878 120th Street		Surrey	604-591-3914
197	Kal Tire	13443 72nd Ave.		Surrey	604-597-8826
198	Kal Tire - Fraser Hwy	16139 Fraser Highway		Surrey	604-592-2300
199	Kal Tire - King George Blvd	2315 King George Blvd.		Surrey	604-531-7195
200	Canadian Tire - Newton	7599 King George Hwy		Surrey	604-501-7159
201	Canadian Tire - North	13665 102nd Street		Surrey	604-583-8473
202	Edmonds Batteries	6468 King George Boul.	1	Surrey	604-596-8774
203	EnerSys Canada	13303 78th Avenue	408	Surrey	604-591-3683
204	Maxdura Battery	19130 24th Avenue	103	Surrey	604-999-4031
205	Phil's Batteries and More Inc.	12332 Pattullo Place	114	Surrey	604-588-7445
206	Schnitzer Steel	12195 Musqueam Drive		Surrey	604-580-0251
207	Canadian Tire	5100 Hwy. 16 West		Terrace	250-635-7178
208	Kal Tire	4929 Keith Avenue		Terrace	250-635-6170
209	Rudon Hydraulics	5035 Keith Avenue		Terrace	250-635-4074
210	West Coast Landfill	1500 Alaska Pine Road		Tofino	250-726-2727
211	Canadian Tire	8238 Hwy 3B		Trail	250 364 3333
212	Petro Canada	2040 Peninsula Road		Ucluelet	250-726-7477
213	Tarmigan Towing	2785 Birch Road		Valemount	250-566-4305
214	Borri Power	3687 E 1st Street		Vancouver	604-439-3054
215	Canadian Tire	2290 Cambie Street		Vancouver	(604)707-2290
216	Kal Tire	8130 Ontario Street		Vancouver	604-322-4060
217	Kal Tire - Arbutus St	2790 Arbutus Street		Vancouver	250-260-0374

Canadian Battery Association 2017 Report to Director, Waste Management

218	Kal Tire - Main St	1670 Main Street		Vancouver	604-669-3124
219	Canadian Tire	2820 Bentall Street		Vancouver	604-431-3570
220	Canadian Tire	2220 Kingsway		Vancouver	604-257-6510
221	Canadian Tire	8277 Ontario Street		Vancouver	604 336 1086
222	Kal Tire	429 West 1st Street		Vanderhoof	250-567-4224
223	Canadian Tire	4510 27th Street		Vernon	250-549-2131
224	Greater Vernon RDF	120 Birnie Road		Vernon	250-545-6410
225	Kal Tire - Anderson Way	5451 Anderson Way		Vernon	250-542-1156
226	Vernon Battery Ltd.	4313 25th Avenue		Vernon	250-542-4275
227	Bumper to Bumper	2017 Government Street		Victoria	250-384-9378
228	Canadian Tire	1610 Hillside Avenue		Victoria	250-361-3152
229	Kal Tire	2882 Douglas Street		Victoria	250-383-1711
230	Schnitzer Steel	307 David Street		Victoria	250-381-5865
231	Canadian Tire	1519 Admirals Road		View Royal	250-381-3111
232	Kal Tire	2180 Elk Road	100	West Kelowna	250-707-1320
233	Kal Tire - Industrial Rd	1225 Industrial Road		West Kelowna	250-769-5265
234	Canadian Tire	3550 Carrington Road		West Kelowna	250-707-3901
235	Canadian Tire	3059 152nd Street		White Rock	604-454-5602
236	Canadian Tire	1050 S. Lakeside Drive		Williams Lake	250-392-3303
237	Kal Tire	1055 Mackenzie Ave. S.		Williams Lake	250-392-7147
238	Daly's Auto Centre	10514 Youbou Road		Youbou	250-745-3433

Appendix 2: Return Collection Facilities for Industrial Lead-Acid Batteries

	Return Collection Facility	Address	City	Telephone
1	Authentic Triple C	1685 Riverside Road	Abbotsford	604-861-0731
2	CCON Recon Ltd	#108 2707 Progressive Way	Abbotsford	604-859-2855
3	Edmonds Batteries	33177 South Fraser Way	Abbotsford	604-852-8774
4	Motive Energy	150 - 2199 Queen Street	Abbotsford	604-210-4650
5	ABC Recycling Ltd	8081 Meadow Avenue	Burnaby	604-522-9727
6	Canadian Energy	#114 4238 Lozells Ave	Burnaby	604-420-7737
7	Edmonds Batteries	7471 Edmonds Street	Burnaby	604-525-8144
8	Polar Battery	1258 Boundary Road	Burnaby	604-294-1891
9	Schnitzer Steel	5551 Duncan Bay Road	Campbell River	250-287-8748
10	Schnitzer Steel	13271 Trans Canada Highway	Cassidy	250-245-5051
11	Interstate Batteries	1651 Old Island Hwy	Colwood	250-391-9748
12	Magnacharge Battery Corp	1279 Derwent Way	Delta	604-525-0391
13	All Battery Powered	5311 Trans-Canada Hwy	Duncan	250-597-1959
14	Canadian Energy	791 Cave Street	Esquimalt	250-361-3933
15	Canadian Energy	1440 Battle Street	Kamloops	250-374-8914
16	Polar Battery	150 Victoria Street W	Kamloops	250-434-5790
17	Canadian Energy	#190 1891 Springfield Road	Kelowna	250-765-6120
18	East Penn Batteries	1505 Hardy Street	Kelowna	604-455-0355
19	Interstate Batteries	311 Banks Road	Kelowna	250-860-3444
20	The Battery Doctors	1972 Windsor Road	Kelowna	250-860-2866
21	East Penn Batteries	#110 26988 56th Avenue	Langley	604-455-0355
22	Edmonds Batteries	#101 20131 Industrial Avenue	Langley	604-534-7995
23	Edmonds Batteries	101-20583 Langley Bypass	Langley	604-530-9235
24	Interstate Batteries	20148 102nd Avenue	Langley	604-888-3446
25	Canadian Energy	541 1st Avenue	Prince George	250-564-1551
26	Interstate Batteries	3584 Massey Drive	Prince George	250-765-3477
27	Exide Technologies	#115 14480 Knox Way	Richmond	604-273-9779
28	RME Energy Ltd	#3155 21331 Gordon Way	Richmond	604-241-4470
29	East Penn Batteries	2050 Mills Road	Sidney	604-455-0355
30	Edmonds Batteries	#1 6468 King George Boul.	Surrey	604-596-8774
31	EnerSys Canada	#408 13303 78th Avenue	Surrey	604-591-3683
32	Phil's Batteries & More	#114 12332 Pattullo Place	Surrey	604-588-7445
33	Schnitzer Steel	12195 Musqueam Drive	Surrey	604-580-0251
34	Vernon Battery Ltd.	4313 25th Avenue	Vernon	250-542-4275
35	Schnitzer Steel	307 David Street	Victoria	250-381-5865

Canadian Battery Association
2017 Report to Director, Waste Management

INDEPENDENT REASONABLE ASSURANCE REPORT

**To the Director of
Canadian Battery Association (the “Association”)**

We have been engaged by the management of Canadian Battery Association (the Association) to undertake a reasonable assurance engagement in respect of the following disclosures within the Company’s Annual Report the Director (the Report) for the year ended December 31, 2017 (together the “Subject Matter”):

- Location of collection facilities, and any changes in the number and location of collection facilities from the previous report in accordance with Section 8(2)(b) of BC Regulation 449/2004 (the Recycling Regulation);
- The description of how the product was managed in accordance with the pollution prevention hierarchy in accordance with Section 8(2)(d) of the Recycling Regulation;
- The total amount of the producer’s product sold and collected and, if applicable, the producer’s recovery rate in accordance with Section 8(2)(e) of the Recycling Regulation; and,
- The performance for the year in relation to approved targets under Sections 8(2)(b), (d) and (e) in accordance with Section 8(2)(g) of the Recycling Regulation.

The objective of this report is to disclose how the Association’s management has discharged its responsibility to report on the Subject Matter in accordance with Section 8(2)(b), (d), (e) and (g) of the Recycling Regulation.

RESPONSIBILITIES

The Subject Matter is the responsibility of the Association’s management who have prepared the Subject Matter in accordance with the evaluation criteria which are an integral part of the Subject Matter. Our responsibility in relation to the Subject Matter is to perform a reasonable assurance engagement and to express a conclusion based on the work performed. Our opinion does not constitute a legal determination on the Association’s compliance with the Recycling Regulation.

EVALUATION CRITERIA

The suitability of the evaluation criteria is the responsibility of management. The evaluation criteria presented in Appendix 1 are an integral part of the Subject Matter and address the relevance, completeness, reliability, neutrality and understandability of the Subject Matter.

SCOPE OF THE AUDIT

We carried out our reasonable assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audit or Reviews of Historical Financial Information published by the International Auditing and Assurance Standards Board. This Standard requires, amongst others, that the assurance team possesses the specific knowledge, skills and professional competencies needed to understand the information included within the Subject Matter, and that they comply with the independence and other ethical requirements of the International Federation of Accountants Code of Ethics for Professional Accountants.

A reasonable assurance engagement includes examining, on a test basis, evidence supporting the amounts and disclosures within the Subject Matter. A reasonable assurance engagement also includes assessing the evaluation criteria used and significant estimates made by management, as well as evaluating the overall presentation of the Subject Matter. The main elements of our work were:

- Inquiring and discussing with the Association's management to obtain an understanding of the management and information systems, processes and relevant controls used to generate, aggregate and report the data in the Annual Reports;
- Performing walkthroughs to test the design, and where relevant the operating effectiveness, of internal controls relating to data collection and reporting of the Subject Matter;
- Agreeing the number of collection facilities to supporting documentation;
- Confirming the existence of collection facilities including address, types of product accepted and hours of operations;
- Investigating any significant fluctuation in the total number of collection facilities over the past three years;
- Agreeing the total amounts of the producers product sold and collected during the year to source records on a test basis;
- Verifying that all recovered product was received by recycling and smelting facilities that have valid permits, approvals and/or export permits;
- Agreeing data used in calculations to source records on a test basis;
- Agreeing the applicable Annual Report target data to the approved stewardship plan to ensure completeness and consistency;
- Reviewing the Report to determine whether it is consistent with our overall knowledge of, and experience with, the non-financial performance of the Association; and,
- Comparison of reported performance against targets to internal records and calculations of performance.

OPINION

In our opinion, the Subject Matter within Canadian Battery Association's Annual Report the Director for the year ended December 31, 2017 presents fairly in accordance with the evaluation criteria, in all material respects:

- Location of collection facilities, and any changes in the number and location of collection facilities from the previous report in accordance with Section 8(2)(b) of the Recycling Regulation;
- The description of how the product was managed in accordance with the pollution prevention hierarchy in accordance with Section 8(2)(d) of the Recycling Regulation;
- The total amount of the producer's product sold and collected and, if applicable, the producer's recovery rate in accordance with Section 8(2)(e) of the Recycling Regulation; and,
- The performance for the year in relation to approved targets under Sections 8(2)(b), (d) and (e) in accordance with Section 8(2)(g) of the Recycling Regulation.

Our report has been prepared solely for the purposes of management's stewardship under the Recycling Regulation and is not intended to be and should not be used for any other purpose. Our duties in relation to this report are owed solely to Association, and accordingly, we do not accept any responsibility for loss occasioned to any other party acting or refraining from acting based on this report.

Green Horwood & Co LLP

GREEN HORWOOD & CO LLP
CHARTERED PROFESSIONAL ACCOUNTANTS

Victoria BC, Canada
July 12, 2018

Appendix 1 to the Independent Reasonable Assurance Report

Evaluation Criteria

COLLECTION FACILITIES

Specific Disclosures in the annual stewardship report for which evaluation criteria were developed		
Disclosed information	Claim in the Report	Reference
Number of collection facilities	<ul style="list-style-type: none"> 238 Return Collection Facilities (RCFs) for the public and 34 return locations for the IC&I sector 	<ul style="list-style-type: none"> Part 2, Section 8(2)(b), See Page 2 and Appendix 1 and Appendix 2 of 2017 Annual Report
Changes to number of collection facilities	<ul style="list-style-type: none"> There were 53 new RCFs added in 2017. 	<ul style="list-style-type: none"> Part 2, Section 8(2)(b), See Page 2 and Appendix 1 of 2017 Annual Report

The following definitions were applied to the assessment of the location of collection facilities, and any changes in the number and location of collection facilities from the previous report in accordance with Section 8(2)(b) of the Recycling Regulation:

- Collection Facility: any consumer or industrial facility that accepts Lead Acid Batteries.

The following evaluation criteria were applied to the assessment of the location of collection facilities, and any changes in the number and location of collection facilities from the previous report in accordance with Section 8(2)(b) of the Recycling Regulation:

- The number of collection facilities is determined based on the number of retail outlets or industrial depots that advertise they will accept lead acid batteries.
- Changes in the number of collection facilities are determined based on a review of retail outlets and CBA members self reporting industrial battery depots.

PRODUCT MANAGEMENT

Specific Disclosures in the annual stewardship report for which evaluation criteria were developed		
Disclosed information	Claim in the Report	Reference
A description of how the recovered product was managed in accordance with the pollution prevention hierarchy (S.8(2)(d))	<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 – information from smelter; • 100% of electrolyte (H₂SO₄) is reused in other production processes; • 30% of plastic battery casings used for energy recovery and creating anoxic conditions during smelting process; • 70% of plastic LAB casings recycled into new LAB casings. 	<ul style="list-style-type: none"> • See Part 2, Section 8(2)(d), Pollution Prevention Hierarchy and Product/Component Management • See Page 3 of 2017 Annual Report

The following definitions were applied to the assessment of the description of how the recovered product was managed in accordance with the pollution prevention hierarchy in accordance with Section S.8(2)(d):

- Total weight of LABs processed, by category, is determined based on scaled deliveries to licensed smelters in North America by CBA members or exported by permit to OECD countries.

- 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.

The following evaluation criteria were applied to the assessment of the description of how the recovered product was managed in accordance with the pollution prevention hierarchy in accordance with Section S.8(2)(d):

1. All recovered LABs collected by CBA members are sent to recycling and smelting facilities that have valid permits, approvals and/or export permits.

PRODUCT SOLD AND COLLECTED

Specific Disclosures in the annual stewardship report for which evaluation criteria were developed		
Disclosed information	Claim in the Report	Reference
Product collected	<ul style="list-style-type: none"> • CBA members reported 22.7M kgs of waste lead-acid batteries recovered in 2017. 	<ul style="list-style-type: none"> • Part 2, Section 8(2)(e), • See Page 3 of 2017 Annual Report
Product sold	<ul style="list-style-type: none"> • CBA members reported sales of 26.0M kgs of new and used lead acid batteries in 2017. 	<ul style="list-style-type: none"> • Part 2, Section 8(2)(e), • See Page 3 of 2017 Annual Report
Recovery rate	<ul style="list-style-type: none"> • See the evaluation criterion for performance for the year in relation to targets in the approved stewardship plan below 	

The following evaluation criteria were applied to the assessment of total amounts of the producer’s product sold and collected and, if applicable, the producer’s recovery rate has been calculated in accordance with Section 8(2)(e);

1. Product Sold: Product sold is determined based on self-reporting by each steward of units sold by category on a monthly/quarterly basis.
2. Product Collected: The weight of product collected is based on the weight of material shipped to smelters by CBA members for recycling
3. Product Collected: Adjustments for in-transit material and inventory at consolidation sites that are not yet invoiced by processors are made for annual reporting purposes.

TARGETS

Specific Disclosures in the annual stewardship report for which evaluation criteria were developed		
Disclosed information	Claim in the Report	Reference
Targets associated with Section 8(2)(b) per Approved Stewardship Plan: <ul style="list-style-type: none"> • There will be over 180 retail families located in urban locations for the public to drop off LABs at no charge • There will be a minimum of 20 warehouse drop-off locations for large industrial and commercial batteries at no charge. 	<ul style="list-style-type: none"> • The CBA has identified 238 Return Collection Facilities (RCFs) for the public and 34 Return Collection Facilities for the IC&I sector and their industrial lead-acid batteries. 	See Section 2, Page 5 of 2017 Annual Report
Targets associated with Section 8(2)(d): <ul style="list-style-type: none"> • Compliance with Basel Convention 	<ul style="list-style-type: none"> • All LABs collected by CBA members were sent to permitted smelters in North America or exported to OECD countries for recycling 	See Section 4, page 7 of 2017 Annual Report
Targets associated with Section 8(2)(e): <ul style="list-style-type: none"> • 95% Recovery Rate 	<ul style="list-style-type: none"> • Product sold 26,011,760 kg • Product recovered 22,746,498 kg • Recovery rate 87.4% of CBA sales 	Part 2, Section 8(2)(e), See Page 3 of 2017 Annual Report Part 2, Section 8(2)(e), See Page 3 of 2017 Annual Report Section 3, See Page 6 of 2017 Annual Report

The following evaluation criteria were applied to the description of performance for the year in relation to the specific targets associated with Section 8(2)(b), (d) and (e) of the Recycling Regulation in the approved stewardship plan:

1. Targets in the stewardship plan have been identified and reported on by management in the annual report; and

2. The description of progress against targets to date is supported by records maintained by the Canadian Battery Association.
3. The expected outcomes and target dates in the annual report are consistent with the targets in the approved stewardship plan
4. The facts disclosed in the annual update on progress are supportable by evidence, neutral and understandable.
5. All LABs are delivered to permitted smelters in North America or exported to OECD countries by Export Permits. This is intended to demonstrate that LABs are recycled in accordance with strict environmental standards. This is covered by the product management evaluation criteria above and no further evaluation criteria are necessary.