



BRITISH COLUMBIA ALARMRECYCLE ANNUAL REPORT TO THE DIRECTOR 2016

For submission to:
Director, *Extended Producer
Responsibility Programs*
PO Box 9341, STN PROV GOVT
Victoria, BC V8W 9M1

Submitted By:
Mannie Cheung,
Vice-President, Operations
Product Care Association of Canada
105 W. 3rd Ave
Vancouver, BC, V5Y 1E6

Table of Contents

1. Executive Summary.....	2
2. Program Outline.....	5
3. Public Education Materials and Strategies	6
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.....	12
8. Revenues and Expenditures.....	15
9. Plan Performance.....	16
APPENDIX A. 2016 AlarmRecycle Members	17
APPENDIX B. 2016 AlarmRecycle Communication Materials	19
APPENDIX C. Complete List of all 2016 AlarmRecycle Collection Sites.....	21
APPENDIX D. Breakdown of Collection Sites by Regional District	27
APPENDIX E. 2016 Independent Financial Audit	28
APPENDIX F. 2016 Third Party Assurance Statement for Non-Financial Information	35

1. Executive Summary

The BC Smoke and Carbon Monoxide (CO) Program (“Program”) began on October 1, 2011. AlarmRecycle is operated by Product Care Association of Canada (“PCA”) pursuant to the requirements of the *British Columbia Recycling Regulation* (BC Reg 449/2004 as amended) (“Regulation”) under the Province’s *Environmental Management Act*, as well as the BC Smoke and Carbon Monoxide Alarm Stewardship Plan, approved by the BC Ministry of Environment on August 17, 2011 and covering the period October 1, 2011 to December 31, 2016 (“Program Plan”). This annual report provides the information required pursuant to section 8(2) of the Regulation covering the period from January 1 to December 31, 2016.

Products within plan	Residential-use smoke and carbon monoxide (CO) alarms
Program website	http://www.regeneration.ca/programs/smoke-co-alarms/british-columbia/

Program performance details required under s.8(2) of the Regulation are summarized in the chart below.

Recycling Regulation Reference	Topic	Summary
Part 2, Section 8(2)(a)	Public Education Materials and Strategies	<ul style="list-style-type: none"> • Consumer awareness survey revealed 62% of BC residents were aware of a program to recycle smoke and CO alarms. • Website (productcare.org) redesigned with detailed information about the Program for members and service partners. • Point of sale and point of return materials developed and replenished for free upon request. • Advertised through Yellow Pages digital campaign. • Published print ads in 2015 municipal waste and recycling calendars. • Ran TV campaign with Global TV. • Broadcasted multi language advertisements on a number of radio stations (English, Mandarin, Cantonese, Hindi & Punjabi) • Participated in events (e.g. BC Home & Garden Show, Party for the Planet etc. • Collaborated through RCBC’s Hotline and Recyclepedia, the SABC Recycling Handbook and the BC Recycles Ambassadors to provide consumer-facing information about AlarmRecycle.

Recycling Regulation Reference	Topic	Summary
		<ul style="list-style-type: none"> Focused on community partnerships and collection during Fire Prevention Week.
Part 2, Section 8(2)(b)	Collection System and Facilities	<ul style="list-style-type: none"> At the end of 2016, the collection system included 194 contracted collection sites, including 73 return-to-retail locations, 15 local government facilities, 2 fire departments and 104 private recycling depots.
Part 2, Section 8(2)(c)	Product Environmental Impact Reduction, Reusability and Recyclability	<ul style="list-style-type: none"> Ionization foil stamping technology ensures less waste produced and less precious metals used in this stage of the manufacturing process. Amount of materials in alarms continue to decrease while the use of recyclable materials in packaging increase. There is a general trend in the industry to move from 9 volt to 3 volt alarms reducing the number of batteries required for product operation. Some manufacturers are looking into implementing best practice environmental standards from one region across all products sold to different countries.
Part 2, Section 8(2)(d)	Pollution Prevention Hierarchy and Product / Component Management	<ul style="list-style-type: none"> The plastic and metal components (copper, aluminum, ferrous, etc.) are separated and recycled. For alarms with radioactive components, the radioactive component (Am-241 foil) is shipped for final disposal at a licensed radioactive waste facility.
Part 2, Section 8(2)(e)	Product Sold and Collected and Recovery Rate	<ul style="list-style-type: none"> As per the approved Program Plan, due to the limited number of manufacturers in the sector, aggregated sales data is not made publicly available to protect confidential market share information. Between January 1 and December 31, 2016, the Program collected approximately 89,309 units.
Part 2, Section 8(2)(e.1)		<ul style="list-style-type: none"> Table 4 lists units collected by Regional District.
Part 2, Section 8(2)(f)	Summary of Deposits, Refunds, Revenues and Expenses	<ul style="list-style-type: none"> See Appendix E for the Program's Independent Financial 2016 Audit report.

The Program Plan sets out a number of key performance targets for the Program. The following chart summarizes the Program's targets, performance in 2016 and strategies for improvement going forward.

Key Program Targets and Performance

2016 Key Program Targets and Performance		
Part 2 section 8(2)(g)		
2016 Program Plan Targets	2016 Performance	Strategies for Improvement
Collection target of 26,741 units based on 5% annual increase from 2012 baseline of 21,326 units.	Target Exceeded: Approximately 89,309 units collected.	n/a
The Program will work with other stewardship programs to try to limit consumer confusion and to develop communication synergies between programs.	Target Met: As part of SABC, AlarmRecycle continued to work with other stewardship organizations (e.g. LightRecycle and PaintRecycle) in outreach to stakeholders. In addition, AlarmRecycle engaged RCBC for hotline and Recyclepedia services.	AlarmRecycle will continue to reach out to community groups and work with other stewardship programs, where synergies exist.

2. Program Outline

The BC Smoke and Carbon Monoxide (CO) Alarm Program (“Program”) began on October 1, 2011. AlarmRecycle is operated by Product Care Association of Canada (“PCA”) pursuant to the requirements of the *British Columbia Recycling Regulation* (BC Reg 449/2004 as amended) (“Regulation”) under the Province’s *Environmental Management Act*, as well as the BC Smoke and Carbon Monoxide Alarm Stewardship Plan, approved by the BC Ministry of Environment on August 17, 2011 and covering the period October 1, 2011 to December 31, 2016 (“Program Plan”). This annual report provides the information required pursuant to section 8(2) of the Regulation covering the period from January 1 to December 31, 2016.

AlarmRecycle members include manufacturers, brand owners, distributors, first importers and retailers. In 2016, there were 59 AlarmRecycle members. For a complete list of Program members registered as of December 31, 2016, see Appendix A.

Products that are recycled through AlarmRecycle include:

- Smoke alarms designed for residential-use as defined by the CAN/ULC-S531 standard.¹
- Carbon monoxide (CO) alarms designed for residential use, as defined by the CAN/CSA 6.19 standard.

By the end of 2016, the Program had developed a collection network of 194 permanent year-round collection sites. AlarmRecycle does not directly own or manage collection sites, but rather contracts with all collection locations. Collection sites include fire safety organizations, fire halls, recycling organizations (both non-profit and for-profit), retailers and local government, recycling centres and transfer stations.

The AlarmRecycle website is a consumer-facing portal where the public can obtain information about the Program, including what products are accepted in the Program, where to find the nearest collection site, promotional materials and membership information. Further details on education and outreach efforts are outlined in Section 3 of this report.

The Program, pursuant to the terms in its approved Program Plan, established a collection rate target increase of 5% per annum with the 2012 collection volume of 21,326 units as a baseline. In 2016, approximately 89,309 alarm units were collected, exceeding the collection target by 62,568 units or 234% (see Table 5).

¹ Underwriters Laboratory of Canada (ULC) Standards develops and publishes standards and specifications for specific product types, including those having a bearing on fire safety. Fire alarms installed in dwelling units must conform to the CAN/ULC-S531-02 standard.

3. Public Education Materials and Strategies

PCA implemented a communication program to educate consumers in accordance with regulatory requirements. The following section provide a summary of communication efforts for 2016.

Program Awareness

A consumer awareness survey conducted in 2016 revealed that 62% of British Columbians were aware of a recycling program for smoke and CO alarms, compared to 49% awareness of such a program in 2015. The survey was conducted between December 9 and December 13, 2016, surveying 1,012 randomly selected adult British Columbia residents.

Website

The Program utilizes two websites: Regeneration.ca is a consumer-facing portal for information about the Program. Productcare.org provides Program members and service partners, with materials, information and resources.

ReGeneration.ca includes the following bilingual content for the Program in British Columbia:

- Collection site finder (a map displaying locations of the collection sites);
- Collection site hours and operations;
- Accepted product list;
- Other information (e.g., Frequently Asked Questions about the Program).

An estimated 90,074 unique visitors utilized the website during the 2016 calendar year. The AlarmRecycle Program page received 2,458 visitors.

Point of Sale (PoS) and Point of Return (PoR) Materials

PCA designed and distributed both PoS and PoR materials free of charge as requested by retailers, collection sites, municipalities, etc. AlarmRecycle rack cards (5x8) and posters (11x17) were made available for reorder through the online order form (see Appendix B for examples).

Program Phone Line

PCA operated a toll-free telephone number (1-888-772-9772) by which consumers were able to obtain information about the Program.

Yellow Pages Advertising

PCA continued a targeted digital campaign via YP Group, including syndicated Facebook posts, targeted digital display ads, and smart digital display (re-serving impressions to pre-qualified audiences). Digital ads were specifically generated to internet users who performed online searches related to the purchase, use and disposal of smoke and CO alarm products in British Columbia.

Additionally, our Facebook advertising campaign pursued a “gated” strategy, which is to say, content viewable by residents of British Columbia was relevant to that audience specifically, and was not necessarily seen by audiences in other provinces.

Print Advertising

Print ads were published in 2016 municipal waste and recycling calendars.

TV Campaign

A Province-wide campaign with Global TV began to air on January 25, 2016 and ran for the entire year. There is a dedicated 15-second spot for AlarmRecycle educating viewers on smoke and CO alarm recycling.

Radio Campaign

AlarmRecycle was the sponsor of the Push to the Playoffs promotion of TSN/Virgin Radio from February 20 to April 10. This ad featured 30-second brand sell commercials as well as sponsorship tags (“brought to you by Regeneration”).

AlarmRecycle, captured under ReGeneration’s roster of programs, was part of a year-long advertising campaign on a top Lower Mainland radio station, Z95.3FM. 30-second brand sell commercials provided the foundation of the campaign, with a series of shorter on-air promotions and contests providing support. Multi-language ads were broadcasted on Spice Radio (Hindi, Punjabi and English), which began on February 1 and ran until December 31. A campaign also ran on Fairchild Radio from January 20, 2016 to February 20th, 2016 where 30 second spots for ReGeneration aired in Mandarin and Cantonese.

Events

ReGeneration, representing AlarmRecycle, PaintRecycle and LightRecycle, attended the BC Home & Garden Show, Party for the Planet, Regional Recycling’s Product of the Month and others, with the goal of educating people on the importance of waste diversion and recycling.

Partnerships

A custom AlarmRecycle colouring and activity book and AlarmRecycle branded crayons were developed for distribution to BC fire halls. The education piece informs children both about the importance of ensuring that household smoke and CO alarms are current and in good working order, as well as about the need to recycle expired, broken and unwanted alarms at one of BC’s many AlarmRecycle collection facilities. Distribution of these items is ongoing. An example of the coloring book is presented in Appendix B.

AlarmRecycle collaborated with the Recycling Council of British Columbia (RCBC) in their Hotline and Recyclepedia consumer enquiry resources (including a smartphone app), the Stewardship Association of BC’s (SABC) Recycling Handbook and in the BC Recycle Ambassador tour. This latter was a joint community event and stakeholder relations initiative (in association with select other SABC stewardship groups), through which a team of trained ambassadors travelled the Province bearing program-branded informational materials and interacted with consumers, municipal and regional governments and collection sites, providing information about the AlarmRecycle program.

4. Collection System and Facilities

AlarmRecycle contracts with existing collection sites across BC where end users can return their smoke and CO alarms. There is no charge for consumers to drop-off their products. PCA does not directly own or manage any collection sites, but rather contracts with all collection sites. At the end of 2016, the collection system was comprised of 194 advertised collection sites, including 73 return-to-retail locations, 15 local government facilities, 2 fire departments and 104 private recycling depots. Twelve collection sites were added and three collection sites were removed during 2016. Table 1 below provides a breakdown of the different types of collection sites in 2015 and 2016. Appendix C provides a complete list of collection sites as of December 31, 2016. Appendix D lists the number of collection sites in each regional district.

Table 1: Collection Site by Type (2015 and 2016)

Collection Site Type	# in 2015	# in 2016
Retailers	72	73
Local government	14	15
Recycling depots	97	104
Fire departments	2	2
Total	185	194

AlarmRecycle supplements the collection system with a Large Volume End User (LVEU) program. The LVEU program provides a free pick-up service from any entity that generates large volumes (i.e., more than 40) of smoke and CO alarms. In 2016, 53 entities were signed-up as LVEUs with AlarmRecycle, including fire safety organizations, electrical distributors, local government facilities and others.

5. Product Environmental Impact Reduction, Reusability and Recyclability

Reduce and Redesign

While the principal purpose of smoke and CO alarms is safety, the industry continues to take into account environmental considerations. The smoke and CO alarm industry maintains efforts to reduce the environmental impact of their products. Ionization foil stamping technology ensures less waste and precious metals are produced in this stage of the manufacturing process. The amount of plastic and other materials in a typical smoke alarm continue to decrease while the use of recyclable materials in product packaging increase. For example, some manufacturers now create alarms with 75% to 80% recyclable materials. Finally, there is a continued trend in the industry away from 9 volt towards 3 volt alarms to reduce the number of batteries required for product operation.

Manufacturers regularly review the design of their products for functionality, sustainability and impact on the environment, ensuring compliance with environmental requirements. In addition, some manufacturers are looking into implementing best practice environmental standards from one region across all products sold to different countries, rather than just implementing the standards in the country that mandates them. An example of a best practice environmental standard is the RoHS (Restriction of Hazardous Substances) initiative in Europe, which restricts the use of certain hazardous materials found in electrical and electronic products.

Reuse and Repair

Given the requirement that new smoke and CO alarms be certified for safety purposes and the absolute importance that program products function properly in the case of an emergency, the repair or reuse of returned products or product components is not considered viable.

Recycle, Recover and Dispose

It is the Program's intention to recycle as many components of returned products as possible, subject to economic conditions, such as fluctuations in demand and commodity prices.

6. Pollution Prevention Hierarchy and Product / Component Management

The following is based on information provided by the Program's downstream processors, where available, or based on the understanding of the service agreement with the downstream processor.²

There are generally two types of common smoke alarms; ionization, photoelectric and combination ionization/photoelectric. Alarms that use the ionization technology has a radioactive source within the detector to ionize the air and produce a small electric current. When smoke enters the detector chamber, the current is interrupted, which causes the alarm to sound. The radioactive element used in the smoke detector is most commonly Americium-241 (Am-241), which emits alpha radiation (or alpha particles). The source of radioactivity is quite small. Photoelectric alarms aim a light source into a sensing chamber at an angle away from the sensor. Smoke enters the chamber, reflecting light onto the light sensor; triggering the alarm. Combination ionization & photoelectric alarms use both sensing technologies in parallel.

The boxes of collected units are received at PCA's facility. At the facility, they are sorted which includes counting the number of alarms and removing batteries as well as any non-program products³. PCA has collaborated with the Call2Recycle stewardship program to recycle batteries through their program. The sorted units are consolidated into larger containers and shipped to an approved and licensed downstream processor. In 2016, the Program added an additional processor.

At the downstream processor's facility, prior to dismantling, each smoke alarm is sorted by type, and inventoried by a trained technician. According to information obtained from end fate surveys completed by the downstream processors, the plastic and metal components are separated and sent for recycling and the Am-241 foil is shipped for final disposal at a licensed radioactive waste facility. Table 2 provides a summary of the management of all alarm sub-components, according to information provided by the Program's downstream processor.

² The information detailed in this section may have a degree of uncertainty as the program has not verified product management information to a reasonable assurance level in accordance with audit standards. However, there is greater confidence in the end fate of hazardous wastes given the framework of regulatory requirements governing hazardous materials and commensurate oversight by various environmental departments and agencies.

³ Some of the alarms collected in 2016 were not shipped for processing until the subsequent year. Statements regarding the end fate of alarms are in reference to materials processed in 2016 only.

Table 2: Product / Component Management ⁴

Type of Alarm	Sub-component	Recycled	Storage at a licensed long-term storage facility
Radioactive Alarms	Radioactive Cells		100%
	Plastic	100%	
	Metal	100%	
Photovoltaic (non-radioactive alarms)	Plastic	100%	
	Metal	100%	

⁴ Based on information provided in end fate surveys completed by the Program's primary processors.

7. Product Sold and Collected and Recovery Rate

Products Sold

The BC smoke and CO alarm market is primarily served by three brand owners. Given the small number of manufacturers of these products selling into the BC market, it was approved by the Ministry of Environment that aggregated sales data for AlarmRecycle members would not be made publicly available, as is done with other stewardship programs.

Collection Volumes

Smoke and CO alarms are collected at collection sites in boxes, cardboard Gaylord boxes or mega bags, depending on the volume the collection site expects to receive. Between January 1 and December 31, 2016, the Program collected approximately 89,309 units, as detailed in Table 3 below.

The number of alarms collected in small containers (boxes and totes) and mega-bags was determined by multiplying the number of small containers and mega-bags collected each month by a conversion factor of 47 alarms per small container and 1,244 alarms per mega-bag. The conversion factors were calculated by averaging the sorted values of more than 1,000 small collection containers and 12 mega-bags, which were collected in 2016 and counted at the time of sorting and consolidation in Product Care's facility.

Table 3: Units Collected, January 1 – December 31, 2016

Container Type	# of Containers Collected	Approximate # of Alarms Collected
Small Containers	1,556	73,132
Mega Bags	13	16,177
Total	1,569	89,309

Units Collected by Regional District

Table 4 illustrates the approximate number of smoke and CO alarms collected from each of the Province's Regional Districts between January 1 and December 31, 2016.

Table 4: Total Smoke and CO Alarms Collected by Regional District, 2016

Regional District	# Small Containers ⁷	# Mega Bags ⁸	# of Smoke & CO Alarms
Alberni-Clayoquot	5	0	235
Bulkley-Nechako	2	0	94
Capital	117	0	5,499
Cariboo	4	0	188
Central Coast	0	0	0
Central Kootenay	6	0	282
Central Okanagan	102	0	4,794
Columbia-Shuswap	2	0	94
Comox Valley	14	0	658
Cowichan Valley	21	0	987
East Kootenay	10	0	470
Fraser-Fort George	11	0	517
Fraser Valley	130	8	16065
Kitimat-Stikine	0	0	0
Kootenay Boundary	9	0	423
Metro Vancouver	986	5	52,5648
Mount Waddington	0	0	0
Nanaimo	48	0	2,2564
North Okanagan	18	0	846
Northern Rockies	0	0	0
Okanagan-Similkameen	17	0	799
Peace River	3	0	141
Powell River	0	0	0
Skeena-Queen Charlotte	0	0	0
Squamish-Lillooet	35	0	1,645
Strathcona	7	0	329
Sunshine Coast	0	0	0
Thompson-Nicola	9	0	423
Total	1,556	13	89,309

⁷ Conversion factor used: 47 units per small container.

⁸ Conversion factor used: 1244 units per mega-bag

PCA submitted AlarmRecycle's collection rate targets to the Ministry of Environment on April 1, 2013 in accordance with its commitment under the approved Program Plan. In the submission, PCA committed to a 5% annual increase in the number of program products collected over the 2012 baseline of 21,326 units. The Program collected approximately 89,309 units in 2016, exceeding the year's collection target of 26,741 units by 62,568 units. Table 5 summarizes the submitted collection rate targets and units collected annually from 2013 to 2016.

Table 5: AlarmRecycle Collection Rate Targets and Collection Rates

Year	2012 (Baseline)	2013	2014	2015	2016
Units Collected Target	21,326	23,100	24,255	25,468	26,741
Units Collected by the Program		32,460	44,253	66,481	89,309

Recovery Rate

Given the unique nature of the smoke and CO alarm market in BC, the Program cannot report out on recovery rate as a performance measure. Recovery rate compares the amount of materials collected to the amount of material sold during the same time period. Collection and sales data are typically published alongside the recovery rate in order to substantiate a percentage based recovery rate. In the case of smoke and CO alarms, given the small number of companies selling these products into the BC market, providing this data would permit competitors to estimate the sales data of individual companies, which is confidential business information. A simple percentage recovery rate does not provide a meaningful measure of Program performance in the absence of an appreciation of the number of units sold during the same period.

8. Revenues and Expenditures

AlarmRecycle is funded by membership fees, known as environmental handling fees (EHFs), remitted to PCA by its members based on the volume of sales of smoke and CO alarms in British Columbia. The EHF rates are set by PCA. In some cases, retailers recover the fees from consumers as a separate visible EHF. Program revenues are applied to the operation of the Program, including administration, education, collection system, transport, recycling and disposal of collected products as well as a reserve fund. Table 6 illustrates the EHFs for Program products effective since October 1, 2011.

Table 6: Environmental Handling Fees as of October 1, 2011

Unit Type	EHF
Smoke Alarms and Combination Smoke/CO Alarms	\$1.20
Carbon Monoxide (CO) Alarms	\$0.60

Table 7 shows AlarmRecycle revenues and expenditures for 2016. Additionally, a copy of the independent financial audit of the Program's revenues and expenses can be found in Appendix E.

Table 7: 2016 AlarmRecycle Revenue and Expenditures

	Amount
Total Revenues	\$ 621,833
Total Expenses	\$ 804,916

9. Plan Performance

Table 8 summarizes the Program's key performance targets for 2016, as committed to in the Program Plan and the collection rate target submission to the Ministry of Environment dated April 1, 2013, along with actual performance values and strategies for improving performance in 2017.

Table 8: 2016 Key Program Targets and Performance

2016 Key Program Targets and Performance		
Part 2 section 8(2)(g)		
2016 Program Plan Targets	2016 Performance	Strategies for Improvement
Collection target of 26,741 units based on 5% annual increase from 2012 baseline of 21,326 units.	Target Exceeded: Approximately 89,309 units collected.	n/a
The Program will work with other stewardship programs to try to limit consumer confusion and to develop communication synergies between programs.	Target Met: As part of SABC, AlarmRecycle worked with other stewardship organizations (e.g. LightRecycle and PaintRecycle) in outreach to stakeholders. In addition, AlarmRecycle engaged RCBC for hotline and Recyclepedia services.	AlarmRecycle will continue to reach out to community groups and work with other stewardship programs, where synergies exist.

APPENDIX A. 2016 AlarmRecycle Members

Company
0797222 BC LTD DBA Pine Lighting
7594828 Canada inc. (o/a Ace Canada)
Acklands-Grainger Inc.
ACME FIRE AND SAFETY CO LTD.
AMELECO ELECTRIC INC.
Assa Industrial Ltd
Bed Bath & Beyond Canada L.P.
Best Buy Canada Ltd.
Bright Ideas Maple Ridge Lighting Inc.
Canadian Tire Corporation, Limited
CASCADE BATH & LIGHTING LTD.
Chalifour Canada Ltd.
Corporate Express Canada, Inc.
Costco Wholesale Canada Ltd.
EUROLINE LIGHTING AND PLUMBING INC.
Farley Manufacturing Inc
Federated Co-operatives Limited
Fire Marshal's Public Fire Safety Council's Distribution Centre
First Alert (Canada) Inc.
Franklin Empire Inc.
Gescan, Division of Sonepar Canada Inc.
Guillevin International Co.
HD Supply Canada Inc.
Home Depot of Canada Inc.
Home Hardware Stores Limited
Hudson's Bay Company Inc. (HBC)
Illuminations Lighting Solutions Ltd.
Indigo Books and Music Inc.
KERRISDALE LUMBER CO. LTD.
Kidde Canada Inc.
Leinshare Holdings Inc. dba Pharmasave #231
Lite-scape Lighting Inc.
Loblaws Inc.
London Drugs Limited
Lowe's Companies Canada, ULC
Mill Bay Pharmacy Ltd
Mircom Distribution (BC) Inc
National Fire Equipment Limited

Company
Nedco (West) a division of REXEL CANADA ELECTRICAL INC.
Orgill Canada Hardlines ULC
Pacific Coast Fire Equipment (1976) Ltd.
Peavey Industries LP
Pine Lighting Ltd.
Renegade Electric Supply LTD
Robertson Electric Wholesale British Columbia Limited
RONA Inc.
Royal City Fire Supplies Ltd.
ROYAL LIGHTING & ELECTRICAL SUPPLY LTD.
Save More Lighting Ltd.
Serva-Lite Sales Ltd.
Shadow Lighting & Supplies Inc.
Shoppers Drug Mart Inc.
Slegg Limited Partnership
Staples Canada Inc.
Troy Life & Fire Safety Ltd.
Wal-Mart Canada Corp.
West Point Lighting Ltd
Westburne West (A Division of Rexel Canada Electrical Inc.)
Westcraft Lighting Ltd

APPENDIX B. 2016 AlarmRecycle Communication Materials

Point of Sale and Point of Return Materials

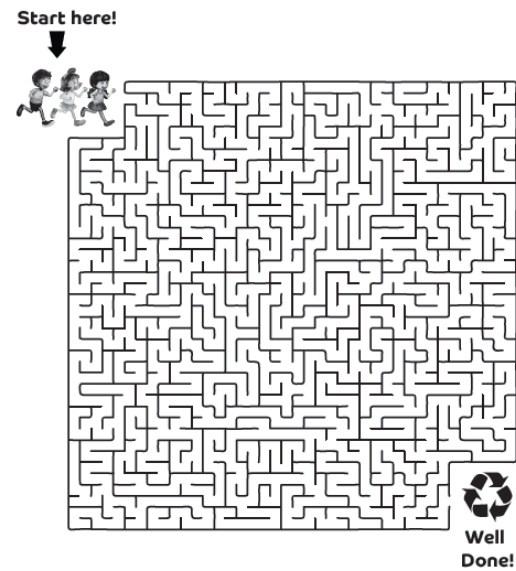
AlarmRecycle 5x8 Rack Card – Front (left) and Back (right):



AlarmRecycle 11x17 Poster:



AlarmRecycle Activity Book – Front (left) and Sample Page (right):



Questions? Visit our website www.ReGeneration.ca
or
call 604-RECYCLE (732-9253) or 1-800-667-4321 toll-free
to find a free drop-off location near you!

APPENDIX C. Complete List of all 2016 AlarmRecycle Collection Sites

Collection Site Name	City	Regional District	Postal Code
Abbotsford Bottle Depot	V2S 2A3	Fraser Valley	Abbotsford
Abbotsford Community Services Recycling	V2S 3S9	Fraser Valley	Abbotsford
Agassiz Bottle Depot Ltd	V0M 1A2	Fraser Valley	Agassiz
Aldergrove Return-It	V4W 3N5	Metro Vancouver	Aldergrove
Alpine Disposal & Recycling	V9B 2S4	Capital	Langford
Augusta Recyclers Ltd.	V8A 4Z2	Powell River	Powell River
Bella Coola Recycling	V0T 1C0	Central Coast	Bella Coola
Biggar Bottle Depot	V3C 1T5	Metro Vancouver	Port Coquitlam
Bill's Bottle Depot	V1E 3K1	Columbia-Shuswap	Salmon Arm
Bings Creek Solid Waste Management Complex	V9L 6K9	Cowichan Valley	North Cowichan
Border Town Recycling Group	V0T 1W0	Kitimat-Stikine	Stewart
Boucherie Self Storage & Bottle Depot	V1Z 2M9	Central Okanagan	West Kelowna
Burns Lake Return-It	V0J 1E0	Bulkley-Nechako	Burns Lake
Campbell Mountain Landfill	V2A8T3	Okanagan Similkameen	Penticton
Campbell River Waste Management Centre	V9H 1P3	Strathcona	Campbell River
Canadian Tire #437 Campbell River	V9W8C9	Strathcona	Campbell River
Canadian Tire Williams Lake	V2G3A6	Cariboo	Williams Lake
Capital City and Sidney Fire Equipment	V8L2X3	Capital	Sidney
Cariboo Metal Recycling	V2J 5T8	Cariboo	Quesnel
Carney's Waste Systems - Squamish	V8B 0K8	Squamish Lillooet	Squamish
Century Hardware Ltd.	V0K2E0	Cariboo	100 Mile House
Chasers Bottle Depot	V1T 6Y4	North Okanagan	Vernon
Chetwynd Recycling and Bottle Depot	V0C 1J0	Peace River	Chetwynd
Chilliwack Bottle Depot	V2P 1K5	Fraser Valley	Chilliwack
Comox Valley Waste Management Centre	V0R 1S0	Comox Valley	Cumberland
Coquitlam Return-It Depot	V3H 1W3	Metro Vancouver	Coquitlam
Coquitlam Transfer Station	V3K 6T4	Metro Vancouver	Coquitlam
Courtenay Return-It Depot	V9N 3P9	Comox Valley	Courtenay
Cranbrook Bottle Depot	V1C5E3	East Kootenay	Cranbrook
D.C. Recycling & Bottle Depot	V1G 1W2	Peace River	Dawson Creek
District of Clearwater	V0E 1N2	Thompson-Nicola	Clearwater
East Hasting Bottle Depot	V5B 1S9	Metro Vancouver	Burnaby
Eco-Depot Recycling	V1J1G4	Peace River	Fort St. John

Collection Site Name	City	Regional District	Postal Code
Enderby Return-It Recycling Depot	V0E 1V0	North Okanagan	Enderby
Fernie Bottle Depot	V0B 1M0	East Kootenay	Fernie
Fleetwood Bottle Return Depot	V3R 3P2	Metro Vancouver	Surrey
Fraser Lake Bottle Depot	V0J 1S0	Bulkley-Nechako	Fraser Lake
FSJ Bottle Drop	V1J 1E2	Peace River	Fort St. John
Gabriola Island Recycling	V0R1X3	Nanaimo	Gabriola Island
Galiano Island Recycling Resources	V0N1P0	Capital	Galino Island
Gibsons Recycling Depot	V0N 1V0	Sunshine Coast	Gibsons
Go Green Depot & Recycling	V5X 2G9	Metro Vancouver	Vancouver
Gold Trail Recycling Ltd.	V0K 2E0	Cariboo	100 Mile House
Grand Forks Bottle Depot	V0H 1H2	Kootenay Boundary	Grand Forks
Home Hardware Grand Forks	V0H 1H0	Kootenay Boundary	Grand Forks
Happy Stan's Recycling Services Ltd.	V3C 1K6	Metro Vancouver	Port Coquitlam
Hartland Landfill Recycling Depot	V9E 1J9	Capital	Victoria
Heiltsuk Environmental Bella Bella Eco-Depot	V0T 1Z0	Central Coast	Bella Bella
Home Hardware Cranbrook	V1C7J2	East Kootenay	Cranbrook
Home Hardware Merritt	V1K1B8	Thompson-Nicola	Merritt
Home Hardware Revelstoke	V0E 2S0	Columbia-Shuswap	Revelstoke
Houston Bottle Depot	V0J 1Z0	Bulkley-Nechako	Houston
Interior Freight & Bottle	V1T 1M1	North Okanagan	Vernon
Invermere Fire Department	V0A 1K0	East Kootenay	Invermere
Island Return It Recycling - CAMPBELL RIVER	V9W 3M7	Strathcona	Campbell River
Island Return It Recycling - DUNCAN	V9L 5T3	Cowichan Valley	Duncan
Island Return It Recycling - ESQUIMALT	V9A 4R9	Capital	Esquimalt
Island Return It Recycling - SIDNEY	V8L 5X3	Capital	Sidney
Island Return-It South Cowichan	V0R 1L2	Cowichan Valley	Cobble Hill
Island Solid Waste Management	V0T 1Y0	Skeena-Queen Charlotte	Port Clements
J&C Bottle Depot	V2A 3J4	Okanagan Similkameen	Penticton
Joe's Bottle Depot	V5V 3P9	Metro Vancouver	Vancouver
Junction Bottle Depot	V9G 1A3	Cowichan Valley	Ladysmith
Kamloops Fire Rescue	V2C5R9	Thompson-Nicola	Kamloops
Kaslo Building Supplies	V0G 1M0	Central Kootenay	Kaslo
Keremeos Landfill	V0X 1N1	Okanagan Similkameen	Keremeos
KUTE-Kitimat Recycling Depot	V8C 2G2	Kitimat-Stikine	Kitimat
Ladner Bottle Depot	V4K 2Y1	Metro Vancouver	Delta
Langley Bottle Depot	V3A 4K6	Metro Vancouver	Langley
London Drugs #10	V6M 2B4	Metro Vancouver	Vancouver

Collection Site Name	City	Regional District	Postal Code
London Drugs #11	V6X 2E3	Metro Vancouver	Richmond
London Drugs #12	V1Y 8J8	Central Okanagan	Kelowna
London Drugs #14	V8X 1J8	Capital	Victoria
London Drugs #15	V3B 5R5	Metro Vancouver	Coquitlam
London Drugs #16	V2T 4M5	Fraser Valley	Abbotsford
London Drugs #17	V4C 6P5	Metro Vancouver	Delta
London Drugs #18	V2Y 1P3	Metro Vancouver	Langley
London Drugs #19	V6E 1B5	Metro Vancouver	Vancouver
London Drugs #2	V6Z 1E4	Metro Vancouver	Vancouver
London Drugs #25	V3J 1N4	Metro Vancouver	Burnaby
London Drugs #28	V5R 5L1	Metro Vancouver	Vancouver
London Drugs #29	V8V 3M4	Capital	Victoria
London Drugs #3	V3M 3X3	Metro Vancouver	New Westminster
London Drugs #35	V2C 1Y3	Thompson-Nicola	Kamloops
London Drugs #36	V9R 5E2	Nanaimo	Nanaimo
London Drugs #37	V4K 1W4	Metro Vancouver	Delta
London Drugs #39	V1T 9H2	North Okanagan	Vernon
London Drugs #4	V5Z 1E6	Metro Vancouver	Vancouver
London Drugs #41	V2R 1A1	Fraser Valley	Chilliwack
London Drugs #42	V4A 2H9	Metro Vancouver	South Surrey
London Drugs #44	V7T 1H9	Metro Vancouver	West Vancouver
London Drugs #46	V9B 1V8	Capital	Victoria
London Drugs #47	V2X 2V5	Metro Vancouver	Maple Ridge
London Drugs #5	V7M 2K5	Metro Vancouver	North Vancouver
London Drugs #50	V6G 1V9	Metro Vancouver	Vancouver
London Drugs #51	V2L 3X3	Fraser-Fort George	Prince George
London Drugs #52	V7A 5J3	Metro Vancouver	Richmond
London Drugs #53	V5P 3W2	Metro Vancouver	Vancouver
London Drugs #54	V9A 7C5	Capital	Victoria
London Drugs #55	V2V 6M7	Fraser Valley	Mission
London Drugs #56	V5C 3Z6	Metro Vancouver	Burnaby
London Drugs #6	V5H 2E2	Metro Vancouver	Burnaby
London Drugs #61	V0N 1V7	Sunshine Coast	Gibsons
London Drugs #67	V9N 2L8	Comox Valley	Courtenay
London Drugs #7	V5K 1Z1	Metro Vancouver	Vancouver
London Drugs #70	V2A 6W6	Okanagan Similkameen	Penticton
London Drugs #71	V5J 0A2	Metro Vancouver	Burnaby

Collection Site Name	City	Regional District	Postal Code
London Drugs #72	V9T 4K6	Nanaimo	Nanaimo
London Drugs #73	V9W 3A6	Strathcona	Campbell River
London Drugs #74	V6K 2E3	Metro Vancouver	Vancouver
London Drugs #75	V3S 1Z2	Metro Vancouver	Surrey
London Drugs #76	V4T 1Y2	Central Okanagan	Westbank
London Drugs #77	V9L 3P8	Cowichan Valley	Duncan
London Drugs #78	V6B 0G6	Metro Vancouver	Vancouver
London Drugs #8	V3T 2W5	Metro Vancouver	Surrey
London Drugs #80	V8B 0G2	Squamish Lillooet	Squamish
London Drugs #81	V3S2N6	Metro Vancouver	Surrey
London Drugs #82	V5Y0E4	Metro Vancouver	Vancouver
London Drugs #85	V2T 0C5	Fraser Valley	Abbotsford
London Drugs #9	V3R 1B9	Metro Vancouver	Surrey
Lone Butte Supply	V0K2E0	Cariboo	100 Mile House
Lougheed Return-It Depot	V3K 6N5	Metro Vancouver	Coquitlam
Mayne Island Recycling Society	V0N 2J1	Capital	Mayne Island
Meade Creek Recycling Drop-Off Depot	V0R 2G0	Cowichan Valley	Lake Cowichan
Mission Recycling Depot	V2V 4M5	Fraser Valley	Mission
Nanaimo Recycling Exchange Society	V9T 5K4	Nanaimo	Nanaimo
Nelson Home Hardware Building Centre	V1L6B9	Central Kootenay	Nelson
New & Nearly New	V1A 1R5	East Kootenay	Kimberley
New Life Furniture & Recycling / Kootenai Community Centre Society	V0B1G0	Central Kootenay	Creston
Newton Bottle Depot	V3W 2N5	Metro Vancouver	Surrey
North Shore Bottle Depot	V7P2L6	Metro Vancouver	North Vancouver
North Shore Transfer Station	V7H 1T4	Metro Vancouver	North Vancouver
North Van Bottle Depot	V2J2C1	Metro Vancouver	North Vancouver
Oak Bay Recycling Depot	V8R 5L7	Capital	Victoria
Okanagan Falls Landfill	V0H 1R2	Okanagan Similkameen	Okanagan Falls
Oliver Sanitary Landfill	V2A 5J9	Okanagan Similkameen	Oliver
Osoyoos Bottle Depot	V0H 1V0	Okanagan Similkameen	Osoyoos
Panorama Village Return-It	V3S 9A5	Metro Vancouver	Surrey
Parksville Bottle & Recycling Depot	V9P 1J9	Nanaimo	Parksville
Parksville Home Hardware	V9P2G7	Nanaimo	Parksville
Peerless Road Recycling Depot	V9G 1A4	Cowichan Valley	Ladysmith
Pender Island Recycling Society	V0N 2M1	Capital	Pender Island
PG Recycling (formerly BBK Bottle Depot)	V2N 1P2	Fraser-Fort George	Prince George

Collection Site Name	City	Regional District	Postal Code
Planet Earth Recycling Ltd.	V1Z 1G5	Central Okanagan	West Kelowna
Port Alberni Recycling Depot (Sun Coast Waste Services)	V9Y4E8	Alberni-Clayoquot	Port Alberni
Port Hardy Return-it	V0N2P0	Mount Waddington	Port Hardy
Powell Street Return-It Bottle Depot	V5L 1H9	Metro Vancouver	Vancouver
Quality Glass Ltd.	V0K 1A0	Thompson-Nicola	Ashcroft
Queensborough Landing Return-It	V3M 5K2	Metro Vancouver	New Westminster
Recycle-It Resource Recovery	V1J 4J3	Peace River	Fort St John
Regional Recycling Abbotsford	V2S 7P6	Fraser Valley	Abbotsford
Regional Recycling Burnaby	V5B 3A9	Metro Vancouver	Burnaby
Regional Recycling Cloverdale	V3S 4C3	Metro Vancouver	Surrey
Regional Recycling Nanaimo	V9R 5Z9	Nanaimo	Nanaimo
Regional Recycling Nanaimo	V9T 3X3	Nanaimo	Nanaimo
Regional Recycling Prince Rupert	V8J 1A6	Skeena-Queen Charlotte	Prince Rupert
Regional Recycling Richmond	V6V 1K2	Metro Vancouver	Richmond
Regional Recycling Vancouver	V6A 2L2	Metro Vancouver	Vancouver
Regional Recycling Whistler	V0N 1B0	Squamish Lillooet	Whistler
Ridge Meadows Recycling Society	V2X 7G2	Metro Vancouver	Maple Ridge
RONA (Alert Bay)	V0N 2R0	Mount Waddington	Alert Bay
RONA (Penticton)	V2A 7N1	Okanagan Similkameen	Penticton
RONA Home Centre (Hope)	V0X 1L0	Fraser Valley	Hope
Salt Spring Island Recycling Depot	V8K 2K6	Capital	Saltspring Island
Sardis Bottle Depot	V2R 3N5	Fraser Valley	Chilliwack
Scotch Creek Bottle Depot	V0E 1M5	Columbia-Shuswap	Scotch Creek
Scott Road Bottle Depot	V3W 3H8	Metro Vancouver	Surrey
Semiahmoo Bottle Depot	V4A 2J4	Metro Vancouver	Surrey
7 Mile Landfill and Recycling	V0N 2R0	Mount Waddington	Port McNeil
Home Hardware Shepherds	V0E 1B0	North Okanagan	Armstrong
Home Hardware Smithers	V0J 2N0	Bulkley-Nechako	Smithers
Home Hardware Sooke	V9Z0A4	Capital	Sooke
South Van Bottle Depot	V5X 4K6	Metro Vancouver	Vancouver
Steveston Return-It Depot	V7E 3R7	Metro Vancouver	Richmond
The Battery Doctors	V1Y 4R5	Central Okanagan	Kelowna
The City of New Westminster Recycling	V3L 2J1	Metro Vancouver	New Westminster
The Hut Bottle Depot	V0X 1W0	Okanagan Similkameen	Princeton

Collection Site Name	City	Regional District	Postal Code
Thornhill Fire Department	V8G 4N8	Kitimat-Stikine	Terrace
Thorsen Creek Recycling Depot	V0T 1C0	Central Coast	Bella Coola
Tofino Bottle Depot	V0R 2Z0	Alberni-Clayoquot	Tofino
Trail Bay Hardware	V0N 3A0	Sunshine Coast	Sechelt
Trail Bottle Depot	V1R 3M8	Kootenay Boundary	Trail
Tsawwassen Bottle Depot/D&G Recycling	V4L 1C4	Metro Vancouver	Delta
Ucluelet Bottle Depot	V0R 3A0	Alberni-Clayoquot	Ucluelet
Valemount Recycling Centre	V0E 2Z0	Fraser-Fort George	Valemount
Venture Training Vernon	V1T 6H3	North Okanagan	Vernon
Village of Gold River	V0P 1G0	Strathcona	Gold River
Village of MontRose	V06 1P0	Kootenay Boundary	Montrose
Walnut Grove Bottle Depot	V1M 4B9	Metro Vancouver	Langley
Westcoast Hardware	V9Y 7W8	Alberni-Clayoquot	Port Alberni
Wesbrook Community Centre	V6T 1W5	Metro Vancouver	Vancouver
White Rock Return-it Depot	V4P 2B1	Metro Vancouver	Surrey
Wide Sky Disposal	V0C 1R0	Northern Rockies	Fort Nelson
Willowbrook Recycling Depot	V3A 1A8	Metro Vancouver	Langley

APPENDIX D. Breakdown of Collection Sites by Regional District

Regional District	# of Collection Sites
Alberni-Clayoquot	4
Bulkley-Nechako	4
Capital	15
Cariboo	5
Central Coast	3
Central Kootenay	3
Central Okanagan	5
Columbia-Shuswap	3
Comox Valley	3
Cowichan Valley	7
East Kootenay	5
Fraser-Fort George	12
Fraser Valley	3
Kitimat-Stikine	3
Kootenay Boundary	4
Metro Vancouver	64
Mount Waddington	3
Nanaimo	8
North Okanagan	6
Northern Rockies	1
Okanagan-Similkameen	9
Peace River	5
Powell River	1
Skeena-Queen Charlotte	2
Squamish Lillooet	3
Strathcona	5
Sunshine Coast	3
Thompson-Nicola	5
Total	194

APPENDIX E. 2016 Independent Financial Audit

**PRODUCT CARE ASSOCIATION
BC SMOKE AND CARBON MONOXIDE
(CO) ALARMS PROGRAM**

STATEMENT OF REVENUES AND EXPENSES

31 DECEMBER 2016



ROLFE, BENSON LLP
CHARTERED PROFESSIONAL ACCOUNTANTS

**PRODUCT CARE ASSOCIATION
BC SMOKE AND CARBON MONOXIDE (CO) ALARMS PROGRAM
Statement of Revenues and Expenses
For the year ended 31 December 2016**

Contents

Independent Auditors' Report	
Statement of Revenues and Expenses	4
Notes to the Statement of Revenues and Expenses	5





ROLFE, BENSON LLP

CHARTERED PROFESSIONAL ACCOUNTANTS

1500-1090 West Georgia Street
Vancouver, B.C. V6E 3V7
Tel: 604-684-1101 Fax: 604-684-7937
E-mail: admin@rolfebenson.com

INDEPENDENT AUDITORS' REPORT

To: BC Ministry of Environment,

As required the British Columbia Environmental Management Act, Recycling Regulation 8(2)(f)(ii), we have audited the Statement of Revenues and Expenses of the BC Smoke and Carbon Monoxide (CO) Alarms Program (the "Statement") as reported by Product Care Association for the year ended 31 December 2016 and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Statement

Management is responsible for the preparation of the Statement in accordance with Canadian accounting standards for not-for-profit organizations, and for such internal control as management determines is necessary to enable the preparation of the Statement that is free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on the Statement based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the Statement is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Statement. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the Statement, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation of the Statement in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the Statement.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



INDEPENDENT AUDITORS' REPORT - continued

Opinion

In our opinion, the Statement presents fairly, in all material respects, the revenues and expenses of the BC Smoke and Carbon Monoxide (CO) Alarms Program as reported by Product Care Association for the year ended 31 December 2016 in accordance with Canadian accounting standards for not-for-profit organizations.

Restriction on Distribution

This report is prepared on the direction of Product Care Association's management and the BC Ministry of Environment. As a result, the report may not be suitable for another purpose. Our report is intended solely for Product Care Association's management and the BC Ministry of Environment and should not be distributed to other parties.

Rolfe, Benson LLP

CHARTERED PROFESSIONAL ACCOUNTANTS

Vancouver, Canada
4 April 2017

PRODUCT CARE ASSOCIATION
BC SMOKE AND CARBON MONOXIDE (CO) ALARMS PROGRAM
Statement of Revenues and Expenses
For the year ended 31 December 2016

	2016
Revenues	<u>\$ 621,833</u>
Program expenses	
Processing	518,451
Communications	131,947
Administration (Note 2(c))	61,490
Collection	59,498
Transportation	<u>33,530</u>
	<u>804,916</u>
Deficiency of revenues over expenses for the year	<u>\$ (183,083)</u>
Commitment (Note 3)	

The accompanying notes are an integral part of this statement.



PRODUCT CARE ASSOCIATION
BC SMOKE AND CARBON MONOXIDE (CO) ALARMS PROGRAM
Notes to the Statement of Revenues and Expenses
For the year ended 31 December 2016

1. Basis of Presentation

The Statement of Revenues and Expenses (the "Statement") only includes the revenues and expenses related to the BC Smoke and Carbon Monoxide (CO) Alarms Program (the "Program"), a segment of the operations of Product Care Association (the "Association").

2. Summary of Significant Accounting Policies

The Statement is prepared in accordance with Canadian accounting standards for not-for-profit organizations. The significant policies are detailed as follows:

(a) Revenue Recognition

Environmental handling fees ("EHF") are received from members of the BC Smoke and Carbon Monoxide (CO) Alarms Program. The Association recognizes these fees as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured. EHF revenues are recognized as individual members report and remit them as required by applicable provincial environmental legislation.

(b) Use of Estimates

The preparation of financial statements in accordance with Canadian accounting standards for not-for-profit organizations requires management to make estimates and assumptions that affect the reported amounts of revenues and expenses and disclosure of contingencies included in the Statement. Accounts subject to significant estimates include revenue accruals, expense accruals, overhead allocation and processing commitments. Actual results could differ from those estimates.

(c) General and Administrative Expenses - Overhead Allocation

A portion of the total general and administrative expenses of the Association, net of expense recoveries, has been allocated to the Program. The allocation of general and administrative expenses to the Program is determined using the percentage of program specific operating expenses as compared to total operating expenses for all the Association's programs. Included in administration expense is \$50,904 of overhead expense which has been allocated to the Program.

3. Processing Commitment

At year end, the Association had unprocessed program materials on hand related to the Program with an estimated cost to process, transport and recycle of \$38,407 which will be incurred in 2017.

APPENDIX F. 2016 Third Party Assurance Statement for Non-Financial Information

PRODUCT CARE ASSOCIATION OF CANADA

**INDEPENDENT REASONABLE
ASSURANCE REPORT**

31 DECEMBER 2016



ROLFE, BENSON LLP
CHARTERED PROFESSIONAL ACCOUNTANTS



ROLFE, BENSON LLP

CHARTERED PROFESSIONAL ACCOUNTANTS

1500-1090 West Georgia Street
Vancouver, B.C. V6E 3V7
Tel: 604-684-1101 Fax: 604-684-7937
E-mail: admin@rolfebenson.com

INDEPENDENT REASONABLE ASSURANCE REPORT

To the Directors of
Product Care Association of Canada,

We have been engaged by Product Care Association of Canada (the "Association") to perform a reasonable assurance engagement in respect of the following information (the "Selected Information") detailed in Appendix 1, and also included within the Association's Annual Report for the BC Smoke and Carbon Monoxide (CO) Alarms ("AlarmRecycle") Program to the Ministry of Environment for the year ended 31 December 2016:

- Section 4 Collection System and Facilities and Appendix C - 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 BC Regulation 449/2004 (the "Recycling Regulation");
- Section 6 Pollution Prevention Hierarchy and Product/Component Management - the description of how the recovered product was managed in accordance with the pollution prevention hierarchy under Section 8(2)(d) of the Recycling Regulation;
- Section 7 Product Collected - the description of how total amounts of the producer's product collected has been calculated in accordance with Section 8(2)(e) of the Recycling Regulation; and
- Section 9 Plan Performance - the description of performance for the year in relation to targets in the approved stewardship plan under Section 8(2)(b), (d) and (e) of the Recycling Regulation.

Our reasonable assurance engagement does not constitute a legal determination on the Association's compliance with Sections 8(2)(b), (d) and (e) of the Recycling Regulation.



Responsibilities

Preparation and fair presentation of the Selected Information in accordance with the evaluation criteria as listed in Appendix 1 is the responsibility of the Association's management. Management is also responsible for such internal control as management determines is necessary to enable the preparation of the Selected Information such that it is free from material misstatement. Furthermore management is responsible for preparation of suitable evaluation criteria in accordance with the Third Party Assurance Requirements for Non-Financial Information in Annual Reports – 2016 Reporting Year dated March 2017 as specified by the Director under section 8(2)(h) of the Recycling Regulation of the Province of British Columbia. The Ministry of Environment has granted the Association certain exemptions from these guidelines.

Our responsibility is to express an opinion on the Selected Information based on the procedures we have performed and the evidence we have obtained.

Evaluation Criteria

The evaluation criteria presented in Appendix 1 are an integral part of the Selected Information and address the relevance, completeness, reliability, neutrality and understandability of the Selected Information.

Scope of the Assurance Procedures

We carried out our reasonable assurance engagement in accordance with the International Standard on Assurance Engagements 3000 (ISAE 3000) published by the International Federation of Accountants. This Standard requires that we comply with independence requirements and plan and perform the engagement to obtain reasonable assurance about whether the Selected Information is free of material misstatement.

A reasonable assurance engagement includes examining, on a test basis, evidence supporting the amounts and disclosures within the Selected Information. The procedures selected depend on our judgement, including the assessment of the risks of material misstatement in the Selected Information due to omissions, misrepresentations and errors. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the Selected Information in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing a conclusion on the effectiveness of the entity's internal control. 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 Selected Information. The main elements of our work were:

- Gain an understanding of the data collection, monitoring and reporting processes through inquiries of management;
- Testing the processes, documents and records on a sample basis;
- Re-calculating quantitative data on a sample basis as it pertains to the Selected Information;
- Ensuring the Selected Information is presented consistently in the Annual Report.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

**Inherent Limitations**

Non-financial performance information is subject to more inherent limitations than financial information, given the characteristics of the Selected Information and the methods used for determining and calculating such information. Qualitative interpretations of relevance, materiality and the accuracy of data are subject to individual assumptions and judgments. Furthermore, the nature and methods used to determine such information, as well the evaluation criteria and the precision thereof, may change over time. It is important to read our report in the context of the evaluation criteria.

Conclusion

In our opinion, the Selected Information within Product Care Association of Canada's Annual Report for the BC Smoke and Carbon Monoxide (CO) Alarms Program for the year ended 31 December 2016 presents fairly in accordance with the evaluation criteria, in all material respects:

- 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 description of how the recovered product was managed in accordance with the pollution prevention hierarchy under Section 8(2)(d) of the Recycling Regulation;
- the description of how total amounts of the producer's product collected has been calculated in accordance with Section 8(2)(e) of the Recycling Regulation; and
- the description of performance for the year in relation to targets in the approved stewardship plan under Section 8(2)(b), (d) and (e) of the Recycling Regulation.

Emphasis of Matter

Without qualifying our opinion, the following should be noted regarding the information contained in the Annual Report:

1. The Selected Information included in Section 6 Pollution Prevention Hierarchy and Product/Component Management is determined based on supporting documentation and survey responses from the primary processor. Hazardous materials are not tracked on shipping manifests until radioactive alarms are broken into sub-components and the radioactive material is sent from the primary processor to a secondary storage facility. For one of the primary processors, this process is completed in the United States and falls under the US Environmental Protection Agency standards. No shipping documents have been reviewed to ensure these standards have been met. Shipments of AlarmRecycle program material sent to the other primary processor were not broken into sub-components before year end and therefore no shipments were made to the secondary processor. Due to this, no hazardous waste manifests were available to verify the final disposition of these materials. As such, there is uncertainty surrounding the Selected Information contained in the Pollution Prevention Hierarchy section of Appendix 1.
2. The amount of product sold and recovery rate was not included in the scope of the Selected Information. Given the small number of manufacturers of these products selling into the B.C. market, it was approved by the Ministry of Environment that aggregated sales data would not be made publicly available in the Annual Report. As the Association is not required to report sales data, the recovery rate has also been excluded from the scope of the Selected Information as sales data forms part of this calculation.



3. As noted in the Responsibilities section of the audit report, the Association is required to prepare suitable evaluation criteria in accordance with the Guide to Third Party Assurance Requirements for Non-Financial Information in Annual Reports – 2016 Reporting Year dated March 2017. For the 2016 reporting year, the Ministry of Environment has granted the Association an exemption from adopting the definition of reuse, recycling, material and energy recovery, landfill, final disposition and primary service provider as defined in SPE-890-15 - A Guideline for Accountable Management of End-of-life Materials.

Other Matter

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 the 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.

Rolfe, Benson LLP

CHARTERED PROFESSIONAL ACCOUNTANTS

Vancouver, Canada
26 June 2017

Appendix 1

Evaluation Criteria

Collection facilities

Specific disclosures in the annual stewardship report for which evaluation criteria were developed	
Disclosure per Annual Report	Reference
Total number of collection facilities – 194	Section 4 Collection System and Facilities - Table 1: Collection Site by Type (2015 and 2016) on page 8 and: Appendix C – List of Contracted Collection Sites in 2016 on pages 21-26
Change in the number of collection facilities in 2016 – 12 collection sites added and 3 collection sites removed.	Section 4 Collection System and Facilities on page 8

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:

- “Collection facilities” are depots that have a signed contract with the Association for the collection of program materials during the reporting period: 1 January – 31 December 2016, a physical location that is available to collect program materials, and the staff of the facility has an adequate understanding of the program.
- The Association maintains a listing of all collection facilities for the program, including the location of the collection facility, the total of which agrees to the number of collection facilities as disclosed in the Annual Report.
- Large volume end users (LVEU's) are excluded from the number of collection facilities.
- The change in number of collection facilities is calculated by comparing the current number of collection facilities, a sum of all the collection facilities that have a signed contract within a given reporting year and those that closed within the same reporting year, to the number of collection facilities reported in the prior reporting year.

Pollution prevention hierarchy

Specific disclosures in the annual stewardship report for which evaluation criteria were developed	
Disclosure per Annual Report	Reference
Alarm Type: Radioactive Alarms Sub-component: Radioactive cells End fate: 100% of product recovered stored at licensed long-term storage facility Sub-component: Plastic End fate: 100% of product recovered recycled Sub-component: Metal End fate: 100% of product recovered recycled	Section 6 Pollution Prevention Hierarchy and Product/Component Management - Table 2: Product / Component Management on page 11 and footnotes 3 on page 10 and footnote 4 on page 11
Alarm Type: Photovoltaic (non-radioactive alarms)	



<p>Sub-component: Plastic End fate: 100% of product recovered recycled</p> <p>Sub-component: Metal End fate: 100% of product recovered recycled</p> <p>“Some of the alarms collected in 2016 were not shipped for processing until the subsequent year. Statements regarding the end fate of alarms are in reference to materials processed in 2016 only.”</p> <p>“Based on information provided in end fate surveys completed by the Program’s primary processors.”</p>	
<p>“The following is based on information provided by the Program’s downstream processors, where available, or based on the understanding of the service agreement with the downstream processors.”</p> <p>“The information detailed in this section may have a degree of uncertainty as the program has not verified product management information to a reasonable assurance level in accordance with audit standards. However, there is greater confidence in the end fate of hazardous wastes given the framework of regulatory requirements governing hazardous materials and commensurate oversight by various environmental departments and agencies.”</p>	<p>Section 6 Pollution Prevention Hierarchy and Product/Component Management - on page 10 and footnote 2 on page 10</p>
<p>“The boxes of collected units are received at PCA’s facility. At the facility, they are sorted which includes counting the number of alarms and removing batteries as well as any non-program products. PCA has collaborated with the Call2Recycle stewardship program to recycle batteries through their program. The sorted units are consolidated into larger containers and shipped to an approved and licensed downstream processor. In 2016, the Program added an additional processor.”</p>	<p>Section 6 Pollution Prevention Hierarchy and Product/Component Management - on page 10</p>
<p>“According to information obtained from end fate surveys completed by the downstream processors, the plastic and metal components are separated and sent for recycling, and the Am-241 foil is shipped for final disposal at a licensed radioactive waste facility.”</p>	<p>Section 6 Pollution Prevention Hierarchy and Product/Component Management - on page 10</p>

The following evaluation criteria were applied to the assessment of how the recovered product is managed in accordance with the pollution prevention hierarchy in accordance with Section 8(2)(d) of the Recycling Regulation:

- The Association maintains a listing of all products shipped to the primary processors which is supported by shipping documents or processor invoices.

- One of the program's primary processors provides Certificates of Management and Recycling indicating the amounts of Am-241 sent to long term hazardous waste storage facilities. The other primary processor did not make any shipments of Am-241 to downstream processors during the year. No shipping documents or hazardous waste manifests were reviewed to confirm the shipment of materials to downstream processors.
- The processors provide information on product management in an annual questionnaire.
- The Association performs periodic site inspections of the processors' facilities. Site inspection criteria have been developed to confirm the responses in the questionnaire provided by the primary processor. Site inspections were performed for both primary processors in 2016. Following the initial site inspections in 2016, processor site inspections are scheduled to be performed on a rotating 3 year schedule thereafter.

Product collected

Specific disclosures in the annual stewardship report for which evaluation criteria were developed	
Disclosure per Annual Report	Reference
# of alarms collected – in small containers 73,132 # of alarms collected – in mega bags 16,177	Section 7 Product Collected - Table 3: Units Collected, January 1 – December 31, 2016 on page 12
"The number of alarms collected in small containers (boxes and totes) and mega-bags was estimated by multiplying the number of small containers and mega-bags collected each month by a conversion factor of 47 alarms per small container and 1,244 alarms per mega-bag. The conversion factors were calculated by averaging the sorted values of more than 1,000 small collection containers and 12 mega-bags, which were collected in 2016 and counted at the time of sorting and consolidation in Product Care's facility."	Section 7 Product Collected - on page 12

The following evaluation criteria were applied to the assessment of the description of how total amounts of the producer's product collected has been calculated in accordance with Section 8(2)(e) of the Recycling Regulation:

- The Association maintains a listing of product collected by product category for the fiscal year which agrees to the amounts disclosed in the Annual Report.
- Each shipment of product collected is supported by documentation indicating the total number of small containers or mega bags collected and the type of program materials collected which has been agreed upon by the shipper, receiver and carrier.
- The calculation of the number of alarms in small containers is determined using the total number of small containers collected during the year and converting to units using the average number of units per boxes. The average number of units per box is determined by counting the contents of a sample of small containers received during the year.
- The number of alarms collected in mega bags is determined using the total number of mega bags collected during the year and converting to units using the average number of units per mega bag. The average number of units per mega bag is determined by counting the contents of a sample of mega bags received during the year.



- The Association is not required to present product sold or a recovery rate in the Annual Report. Given the small number of manufacturers of these products selling into the B.C. market, it was approved by the Ministry of Environment that aggregated sales data would not be made publicly available in the Annual Report.

Performance targets

Specific disclosures in the annual stewardship report for which evaluation criteria were developed	
Disclosure per Annual Report	Reference
Target – units collected 2016 Assertion – Target exceeded: Estimated 89,309 units	Section 9 Plan Performance - Table 8: Key Program Targets and Performance – on page 16

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

- All stewardship plan targets relating to Section 8(2)(b), (d) and (e) of the Recycling Regulation have been identified and reported on by management in the Annual Report.
- The description of progress against targets to date is supported by records of progress maintained by the Association.



