

Ministry of Environment Attention: Director, Extended Producer Responsibility Programs PO Box 9341, STN PROV GOVT Victoria, BC V8W 9M1

Via Email: ExtendedProducerResponsibility@gov.bc.ca

June 27, 2018

Dear Director:

Re: 2017 BC Paint and Household Hazardous Waste Annual Report

Pursuant to the British Columbia Recycling Regulation, 449/2004, issued under the Environmental Management Act (O.C. 995/2004), please find attached the Product Care Association annual report for the Paint and Household Hazardous Waste Stewardship Program for the period January 1, 2017 through December 31, 2017.

Please provide confirmation of receipt. We will also post the report on Product Care's website as per the requirements in the Regulation.

If you have any questions regarding this report, please contact me at (778) 331-6968 or mannie@productcare.org.

Yours truly,

Mannie Cheung

Vice-President, Operations Product Care Association

cc. Mark Kurschner Hanna Vovk



BRITISH COLUMBIA PAINT AND HOUSEHOLD HAZARDOUS WASTE STEWARDSHIP PROGRAM

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

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Product Care Association Paint and Household Hazardous Waste Annual Report to the Director 2017

Submitted to: Director, Extended Producer Responsibility Programs

PO Box 9341, STN PROV GOVT

Victoria, BC V8W 9M1

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June 27, 2018

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1. Executive Summary

The BC Paint and Household Hazardous Waste (HHW) Program ("Program") has been in operation since 1994 under the operation and management of Product Care Association of Canada ("PCA"). The Program operates 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 British Columbia Paint and Household Hazardous Waste (HHW) Product Stewardship Plan ("Program Plan") submitted to the Ministry of Environment covering January 1, 2012 to December 31, 2016. This annual report reports on program information required pursuant to Section 8(2) of the Regulation for the period January 1 to December 31, 2017.

An amended program plan was submitted to the MoE in July 2017. Following consultation with the MoE, a second version was submitted in December 2017. After review by the MoE, a third version was submitted in March 2018, which remains under review with the MoE as of the date of writing this report. This annual report addresses the performance of the Program in relation to the 2012-2016 Program Plan.

	 Architectural paints and coatings (household); paint aerosols 				
	(consumer, industrial and automotive)				
Products within plan	Domestic pesticides				
	Flammable liquids and aerosols				
	Gasoline				
Program website	www.regeneration.ca/programs/paint/british-columbia/				
Program website	www.productcare.org				

The Program's performance information required pursuant to s.8(2) of the Regulation is provided below.

Regulatory Provision	Program Area	Summary of Activities in 2017
Part 2, section 8(2)(a)	Public Education Materials and Strategies	 Consumer awareness survey (2017) revealed 60% of BC adults were aware of a program to recycle paint and 49% were aware of a program to recycle HHW. ReGeneration.ca provided consumers with bilingual content about the Program, with a collection site finder, collection site hours and operations, and accepted product lists. Productcare.org provided service partners and members with content about the program, membership, regulatory documentation, stewardship plans, annual reports, product lists and fee schedules.

Regulatory Provision	Program Area	Summary of Activities in 2017
		 Point of sale and point of return materials were available for reorder, free of charge, upon request. Advertised using indoor print advertising. Print ads published in 2017 municipal waste and recycling calendars. Ran TV campaign with Global TV. Advertised on Z95.3 FM, Fairchild Radio 96.1 FM, and Spice Radio 1200 AM in the Greater Vancouver area, as well as on several Vista Radio stations in rural areas. Participated in events (e.g. BC Home & Garden Show) and the Program was a prize sponsor of Science World's BC Green Games. Collaboration through RCBC's Hotline and Recyclepedia.
Part 2, section 8(2)(b)	Collection System and Facilities	 Added a net total of 3 collection sites in 2017, for a total of 222 collection sites as of December 31, 2017. Of the 222 collection sites, 113 were paint-only and 109 were paint plus collection sites. Participated in 15 collection events in 2017.
Part 2, section 8(2)(c)	Product Environmental Impact Reduction, Reusability and Recyclability	 There has been a steady shift in the marketplace from oil-based (alkyd) paints to water-based (latex) paints. This trend is expected to continue as the consumer preference for latex paint increases and technical specifications improve. Federal regulations relating to volatile organic compounds and the composition of surface coatings are hastening the process of reducing the environmental impact of paint products.
Part 2, section 8(2)(d)	Pollution Prevention Hierarchy and Product / Component Management	 Paint (Latex/Alkyd): Reuse: 2.3 % of all paint collected by PCA was reused through the Paint Reuse program. Recycling: 75.5% of latex paint was recycled back into paint and coating products or used as a raw material in the manufacturing of concrete products. Energy recovery: 100% of alkyd paint and 18.3% of latex paint, was sent to energy recovery as an alternative energy source in permitted incinerators.

Regulatory Provision	Program Area	Summary of Activities in 2017
		 Landfill: 6.3% of latex paint was sent to a landfill.¹ Paint containers: Recycling: 100% of metal containers and 100% of #2 plastic containers were recycled. Energy recovery: 36% of #5 plastic (polypropylene) containers were used as an alternative energy source in permitted incinerators, and 64% were recycled. Paint aerosols and containers: Energy Recovery: 100% of paint aerosol residuals were sent to energy recovery as an alternative energy source in permitted incinerators. Recycling: 100% of paint aerosol containers were recycled. Flammables liquids and containers: Energy recovery: 100% of flammable liquids were sent to energy recovery as an alternative energy source in permitted incinerators. Recycling: 100% of flammable liquid containers were recycled. Pesticides and containers: Incineration: 100% of pesticide residuals were sent for incineration at licensed facilities. Recycling: 100% of pesticide containers were recycled. Gasoline and containers: Energy recovery: 100% of gasoline liquids were sent for energy recovery as an alternative energy source in permitted incinerators. Recycling: 100% of gasoline containers were recycled.
Part 2, section 8(2)(e)	Product Sold and Collected and Recovery Rate	Recovery rates: Paint, 10.8% Paint aerosols, 4.7% Flammable liquids/gasoline, 5.2% Pesticides, 18.1%

¹ Percentages have been rounded to the nearest whole number.

Regulatory Provision	Program Area	Summary of Activities in 2017	
Part 2, section 8(2)(e.1)		See Section 7 for the collection volumes breakdown by regional district.	
Part 2, section 8(2)(f)	Summary of Deposits, Refunds, Revenues and Expenses	See Appendix C for the audited financial statements for the reporting year.	
Part 2 section 8(2)(g)	Summary of Program Targets and Performance	See summary of program measures in chart "Key Performance Measures" below and in section 9 of this report ("Performance Measures").	

The Program Plan sets out a number of key performance measures for the Program. The following chart summarizes the performance in 2017 and PCA's strategies for improvement going forward, where applicable.

Key Performance Measures

Key Performance Measures			
Program Area	2017 Performance	Strategies for Improvement	
Collection System			
Collection Sites	 113 paint collection sites 109 paint plus collection sites Total of 222 collection sites 	PCA continues to expand the network as needed.	
Paint Reuse Collection Sites	152 collection sites (69% of all collection sites) offered the Paint Reuse program	Continue to encourage collection sites to offer the Paint Reuse program	
Management of Collected Materials			
Paint Collected	Paint (non-aerosol) collection volume increase: 0.8%	N/A	
	 Paint (aerosol) collection volume decrease: -4.2% 		

Key Performance Measures			
Program Area	2017 Performance	Strategies for Improvement	
Flammable Liquids and Pesticides Collected	 Flammable Liquids/Gasoline collection volume decrease: - 6.2% Pesticide collection volume decrease: -2.4% 	N/A	
Pesticides Collected	• Pesticide collection volume was 98,172 litres.	N/A	
Paint Reused	• 2.3% of paint collected was reused.	N/A	
Latex (water-based) Paint Recycling	 75.5% of latex paint was recycled. 18.3% was sent for energy recovery. 6.3% was sent to a landfill.² 	Continue to seek alternative recycling options.	
Alkyd (oil-based) Paint Recycling	Product Care continues to search for recycling options for alkyd paint. Currently no recycling options have been identified.	Continue to seek options for recycling.	
Metal and #2 Plastic Container Recycling	• 100% of metal and #2 plastic paint containers were recycled.	N/A	
Plastic and Metal Gasoline Container Recycling	• 100% of plastic and metal gasoline containers were recycled.	N/A	

2. Program Overview

The BC Paint and Household Hazardous Waste (HHW) Program ("Program") has been in operation since 1994 under the operation and management of Product Care Association of Canada ("PCA"). PCA is a federally incorporated, not-for-profit product stewardship association formed in response to stewardship regulations and is governed by a multi-sector industry board of directors.

Producers of designated products are required to meet the obligations set out in BC's Recycling Regulation (BC Reg 449/2004 as amended) ("Regulation") under the Province's Environmental Management Act. The

² Percentages have been rounded to the nearest whole number.

Program is funded by membership fees, known as environmental handling fees ("EHF"), remitted to PCA by its members based on the volume of sales of products included in the program plan ("Program Products"). The Program's member list may be viewed here: http://www.productcare.org/member-support/british-columbia/.

The Program operates under the requirements of the Regulation and the Program Plan submitted to the Ministry of Environment covering January 1, 2012 through December 31, 2016. Amendments to the Program Plan are currently under review with the Ministry. This annual report provides the information required pursuant Section 8(2) of the Regulation covering the period of January 1 to December 31, 2017. As the Program Plan does not identify performance targets for 2017, this report provides performance levels only for 2017.

3. Public Education Materials and Strategies

Public Education Materials and Strategies

The following sections provide a summary of the Program's communication and education efforts for 2017. PCA connects with consumers through the consumer-facing brand "ReGeneration".

Website

ReGeneration.ca provided consumers with the following content for the Program in BC:

- A geography-based collection site finder
- Collection site hours of operations
- Program accepted product lists
- Contact information for key Program staff

An estimated 89,576 unique visitors utilized ReGeneration.ca during the 2017 calendar year. The paint program page received 19,394 visitors and an additional 10,594 visitors to the collection site finder.

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

Program posters, rack cards, and signage for both retailer and collection site audiences were replenished upon request, free of charge. A dedicated online re-order form for these materials is hosted on the Program's website (see Appendix B for examples).

Program Phone Line

PCA operated a toll-free number (1-888-772-9772) to respond to consumer inquiries.

Digital Marketing

As in previous years, the Program's digital marketing efforts included syndicated bilingual Facebook posts, targeted digital display ads, and smart digital display (ie. retargeting or re-serving ads to pre-qualified users who had engaged with the Program's website at some previous point in time). Digital ads were specifically targeted to internet users who performed online searches related to paint and HHW product

purchasing, use, and disposal. Additionally, the Facebook advertising campaign pursued a "gated" strategy, meaning content was targeted specifically at residents of British Columbia.

Print and Digital Advertising

Print ads were published in several 2017 municipal waste and recycling calendars. The Program also ran an integrated interview-style article and complementary service partner ad in The Valley Voice, a biweekly regional newspaper servicing Slocan, Arrow Lakes and North Kootenay Lake Valleys.

TV Campaigns

A province-wide campaign with Global TV ran from February to August 2017. This campaign included heavy rotations of 30-second traditional commercial spots that aired on prime time during high viewership news programming. Starting in September 2017, community PSAs involving local talent voiced 15-second "infomercial" style spots educating viewers about recycling paint and HHW products.

Radio Campaign

PCA ran several English and multi-lingual radio campaigns in 2017 to raise program awareness and to promote the collection site finder.

- The Program pursued a significant radio advertising campaign on Newcap Radio station Z95.3 FM.
 Thirty second commercials aired from March to June 2017 and again from September to December 2017. To complement this on-air campaign, the Program also advertised on the radio station's digital pre-roll video segments from January to April 2017 and again from May to August 2017.
- The Program aired 132 (30-second spots) on Fairchild Radio (Cantonese and Mandarin) from March to May 2017 and September to November 2017. In addition, over 500 (30-second spots) aired on Spice Radio (Hindi, Punjabi and English) from January to November 2017, expanding Program reach via multi-lingual programming
- To cover rural areas of BC, the Program ran 30-second commercials from April to August of 2017 via several Vista Radio stations. These spots aired in cities including Quesnel, Kelowna, Castlegar, Smithers and Vanderhoof.

Events

The Program attended multiple events with the goal of educating people on the importance of waste diversion and recycling of paint and HHW products. They included the following:

• BC Home & Garden Show: February 22 - 26

Party for the Planet (City of Surrey): April 22

Burnaby Environmental Festival: May 27

• Science World's Green Days: May 13

Khatsahlano Street Party: July 8

Vancouver Pride Festival: August 6

Vancouver Mural Festival: August 12

Knowledgeable ambassadors interacted with thousands of event-goers during the summer festival season and raised awareness about paint and HHW recycling. Branded event materials supported this direct engagement program, and included signage and audience engagement tools like games and giveaways.

Partnerships

The Program continued to participate in the Recycling Council of British Columbia (RCBC) recycling hotline service (1 800 667 4321 or 604 RECYCLE). Consumers were able to contact RCBC operators during business hours and obtain information about return options for Program Products.

The BC Paint & HHW collection sites were included in the Recyclepedia app. Developed by RCBC, Recyclepedia is a free smart phone app that allows users to locate +1000 recycling sites for over 70 products types in BC, including paint and household hazardous waste. The app creates a list of the 10 closest recycling sites for an item based on users' current location and the product they select in the app's product menu.

The Program was a prize sponsor of Science World's BC Green Games in 2017. The Program is a digital eco-storytelling contest for schools throughout British Columbia. As part of the sponsorship, Science World's "On the Road" team visited schools across the province and reached more than 31,000 students with Program messaging. During these visits, Science World staff handed out program brochures containing paint and HHW recycling information and eco-friendly giveaways. In addition, the BC Green Games website listed the program as a sponsor with a description of its recycling programs. The sponsorship also included awarding recycled paint murals to two schools through the contest. There were two schools awarded the Program's mural prize; one of the murals was displayed in Science World's Search gallery during the month of October, which has an average monthly visitor attendance of 55,000. The murals were accompanied with a branded plaque to explain the display and what the Program does.

Out-of-Home Advertising

The Program ran paint and HHW -specific advertisements via NewAd print advertising featured in "restobars" throughout the province, targeting homeowners in suburban areas. The campaign ran for 11 weeks from April to June 2017, and received over 148,000 impressions.

4. Collection Systems Information

As of December 31, 2017, PCA contracted with 222 permanent collection sites in British Columbia to provide convenient locations for consumers to drop off unwanted Program Products, an increase from 219 collection sites in the prior year. Of the 222 locations, 113 were paint collection sites that collected leftover paint products only, including paint aerosols, and 109 were "paint plus" collection sites that collected paint products, as well as flammable liquids, pesticides and gasoline. Of the 222 locations, 152 were part of the Paint Reuse program, providing paint to customers for free.

3 Paint sites and 4 Paint Plus sites were added to the collection network in 2017, while 3 Paint sites and 1 Paint Plus were removed, representing a net increase of 3 sites from 2016. In addition, 2 sites were changed from Paint to Paint Plus. Table 1 provides a comparison of 2016 and 2017 collection site numbers and Table 2 lists the specific changes in the collection system in 2017. Table 3 lists the collection sites by Regional District. A complete list of collection sites as of December 31, 2017 is provided in Appendix A.

Table 1: Paint and Paint Plus Contracted Collection Sites, 2016 and 2017

Collection Site Type	2016	2017
Paint	115	113
Paint Plus	104	109
Total Permanent	219	222

Table 2: Collection Site Changes in 2017

Collection Site Name	Location	Change from 2016
Rona Home Centre (Golden)	Golden	New paint collection site
Burns Lake Recycling Depot	Burns Lake	New paint collection site
Pitt Meadows Bottle & Return-it Depot	Pitt Meadows	New paint collection site
Tsal'alh Eco-Depot - Seton Lake	Shalalth	New paint plus collection site
Lax Kw'alaams	Lax Kw'alaams	New paint plus collection site
Do Your Part Recycling	Terrace	New paint plus collection site
R3 Resource Recycling Recovery	Fort St. John	New paint plus collection site
Rona Home Centres (Kingsway)	Vancouver	CLOSED paint depot
Burns Lake Transfer Station	Burns Lake	CLOSED paint depot
RONA Shuswap Building Supplies	Scotch Creek	CLOSED paint depot
Lakelse Holdings Ltd.	Terrace	CLOSED paint plus depot
Hornby Island Waste Management	Hornby Island	Changed from paint to paint plus
North Shore Bottle Depot	North Vancouver	Changed from paint to paint plus

Table 3: Summary of Collection Sites by Regional District in 2017

District	Number of Collection Site
Alberni-Clayoquot	3
Bulkley-Nechako	9
Capital	13
Cariboo	6
Central Coast	3
Central Kootenay	4
Central Okanagan	3
Columbia-Shuswap	6
Comox Valley	4
Cowichan Valley	7
East Kootenay	6
Fraser Fort-George	5
Fraser Valley	12
Kitimat-Stikine	4
Kootenay Boundary	5
Metro Vancouver	54
Mt. Waddington	6
Nanaimo	6
North Okanagan	6
Northern Rockies	1
Okanagan-Similkameen	9
Peace River	7
Powell River	2
Skeena-Queen Charlotte	5
Squamish-Lillooet	9
Strathcona	4
Sunshine Coast	4
Thompson-Nicola	19
Total	222

PCA also supplements the collection system with a number of one day collection events, often carried out in collaboration with a municipality or regional district. PCA participated in 22 collection events in 2017. See Table 4 for a list of collection events.

Table 4: Collection Events in 2017

Date	Event Location
April 22, 2017	Cache Creek
May 6, 2017	Delta
May 6, 2017	Merritt
May 13, 2016	Mission
June 3, 2017	Golden
June 10, 2016	Kamloops
August 12, 2017	Gambier Island
August 12, 2017	Anvil Island
August 26, 2017	Gambier Island
August 26, 2017	Keats Island @ Eastbourne
August 26, 2017	Keats Island @ Keats Landing
August 26, 2017	Keats barge
September 9, 2017	Thormanby Island
September 9, 2017	Trail Island
September 16, 2017	Kaslo
September 23, 2017	Creston
September 24, 2017	Castlegar
September 23, 2017	Golden
September 30, 2017	Silverton
October 1, 2017	Nakusp
October 14, 2017	Chilliwack
October 21-22, 2017	Langley

5. Product Environmental Impact Reduction, Reusability and Recyclability

Chemical Management Plan

The paint and coatings industry is continually pursuing innovations in product formulations that strike a balance between sustainability, health and safety and product performance. This is done working in concert with key agencies such as Health Canada, Environment Canada and numerous standard-setting organizations. An example of industry's sustainability initiatives includes involvement with the federal government's Chemicals Management Plan (CMP). Assessing chemicals in commerce for all industry sectors including paint and coatings. This comprehensive federal government initiative evaluates risks associated with substances contained in products and intended uses or applications of the product. These risk assessments are done with a view to banning the highly toxic substances that are considered dangerous to human health and the environment or managing the risks in the ones that are deemed to be less harmful. The CMP entered its third phase and identified 1,550 substances being risk assessed for potential to cause harm to human health or the environment. Over five hundred of those chemicals are implicated in the

paint and coatings industry. Over the next five years, the coatings industry will provide detailed information on all the substances used in order for the Government to make a determination as to whether or not they need a risk management regime or an outright ban. This will further enhance the sustainability of the products once the assessment is completed and action taken where needed.

Where toxicity in chemicals is considered potentially harmful to human health or the environment, a risk management approach is required to permit continued use of the substances contained in products like paint and coatings. This may result in regulations, pollution prevention plans, codes of practice or compliance agreements and ultimately reformulation or re-design of products for the marketplace, which reduces or eliminates negative impacts. In some cases, this has led to less toxic and more environmentally friendly alternatives or substitutes for product formulations that still ensure product performance demands of the customer. We have seen these measures lead to important benefits, such as the reduction of low-level emissions from Volatile Organic Compounds (VOC) in paints with most paints now containing low or no VOC content.

VOC Emissions Reductions in the Paint and Coatings Industry

Almost all ground-level ozone and about two-thirds of particulate matter are formed in the atmosphere through the reactions of precursor substances, with VOCs being one of the most significant. Consequently, Canada's approach to reduce atmospheric levels of particulate matter and ozone is to reduce the precursor emissions, including VOCs. In 2009 the federal government implemented VOC Concentration Limits for Architectural Coatings Regulations for all architectural and automotive paint and coatings in 54 product categories. Since that time there has been tremendous success in the emissions reduced in all paint and coatings used in Canada as follows:

- 93 per cent of the sales volume of all architectural coatings in Canada is now water-based, up from less than 50 percent ten years ago.
- In 2015, based on comprehensive and random testing conducted by Environment an Climate Change Canada (ECCC), 99+ per cent of the sales volume for architectural waterborne coatings in Canada, traditionally associated with high VOC content, are now fully compliant with the lower VOC limits required by the VOC Concentration Limits for Architectural Coatings Regulations.
- Compared with 2002 levels, the architectural paint and coatings sector has achieved 74 per cent reduction in overall VOC emissions due to lowering of the VOC content in waterborne products and by eliminating most of the solvent borne product lines completely. These industry efforts greatly exceeded the government's own expectations, which was projected to be a 28 per cent reduction.

Industry Leadership

Many companies now have sustainability goals and targets. Those are put in place for environmental reasons, but they also make good business sense as efficient use of natural resources has been shown to reduce operating costs. As a result, many firms now have regular sustainability reporting as an ongoing part of their business planning, allowing them to integrate the addressing of environmental challenges

into their long-term development strategy. Some of the ways in which paint and coatings companies address the alignment of sustainability with capital allocation decisions include:

- Setting and updating long-term green house gas reduction targets and linking those with environmental compensation and sustainable product innovation
- Using life cycle assessment to set business goals when expanding product offerings and risks management
- Developing metrics to factor in the social and environmental impact of their suppliers along the supply chain to determine true business costs
- Making investments in new environmental research and innovation
- Ensuring R&Ds projects are aligned with the sustainability policy of the company
- Some companies now have Chief Sustainability Officers, who are one of the decision makers for large internal capital budget requests, signing-off with the controller on capital budget requests to ensure sustainability is evaluated and included in decision making

Customer preference

Many initiatives are also driven by customer preferences. Companies now focus attention on answering consumer preferences for products that reduce fuel use, limit real estate footprints, improve water and wastewater management while ensuring customers get the same product performance. For example, paint and coatings companies develop products that help businesses and their customers to reduce their environmental footprint, while creating value. These product lines include architectural paints being now more durable, lasting longer and protecting valuable assets;

Greenhouse Gas Emissions

The estimated greenhouse gas (GHG) impact of the recycling of paint products, flammable liquids and pesticides was calculated using a GHG emission inventory tool developed specifically for the Program by a third party based on nationally and internationally recognized reference protocols and standards. Based on the limited available information from downstream processors and the numerous assumptions that had to be made to determine the GHG impact, the final GHG emission numbers are accurate to only one significant digit. The GHG emissions for 2017 were estimated based on these calculations, to be 10,000 tonnes of equivalent carbon dioxide (CO2e). This value is based on 2 tonnes of CO2e generated per tonne of material managed.

6. Pollution Prevention Hierarchy and Product / Component Management

PCA endeavours to manage collected products in accordance with the "pollution prevention hierarchy". This section details the measures that PCA follows with respect to each product category based on information provided by downstream processors, where available.⁴

⁴ The information detailed in this section was verified based on processor questionnaires or site visits of the various processors and the review of final disposition as indicated on hazardous waste manifests as applicable. 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.

Consolidation

Collected products are sent to a consolidation facility in the Lower Mainland. During consolidation, paint is separated into latex (water-based) and alkyd (oil-based) paint. Paint aerosols are separated into liquid paint, metal containers and propellant. Pesticides and flammable liquids are consolidated by product type and properties, and "other aerosols" (flammable and pesticide aerosols) are repackaged into larger containers.

Following these initial processes, consolidated or repackaged materials are sent to downstream processors for recycling, energy recovery, incineration or landfill. Detailed information on how collected materials are processed is provided below.

Paint

Leftover paint is the largest volume of the residual products managed by the Program. Leftover paint is managed in a number of ways:

Reuse

Reusable paint is given away at no charge through the Paint Reuse (previously Paint Exchange) program to members of the public and non-profit organizations to be used for its originally intended purpose. In 2017, 152 depots participated in the Paint Reuse program, representing 69% of all depots. Users of the program included individuals, community organizations, theatres and anti-graffiti programs. Based on monthly reports provided by collection sites, approximately 2.3%⁵ of the total volume of paint processed in 2017 was reused through the Paint Reuse program, down from 2.8% in 2016.

Recycling

PCA utilizes a number of options for latex (water-based) paint recycling. High grade recyclable water-based paint is reprocessed into paint and coatings products. The lower grade liquid recyclable paint (i.e., paint that is not suitable for paint to paint recycling) is used as a raw material in the manufacturing of concrete products (blocks, barriers, etc.).

According to shipment records⁶, approximately 75.5% of the latex paint sent to downstream processors by the Program in 2017 was recycled utilizing one of the two options listed above.

The total volume of paint processed is the sum of the total volume of paint reused through Paint Reuse plus the total volume of paint shipped from the consolidation facility to the downstream processors.

⁵ Based on the estimate of paint containers being 75% full and compared against residual recovery volumes.

⁶ Shipment records evidencing the management of program product may include Certificates of Disposal, bills of lading or processor invoices and the review of final disposition as indicated on hazardous waste manifests as applicable. Shipment records evidencing the management of metal and plastic containers may include bills of lading, scale tickets or processor invoices.

Energy Recovery

Alkyd (oil-based) paints are suitable for energy recovery by virtue of their high solvent content. According to shipment records, 100% of the oil-based paint shipped to downstream processors from the consolidation facility in 2017 went to hazardous waste management companies who then sent the paint to permitted/licensed facilities to be used for alternative energy recovery.

PCA continues to search for recycling options for alkyd paint. This is generally more difficult due to hazardous waste and transportation regulations, which limit the movement of this kind of material. Regulations, such as the Federal VOC Regulations, require tighter limits on certain chemical constituents, which tend to be higher in older paints, making recycling of alkyd paints more difficult. In addition, the chemistry of alkyd paints makes it more difficult to recycle into paint and coating products, and the diminishing market for recycled alkyd products is significantly smaller than that for latex paint products.

Due to the colour or physical/chemical composition, some latex paint cannot be recycled. Latex paint has heat value but not as high as oil-based paints. A portion of the unrecyclable latex paint is sent to downstream processor who sends it to a licensed facility, to be used as alternative fuel (energy recovery). According to shipment records, 18.3% of the latex paint sent to downstream processors was used as an alternative fuel in 2017.

Secure Landfill

Due to increased volumes and limited capacity of the downstream processors for energy recovery, a portion of unrecyclable latex paint could not be sent for energy recovery. In addition, a portion of liquid lower grade recyclable paint could not be accepted by the downstream concrete block manufacturer due to capacity limits. Consequently, according to shipment records, 6.3% of unrecyclable latex paint and lower grade recyclable paint was solidified and diverted to a secure landfill in 2017. In comparison to 2016, PCA was able to divert 10% of latex paint from landfill, managing this material through energy recovery.

Flammable Liquids

As a result of the nature of flammable liquids, and the fact that many flammable liquids are sold as fuels, leftover flammables collected are treated as alternative fuels for energy recovery. According to shipment records, 100% of the flammable liquids shipped from the consolidation facility to downstream processors in 2017 went to a hazardous waste management company who then sent them to permitted/licensed facilities to be used for alternative energy recovery.

Gasoline

Due to the nature of gasoline, which is intended for use as a fuel, collected leftover gasoline is treated as alternative fuel for energy recovery. According to shipment records, 100% of the gasoline shipped from the consolidation facility to downstream processors in 2017 went to a hazardous waste management company who then sent the gasoline to permitted/licensed facilities to be used for alternative energy recovery.

Pesticides

Due to the nature of pesticides, there is no reuse or recycling option available for these products. According to shipment records, 100% of pesticide products shipped from the consolidation facility to downstream processors in 2017 went to a hazardous waste management company who then sent them to permitted/licensed facilities for incineration.

Containers

Metal Container Recycling

Based on shipment records from the consolidation facility, 100% of metal containers processed by the Program in 2017 from paint, flammable liquids, pesticides and gasoline were sent for metal recycling. Pesticide containers were triple rinsed before being sent for recycling.

Plastic Container Recycling

According to shipment records, 100% of 5 gallon size #2 HDPE plastic paint pails and gasoline containers shipped from the consolidation facility to downstream processors were recycled in 2017. Furthermore, plastic containers from pesticides and flammable liquids were sent for plastics recycling. Pesticide containers were triple rinsed before being sent for recycling.

Plastic Container Energy Recovery

The Program managed 64% of plastic (polypropylene #5) one US gallon size paint cans through recycling, and 36% through energy recovery due to the limited market demand for recycled polypropylene #5.

Table 5: Program Product End Fate (Excluding Paint Reuse) 2017

Product Category ⁷	Recycling	Energy Recovery	Incineration	Landfill
Latex paint	75.5%	18.3%		6.3%
Alkyd paint		100%		
Flammable Liquids		100%		
Pesticides			100%	
Gasoline		100%		
Metal Containers	100%			
#2 Plastic Containers	100%			
#5 Plastic Containers	64%	36%		

⁷ Percentages for each product category may not total 100% due to rounding.

7. Product Sold and Collected and Recovery Rate

Product Collected

Program Products are collected in either tubskids or drums.⁸ Table 6 shows the tubskids (or tubskid equivalents) collected in BC, broken down by regional district.

Table 6: Tubskids (or tubskid equivalents) Collected by Regional District (2017)

REGIONAL DISTRICT	PAINT	AEROSOLS	SOLVENTS	PESTICIDES	AEROSOLS	TOTAL
					OTHER	
Alberni Clayoquot	140	16	3	0	0	159
Bulkley Nechako	80	22	0	0	2	104
Capital Regional District	3,022	96	118	39	45	3,320
Cariboo	209	33	2	0	2	246
Central Coast	10	1	0	0	0	11
Central Kootenay	322	16	5	2	1	346
Central Okanagan	1,004	37	28	6	9	1,084
Columbia Shuswap	284	28	3	0	1	315
Comox Valley	506	19	19	10	5	559
Cowichan Valley	716	78	52	17	18	881
East Kootenay	351	19	12	3	13	399
Fraser Fort George	332	20	9	2	0	363
Fraser Valley	1,895	69	48	14	14	2,040
Kitimat Stikine	118	11	2	2	2	135
Kootenay Boundary	225	11	6	6	4	252
Metro Vancouver	14,006	458	364	93	88	15,009
Mt. Waddington	62	32	0	0	0	94
Nanaimo Regional	1,370	128	52	9	16	1,575
District	66	22				0.1
North Coast Regional	66	22	3	0	0	91
District			10			
North Okanagan	517	27	13	2	4	563
Northern Rockies	19	2	0	0	0	21
Okanagan Similkameen	620	25	9	6	3	663
Peace River	219	20	1	1	2	243

⁸ Tubskids are 4'x4'x3' plastic boxes used for the collection of paint, paint aerosols, flammable liquids and pesticides. Drums are converted into tubskids at a factor of 0.25 tubskids per drum. The total number of tubskids has been rounded to the nearest whole number. The total number of tubskids is based on tubskids picked up from collection sites as evidenced by bills of lading.

REGIONAL DISTRICT	PAINT	AEROSOLS	SOLVENTS	PESTICIDES	AEROSOLS OTHER	TOTAL
Powell River Regional District	108	18	6	1	1	134
Squamish Lillooet	413	23	19	1	4	460
Strathcona	225	95	18	7	4	349
Sunshine Coast	333	97	20	6	2	458
Thompson Nicola	700	33	11	2	6	751
TOTAL	27,872	1,456	824	227	243	30,621

The Program employs two metrics for measuring collected volumes of Program Product. Residual Recovery Volume (RRV) measures the amount of product collected as a function of the amount of product sold in the same year. The container capacity volume (CCV), also known as "equivalent litres of containers" (ELC), measures the maximum capacity of the containers that could fit within tubskids or drums returned through the Program. Table 7 provides the total 2017 residual recovery volumes (RRV) for each product category compared to 2016. Table 8 contains information on the container capacity volume (CCV) extrapolated from the number of tubskids of Program Product managed by the Program as reported in Table 6.

Table 7: Approximate Total Collected Volumes (residual recovery volume) for Paint, Paint Aerosols, Flammable Liquids and Pesticides (2016 v. 2017)

Residual recovery volume (litres)	Paint (non-aerosol) ⁹	Paint (Aerosol) ¹⁰	Flammable Liquids/Gasoline ¹¹	Pesticides ¹²
2017	3,261,069	52,111	156,537	22,725
2016	3,348,025	48,000	152,460	27,768

⁹ Paint residual recovery volume was calculated using a conversion factor of 114.33 litres per tubskid, based on the average volume generated per tubskid over the full year 2017.

¹⁰ Paint aerosol residual recovery volume was calculated using a conversion factor of 35.80 litres per tubskid, based on the average volume generated per tubskid that was processed over the full year 2017. Processing took place in 4 months during the year.

¹¹ Flammable Liquids/Gasoline residual recovery volume was calculated using a conversion factor of 190.09 litres per tubskid, based on the average volume generated per tubskid over the full year 2017. This does not include volume from flammable or pesticide aerosols.

¹² Pesticide residual recovery volume was calculated using a conversion factor of 100 litres per tubskid, based on the average volume generated per tubskid that was processed over the full year 2017. Processing took place in 7 months during the year.

Table 8: Approximate Total Collected Volumes (container capacity volume) for Paint, Paint Aerosols, Flammable Liquids and Pesticides (2016 v. 2017)

Container capacity volume (litres) ¹³	Paint (non-aerosol)	Paint Aerosol	Flammable Liquids/Gasoline ¹⁴	Pesticides
2017	12,040,704	254,756	398,190	98,172
2016	11,945,664	266,018	424,527	100,613
Variance	0.8%	-4.2%	-6.2%	-2.4%

Recovery Rate

For all product cateogries, Table 9 below shows the calculation of the recovery rate, based on the sales in BC and the residual recovery volume collected in 2017. With regard to gasoline collection, members report the number of gasoline stations, not volumes of gasoline sold. Therefore sales volumes (in litres) for gasoline are not available and are excluded from the flammable liquids/gasoline category. Gasoline collected volumes are included in the residual recovery volumes for flammable liquids, as gasoline and other flammable liquids are processed together, and therefore indistinguishable.

Table 9: Approximate Sales, Residual Recovery Volume and Recovery Rates of Paint, Paint Aerosols, Flammable Liquids and Pesticides (2017)

2017	Paint (non-aerosol) ¹⁵	Paint (aerosol) ¹⁶	Flammable Liquids/Gasoline ¹⁷	Pesticides ¹⁸
Sales (litres) ¹⁹	30,339,801	1,099,283	2,992,811	125,869
Residual				
Recovery	3,261,069	52,111	156,537	22,725
Volume (litres)				
Recovery Rate	10.8%	4.7%	5.2%	18.1%

¹³ Container capacity volume was calculated by converting the total number of tubskids collected into equivalent litres of containers, using a conversion factor of 432 litres per tubskid, and 0.25 tubskids per drum for the paint (non-aerosol), flammable liquids/gasoline (non-aerosol) and pesticides categories. A conversion factor of 175 litres per tubskid was used for the paint aerosol and flammable liquids aerosol categories.

¹⁴ Includes both non-aerosol and aerosol flammables and pesticides.

¹⁵ Paint residual recovery volume was calculated using a conversion factor of 114.33 litres per tubskid, based on the average volume generated per tubskid over the full year 2017.

¹⁶ Paint aerosol residual recovery volume was calculated using a conversion factor of 35.80 litres per tubskid, based on the average volume generated per tubskid that was processed over the full year 2017. Processing took place in 4 months during the year.

¹⁷ Flammable Liquids/Gasoline residual recovery volume was calculated using a conversion factor of 190.09 litres per tubskid, based on the average volume generated per tubskid over the full year 2017. This does not include volume from flammable or pesticide aerosols.

¹⁸ Pesticide residual recovery volume was calculated using a conversion factor of 100 litres per tubskid, based on the average volume generated per tubskid that was processed over the full year 2017. Processing took place in 7 months during the year.

¹⁹ Volumes reported as "Sales (litres)" are estimated by converting units reported to PCA by its members and applying the typical residual container volume for each EHF category.

8. Revenues and Expenditures

Environmental Handling Fees

The Program is funded by membership fees, known as environmental handling fees (EHF), remitted to PCA by its members based on the volume of sales of designated products in or into BC. On October 1st, 2017, the paint and pesticide environmental handling fees increased. Table 10 lists the EHFs up to, and after, October 1st, 2017. A copy of the independent financial audit of the Program's revenues and expenses can be found in Appendix C.

Table 10: Environmental Handling Fees (2017)

Paint Category

Container Size	Rates until September 30, 2017	Rates as of October 1, 2017
100 ml to 250 ml	\$0.20	\$0.35
251 ml to 1 litre	\$0.35	\$0.65
1.01 litres to 5 litres	\$0.85	\$1.00
5.01 litres to 23 litres	\$2.15	\$2.25
Aerosol Paint (any size)	\$0.25	\$0.35

Pesticide Category

Container Size	Rates until September 30, 2017	Rates as of October 1, 2017
Less than 10 ml or grams	\$0.01	\$0.10
0.01 to 0.89 litres or kg	\$0.65	\$1.85
0.9 to 1.79 litres or kg	\$1.30	\$2.10
1.8 to 10 litres or kg	\$2.60	\$3.50

Flammable Liquids Category

Container Size	Rates 2017
Less than 750 ml	\$0.10
751 ml to 1 litre	\$0.15
1.01 litres to 2 litres	\$0.35
2.01 litres to 4 litres	\$0.60
4.01 litres to 10 litres	\$1.50
Aerosol Flammable Liquids	
1 to 75 ml or grams	\$0.01
76 to 200 ml or grams	\$0.10
Over 201 ml or grams	\$0.15

9. Performance Measures

The 2012-2016 Program Plan did not set targets for 2017. Amendments to the Program Plan submitted to the Ministry have yet to receive approval at the time of the writing of this report. Accordingly, table 11 sets out the key performance measures for 2017, and strategies for performance improvement going forward.

Table 11: Key Performance Measures

Key Performance Measures		
Program Area	2017 Performance	Strategies for Improvement
Collection System		
Collection Sites	 113 paint collection sites 109 paint plus collection sites Total of 222 collection sites 	PCA continues to expand the network as needed.
Paint Reuse Collection Sites	152 collection sites (69% of all collection sites) offered the Paint Reuse program	Continue to encourage collection sites to offer the Paint Reuse program
Management of Collected M	aterials	
Paint Collected	 Paint (non-aerosol) collection volume increase: 0.8% Paint (aerosol) collection volume decrease: -4.2% 	N/A
Flammable Liquids and Pesticides Collected	 Flammable Liquids/Gasoline collection volume decrease: - 6.2% Pesticide collection volume decrease: -2.4% 	N/A
Pesticides Collected	Pesticide collection volume was 98,172 litres	N/A
Paint Reused	• 2.3% of paint collected was reused.	N/A
Latex (water-based) Paint Recycling	• 75.5% of latex paint was recycled.	Continue to seek alternative recycling options.

Key Performance Measures						
Program Area	2017 Performance	Strategies for Improvement				
	 18.3% was sent for energy recovery. 6.3% was sent to a landfill.²⁰ 					
Alkyd (oil-based) Paint Recycling	Product Care continues to search for recycling options for alkyd paint. Currently no recycling options have been identified.	Continue to seek options for recycling.				
Metal and #2 Plastic Container Recycling	• 100% of metal and #2 plastic paint containers were recycled.	N/A				
Plastic and Metal Gasoline Container Recycling	• 100% of plastic and metal gasoline containers were recycled.	N/A				

⁻

²⁰ Percentages have been rounded to the nearest whole number.

APPENDIX A. Collection Site List as of December 31, 2017 (by Regional District)

Collection Site Name	Regional District	City	Paint Reuse	Paint Plus
Sun Coast Eco Depot	Alberni Clayoquot	Port Alberni	Yes	Yes
Thompson Bottle Depot (was The Bottle Depot)	Alberni Clayoquot	Port Alberni	Yes	Yes
Ucluelet Bottle Depot	Alberni Clayoquot	Ucluelet	Yes	No
Bulkley Valley Bottle Depot	Bulkley Nechako	Smithers	Yes	Yes
Houston Bottle Depot	Bulkley Nechako	Houston	Yes	Yes
Ouellette Bros. Building Supplies	Bulkley Nechako	Fort St. James	No	Yes
Smithers/Telkwa Transfer Station	Bulkley Nechako	Smithers	Yes	Yes
Area 'D' Transfer Station	Bulkley Nechako	Fraser Lake	Yes	No
Burns Lake Recycling Depot	Bulkley Nechako	Burns Lake	Yes	No
Fort St. James Transfer Station	Bulkley Nechako	Fort St. James	Yes	No
Knockholt Sub-Regional Landfill	Bulkley Nechako	Houston	Yes	No
Nechako Valley School Bottle Depot	Bulkley Nechako	Vanderhoof	Yes	No
A&P Disposal	Capital Regional District	Sooke	Yes	Yes
Alpine Disposal & Recycling	Capital Regional District	Langford	No	Yes
Ellice Recycle Ltd.	Capital Regional District	Victoria	No	Yes
Bay Street Castle	Capital Regional District	Victoria	No	No
Gabriola Island Recycling Depot	Capital Regional District	Gabriola Island	Yes	Yes
Hartland Recycling Depot	Capital Regional District	Saanich	Yes	Yes
Pender Island Recycling Society	Capital Regional District	Pender Island	Yes	No
Saltspring Island Recycling	Capital Regional District	Saltspring Island	No	Yes
Galiano Island Recycling	Capital Regional District	Galiano Island	Yes	No
Mayne Island Recycling Society	Capital Regional District	Mayne Island	No	No

Collection Site Name	Regional District	City	Paint Reuse	Paint Plus
Oak Bay Recycling Depot	Capital Regional District	Oak Bay	No	No
RONA Home & Garden (Langford)	Capital Regional District	Victoria	No	No
Sidney Bottle Depot (Island Return-It Recycling Centre)	Capital Regional District	Sidney	Yes	No
Central Cariboo Disposal Services	Cariboo	Williams Lake	Yes	Yes
Gold Trail Recycling	Cariboo	100 Mile House	Yes	Yes
Quesnel Landfill Site	Cariboo	Quesnel	No	No
RONA - Interlakes Building Supplies Ltd.	Cariboo	Lone Butte	No	No
RONA Home Centre (Quesnel)	Cariboo	Quesnel	No	No
RONA Home Centre (Willams Lake)	Cariboo	Williams Lake	No	No
Bella Coola Recycling Depot	Central Coast	Bella Coola	Yes	No
Bella Bella Eco-Depot (Heiltsuk Environmental)	Central Coast	Bella Bella	Yes	Yes
Thorsen Creek Recycling Depot	Central Coast	Bella Coola	Yes	Yes
Kaslo Building Supplies	Central Kootenay	Kaslo	No	Yes
Nelson Leafs Recycling	Central Kootenay	Nelson	Yes	Yes
Columbia Bottle Recycling	Central Kootenay	Creston	Yes	No
Silverton Building Supplies	Central Kootenay	Silverton	No	No
Battery Doctors	Central Okanagan	Kelowna	Yes	Yes
Boucherie Self Storage & Bottle Depot	Central Okanagan	Westbank	Yes	Yes
RONA Home & Garden (Kelowna)	Central Okanagan	Kelowna	No	No
B&D Bottlers Ltd dba Revelstoke Bottle Depot	Columbia Shuswap	Revelstoke	Yes	No
Bill's Bottle Depot	Columbia Shuswap	Salmon Arm	Yes	Yes
Revelstoke Refuse Disposal Facility	Columbia Shuswap	Revelstoke	Yes	Yes
RONA - Glacier Building Supplies	Columbia Shuswap	Revelstoke	No	No

Collection Site Name	Regional District	City	Paint Reuse	Paint Plus
RONA Home Centre (Golden)	Columbia Shuswap	Golden	No	No
Scotch Creek Bottle Depot	Columbia Shuswap	Scotch Creek	Yes	No
Comox Valley Waste Management Centre	Comox Valley	Cumberland	Yes	Yes
Hornby Island Waste Mgmt Centre	Comox Valley	Hornby Island	Yes	Yes
Comox Return Centre	Comox Valley	Comox	Yes	No
Courtenay Return-It Depot	Comox Valley	Courtenay	Yes	No
Bings Creek Recycling Depot	Cowichan Valley	Duncan	Yes	Yes
Cowichan Valley Bottle Depot dba Island Return-It Recycling Centre - Cowichan Valley Bottle Depot	Cowichan Valley	Duncan	Yes	Yes
Fisher Road Recycling	Cowichan Valley	Cobble Hill	Yes	Yes
Meade Creek Recycling Drop-Off Depot	Cowichan Valley	Lake Cowichan	Yes	Yes
Peerless Road Recycling	Cowichan Valley	Ladysmith	Yes	Yes
Junction Bottle Depot Ltd.	Cowichan Valley	Ladysmith	Yes	No
RONA Building Centre (Cobble Hill)	Cowichan Valley	Cobble Hill	No	No
Cranbrook Bottle Depot	East Kootenay	Cranbrook	Yes	Yes
Fernie Bottle Depot	East Kootenay	Fernie	Yes	No
Invermere Fire Department	East Kootenay	Invermere	Yes	No
New & Nearly New	East Kootenay	Kimberley	Yes	No
RONA - Cranbrook Building Centre	East Kootenay	Cranbrook	No	No
RONA - Northstar Hardware	East Kootenay	Invermere	No	No
Nechako Bottle Depot	Fraser Fort George	Prince George	No	Yes
PG Recycling & Return-It Centre	Fraser Fort George	Prince George	Yes	No
RONA - Capital Building Supplies	Fraser Fort George	Prince George	No	No

Collection Site Name	Regional District	City	Paint Reuse	Paint Plus
Valemount Recycling Centre	Fraser Fort George	Valemount	Yes	No
Victory Building Center - Mackenzie	Fraser Fort George	Mackenzie	No	No
Abbotsford Bottle Depot	Fraser Valley	Abbotsford	No	Yes
Abbotsford Mission Recycling Depot (Abbotsford Community Services)	Fraser Valley	Abbotsford	Yes	Yes
Aldergrove Return-It	Fraser Valley	Aldergrove	Yes	Yes
Chilliwack Bottle Depot	Fraser Valley	Chilliwack	No	Yes
Mission Recycling Depot	Fraser Valley	Mission	Yes	Yes
Regional Recycling - Abbotsford	Fraser Valley	Abbotsford	Yes	Yes
Mission Recycle Center Ltd.	Fraser Valley	Mission	Yes	No
R&T Bottle Depot	Fraser Valley	Abbotsford	Yes	No
RONA Home Centre (Chilliwack)	Fraser Valley	Chilliwack	No	No
RONA Home Centre (Clearbrook)	Fraser Valley	Abbotsford	No	No
RONA Home Centre (Hope)	Fraser Valley	Норе	No	No
Sardis Bottle Depot	Fraser Valley	Chilliwack	Yes	No
District of Stewart	Kitimat Stikine	Stewart	Yes	No
Do Your Part Recycling Corp	Kitimat Stikine	Terrace	Yes	Yes
Hazelton Bottle Depot (was New Hazelton Bottle)	Kitimat Stikine	New Hazelton	Yes	No
Kitimat Recycling Depot (KUTE)	Kitimat Stikine	Kitimat	Yes	No
Beaverdell Landfill	Kootenay Boundary	Beaverdell	Yes	Yes
Grand Forks Regional Landfill	Kootenay Boundary	Grand Forks	Yes	Yes
McKelvey Creek Landfill	Kootenay Boundary	Trail	Yes	Yes
West Boundary Regional Landfill	Kootenay Boundary	Greenwood	Yes	Yes
Trail Bottle Depot	Kootenay Boundary	Trail	Yes	No
Bridgeview Return-It	Metro Vancouver	Surrey	Yes	No
Coquitlam Return-It Depot	Metro Vancouver	Coquitlam	Yes	No

Collection Site Name	Regional District	City	Paint Reuse	Paint Plus
Fleetwood Bottle Return Depot Ltd.	Metro Vancouver	Surrey	No	No
Agassiz Bottle Depot	Metro Vancouver	Agassiz	Yes	Yes
Go Green Depot & Recycling	Metro Vancouver	Vancouver	No	No
Biggar Bottle Depot	Metro Vancouver	Port Coquitlam	No	Yes
Burnaby Recycling Depot	Metro Vancouver	Burnaby	No	Yes
Guildford Bottle Depot	Metro Vancouver	Surrey	Yes	No
Coquitlam Transfer Station (Wastech)	Metro Vancouver	Coquitlam	Yes	Yes
East Hastings Bottle Depot	Metro Vancouver	Burnaby	Yes	Yes
East Van Bottle Depot	Metro Vancouver	Vancouver	No	Yes
Edmonds Return-It Depot	Metro Vancouver	Burnaby	Yes	Yes
Jenill Bottle Depot	Metro Vancouver	Surrey	Yes	Yes
Langley Bottle Depot	Metro Vancouver	Langley	Yes	Yes
Ironwood Bottle & Return-it Depot	Metro Vancouver	Richmond	Yes	No
North Shore Bottle Depot	Metro Vancouver	North Vancouver	Yes	Yes
North Van Bottle Depot	Metro Vancouver	North Vancouver	Yes	Yes
Joe's Bottle Depot	Metro Vancouver	Vancouver	No	No
North Van. Transfer Station	Metro Vancouver	North Vancouver	No	Yes
Kitchener Bottle Depot Ltd.	Metro Vancouver	Burnaby	Yes	No
Ladner Bottle Depot	Metro Vancouver	Delta	No	No
Regional Recycling - Burnaby	Metro Vancouver	Burnaby	Yes	Yes
Regional Recycling - Cloverdale	Metro Vancouver	Surrey	Yes	Yes
Lee's Bottle Depot	Metro Vancouver	Burnaby	No	No
Regional Recycling - Richmond	Metro Vancouver	Richmond	Yes	Yes
Regional Recycling - Vancouver	Metro Vancouver	Vancouver	Yes	Yes
Lougheed Return-It Depot	Metro Vancouver	Coquitlam	Yes	No
Richmond Recycling Depot	Metro Vancouver	Richmond	No	Yes
Ridge Meadows Recycling Society	Metro Vancouver	Maple Ridge	Yes	Yes
Lowe's - New Westminster	Metro Vancouver	New Westminster	No	No
Scott Road Bottle Depot	Metro Vancouver	Surrey	No	Yes

	Regional District	City	Paint	Paint
Collection Site Name			Reuse	Plus
South Van Bottle Depot	Metro Vancouver	Vancouver	Yes	Yes
White Rock Return-It Depot	Metro Vancouver	Surrey	Yes	Yes
New Westminster Recycling	Metro Vancouver	New Westminster	No	No
Newton Bottle Depot	Metro Vancouver	Surrey	Yes	No
Panorama Village Return-it	Metro Vancouver	Surrey	Yes	No
Pitt Meadows Bottle & Return-it Depot Ltd.	Metro Vancouver	Pitt Meadows	Yes	No
Powell Street Return-it Bottle Depot	Metro Vancouver	Vancouver	Yes	No
RONA - BH Allen Building Centre	Metro Vancouver	North Vancouver	No	No
RONA - Mack Foster (Richmond)	Metro Vancouver	Richmond	No	No
RONA Home & Garden (Grandview)	Metro Vancouver	Vancouver	No	No
RONA Home Centre (Austin)	Metro Vancouver	Coquitlam	No	No
RONA Home Centre (Burnaby - Edmonds)	Metro Vancouver	Burnaby	No	No
RONA Home Centre (Coquitlam)	Metro Vancouver	Coquitlam	No	No
RONA Home Centre (Fleetwood)	Metro Vancouver	Surrey	No	No
RONA Home Centre (King George)	Metro Vancouver	Surrey	No	No
RONA Home Centre (Maple Ridge)	Metro Vancouver	Maple Ridge	No	No
RONA Home Centre (North Vancouver)	Metro Vancouver	North Vancouver	No	No
RONA Home Centre (South Surrey)	Metro Vancouver	Surrey	No	No
Semiahmoo Bottle Depot	Metro Vancouver	Surrey	No	No
Tsawassen Bottle Depot	Metro Vancouver	Delta (Tsawwasse n)	Yes	No
Vancouver West bottle depot	Metro Vancouver	Vancouver	Yes	No
Walnut Grove Bottle Depot	Metro Vancouver	Langley	Yes	No
Willowbrook Recycling Depot	Metro Vancouver	Langley	No	No
Malcolm Island Recycling Centre	Mt. Waddington	Sointula	Yes	No
Port Hardy Return-it Centre	Mt. Waddington	Port Hardy	Yes	Yes

Collection Site Name	Regional District	City	Paint Reuse	Paint Plus
Seven Mile Recycling Centre	Mt. Waddington	Port McNeill	Yes	Yes
RONA - RA Rosback (Alert Bay)	Mt. Waddington	Alert Bay	No	No
RONA - RA Rosback(Port McNeill)	Mt. Waddington	Port McNeill	No	No
Woss Recycling Depot	Mt. Waddington		Yes	No
Nanaimo Recycling Exchange Society	Nanaimo Regional District	Nanaimo	Yes	Yes
Parksville Bottle & Recycling Depot	Nanaimo Regional District	Parksville	Yes	Yes
Regional Recycling - Nanaimo	Nanaimo Regional District	Nanaimo	Yes	Yes
Regional Recycling - Nanaimo (Old Victoria Road)	Nanaimo Regional District	Nanaimo	Yes	Yes
Qualicum Bottle Depot	Nanaimo Regional District	Qualicum Beach	Yes	No
RONA Building Centre (Nanaimo)	Nanaimo Regional District	Nanaimo	No	No
Armstrong Collision	North Okanagan	Armstrong	Yes	No
Enderby Return-It Recycling Depot	North Okanagan	Enderby	Yes	No
KBM Autoworks	North Okanagan	Lumby	Yes	No
Chasers Bottle Depot	North Okanagan	Vernon	Yes	Yes
Interior Freight & Bottle Ltd.	North Okanagan	Vernon	Yes	Yes
RONA Home Centre (Vernon)	North Okanagan	Vernon	No	No
Wide Sky Disposal	Northern Rockies	Fort Nelson	Yes	Yes
Oliver Sanitary Landfill	Okanagan Similkameen	Oliver	Yes	No
Osoyoos Bottle Depot	Okanagan Similkameen	Osoyoos	Yes	No
Campbell Mountain Landfill	Okanagan Similkameen	Penticton	Yes	Yes
J&C Bottle Depot	Okanagan Similkameen	Penticton	Yes	Yes
Summerland Landfill	Okanagan Similkameen	Summerland	Yes	Yes
T-2 Market	Okanagan Similkameen	Oliver	Yes	Yes
RONA Home Centre (Penticton)	Okanagan Similkameen	Penticton	No	No

Collection Site Name	Regional District	City	Paint Reuse	Paint Plus
Summerland Bottle Depot	Okanagan Similkameen	Summerland	Yes	No
Town of Princeton	Okanagan Similkameen	Princeton	Yes	No
Chetwynd Recycling & Bottle Depot	Peace River	Chetwynd	Yes	Yes
D.C. Recycling & Bottle Depot	Peace River	Dawson Creek	Yes	Yes
FSJ Bottle Drop	Peace River	Fort St. John	Yes	Yes
Prespatou Transfer Station	Peace River	Prespatou	Yes	Yes
R3 Recycle-It Resource Recovery	Peace River	Fort St. John	Yes	Yes
Tumbler Ridge Transfer Station	Peace River	Tumbler Ridge	Yes	Yes
RONA Bulding Centre (Fort St. John)	Peace River	Fort St. John	No	No
Augusta Recyclers Ltd.	Powell River Regional District	Powell River	Yes	Yes
RONA - Powell River Building Supply	Powell River Regional District	Powell River	No	No
Islands Regional Landfill Depot	Skeena-Queen Charlotte	Port Clements	Yes	No
Queen Charlotte City Depot	Skeena-Queen Charlotte	Queen Charlotte City	Yes	No
Lax Kw'alaams Waste Transfer Station	Skeena-Queen Charlotte	Lax Kw'alaams	Yes	Yes
Regional Recycling - Prince Rupert (SQCRD)	Skeena-Queen Charlotte	Prince Rupert	Yes	Yes
RONA - Tyee Building Supplies	Skeena-Queen Charlotte	Prince Rupert	No	No
Carney's Waste Systems - Whistler	Squamish Lillooet	Whistler	Yes	No
Carney's Waste Systems - Pemberton	Squamish Lillooet	Pemberton	Yes	Yes
Carney's Waste Systems - Squamish	Squamish Lillooet	Squamish	Yes	Yes
Regional Recycling - Whistler	Squamish Lillooet	Whistler	Yes	Yes
SLRD Lillooet Landfill	Squamish Lillooet	Lillooet	Yes	Yes
Tsal'alh Eco-Depot - Seton Lake	Squamish Lillooet	Shalalth	Yes	Yes

Collection Site Name	Regional District	City	Paint Reuse	Paint Plus
RONA - Pemberton Valley Hardware	Squamish Lillooet	Pemberton	No	No
RONA Home Centre (Squamish)	Squamish Lillooet	Squamish	No	No
RONA Home Centre (Whistler)	Squamish Lillooet	Whistler	No	No
Campbell River Bottle Depot dba Island Return It Recycling Centre - Campbell River	Strathcona	Campbell River	Yes	Yes
Campbell River Waste Management Centre	Strathcona	Campbell River	Yes	Yes
Cortes Island Recycling	Strathcona	Cortes Island	Yes	Yes
Village of Gold River	Strathcona	Gold River	Yes	Yes
GRIPS Recycling	Sunshine Coast	Pender Harbour	Yes	No
RONA Home Centre (Madeira Park)	Sunshine Coast	Madeira Park	No	No
Gibsons Recycling Depot	Sunshine Coast	Gibsons	Yes	Yes
Sechelt Landfill	Sunshine Coast	Sechelt	Yes	Yes
Barnhartvale Landfill	Thompson Nicola	Kamloops	No	No
Merritt Machine Works Ltd.	Thompson Nicola	Merritt	Yes	No
Quality Glass Ltd.	Thompson Nicola	Ashcroft	Yes	No
RONA - North Valley Supply Ltd.	Thompson Nicola	Clearwater	No	No
RONA Home Centre (Kamloops)	Thompson Nicola	Kamloops	No	No
70 Mile House Eco-Depot	Thompson Nicola	70 Mile House	Yes	Yes
Blue River Eco-Depot	Thompson Nicola	Blue River	Yes	Yes
Starlite Auto Wrecking & Repair	Thompson Nicola	Sorrento	Yes	No
Clearwater Eco-Depot	Thompson Nicola	Clearwater	Yes	Yes
Clinton Eco-Depot	Thompson Nicola	Clinton	Yes	Yes
Heffley Creek Eco-Depot	Thompson Nicola	Heffley Creek	Yes	Yes
Home Hardware - Merritt	Thompson Nicola	Merritt	No	Yes
Logan Lake Eco-Depot	Thompson Nicola	Logan Lake	Yes	Yes
Lorne Street Bottle Depot	Thompson Nicola	Kamloops	Yes	Yes
Louis Creek Eco-Depot	Thompson Nicola	Louis Creek	Yes	Yes

	Regional District	City	Paint	Paint
Collection Site Name			Reuse	Plus
Lower Nicola Eco-Depot	Thompson Nicola	Lower Nicola	Yes	Yes
Lytton Eco-Depot	Thompson Nicola	Lytton	Yes	Yes
Mission Flats Landfill	Thompson Nicola	Kamloops	Yes	Yes
South Thompson Eco-Depot	Thompson Nicola	Pritchard	Yes	Yes

APPENDIX B. 2017 BC Paint and HHW Communications Materials

BC Paint Accepted Products Brochure:





BC Paint & HHW Accepted Products Brochure:

FAQs

How do I store my products for later use?

- Store in original, securely-sealed, labelled
- Store in well-ventilated areas, away from heat
- Keep out of reach of children and pets.
- Paint can be stored for reuse. Clean the rim for a good seal. Pour 3mm (1/8") of paint thinner on top of oil-based paint, or 3mm (1/8") of water on latex paint, or store with container upside down.
- Paint thinner can be stored for reuse. Allow solids to settle and pour off the clear thinner into an appropriate container for reuse. Discard the leftover residual when completely dry.

Are all products accepted at every

What happens to the collected products?



Want FREE leftover paint for a small job or touch-up project?







About Us

Who is ReGeneration?

At our core, we are a group of people committed to making the recycling of special waste easy for everyone. ReGeneration provides consumers with a no-charge collection network for a number of special waste products, including partir, household hazardous materials, lights and light flotures, smoke alarms, and more.

How is the program funded?

Similar to other recycling programs in B.C., this program is funded by an environmental handling fee applied to the sale of new products to cover the cost of collection, transportation, and recycling.





ReGeneration.ca 1.888.772.9772 - Toll Free 604.732.9253 - Lower Mainland Got leftover household paint, flammable liquids, pesticides or gasoline?



Drop them off FOR FREE at a collection site near you!



Accepted Products

Paint Products



- Interior and exterior: water-based (e.g. citize, coryic) and oil-based (e.g. cityd, enomel) consumer paint Deck and floor coating fine hards.
- Deck and floor coating (including elastor Varnish and urethane /s
- Concrete and masonry paint
- Drywall paint
- Undercoats and primers (e.g. metal, wood, etc.) Stucco paint
- Marine paint (unless registered under Pest Control Products Act)
 Wood finishing oil
- Melamine, metal and anti-rust paint, stain and shellac
- Swimming pool paint (single-component)
- Stain blocking paint
 Textured paint
- Block filler
- Wood, masonry, driveway sealer or water repellant (non-tar based or bitumen based)
- · Aiready empty paint container

Paint Aerosols

or 24 ounces
All paint aerosols are accepted

- Consumer
- Industrial









Flammable Liquids

Flammable liquids and aerosols ri display the flammable symbol.



- Acetone
- BBQ lighter fluid Camping fuel
- Fondue fuel
- Furniture stripper
- Kerosene
- Flammable degreasers, lubricants, and liquid adhesives
- Flammable fuel treatment and additives Methanol and methyl hydrate
- Mineral spirits
- Paint stripper and thinners Paint and varnish remover
- Turpentine and varsol



Maximum container size for liquid and solid pesticides is 10 litnes; maximum size for aerosols is 660 grams or 24 ounces

- Uquid and solid pesticides
- Aerosol containers

Gasoline



Leftover, stale, or old gasoline contaminated

Not Accepted

- We don't accept empty containers, other than empty paint cans or aerosols
- Products must be in their original container with label intact
- Gasoline must be returned in an approved ULC gasoline container

 Do not mix different types of products together



BC Paint Retail Floor Decal:



BC Paint Outdoor Collection Site Signage:



Accepted Paints

- Interior and exterior: water-based (e.g. latex, acrylic) and oil-based (e.g. alkyd, enamel) consumer paint
- Deck and floor coating (including elastomeric)
- Varnish and urethane (single-component)
- Concrete and masonry paint
- Drywall paint
- Undercoats and primers (e.g. metal, wood etc.)
- Stucco paint
- Marine paint (unless registered under Pest Control Products Act)
- Wood finishing oil
- Melamine, metal and anti-rust paint, stain and shellac
- Swimming pool paint (single-component)
- Stain blocking paint
- Textured paint
- Block filler
- Wood, masonry, driveway sealer or water repellant (non-tar based or
- · Already empty paint containers

Paint Aerosols

- Aerosol paint of all types, including:
- Craft
- Industrial







Paint products not accepted

- Unidentifiable or unlabelled containers
- Brushes, rags and rollers
- Improperly sealed paint containers
- Paint containers with poor integrity (e.g. badly rusted or leaking cans)
- Bulging containers
- Industrial paints & finishes (e.g. baked-on, heat resistant etc.)
- Paints or wood preservatives that are registered as a pesticide under the Pest Control Products Act (has a P.C.P. Registration number on label)
- Craft paint (non-aerosol)Automotive paint (non-aerosol)
- Two-part or component paints containing catalyst or activator
- Roof patch or repair
 Tar or tar/bitumen-based products
 Traffic or line marking paint
- Quick drying paint
- Resins
- Paint thinner, mineral spirits or solvents
- Deck cleaners
- Colorants and Tints
- Caulking compound, epoxies, glues or adhesives
- Other household chemicals





BC Paint & HHW Outdoor Collection Site Signage:











PAINT PRODUCTS

- Interior and exterior: water-based (e.g. latex, acrylic) and oil-based (e.g. alkyd, enamel) consumer paint

 Deck and floor coating (including elastomeric)
 Varnish and urethane (single-component)

 Single-component

 Textured paint

 Single-component

 Stain blocking paint

 Textured paint

 Block filler

PAINT AEROSOLS

Stucco paint

Automotive

· Craft Industrial

• Marine paint (unless registered under Pest Control Products Act)

Aerosol paint of all types, including:

- Deck and floor coating
 (including elastomeric)
 Varnish and urethane
 (single-component)
 Concrete and masonry paint
 Drywall paint

 Stain blocking paint
 Fondue fuel
 Furniture stripper
 Fur
 - Already empty paint containers

FLAMMABLE LIQUIDS

- Acetone
 BBQ lighter fluid
 Camping fuel
 Fondue fuel
 Fondue fuel
 Furniture stripper
 Kerosene
 Flammable degreasers,
 Indicate the stripper
 Flammable degreasers,
 Furniture stripper
 Flammable degreasers,
 Furniture and Varsol
- **PESTICIDES**

- Liquid and solid pesticides
- Aerosol containers

GASOLINE

· Leftover, stale, or old gasoline contaminated with oil or water













Leftover paint from your last DIY project? Recycle it for FREE across BC!

With over 220 collection sites across the province, there's no excuse! Visit ReGeneration.ca to find your nearest collection site.







APPENDIX C. 2017 BC Paint and HHW Audited Financial Statements

PRODUCT CARE ASSOCIATION OF CANADA BC PAINT AND HOUSEHOLD HAZARDOUS WASTE PROGRAM

STATEMENT OF REVENUES AND EXPENSES

31 DECEMBER 2017

PRODUCT CARE ASSOCIATION OF CANADA BC PAINT AND HOUSEHOLD HAZARDOUS WASTE PROGRAM

Statement of Revenues and Expenses

For the year ended 31 December 2017

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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 Paint and Household Hazardous Waste Program (the "Statement") as reported by Product Care Association of Canada for the year ended 31 December 2017 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 Paint and Household Hazardous Waste Program as reported by Product Care Association of Canada for the year ended 31 December 2017 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 of Canada'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 of Canada's management and the BC Ministry of Environment and should not be distributed to other parties.

CHARTERED PROFESSIONAL ACCOUNTANTS

Kolfe, Berson LLP

Vancouver, Canada 16 April 2018



PRODUCT CARE ASSOCIATION OF CANADA BC PAINT AND HOUSEHOLD HAZARDOUS WASTE PROGRAM

Statement of Revenues and Expenses For the year ended 31 December 2017

		2017
Revenues	\$	7,582,861
Program expenses		
Processing		4,182,011
Collection		1,630,331
Adminstration (Note 3(b) & (d))		1,118,546
Transportation		1,107,751
Communications		129,921
	_	8,168,560
Deficiency of revenues over expenses for the year	\$	(585,699)

Change in accounting policy (Note 2)

Commitment (Note 4)

PRODUCT CARE ASSOCIATION OF CANADA BC PAINT AND HOUSEHOLD HAZARDOUS WASTE PROGRAM

Notes to the Statement of Revenues and Expenses

For the year ended 31 December 2017

1. Basis of Presentation

The Statement of Revenues and Expenses (the "Statement") only includes the revenues and expenses related to the BC Paint and Household Hazardous Waste Program (the "Program"), a segment of the operations of Product Care Association of Canada (the "Association").

2. Change in Accounting Policy

During the year, the Association changed its accounting policy for the recognition of revenue from Environmental Handling Fees (EHFs). In previous periods, the Association had recognized revenue from EHFs in the period that the related program materials were sold by the member. The Association has now decided to recognize revenue from EHFs at the end of the month following the reporting period that the program materials were sold by the member. Management believes that the new policy is preferable because it better reflects the requirements of the Association's membership agreements which defines the members' obligations under the various programs.

The Association has accounted for this change in accounting policy retroactively as a prior period restatement of opening accumulated surplus. As a result, accumulated surplus as at 1 January 2017 has decreased by \$374,794 which represents revenues that were previously reported in the 2016 fiscal year and are now reported in 2017 under the new accounting policy. As the Program's Statement does not present comparative figures or accumulated surplus the adjustments impacting the previous year are not reflected in the Statement.

3. 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 (EHFs) are received from members of the BC Paint and Household Hazardous Waste 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. EHFs revenues are recognized as individual members report and remit them as required by the Association's membership agreement which is at the end of the month following the reporting period that the designated program materials were sold by the member.

(b) Capital Assets

Capital assets are recorded at cost. The Association provides for amortization using the straightline method at rates designed to amortize the cost of the capital assets over their estimated useful lives. The annual amortization rates are as follows:

Depot equipment

3 and 5 years

Included in administration expense is \$342,664 of amortization expense.

PRODUCT CARE ASSOCIATION OF CANADA BC PAINT AND HOUSEHOLD HAZARDOUS WASTE PROGRAM

Notes to the Statement of Revenues and Expenses

For the year ended 31 December 2017

3. Summary of Significant Accounting Policies - continued

(c) Use of Estimates

The preparation of financial statements in accordance with Canadian accounting standards for notfor-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 estimates include revenue accruals, expense accruals, depreciation, overhead allocation and processing commitment. Actual results could differ from those estimates.

(d) 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 this Program. The allocation of general and administrative expenses to this 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 \$447,733 of overhead expense allocated to the Program.

4. **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 \$105,437 which will be incurred in 2018.

APPENDIX D.	2017 1	Γhird	Party	Assurance	Statement	for	Non-Fin	ancial I	nformatior

PRODUCT CARE ASSOCIATION OF CANADA -BC PAINT AND HOUSEHOLD HAZARDOUS WASTE PROGRAM

INDEPENDENT REASONABLE ASSURANCE REPORT

31 DECEMBER 2017

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,

Level of Assurance and Selected Information

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 Paint and Household Hazardous Waste Program to the Ministry of Environment for the year ended 31 December 2017:

- Section 4 Collection System Information and Appendix A 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 Sold and Collected and Recovery Rate the description of how total amounts of the producer's product sold and collected and the recovery rate has been calculated in accordance with Section 8(2)(e) of the Recycling Regulation; and
- Section 9 Performance Measures 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 Guide to Third Party Assurance Requirements for Non-Financial Information in Annual Reports – 2017 Reporting Year dated October 2017 as specified by the Director under section 8(2)(h) of the Recycling Regulation of the Province of British Columbia.

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.

Applicable Quality Control Requirements

We apply Canadian Standard on Quality Control 1 and, accordingly, maintain a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Scope of the Reasonable Assurance Engagement

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; and
- 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 evaluation criteria.



Basis for Qualified Conclusion

As noted in the Guide to Third Party Assurance Requirements for Non-Financial Information in Annual Reports – 2017 Reporting Year dated October 2017, the definition of collection facilities accepting household hazardous waste is required to follow the Environmental Management Act Hazardous Waste Regulation, specifically Section 42.3 Requirements for Establishment and Operation of a Return Collection Facility and Section 42.4 Operating Requirements for a Return Collection Facility (the "Hazardous Waste Regulations"). We were unable to obtain sufficient appropriate evidence whether the collection facilities accepting household hazardous waste have conformed with the Hazardous Waste Regulations as the Association's management had not developed a process to evaluate this and as such, the information was not available. Consequently, we were unable to determine whether collection facilities participating in the BC Paint and Household Hazardous Waste Program that accept household hazardous waste had conformed to the requirements of the Hazardous Waste Regulations.

Qualified Conclusion

In our opinion, except for the effect of the matter described in the Basis for Qualified Conclusion paragraph, the Selected Information within Product Care Association of Canada's Annual Report for the BC Paint and Household Hazardous Waste Program for the year ended 31 December 2017 presents fairly in accordance with the evaluation criteria listed in Appendix 1, 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 sold and collected and, if applicable, the producer's recovery rate 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 further qualifying our opinion, the following should be noted regarding the information contained in the Annual Report:

1. The Selected Information in Section 6 - Pollution Prevention Hierarchy and Product/Component Management includes information related to the disposition of hazardous waste. The product management of hazardous waste is a multi-step process and shipments are tracked on government manifests. Shipments to the primary processor do not indicate the final treatment of products as this takes place at a secondary processor. Materials are comingled at the primary processor before being shipped to a secondary processor. Sample hazardous waste manifests indicating the expected disposition of products for shipments from the primary to secondary processors were obtained from 3 of the 4 hazardous waste primary processors. The final disposition of products shipped to the 1 processor where hazardous waste manifests were not available is based on questionnaire responses from these processors. As such, there is uncertainty surrounding the Selected Information contained in the Pollution Prevention Hierarchy section of Appendix 1 as it pertains to hazardous waste.



CHARTERED PROFESSIONAL ACCOUNTANTS

- 2. The Selected Information included in Section 7 specifically relating to Product Sold is based on self-reported member data. During the 2017 fiscal year, the Association performed internal member audits of 6 of the 144 members of the program and as such, the product sold data presented is subject to uncertainty.
- 3. No performance targets have been included in Section 9 of the Annual Report or in Appendix 1. The approved Program Plan contains targets for 2012 to 2016. At the date of the independent reasonable assurance report, the amended program plan, which will contain performance targets for 2017 and beyond, had yet to receive approval from the BC Ministry of Environment. As the performance targets in the amended program plan have not been approved by the BC Ministry of Environment, these have not been included in the annual report or the Selected Information.

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.

CHARTERED PROFESSIONAL ACCOUNTANTS

Holfe, Berson LLP

Vancouver, Canada 25 June 2018



Appendix 1

Evaluation Criteria

Collection facilities

Specific disclosures in the annual stewardship report from Section 4 - Collection Systems Information for which evaluation criteria were developed			
Disclosure per Annual Report	Reference		
Total number of collection facilities – 222	Table 1: Paint and Paint Plus Contracted Collection		
	Sites, 2016 and 2017; and:		
	Appendix A. Collection Site List as of December 31, 2017 (by Regional District)		
"As of December 31, 2017, PCA contracted with 222 permanent collection sites in British			
Columbia to provide convenient locations for consumers to drop off unwanted Program Products, an			
increase from 219 collection sites in the prior year."			
"3 Paint sites and 4 Paint Plus sites were added to the collection network in 2017, while 3 Paint sites and 1 Paint Plus were removed, representing a net increase of 3 sites from 2016."			

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 2017, 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.
- One day collection events are excluded from the listing 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 from Section 6 - Pollution Prevention Hierarchy and Product/Component Management for which evaluation criteria were developed

"PCA endeavours to manage collected products in accordance with the "pollution prevention hierarchy". This section details the measures that PCA follows with respect to each product category based on information provided by downstream processors, where available."

"The information detailed in this section was verified based on processor questionnaires or site visits of the various processors and the review of final disposition as indicated on hazardous waste manifests as applicable. 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."

"Shipment records evidencing the management of program product may include Certificates of Disposal, bills of lading or processor invoices and the review of final disposition as indicated on hazardous waste manifests as applicable. Shipment records evidencing the management of metal and plastic containers may include bills of lading, scale tickets or processor invoices."

Material: All Paint Excluding Aerosol (Paint Reuse Program)

"Reusable paint is given away at no charge through the Paint Reuse (previously Paint Exchange) program to members of the public and non-profit organizations to be used for its originally intended purpose."

"Based on monthly reports provided by collection sites, approximately 2.3% of the total volume of paint collected in 2017 was reused through the Paint Reuse program, down from 2.8% in 2016."

"Based on the estimate of paint containers being 75% full and compared against total recovery volumes."

Material: Latex Paint (Excluding Paint Reuse)	Table 5: Program Product End Fate
End fate:	(Excluding Paint Reuse) 2017
Recycling – 75.5%, Energy Recovery – 18.3% and Landfill	
-6.3%	

"PCA utilizes a number of options for latex (water-based) paint recycling. High grade recyclable water-based paint is reprocessed into paint and coatings products. The lower grade liquid recyclable paint (i.e., paint that is not suitable for paint to paint recycling) is used as a raw material in the manufacturing of concrete products (blocks, barriers, etc.)."

"According to shipment records, approximately 75.5% of the latex paint sent to downstream processors by the Program in 2017 was recycled utilizing one of the two options listed above."

- "According to shipment records, 18.3% of the latex paint sent to downstream processors was used as an alternative fuel in 2017."
- "...according to shipment records, 6.3% of unrecyclable latex paint and lower grade recyclable paint was solidified and diverted to a secure landfill in 2017."

Material: Alkyd Paint (Excluding Paint Reuse)	Table 5: Program Product End Fate
End fate:	(Excluding Paint Reuse) 2017
Energy recovery – 100%	

"According to shipment records, 100% of the oil-based pain consolidation facility in 2017 went to hazardous waste mana permitted/licensed facilities to be used for alternative energy	gement companies who then sent the paint to
Material: Flammable Liquids End Fate: Energy recovery – 100%	Table 5: Program Product End Fate (Excluding Paint Reuse) 2017
"According to shipment records, 100% of the flammable liquidownstream processors in 2017 went to a hazardous wastent permitted/licensed facilities to be used for alternative energy	nanagement company who then sent them to
Material: Pesticides End Fate: Incineration – 100%	Table 5: Program Product End Fate (Excluding Paint Reuse) 2017
"According to shipment records, 100% of pesticide production downstream processors in 2017 went to a hazardous waste permitted/licensed facilities for incineration."	
Material: Gasoline End Fate: Energy recovery – 100%	Table 5: Program Product End Fate (Excluding Paint Reuse) 2017
"According to shipment records, 100% of the gasoline shipp downstream processors in 2017 went to a hazardous waste n gasoline to permitted/licensed facilities to be used for alterna	nanagement company who then sent the
Material: Metal Containers End fate: Recycling – 100%	Table 5: Program Product End Fate (Excluding Paint Reuse) 2017
"Based on shipment records from the consolidation facility Program in 2017 from paint, flammable liquids, pesticides a	,
Material: #2 Plastic Containers End fate: Recycling – 100%	Table 5: Program Product End Fate (Excluding Paint Reuse) 2017
"According to shipment records, 100% of 5 gallon size #2 I containers shipped from the consolidation facility to downstr Furthermore, plastic containers from pesticides and flammab	ream processors were recycled in 2017.
Material: #5 Plastic Containers End Fate: Recycling – 64%, Energy recovery – 36%	Table 5: Program Product End Fate (Excluding Paint Reuse) 2017
"The Program managed 64% of plastic (polypropylene #5) o and 36% through energy recovery."	ne US gallon size paint cans through recycling

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 processor which is supported by shipping documents or processor invoices.
- Shipments of non-hazardous waste are supported by shipping documents indicating the type and amount of product received.
- Shipments of hazardous waste flow through a multi-step processing environment. Shipments to the primary processor are supported by the applicable government manifest which does not include information on the expected disposition of product by the secondary processor. Shipments from the primary processor to the secondary processor are supported by the applicable government manifest which includes co-mingled materials from other sources and information on the expected disposition as completed by the consignee after receiving the shipment. Sample hazardous waste manifests indicating the expected disposition of products for shipments from the primary to secondary processors were obtained from 3 of the 4 hazardous waste primary processors. Information on expected disposition from the other processor is obtained through a processor questionnaire on product management.
- The processors provide information on product management in an annual questionnaire. Questionnaire responses were received from all of the processors used by the Program.
- The Association performs periodic site inspections for certain of the non-hazardous waste processors' facilities. Site inspection criteria have been developed to confirm the responses in the questionnaire provided by the primary processor. The initial site inspections for the non-hazardous waste processors were performed in 2015 and 2016 and subsequent site inspections will be performed on a rotating five year schedule.

Product sold and collected and recovery rate

Specific disclosures in the annual stewardship report from Section 7 - Product Sold and Collected and Recovery Rate for which evaluation criteria were developed			
Disclosure per Annual Report	Reference		
Product Collected	Table 7: Approximate Total Collected Volumes		
Paint (non-aerosol) collected – 3,261,069 Litres	(residual recovery volume) for Paint, Paint Aerosols, Flammable Liquids and Pesticides (2016)		
Paint (aerosol) collected – 52,111 Litres	v. 2017)		
Flammable Liquids/Gasoline collected – 156,537 Litres			
Pesticides collected – 22,725 Litres			

[&]quot;Paint residual recovery volume was calculated using a conversion factor of 114.33 litres per tubskid, based on the average volume generated per tubskid over the full year 2017."

"Paint aerosol residual recovery volume was calculated using a conversion factor of 35.80 litres per tubskid, based on the average volume generated per tubskid that was processed over the full year 2017. Processing took place in 4 months during the year."

"Flammable Liquids/Gasoline residual recovery volume was calculated using a conversion factor of 190.09 litres per tubskid, based on the average volume generated per tubskid over the full year 2017. This does not include volume from flammable or pesticide aerosols."

"Pesticide residual recovery volume was calculated using a conversion factor of 100 litres per tubskid,

based on the average volume generated per tubskid that was processed over the full year 2017. Processing			
took place in 7 months during the year."			
Product Sold	Table 9 – Approximate Sales, Residual Recovery		
Paint (non-aerosol) sold – 30,339,801 Litres	Volume and Recovery Rates of Paint, Paint		
	Aerosols, Flammable Liquids and Pesticides (2017)		
Paint (aerosol) sold – 1,099,283 Litres			
Flammable Liquids/Gasoline sold – 2,992,811			
Litres			

"With regard to gasoline collection, members report the number of gasoline stations, not volumes of gasoline sold. Therefore sales volumes (in litres) for gasoline are not available and are excluded from the flammable liquids/gasoline category. Gasoline collected volumes are included in the residual recovery volumes for flammable liquids, as gasoline and other flammable liquids are processed together, and therefore indistinguishable."

"Volumes reported as "Sales (litres)" are estimated by converting units reported to PCA by its members and applying the typical residual container volume for each EHF category."

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Recovery Rate	Table 9 – Approximate Sales, Residual Recovery
Recovery rate Paint (non-aerosol) – 10.8%	Volume and Recovery Rates of Paint, Paint
	Aerosols, Flammable Liquids and Pesticides (2017)
Recovery rate Paint (aerosol) – 4.7%	
Recovery rate Flammable Liquids/Gasoline – 5.2%	
Recovery rate Pesticides – 18.1%	

The following evaluation criteria were applied to the assessment of the description of how 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) of the Recycling Regulation:

Product Collected

Pesticides sold – 125,869 Litres

- 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 units collected and the type of program materials collected which has been agreed upon by the shipper, receiver and carrier.
- The calculation of total litres of program materials collected is based on total units collected and converted to litres using the standard volume of containers used to collect the materials and the average litres of program materials collected from each container.

Product Sold

- The Association maintains a listing of product sold by product category for the fiscal year which agrees to the amounts disclosed in the Annual Report.
- The units of product sold per program category have been recalculated using the data included in the Association's audited financial statements. Data not included in the audited financial statements has been agreed to supporting documents and recalculated.
- The calculation of total litres of program material sold is based on total units sold converted to litres based on the average volume of the most popular container sizes sold as provided by the Association's members.

• Units sold are determined based on self-reporting by each member of the Program. A key source of information in determining the accuracy of units sold and reported to the Program by members is the internal audit process carried out on sales data reported by individual members. The Association has performed 6 internal audits of its 144 members' sales data for the 2017 fiscal year.

Recovery Rate

• The calculation of the recovery rate has been performed accurately using the appropriate sources of information for product collected and product sold.

Performance targets

Specific disclosures in the annual stewardship report from Section 9 - Performance Measures for which evaluation criteria were developed

"The 2012-2016 Program Plan did not set targets for 2017. Amendments to the Program Plan submitted to the Ministry have yet to receive approval at the time of the writing of this report. Accordingly, table 11 sets out the key performance measures for 2017, and strategies for performance improvement going forward."

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.