



NEWFOUNDLAND & LABRADOR

PAINT STEWARDSHIP PLAN 2018-2022

For submission to:
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1. Introduction

The 2018-2022 Newfoundland and Labrador Paint Stewardship Program Plan ("Plan") is submitted by Product Care Association of Canada ("PCA") to Multi Materials Stewardship Board (MMSB), pursuant to the requirements of the

E E (O.C. 2012-290) ("Regulation") issued under the *E E* (O.C. 2003-226).

The Plan covers the years 2018-2022. Subject to MMSB approval, the Plan replaces the PCA Stewardship Plan dated June 18, 2012 covering the period 2012 - 2015.

Sections 5 through 12 of the Plan address the required elements of a program plan as specified under section 31.6 of the Regulation.

2. Product Care Association of Canada

The Newfoundland and Labrador Paint Stewardship Program is operated and managed by 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.

PCA also operates paint stewardship programs in seven other Canadian provinces: BC, SK, MB, ON, NB, NS and PEI, as well as stewardship programs for other products such as household hazardous waste, smoke alarms, and lighting products in a number of provinces, including QC.

3. Program Membership and Program Funding

The Plan is submitted by PCA on behalf of brand owners of paint products who have appointed PCA as their agent under the Regulation (for a current list of brand owners see Appendix B – Newfoundland and Labrador Brand Owners). The Program is open to any brand owner to join, subject to agreeing to PCA's by-laws and membership agreement.

The Program is funded by Environmental Handling Fees (EHFs) paid to PCA by its members based on the quantity of designated products sold or supplied in Newfoundland and Labrador. The EHF is not a tax or a refundable deposit. According to section 31.14 of the Regulation, the EHF must be integrated into the product price and is subject to retail sales taxes; it may not be displayed at the time of retail sale as a separate charge.

EHF rates are set by PCA's Board of Directors and are subject to change as needed to ensure there are sufficient funds to operate the Program. Current EHFs for Program Products (as defined under section 5.1 of this Plan) are listed in Table 1Error! Reference source not found. below.

Table 1: EHF for Program Products as of February 2018

Paint container size ranges	EHF Rate
100 ml to 250 ml	\$0.20
251 ml to 1 litre	\$0.35
1.01 litres to 5 litres	\$0.70
5.01 litres to 23 litres	\$1.50
Aerosol paint (any size)	\$0.20

4. Financials

Program revenues are applied to the operation of the Program, including but not limited to administration, communication and public education, collection, transport, recycling and responsible disposal of collected residual products, as well as maintenance of a reserve fund. The Program's financial performance is tracked separately and segmented from PCA's other programs. A summary of the Program's audited revenues and expenses for 2016 is provided in Appendix A. The Program discloses its audited financial statements each year in its annual report, available on PCA's website (www.productcare.org).

The reserve fund is used to stabilize program funding in the case of unexpected fluctuations in operating costs or reduced revenue due to economic or other factors. The reserve fund is also intended to cover the cost of winding up the Program in the event of regulatory changes. The reserve fund policy is set by PCA's Board of Directors.

5. Program Products

Regulatory Requirement

31.6 (a): the collection of waste paint by the brand owner, including the collection of waste paint of other brand owners

5.1 Accepted Products

The Program is responsible for managing post-consumer leftover "paint" as defined in section 31.1(f) of the Regulation. The Regulation defines "Paint" as:

- i. a tinted or untinted latex, oil or solvent-based architectural coating used for a commercial or household purpose, and includes stain and the coating's container, or
- ii. a coloured or clear paint or stain sold in an aerosol container and includes the paint's or stain's container, but does not include coatings intended for marine antifouling or industrial applications.

For further clarity, the following are included as "Program Products". This list is subject to change by PCA.

- Architectural paint and related containers (including already empty containers) to a maximum container size of 25L, sold or supplied in Newfoundland and Labrador including:
 - Interior & exterior: latex, acrylic, water-based, alkyd, enamel, oil-based deck coatings and floor paints (including elastomeric)
 - Varnishes and urethanes (single component)
 - Concrete/masonry paints
 - Drywall paints
 - Primers (metal, wood)
 - Undercoats
 - Stucco paint
 - Marine paint (unless registered under Pest Control Act)
 - Wood finishing oils
 - Wood preservatives (unless registered under Pest Control Act)
 - Melamine, metal & anti-rust paints, stains, shellac
 - Swimming pool (single component)
 - Already empty paint containers
 - Stain blocking paint
 - Textured paints
 - Block fillers
 - Wood, masonry, driveway sealers or water repellants (non-tar/bitumen based)

The Program accepts Program Products sold in Newfoundland and Labrador regardless of the brand owner. The Program accepts Program Products from any consumer/user of Program Products including households, businesses, institutions and government and commercial painters as long as the leftover Program Products were generated in Newfoundland and Labrador.

5.4 Non Program Material

Non program materials, whether paint (e.g. industrial coatings) or non-paint products (e.g. paint thinners), introduce unfunded costs and safety hazards into the system and are not accepted. Minimization of non-program material is achieved through a comprehensive program of public education, signage at collection sites, collection site staff training, as well as effective regulatory enforcement against those who abandon products at or near collection sites. Any non-program material which does accidentally enter the system is segregated at the time of processing for special handling. Non program material includes, but is not limited to, the following:

- Paint for industrial use
- Paint containing pesticides (e.g., anti-fouling paints)
- Automotive paint (non-aerosol)
- Baked on coatings
- Craft paint (non-aerosol)
- 2 component epoxies
- 2 part paints
- Resins
- Traffic or line marking paint

- Deck cleaners
- Caulking compounds, epoxies, glues or adhesives
- Tar or bitumen based products
- Paint thinners, mineral spirits or solvents
- Household chemicals
- Brushes, bags and rollers
- Unlabelled or improperly sealed containers
- Non paint products

6. Management of Collected Paint

Regulatory Requirement

31.6 (b): the management of waste paint in adherence with the following, in order of preference:

(i) reuse

(ii) recycle

(iii) disposal in an engineered landfill

(iv) recovery of energy

6.1 Leftover Paint Management

The Program's objective is to eliminate the improper disposal of paint in the environment, while recovering the resources present in leftover paint. The following are the management options that the Program employs for the various Program Products in accordance with the hierarchy of management options under section 31.6(b) of the Regulation:

	Reuse	Recycle	Energy Recovery	Engineered Landfill	Incineration
Latex Paint	✓	✓		✓	
Oil-based Paint	✓		✓		
Aerosol Paint			✓		✓
Empty Paint Containers		✓		✓	

6.1.1 Reuse (Paint Reuse)

PCA has implemented a "Paint Reuse" program which gives away better quality returned paint (latex or alkyd) to the public at participating collection sites. This is an efficient way to manage leftover paint as the product is used for its intended purpose, and does not require transportation and reprocessing. However, this may reduce the volume and quality of paint available for reprocessing. Not all paint is of quality that can be used in the Paint Reuse program. In some cases the paint may be contaminated or in the form of skin/sludge, making it unsuitable for Paint Reuse.

In 2016, 21 collection sites offered paint reuse, including Green Depots and local government waste facilities. Participation in the Paint Reuse program is voluntary and can be limited by factors such as storage space, weather conditions and staff availability.

In the four year period 2013-2016, approximately 28,500 litres of paint were reused through the Paint Reuse program.

Consumers receiving paint from the Paint Reuse program take the product "as is" and are informed that there is no guarantee regarding the suitability of container contents. Collection site staff apply special labels to each container for this purpose and consumers are required to sign a waiver form prior to taking the paint for reuse.

The Program will continue its efforts to expand the Paint Reuse program.

6.1.2 Latex Paint

Currently, waterborne (latex) paints make up more than 90 per cent of paint products on the market. Recovered latex paint is first sorted by quality. The higher quality latex paint is then consolidated by colour, in preparation for recycling. Lower quality latex paint, which is not suitable for recycling, is stabilized and sent to an engineered landfill. Canadian and overseas markets for recycled latex paint continue to grow, influenced by increased consumer awareness and acceptance of "green" building products.

6.1.3 Oil-Based Paint

Sales of oil-based (alkyd) paint continue to decline, due to regulations addressing volatile organic compounds (VOC) and other factors, and currently represent less than 10% of the architectural paint market. Similarly, while technology exists for "paint to paint" recycling of alkyd paints, the market for the product is very limited and continues to decline due to stricter VOC regulations affecting alkyd paint, as well as technological advancements in the manufacture of latex paint. Alkyd paint that can be recycled as paint is limited to specific colours for specific applications. The remaining recovered alkyd paint is utilized for its energy value, blended with other hydrocarbons as an alternative fuel in licensed facilities, such as cement kilns with high level air quality controls.

6.1.4 Aerosol Paints

The quantity of paint recovered from paint aerosols is very limited and consists of a variety of product formulations that limit the options for recycling. In order to be processed, paint aerosols are punctured, the contents drained and the propellant captured in activated carbon filters. The residual paint is used for energy recovery and the steel containers are recycled.

6.1.5 Empty Paint Containers

The ability to recycle empty containers (metal and plastic) is dependent on a number of factors including, but not limited to, availability of recycling technology, reasonable accessibility to recycling facilities, commodity market pricing, etc.

Steel containers are generally recyclable subject to market conditions. Options to recycle plastic containers are more limited. Containers that cannot be recycled are disposed of responsibly.

6.1.6 Non Program Material

Non-program material which enters the system is segregated at the processing stage for shipment to a hazardous waste management company for processing and management. Depending on material type,

processing methods for non-program material include physical or chemical treatment, energy recovery, incineration or landfilling.

7. Design for Environment

Regulatory Requirement

31.6 (e): a description of the efforts being made by the brand owner to redesign paint products to improve reusability and recyclability

31.6 (j) the elimination or reduction of the environmental impacts of waste paint

The overall program objective is to reduce the environmental impact of leftover paint through the application of the pollution prevention hierarchy (reduce/reuse/recycle). However, most brand owners manufacture for a market area that includes more than one province or country, limiting the ability for a stewardship program of this scope to influence how products are designed.

Nevertheless, there are several significant trends that are improving the environmental footprint of paint products. There has been a steady shift in the marketplace from oil based (alkyd) paints to water based (latex) paints due to a number of factors, including:

- Consumer preference for more environmentally friendly products;
- Advanced water based coating technology providing similar product performance as oil based technology; and
- Regulatory requirements such as Environment Canada's *E* which sets limits for VOCs for a number of coatings including architectural coatings. These new regulations require coatings manufacturers to switch to low VOC formulations.

This trend is expected to continue as consumer preference for latex paint increases and technical specifications improve.

In addition, the Program utilizes the following tools to minimize the environmental impact of leftover paint:

- Fee rates paid to the Program by brand owners based on container size;
- Promotion to the consumer of the "B.U.D" rule, i.e. Buy what you need, Use what you buy and Dispose of the remainder responsibly;
- Consumer education on the proper storage methods for leftover paint;
- Operation of a paint reuse program whereby leftover paint is made available to the public free of charge; and
- Research into alternative management options for collected materials.

8. Local Economic Benefits

Regulatory Requirement

31.6 (f): a description of the efforts made by the brand owner to maximize the local economic benefits created through the implementation of the paint stewardship plan

Program implementation provides economic benefits within Newfoundland and Labrador. A local program coordinator helps to manage the operation of the Program. The Program utilizes existing collection sites in the Province, and the added activity can result in increased revenue and employment opportunities for those facilities. The Program contracts with transportation services for pickup from collection sites using in-province service providers. The high cost of transportation to and from Newfoundland and Labrador provides an incentive to the Program to manage as many functions within the Province as possible. Communication activities, such as the printing of program materials, are also conducted within the Province.

In 2014 the Program contributed funding to the Harris Centre – MMSB Waste Management Research Fund at Memorial University for a three year period, for the purpose of stimulating research activities related to Newfoundland and Labrador’s solid waste management.

9. Communications and Public Awareness

Regulatory Requirement

31.6(g): a communications plan for informing consumers of the brand owner’s paint stewardship plan and the location of all return collection facilities, in addition to the brand owner’s obligations under section 31.13

The following describes the Program communications strategy for Newfoundland and Labrador. The Program will inform MMSB of planned communication tactics used by the Program on an annual basis.

9.1 Insights

PCA obtains information about the interaction of consumers with paint from a number of sources, including surveys, sales data, industry research, observations from PCA staff visits to communities around the Province, as well as the experience gained from operating the Program since inception.

Through these sources the Program can better assess, among others:

- Who purchases and uses Program Products;
- When consumers consider recycling Program Products;
- Where consumers go to find information about recycling programs;

This information is then used to inform the Program’s strategies for raising consumer awareness.

Findings from these various sources suggest the following about consumer behaviour:

- Program Products are infrequently purchased by consumers.
- Sales data indicates that Program Products are primarily used seasonally, through spring, summer and early fall.

- Consumers seek information about recycling Program Products from a wide variety of sources with a large majority indicating that they learned about the Program through the internet and through various mass media channels (TV, radio, print advertising).
- Consumers tend to keep leftover paint for future reuse and only decide to dispose of it when the product is no longer needed or usable.

PCA considers a number of variables when setting consumer awareness targets. While the above-mentioned consumer behaviour insights play a role, there are several other factors that influence consumer awareness levels. These include:

- Program lifecycle. Experience with other stewardship programs indicates that programs go through a number of phases: launch, growth, maturity. Subject to variations, programs generally experience rapid growth in awareness during the launch phase, followed by strong annual increases in the program's first five years, followed by slower growth and then stabilization.
- Consumer usage patterns. Paint is a product that is used by only a portion of the population, and on an infrequent basis. Most households will only use paint every 5-7 years and then store the leftover product for even longer intervals before deciding to recycle. Studies show that a high percentage of homeowners purchase paint, but only a minor proportion of renters. Virtually all households indicate that one person in the household is responsible for recycling Program Products. Therefore, it is reasonable to expect that awareness levels will be lower than for stewardship programs of other products that are consumed on a regular and frequent basis.
- Product seasonality. The length of the Province's painting season has an impact on the duration of time when paint is "top of mind" (ie. being purchased and used by consumers). Newfoundland and Labrador has a shorter painting season compared to most other provinces, which results in a shorter period of consumer attention.
- Incremental Cost. Increasing awareness levels requires significant resources. Furthermore, as awareness levels increase, so does the incremental cost of further increases. Any communication plan must consider the return on investment.
- Stakeholder participation. Awareness levels are enhanced when communication and education activities are shared with community partners. Other provincial paint programs have seen significant boosts in awareness where local government and communities promote the program. The Program continues to explore opportunities for providing messaging through local community channels.
- Visible fees. Other product stewardship programs in the Province and elsewhere have the benefit of fees being visible to the consumer, which increases consumer awareness of the program at point of sale. Regulations do not permit the visible fee option for paint in Newfoundland and Labrador.
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9.2 Communications Strategy and Direction

Marketing is a rapidly evolving landscape, with new technologies and the way consumers access information changing constantly. Consequently, strategies and tactics can be expected to be adjusted from time to time throughout the life of the Plan. Based on the available information on consumer attitudes and consumption patterns, the Program intends to continue to use a broad range of tactics to educate consumers during peak use periods, ranging from general messaging via mass media to behaviour-specific messaging through targeted channels, such as social media. Various potential tactics are detailed below.

Internet

- Program Website: Provides information to NL residents on:
 - Collection site locations and hours of operation
 - Description of products accepted by the program
 - Details on applicable environmental handling fees and economic benefits of the Program
 - Annual reports and other program information
 - Information for consumers on buying the right amount of paint as well as the safe storage and handling of Program Products
- Website Links: Links between the Program's website and websites of third parties, such as regional governments, improve the Program's search engine ranking, provide third-party validation, and improve accessibility to Program information.
- Social Media: Social media channels, such as Facebook, Twitter, Instagram and YouTube that serve to communicate and engage the public, are used to share educational content about the Program and respond to comments and questions received. Social media also provides an opportunity to create and disseminate targeted messaging. For example, since selling or cleaning a home are the top reasons for recycling, the Program can target those who "like" topics, brands and channels related to home improvement. The Program is also able to target those who like/follow retailers who sell Program Products to develop awareness at the beginning of the Product's lifecycle.
- Search Engine Marketing (SEM) and Digital Advertising: Targeted digital ads, including Google Display and Google Search ads, that target people who are searching for information related to Program Products (e.g. "Where can I recycle paint", "Where can I buy paint", etc.). Digital advertising tools also target those who have previously visited the Program's website and "retargets" them with digital advertisements.

Point of Sale and Return

- Point of Sale (PoS) Materials: Program brochures, posters and other informational materials available to retailers to provide to consumers. The Program regularly updates and replenishes materials upon request, free of charge.
- Point of Return Materials: Program signage for display and counter cards to distribute to consumers. The Program consults with collection sites to identify the type of materials and messaging to best engage consumers.

Traditional Advertising

- Traditional Media Channel: Advertising run via traditional media channels in order to promote public education and awareness of programs. Campaigns may include general awareness campaigns, as well as campaigns focused on specific communities as needed. Potential mediums include TV, radio and print advertising.
- Earned Media: Pitches on newsworthy topics to traditional media reporters in an attempt to gain coverage to promote program awareness.

9.3 Consumer Awareness

In order to measure the awareness of the Program, PCA utilizes a third party research firm to conduct biannual consumer awareness surveys that gauge consumer awareness of recycling options for paint. Surveys are conducted in a manner that recognizes the demographic distribution of the provincial population.

PCA has conducted three consumer awareness surveys since Program inception. As expected with a new program, awareness levels have increased significantly since inception, reflecting the efficiency of the Program's communication tactics.

Taking into account the many considerations detailed above, the Program expects to see continued growth in consumer awareness. It is PCA's aim to achieve steady incremental growth in awareness throughout the term of this Plan, maintaining an awareness level between 60-70% by 2022. Providing a range takes into account fluctuations from year to year, margins of error in consumer awareness surveys and fluctuations in Program revenues.

PCA will continue to conduct public awareness surveys every two years to monitor consumer awareness levels. Awareness levels, along with an overview of the survey methodology, will be published in the Program's annual report.

9.4 Strategic Directions

PCA will continue to build upon the communications methods developed since inception of the Program by introducing the following tactics.

- a) Ensure relevance of messaging. PCA aims to speak to its audiences in a tailored manner based on available demographic information.
- b) Educate before, during and after purchase. Educating the general public (whether likely paint users or not) is critical to ensuring general understanding that paint can, and should, be recycled. The Program also aims to educate directly relevant audiences at point of sale and after purchase to ensure they are educated at all stages of product engagement. This ensures maximum opportunity for education.
- c) Collaborate with industry stakeholders. Service partners, government groups, industry and trade organizations, MMSB, and other product stewards offer opportunity to collaborate to promote recycling. The Program will work to create synergies wherever possible in order to maximize in-market presence and reach of message.
- d) Promote website as central information hub. The Program website houses all core content that consumers and stakeholders need to know about the Program and can be accessed whether they are at home, work or on the move. The primary call-to-action of communications efforts is to drive stakeholders to the website to access such information, such as the collection site locator and the accepted products guide.
- e) Go where the people are looking for information. While the majority of Newfoundlanders said they learned about the Program through word of mouth, the second highest source of awareness was traditional media

advertising (print, TV and radio), followed by internet and social media. As such, PCA ensures a multi-channel approach to consumer awareness

10. Collection and Transportation System

Regulatory Requirement

31.6(h): the establishment of return collection facilities that will ensure reasonable and free consumer access for the return of waste paint and paint containers

10.1 Collection System

PCA does not directly own or manage any collection sites, but rather contracts with collection sites such as paint retailers, Green Depots, local government recycling centres, transfer stations and landfills. In 2015, the Program offered 57 permanent, year round collection sites in Newfoundland and Labrador providing free and convenient locations for consumers to drop off unwanted Program Products. Twenty collection sites offered Paint Reuse as well. A complete list of collection sites is available on the Program's website.

The Program will continue to maintain permanent collection sites in or near the following seventeen communities as prescribed by MMSB, including three locations in St. John's:

Bay Roberts	Gander	Mount Pearl
Carbonear	Grand Falls	Port Aux Basques
Clarenville	Happy Valley-Goose Bay	Port Aux Choix
Conception Bay South	Labrador West	St. John's (3 locations)
Corner Brook	Lewisporte	Stephenville
Deer Lake	Marystown	

The Program will continue to provide collection service in the form of either a permanent site or a collection event in or near the following additional 31 communities as prescribed by MMSB:

Baie Verte	Hopedale	Rigolet
Black Tickle	La Scie	Riverhead
Bonavista	L'Anse au Loup	Robert's Arm
Botwood	Makkovik	Rocky Harbour
Burgeo	Mary's Harbour	Springdale
Cartwright	Nain	St. Alban's/Milltown
Charlottetown	New Wes Valley	St. Anthony
Dunville	New Wold Island	St. Lewis
Fogo	Pasadena	Twillingate
Gambo	Port Hope Simpson	
Glovertown	Postville	

For targeted communities in remote areas serviced by collection events that have experienced low historic collection volumes in the past, the Program will assess the need for maintaining collection services in each of these communities on an ongoing basis. Program research indicates that in some remote communities residents tend to do a great job of using up all their paint, leaving very little to return, and hence no demand for the collection service.

In addition, collection sites that are capable of handling large volumes are designated as “preferred collection sites” for commercial painters. Consumers are requested to provide advance notice of large volumes to ensure collection sites are able to properly receive, handle and store product at the collection site.

The Program will continue to monitor accessibility for residents throughout Newfoundland and Labrador and where gaps are identified, will assess and determine if strategies to improve accessibility is required, in consultation with MMSB. To augment the permanent collection network, the Program will continue to evaluate and consider other opportunities such as:

- Program-sponsored collection events, possibly in partnership with a retailer, local government or other stewardship agencies, where feasible and deemed necessary
- Participating in joint collection events with other organizations and programs

10.1.1 Collection Site Procedures

The Program enters into contracts with each collection site, which covers respective roles and responsibilities. A collection site procedures manual is maintained by PCA and distributed to all collection sites and communities that host collection events. The manual includes information on the following:

- Management requirements
- Program Product information
- Collection site requirements
- Operational procedures
- Reporting requirements

The Program coordinates transportation logistics for the collection system, arranging the drop off of empty collection containers and pick up of full containers. The Program will strive to visit all collection sites bi-annually to ensure adequate training and performance.

10.2 Transportation and Consolidation

Transporters contracted by the Program attend each collection site to pick up full collection containers of collected paint, and to drop off empty collection containers and any related supplies.

Full paint collection containers are transported to a consolidation hub where full trailer loads are assembled for transport to the processor. Emptied collection containers are stored for redistribution to collection sites.

The Program’s shipping documentation is available to MMSB upon request.

10.3 Risk Management

PCA has an approved environmental management plan with the NL Department of Environment and Conservation, which satisfies the Province's regulatory requirements related to the collection and transportation of waste paint.

PCA is cognizant of the need to minimize the potential for environmental incidents when handling waste paint. PCA works with its partners (collection sites, transporters and processors) to ensure compliance with environmental regulations and best environmental practices with respect to the collection, transportation and consolidation of leftover paint.

The Program's environmental risk management system includes:

- System wide shipping documentation
- Tracking of individual shipments from point of collection to recycling and disposal
- Requirement of certificates of disposal and recycling
- Use of only reputable recyclers
- Due diligence reviews of collection sites to ensure compliance
- Development of "recycler standards" as necessary
- Development of best management practices, including training, reporting and guidelines etc. for collection sites and transporters
- Maintenance of an environmental impairment insurance policy

In addition, processors and recyclers are required to track residual volumes collected and how those volumes are managed, with the exception of paint aerosol volumes which are estimated based on data from other programs. The information provided is used for tracking and auditing purposes.

11. Independent Assessment of Plan Performance

Regulatory Requirement

31.6(i): the assessment of the performance of the brand owner's plan by an independent auditor

According to the requirements of MMSB, an annual assessment of the performance of the Program will be conducted by MMSB and PCA following the year end.

12. Performance Measurements

Regulatory Requirement

31.6(c): the brand owner's expected capture rate

31.6(d): the brand owner's plan for achieving at least a 70% reuse rate

Measuring a program's performance requires a range of performance indicators and trends to be taken into consideration, depending on the product. As noted previously, unlike some traditionally stewarded products,

which are durable or consumed frequently, such as electronics and beverage containers, paint is a consumable product that is used infrequently by consumers. In addition, consumers do not immediately view leftover paint as a waste product requiring disposal. Program performance is also a function of program longevity and in some cases, performance measures are influenced by factors beyond a program's control, such as market conditions and changes in consumer behaviour. Recognizing these limitations, PCA will report on the following measures on an annual basis:

- Residual Recovery Volume
- Recovery Rate
- Tubskid Count

12.1 Residual Recovery Volume

Reference to volumes of residuals collected as a measure of Program performance presents some unique challenges in the context of paint products. Unlike some other stewarded products, such as tires, and electronics, Program Products are consumable products that don't necessarily have an expiry date after which they are no longer usable. Studies have shown that residents tend to keep Program Products in their possession for years after initial use. Program Product is only considered waste at the point where the consumer no longer values it or determines they no longer have any use for it. Factors such as the consumable nature of the product, varied product life expectancy, and consumer behavior make it difficult to evaluate program performance based on residual volumes.

Residual recovery volume (RRV) represents the actual quantity of residual paint collected by the Program, measured in litres. In the context of paint, both an increase and decrease in RRV can suggest improvements in Program performance. An increase in RRV shows that more paint is being recovered. However, a decrease in RRV can be an indication that consumers are being more efficient in the use of their paint and exercising the B.U.D. rule. Therefore, while RRV is acknowledged as an important indicator of program performance, it must not be evaluated in isolation but in context with other metrics, such as the accessibility of the network and consumer awareness. As detailed in section 0 and 10, the Program exceeds expectations in term of accessibility and continues to show growth in consumer awareness. PCA will continue to analyze these metrics to continuously improve the Program.

Table 2 indicates recovered volumes and recovery rates since the start of the Program. The Program will continue to report the residual recovery volumes in the annual report.

Table 2: NL Paint Sales, Residual Recovery Volume and Recovery Rate

	2012*	2013	2014	2015	2016
Sales (L)	2,882,235	4,258,282	3,918,948	3,704,464	3,654,562
Residual Recovery Volume (L)	82,565	161,083	133,019	162,901	173,109
Recovery Rate (%)	2.8%	3.7%	3.4%	4.4%	4.7%
Change y/y (%)	-	0.9	-0.3	0.9	0.3

* 2012 was a partial year. The Program began in April 2012.

12.2 Recovery Rate

The recovery rate compares the volume of product collected in a given year to the volume of product sold in that same year:

$$\text{Recovery Rate} = \frac{\text{Litres of paint collected}}{\text{Litres of paint sold}}$$

The quantity of paint collected is derived from collection and processing data. The quantity of paint sold is determined from sales reports provided by Program members.

While recovery rate is acknowledged as an important indicator of program performance, there are several important reasons to evaluate it in context, not in isolation. It is in fact a ratio of two values which can be influenced by different factors in a given year, such as population change, market conditions and consumer purchasing behaviour. Despite a higher recovery volume and consumer awareness in a given year, the recovery rate can decline in comparison to previous years if sales have increased at a higher rate. On the other hand, a decrease in recovery rate may reflect improved program performance if consumers are using paint more efficiently. It is important to look at trends over time. For instance, the recovery rate for the New Brunswick PaintRecycle program decreased by 0.7 per cent between 2011 and 2013 despite a four per cent increase in the level of consumer awareness during the same period. In the context of Newfoundland and Labrador, lower recovery rates compared to other provinces may reflect a better utilization by consumers of the purchased product.

In this context, the Program will report the recovery rate on an annual basis, aiming for an average 0.25% annual increase from the 2016 baseline year rate of 4.7%, resulting in a 6.2% annual recovery rate in 2022.

Although Regulation requires the Program to report out on capture rate¹, it is not a metric used to gauge program performance for several reasons. First, it is difficult to determine the quantity of leftover paint available to collect with any precision because paint is a consumable product. Second, consumers often store leftover paint for years before they decide it is a waste material requiring disposal, and even then the paint may remain in storage for a considerable period of time until the consumer has a change of circumstances, such as the sale of a residence.

12.3 Tubskid Count

The Program utilizes plastic reusable pallet sized containers for the collection and transportation of leftover paint, as shown in the photograph below. Tubskid volume provides an alternative volumetric measure of the recovered product. As with other indicators, tubskid count should be used in combination with other measures to assess program performance. For example, the Program collected fewer tubskids in 2015 compared to 2014, however the residual recovery volume was higher in 2015 than 2014. As with recovery rate, tubskid count can fluctuate year to year based on factors beyond the Program's control, including market conditions and

¹ "Capture rate" compares the volume of paint recovered against the volume of paint "available to collect" (i.e. the amount of waste paint estimated to exist in the marketplace in that year).

consumer behaviour. The Program will report out on the number of tubskids collected annually by collection sites and by collection events organized by PCA.

Figure 1: Tubskid of collected paint



12.4 Reuse Rate

The Regulation requires that the Program must achieve an annual 70% Reuse Rate. Section 31.1 of the Regulation defines Reuse Rate as “the amount of paint (excluding containers) reused under a paint stewardship plan divided by the amount of paint (excluding containers) collected that may be reused, expressed as a percentage”. With respect to waste paint, the term “reuse” includes any paint that is capable of being used by a consumer as paint:

$$\text{Reuse Rate} = \frac{\text{Reuse volume (Paint Reuse)} + \text{volume of paint recycled}}{\text{Total volume of paint processed}}$$

Factors that can affect the Reuse Rate include:

- Condition of returned paint
- Capacity of paint reprocessing facilities
- Current technology for reprocessing paint
- Markets for recycled paint

The Program uses “paint volume processed” instead of “residual recovery volume” in order to calculate the reuse rate. Paint volume processed reflects the actual volume of paint either donated without processing for reuse, or processed for recycling as paint during a given period whereas residual recovery volume is limited to the actual amount of paint recovered from paint cans. Residual recovery volume is also not used to calculate the reuse rate because not all the paint that is collected in one year is necessarily processed in that same year.

13. Annual Report

As required under Section 31.12 of the Regulation, the Program reports on each of the following measures on an annual basis:

- The total amount of waste paint collected in the province by the brand owner;
- The total amount of waste paint processed or in storage;
- The percentage of waste paint collected that was reused, recycled, contained, or otherwise treated;
- A description of the types of processes utilized to reuse, recycle, contain, or otherwise treat or dispose of waste paint;
- A description of efforts to redesign paint products to improve reusability and recyclability;
- The location of all return collection facilities;
- The location of consumer information, educational materials and strategies adopted by the brand owner;
- The annual financial statements prepared by an independent auditor of the revenues received and the expenditures incurred by the paint stewardship plan;
- An assessment of the performance of the brand owner's plan prepared in partnership with the board; and
- Other information requested by the board that relates to the paint stewardship plan.

In addition, the Program will report year over year results on the following items:

- The number of Brand Owners registered with the Program;
- The volume of paint sold, collected and the corresponding recovery rate;
- The volume and percentage of paint processed by each product management method;
- Summary financials, including annual surplus/deficit, as shown in Appendix A below;
- The total number of collection site visits completed during the year and any significant findings; and
- The percentage of non-program products collected with Program Products (by units).

Appendix A – 2016 Program Finance

	2016
Program Revenues	\$ 806,191
Program Expenses	
Collection	\$ 62,170
Transportation	\$ 182,673
Processing	\$ 303,200
Communications	\$ 63,126
Administration	\$ 82,395
Regulatory	\$ 7,172
Total Program Expenses	\$ 700,736
Surplus / (Deficit) from Operations	\$ 105,455

Appendix B – Newfoundland and Labrador Brand Owners

List of 63 brand owners who have appointed Product Care Association as their Agent for the Newfoundland and Labrador Paint Stewardship Program, as of March 13, 2017.

Pro Form Products Limited	Les Produits Techni-Seal Inc.
7594828 Canada inc. (o/a Ace Canada)	Saman Corporation (3777472 Canada Inc.)
WalMart Canada Corp	Sika Canada Inc.
Kleen-Flo Tumbler Industries Ltd.	Calibre Environmental
Dynamic Paint Products Inc.	The North West Company LP
Cloverdale Paint Inc.	Sansin Corporation
Behr Process Corp.	Laurentide re-sources Inc
Benjamin Moore & Co. Ltd.	Kent Building Supplies
Acklands-Grainger Inc	Peintures MF Inc.
The Sherwin-Williams Co.	Produits de Plancher Finitec Inc
Home Hardware Stores Limited	Alexandria Moulding
Canadian Tire Corporation, Ltd.	Wood Essence Distributing
General Motors Corporation	Denalt Paints Ltd
Princess Auto Ltd.	1439174 Ontario Ltd dba NLS Products
Plasti Kote Co., Inc. (Valspar)	BASF - The Chemical Company
RONA Inc.	PPG Industries Inc. (Vanex Inc)
Home Depot of Canada Inc	Loop Recycled Products Inc.
PPG Architectural Coatings Canada Inc.	Country Chic Paint
Michaels Stores Inc.	Motion Industries (Canada), Inc.
John Deere Canada ULC	Soprema Inc.
Fastenal Canada Ltd	Kubota Canada Ltd

Class C Solutions Group, MSC Industrial Supply LLC	Bestbuy Distributors Ltd
Orgill Canada Hardlines ULC	UCP PAINT INC
CBR Products	Sto Canada Ltd
Seymour of Sycamore Inc.	Sherwin-Williams Canada Inc
Timber Pro Coatings Ltd.	Wurth Canada
Henry Company Inc	Diamond Vogel Paints Inc
Ducan Products Inc.	Avanti Sports Group Inc.
Rust-Oleum Consumer Brands Canada	Green Tech Resurfacing Ltd
Cansel Survey Equipment	Amazon.com.ca, Inc.
Sobeys West Inc	Lawson Products Inc
LPS Canada - Division of LPS Laboratories	