



PRINCE EDWARD ISLAND PAINT RECYCLING PROGRAM ANNUAL REPORT 2016

For submission to:
Prince Edward Island
Department of Communities,
Land and Environment

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1.0 About Product Care Association of Canada

Product Care Association of Canada (“PCA”) administers and operates the PEI Paint Stewardship Program (“Program”). The Program is approved by the Prince Edward Island Department of Communities, Land and Environment under the *PEI Materials Recycling Regulations* (“Regulation”) and has been in operation since September 2012. PCA, on behalf of its members, oversees the administration, collection, transportation, recycling and management of all designated consumer paints products. In addition, the Program is responsible for fostering consumer awareness of the Program.

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 has developed and managed paint, household hazardous waste and special waste stewardship programs since 1994.

PCA’s members are the “brand owners” (manufacturers, distributors and retailers) obligated by the Regulation under the category of architectural paint.

PCA also operates the LightRecycle stewardship program for lamps in Prince Edward Island.

1.1 Report Period

This report covers the Program from January 1, 2016 to December 31, 2016.

1.2 Program Summary

The Prince Edward Island Paint Recycling Program offers collection sites throughout the Province to which consumers can bring leftover household paint free of charge. Six collection sites are operated by Island Waste Management Corporation under contract with PCA

The Program is funded by Environmental handling fees (EHFs) remitted by PCA’s members based on the volume of sales of designated consumer paint products that is sold into the Province (see Appendix 1 for 2016 EHF rates).

PCA supplies collection sites with standard reusable collection containers, such as tubskids and drums. A hauler contracted by the Program collects the filled containers from the collection sites and drops off empty containers. The full collection containers are shipped to a processor for recycling. PCA also manages additional elements of the Program, including revenue management, communications and administration.

2.0 Brand Owner Sales Information

Program members reported an estimated liquid volume of 1,004,461 litres of program products sold in PEI from January 1 to December 31, 2016.

3.0 Collection

The following section provides the total amount of waste paint collected in PEI, as well as the location of the Program’s collection sites.

3.1 Total Amount of Waste Paint Collected

Table 1 shows the number of collection containers collected and the amount of waste paint collected by the Program for the reporting period.

Table 1: Total Amount of Waste Paint Collected in 2016

| | Number of Tubskids ¹ | Residual Paint Volume ² | Number of Aerosol Drums | Residual Aerosol Paint Volume ³ | Paint Reuse Volume (L) | Total Residual Paint Volume |
|------------------------------|---------------------------------|------------------------------------|-------------------------|--|------------------------|-----------------------------|
| Waste Paint Collected | 610 | 95,146 | 50 | 972 | 323 | 96,441 |

Table 2 provides the Program’s recovery rate, based on the volume of paint collected as a function of volume of paint sold in PEI in 2016.

Table 2: 2016 Paint Sales, Residual Recovery Volume and Recovery Rate

| | Total |
|-----------------------------------|-----------|
| Sales (litres) | 1,004,461 |
| Residual Recovery Volume (litres) | 96,441 |
| Recovery Rate | 9.6% |

¹ Each collection bin measures 42 x 42 x 48” and with a nominal capacity of 108 one gallon containers. The actual number of paint containers per bin varies depending on the mix of paint container sizes, ranging from 250ml – 18.9L capacity.

² Based on a rounded conversion rate of 155.9 L per tubskid determined by the average volume of material generated during processing. Residual paint volume does not include paint handled through the Paint Reuse Program.

³ Based on a rounded conversion of 64.8 L per drum determined by the average volume of material generated during processing. One drum equals to 0.3 tubskids. The final rounded conversion rate is therefore 19.4L.

3.2 Collection Sites

As of December 31, 2016, six collection sites participated in the Program. All six collection sites are operated and managed by Island Waste Management Corporation. See Table 3 for the list of collection sites. Appendix 2 contains a provincial map of the collection site locations.

Table 3: 2016 PEI Collection Sites

| Collection Site | Address | City |
|---------------------------------------|----------------------------|--------------------|
| GreenIsle | 8 Superior Crescent | Charlottetown |
| Brockton | 2202 Dock Road Rte # 150 | Elmsdale |
| New London | 10142 Rte #6 | Green Gables |
| Murray River | 378 Cape Bear Road Rte #18 | Murray River |
| Dingwells Mills | 100 Selkirk Road Rte #309 | Souris |
| East Prince Waste Management Facility | 29786 Rte #2 | Wellington Station |

4.0 Processing

This section of the report sets out the following:

- a) The total amount of waste paint processed or in storage;
- b) The percentage of waste paint collected that was reused, recycled, disposed of in an engineered landfill, recovered for energy, contained, or otherwise treated or disposed of;
- c) A description of the types of processes utilized to reuse, recycle, dispose of, recover energy from, contain, or otherwise treat or dispose of waste paint;
- d) A description of the efforts to redesign paint products to improve reusability and recyclability; and
- e) The location of processing or containment facilities for waste paint.

4.1 Location of Processing Facilities

The following is a list of facilities contracted by the Program to handle and process consumers paint products.

| | |
|--|---------------------|
| Laurentide Resources Atlantic Inc. 100 Main Street Springhill, NS B0M 1X0 | Processing Facility |
| Laurentide Re-sources Atlantic Inc. 9322 Rue Main Richibucto, NB E4W 4C7 | Storage Facility |
| Société Laurentide Inc. 345 Bulstrode Street Victoriaville, QC G6T 1P7 | Processing Facility |
| Terrapure Environmental 17 Jones Court Sussex, NB E4E 2S2 | Processing Facility |

4.2 Waste Paint Processed

In 2016, a total of 660 collection containers were shipped to Laurentide (Springhill) and Terrapure facilities for processing (see Table 4).

During the reporting period, Laurentide (Springhill) and Terrapure processed (i.e., opened, sorted and bulked into shipping containers) 689 collection containers, including collection containers that remained in their inventory from 2015.

Volumes collected but not shipped, or shipped but not processed, were managed in the following program year.

Table 4: Total Amount Waste Paint Processed in 2016

| Item | Number of Tubskids ⁴ | Residual Paint Volume ⁵ | Number of Aerosol Drums | Residual Aerosol Paint Volume ⁶ | Total Residual Paint Volume |
|-----------------------------|---------------------------------|------------------------------------|-------------------------|--|-----------------------------|
| Shipped to Processor | 610 | 95,146 | 50 | 972 | 96,118 |
| Processed | 641 | 99,973 | 48 | 933 | 100,906 |

Information on the management of containers 2016 is found in Table 5.

Table 5: Container Management 2016

| Container Type | Recycled (Tonnes) | Processor | Management Process |
|------------------------------------|-------------------|---|--|
| Metal | 25.7 | Tri-Province Recycling, NB | Mixed with other scrap metal and sold as a commodity that is eventually sent for smelting |
| Plastic pails (HDPE 2) | 0.85 | Laurentide Re-sources Atlantic (Springhill) | Combined and baled with other plastics and managed as a commodity for plastics recycling or sent for reuse |
| Plastic paint cans (polypropylene) | 4.06 | Laurentide Re-sources Atlantic (Springhill) | Processed and managed as a commodity for plastics recycling |

⁴Each collection bin measures 42 x 42 x 48” and with a nominal capacity of 108 one gallon containers. The actual number of paint containers per bin varies depending on the mix of paint container sizes, ranging from 250ml – 18.9L capacity

⁵ Based on a rounded conversion of 155.9 L per tubskid determined by the average volume of material generated during processing. Residual paint volume does not included paint reuse volume.

⁶ Based on a rounded conversion of 64.8 L per drum determined by the average volume of material generated during processing. One drum equals to 0.3 tubskids. The final rounded conversion rate is therefore 19.4L.

4.3 Disposal Method Descriptions

The following sections describe each method the Program used to reuse, recycle, or otherwise treat or dispose of waste paint.

Reuse (Paint Reuse Program)

The Paint Reuse Program, previously “Paint Exchange”, makes better quality paint returned to collection sites available to the public to take and use at no cost. The collection sites record and report the number of containers given away. This is a highly efficient way to achieve reuse as the paint does not require transportation and reprocessing. An estimated 323 litres of paint was given away to consumers in 2016 at no charge through the Paint Reuse Program. The reuse volume was estimated by assuming that each container was 75% full on average.

Recycling

At the Laurentide Re-sources facility, paint containers are removed from the collection containers, inspected, opened, sorted by type, colour and quality, and poured into shipping containers. Bulked paint of recyclable quality is then transferred to Laurentide Re-sources, Richibucto storage facility, where it is distributed to an affiliated processor, Peintures Recupérées du Quebec (PRQ) in Victoriaville, QC or transferred to other international recyclers. Table 6 provides the quantity of latex paint and alkyd paint that was recycled. The diminishing market for alkyd paint has made it increasingly difficult to recycle. Consequently, the majority of alkyd paint was sent for energy recovery and limited amounts of alkyd paints were recycled.

Table 6: Quantity and Type of Paint Recycled

| Type | Litres | Percentages |
|-------------|--------|-------------|
| Latex Paint | 65,193 | 83.6% |
| Alkyd Paint | 12,790 | 16.4% |
| Total | 77,983 | 100.0% |

Aerosol Paint Management

Paint aerosol containers are punctured, the propellant is filtered through activated carbon, and the contents drained. The residual volumes of paint recovered from paint aerosols are very small and represent a variety of product formulations that limit the options for recycling. Consequently, the residual paint is used for energy recovery.

Energy Recovery

Not all oil-based paint collected is of suitable quality for recycling. In some cases the paint may be in the form of skins or sludge, of an undesirable color, contaminated or of the wrong chemistry for paint recycling. In addition, regulations, such as the Federal VOC Regulations, require more stringent limits on certain chemical constituents, which tend to be found in higher concentrations in older paints, making it difficult to recycle. Finally, the market for recycled solvent-based paint is significantly smaller than that for water-based products and demand continues to decline.

Due to the high solvent content of oil-based paints, these products are suitable for energy recovery. Through the process of fuel blending, some of the oil-based paint collected by the Program that is not suitable for paint recycling is used as an alternative energy source in applications such as permitted incinerators. During the reporting period, 7,709 litres of alkyd paint and paint from paint aerosols were blended with other fuels and utilized for energy value at licensed facilities.

Incineration

During the reporting period, no material went for incineration.

Landfill

The sorting and bulking of the latex paint by Laurentide Re-sources and Terrapure Environmental generated 15,214 litres of non-recyclable latex sludge/solid, which were solidified and disposed of at a synthetic-lined landfill cell with leachate collection.

Table 7 below shows the breakdown of waste paint managed by the different product management methods.

Table 7: Waste Paint by Disposal Method

| Method | Volume (litres) | Percentage |
|-----------------|-----------------|---------------|
| Reuse | 323 | 0.3 % |
| Recycle | 77,982 | 77.0 % |
| Energy Recovery | 15,214 | 7.7 % |
| Landfill | 7,709 | 15.0% |
| Incineration | 0 | 0.0% |
| Total | 101,228 | 100.0% |

4.4 Design for Environment

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, 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.

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 meet 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 per cent ten years ago.
- In 2015, based on comprehensive and random testing conducted by Environment and Climate Change Canada (ECCC), 99+ per cent of the sales volume for architectural waterborne coatings in Canada, traditionally associated with high VOC content, were found to be 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 projected a 28 per cent reduction.

5.0 Communications and Education

PCA continued its communication and public outreach in 2016 to educate consumers about the Program. The following describes the various communication and education tactics employed.

5.1 Website

PCA operates two websites: a consumer-facing site that provides relevant program information (regeneration.ca) and a corporate site that provides information to program members and service partners (productcare.org).

[Regeneration.ca](http://regeneration.ca) provided PEI residents with information on:

- Collection site locations (via a location-based collection site finder – see Appendix 2), including operating hours and products accepted.
- Lists of accepted and non-accepted products.
- Environmental handling fees associated with program products
- Contact information
- Guidance on best practices when purchasing, storing and handling program products
- Information about the Paint Reuse Program
- FAQs related to the Program
- Relevant news and updates

An estimated 90,074 unique visitors accessed regeneration.ca during the 2016 calendar year. The Program page specific to PEI received 562 page views.

[Productcare.org](http://productcare.org) provided program members and service partners with information on:

- Products accepted and not accepted by the Program
- Environmental handling fees associated with the Program products
- Contact information
- Membership-related documents
- Program plan and annual reports
- Program policies, guidelines, forms and related documents
- An online portal for ordering promotional materials

5.2 Telephone Hotline

PCA continued to operate a toll-free, bilingual “hotline” through which consumers were able to obtain information about the Program.

5.3 Point of Sale (PoS) and Point of Return (PoR) Material

PCA provided an online ordering system on its website that allowed collection sites and retailers to order or reorder promotional materials on demand at no cost. Appendix 3 lists the materials that were available, including:

- Rack Cards
- Posters
- Depot signage
- Floor decals
- Paint Can stickers

5.4 Yellow Pages Advertising

PCA continued an Atlantic Canada targeted digital campaign via YP Group, including syndicated Facebook posts, targeted digital display ads, and smart digital display (re-serving impressions to pre-qualified audience). Digital ads were specifically generated to Internet users who performed online searches related to the purchase, use and disposal of paint products in Prince Edward Island.

Additionally, our Facebook advertising campaign pursued a “gated” strategy, which is to say, content was viewable by residents of Prince Edward Island specifically, and was not necessarily seen by audiences in other provinces (See Appendix 4 for example).

5.5 TV Campaign

A Province-wide campaign with Global TV restarted (having run for 26 weeks in 2015) on January 25th, 2016 and aired for the entire 2016 calendar year. Community PSAs, with local talent-voiced 15-second “info-mercial” style spots ran educating viewers on paint recycling. The Program also featured a rotation of 30-second traditional commercial spots airing on prime time during high viewership programming. The TV campaign made use of regional Global TV station affiliates.

5.6 Partnership

PCA continued to contract with Island Waste Management Corporation (IWMC) to promote the PEI paint recycling Program to the public through the following methods:

- A link to Regeneration.ca available through IWMC’s website
- Distribution of a biannual newsletter & special disposal guide to each household in PEI

- Weekly newspaper columns in two daily newspapers and one weekly French newspaper, as applicable
- Promotion through IWMC’s customer service helpline
- Posters at Waste Watch Drop-Off Facilities
- Facebook promotion
- Promotional material handed out at various community outreach events

6.0 Financial Information

Table 8 identifies the key 2016 financial performance indicators for the Program.

Table 8: PEI Paint Recycling Program Financial Information

| (\$'000) | 2016 |
|--|------------|
| Revenues | 280 |
| <i>Program Expenses</i> | |
| Collection | 29 |
| Transportation | 59 |
| Processing | 174 |
| Communications | 23 |
| Regulatory | 10 |
| Administration | 20 |
| Total Program Expenses | 315 |
| Excess / (Deficiency) of revenues over expenses for the year | -35 |
| Accumulated Surplus / (Deficit) | -208 |

Appendix 1 – PEI’s 2016 PaintRecycle Environmental Handling Fee Rates

| Paint Container Size | 2016 Rates |
|--------------------------|------------|
| 100ml to 250ml | \$0.25 |
| 251ml to 1 litre | \$0.50 |
| 1.01 litres to 5 litres | \$1.00 |
| 5.01 litres to 23 litres | \$1.95 |
| Aerosol paint (any size) | \$0.30 |

Appendix 2 – Collection Site Locator

Below is a snap shot of the collection site locator tool available on regeneration.ca.

Collection Site Locator

Our collection sites are here to help you recycle your unwanted, leftover and broken products. Make sure to select the category and collection option that best suits your needs.

Select product: Paint

Enter a city or postal code: Prince Edward Island, Cana

Refine distance: 0km, 50km, 100km

There are 6 paint location(s) near you

- 1 New London** 6.15 km
10142 Route 6
New London, COA 1M0
Tues & Thurs 8:00am - 4:30pm
Sat 8:00am - 12:30pm
Mid-June - Aug:
Mon, Tues & Thurs 8:00am - 4:30pm
Sat 8:00am - 2:00pm
902-886-7425
- 2 Charlottetown**
- 3 Summerside**
- 4 Alberton**
- 7 Souris**
- 8 Murray River**

Get directions

Green Isle

33.51 km

Map data ©2016 Google

Appendix 3 – PoS and PoR Materials

Rack Card Front and Back - 5" x 8"



Posters - 11" x 17"



Depot Sign – 4'x 3'



PaintRecycle Collection Site

Accepted Paints & Coatings
Maximum container size is 25 L.

- 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 repellent (non-tar based or bitumen based)
- Already empty paint containers

Aerosol Paint
Aerosol paint spray cans 660 grams or 24 oz.
Aerosol paint of all types, including:

- Automotive
- Craft
- Industrial

Paint products not accepted

- Unidentifiable or unlabelled containers
- Brushes, rags and rollers
- Paint in glass containers
- 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

ReGeneration.ca
Special waste recycling by Product Care

Product Care
Member since 1998

Floor Decal



Leftover Paint? Recycle It!

Visit ReGeneration.ca to find your nearest collection site

PaintRecycle

Paint can sticker



ReGeneration.ca

RECYCLE ME
FREE OF CHARGE
RECYCLEZ-MOI
GRATUITEMENT

PaintRecycle

Appendix 4 – Sample Facebook Post

**ReGeneration**
Published by Gain [?] · November 13, 2016 · *
Recycle your old paint for #FREE in Eastern Canada! We handle both interior and exterior coatings, from latex to alkyd, aerosol to oil-based paints, varnishes, primers and more. Get more information below.


Paint | ReGeneration
The ReGeneration Paint Program is where it all started for us, back in 1994. Since then, the program has expanded from British Columbia to seven other provinces, where we handle both interior and exterior coatings, from latex to alkyd, aerosol...
WWW.REGENERATION.CA
14,870 people reached  **Boost Post**
Like Comment Share
Write a comment...  