



New Brunswick Paint Stewardship Plan 2016-2021

For submission to:
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1. Introduction

The 2016-2021 New Brunswick Paint Stewardship Program Plan (the “Plan”) is submitted by Product Care Association of Canada (PCA) to Recycle New Brunswick (RNB), pursuant to the requirements of the New Brunswick *Designated Materials Regulation – Clean Environment Act* (the “Regulation”).

The Plan covers the years 2016-2021 or such other period as specified by RNB. When approved, the Plan will replace the Product Care Stewardship Plan dated August 14, 2012 covering the period 2012-2015.

2. Product Care Association of Canada

The New Brunswick Paint Stewardship Program (the “Program”) is operated and managed by 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.

PCA also operates paint stewardship programs in seven other Canadian provinces: BC, SK, MB, ON, NS, PEI and NL.

3. Program Membership and Program Funding

The Plan is submitted by PCA on behalf of the paint brand owners who have appointed PCA as their agent under the Regulation (for a current list of brand owners see Appendix A – New Brunswick Brand Owners). The program is open to any brand owner to join.

The Program is funded by membership fees, known as Environmental Handling Fees (EHFs), remitted to PCA by its members based on the quantity of sales of the designated paint products sold in New Brunswick. The EHF rates are set by PCA. Program revenues are utilized in paying for the operation of the program, including education, collection system, administration, transport, recycling and disposal of collected residual products, as well as a reserve.

The reserve represents the accumulated surplus or deficit of the Program from inception and is necessary to ensure the program is not destabilized due to increases in operational costs. The maximum reserve amount is set by PCA’s Board of Directors and the current policy is set at one year operating expense, subject to change. In the event that the reserve exceeds the maximum amount, PCA will consider making adjustments to the EHF rates.

4. Regulatory Requirements

The Program Plan address the requirements of section 39 of the New Brunswick *Designated Materials Regulation*:

- (a) the collection of waste paint in New Brunswick, including the waste paint of other brand owners;
- (b) the management of waste paint in adherence to the following order of preference:
 - (i) reuse;
 - (ii) recycle;
 - (iii) disposal in an engineered landfill; and
 - (iv) recovery of energy;
- (c) the brand owner's plan for achieving a 70% reuse rate;
- (d) a description of the efforts being made by the brand owner to redesign paint products to improve reusability and recyclability;
- (e) a communications plan for informing consumers of the brand owner's paint stewardship plan and the location of return depots, in addition to the brand owner's obligations under section 46;
- (f) the establishment of return depots that will ensure reasonable and free consumer access for the return of waste paint;
- (g) the assessment of the performance of the brand owner's plan by an independent auditor; and
- (h) the elimination or reduction of the environmental impacts of waste paint.

5. Program Products

Regulatory Requirement

<i>39(a): the collection of waste paint in New Brunswick including the waste paint of other brand owners</i>

5.1 Accepted Products

The Program is responsible for managing post-consumer residual "paint" sold into the province as defined in the Regulation. The Regulation defines "Paint" as:

- a) a tinted or untinted latex, oil or solvent-based architectural coating used for commercial or household purposes, including stain, and includes the coating's container, or
- b) 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, industrial or automotive applications.

For further clarity, the following paints and coatings are included as accepted 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 in New Brunswick 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 Product Act)
 - Wood finishing oils
 - Wood preservatives (unless registered under Pest Control Product 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-based or bitumen based)
- Paint aerosols of all types to a maximum container size of 660g or 24oz
 - Automotive aerosols
 - Craft aerosols
 - Industrial aerosols

5.2 Brand Owner of Products

The Program accepts program products sold in New Brunswick regardless of the brand owner.

5.3 Type of User

The Program accepts program paint sold in New Brunswick from any consumer/user of the program products including households, businesses, institutions, government (all levels) and commercial painters.

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, depot staff training, as well as effective regulatory enforcement against those who abandon products at or near collection sites. Any non-program material which does 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
- Paints containing pesticides (e.g. anti-fouling paints)
- Automotive paints (non-aerosols)
- Baked on coatings
- Craft paints (non-aerosols)
- 2 component epoxies
- 2 part paints
- Nitrocellulose or catalyzed lacquers
- Traffic or line marking paint
- Unlabelled or improperly sealed containers
- Non paint products

6. Management of Collected Paint

Regulatory Requirement

39(b): the management of waste paint in adherence to the following order of preference:

- (i) reuse*
- (ii) recycle*
- (iii) disposal in an engineered landfill*
- (iv) recovery of energy*

6.1 Leftover Paint Management

The objective of the Program 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 for paint in accordance with the hierarchy of management options under section 39(b) of the Regulation:

Latex Paint

- Paint Exchange (Reuse)
 - Reprocessing as Paint
 - Engineered Landfill

Oil Based Paint

- Paint Exchange (Reuse)
 - Energy Recovery

Aerosol Paint

- Energy Recovery
 - Incineration

Empty Paint Containers

- Recycling
 - Engineered Landfill

6.1.1 Paint Exchange (Reuse)

PCA has implemented a “paint exchange” program, which gives away better quality returned paint (latex and alkyd) to the public at participating collection depots. This is an efficient way to manage leftover paint as the product is used for its originally intended purpose, and does not require transportation and reprocessing. However, this may reduce the average quality of paint available for reprocessing.

Users of the paint exchange program are notified that the suitability of the container contents cannot be guaranteed. Special labels are applied by depot staff to each container informing consumers of this. Users are also required to sign a waiver form prior to taking the paint away for reuse.

6.1.2 Paint Reprocessing

Approximately 90% of paint sold today is latex-based. Not all leftover latex paint is of suitable quality for paint recycling and the remaining percentage must be sent to an engineered landfill. Recycled paint is marketed through a number of channels in Canada and overseas. The Canadian market continues to grow for latex paint, and is influenced by the steady improvement in consumer awareness and the trend to “green” building practices.

Alkyd paint, today, represents approximately 10% of the architectural paint market and is continuing to decline in sales due to regulations relating to volatile organic compounds and other factors. While technologies exist for “paint to paint” recycling of alkyd paints, the market is very limited and is in decline due to stricter VOC regulations and the technology advancement of water based paint. Leftover alkyd paint can be utilized for its energy value, blended with other hydrocarbons as an alternative fuel in permitted facilities such as cement kilns with high level air quality controls.

6.1.3 Aerosol Paints

The residual volumes recovered from paint aerosols are very small and represent a variety of product formulations that limit the options for recycling. Paint aerosols are punctured and the contents drained. The residual paint is typically used for energy recovery. The steel containers are then recycled.

6.1.4 Empty Paint Containers

The Program will strive to recycle all empty steel containers, subject to scrap metal commodity prices where economically viable and feasible. In order to reduce unnecessary transportation and cost, collection depots already managing scrap metal on site are encouraged to include empty metal paint containers with other scrap metal. The Program will strive to recycle all plastic paint containers where recycling options exist, or determine an acceptable method of managing containers that cannot be recycled.

6.1.5 PCB Contaminated Paint and Non-program Material

Alkyd/oil based paints are tested for PCB (Polychlorinated biphenyl) contamination. Where allowable PCB limits are exceeded, the paint is managed as PCB waste according to regulatory requirements.

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

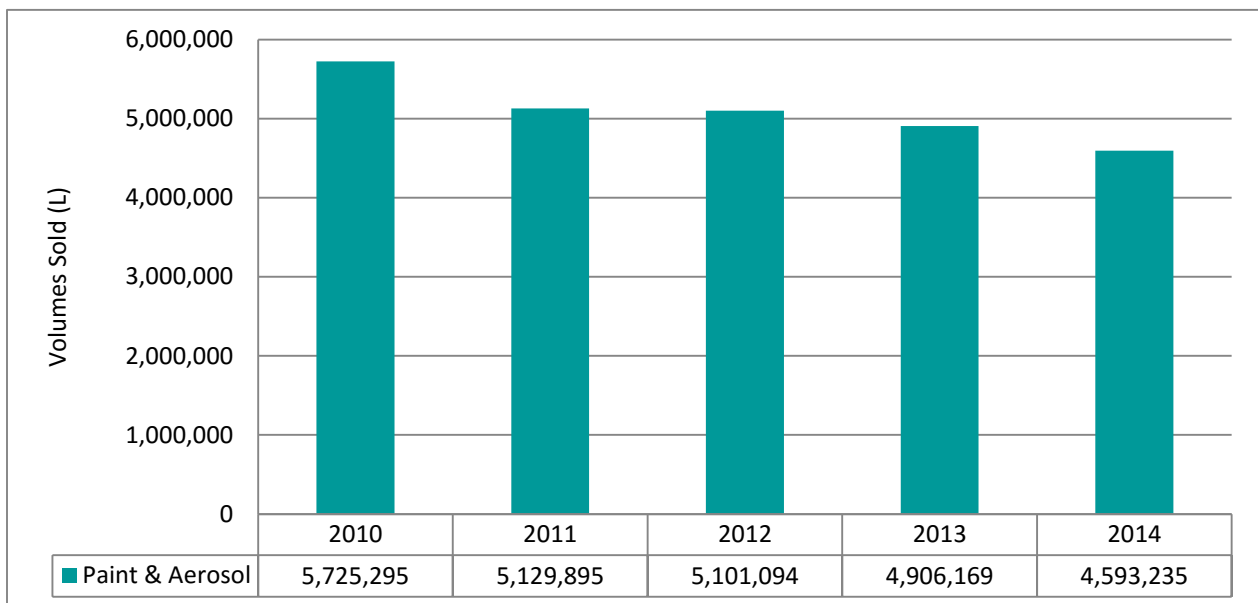
methods for non program material include landfilling, physical or chemical treatment, energy recovery or incineration.

6.2 Product Sales

The quantity of paint sold annually varies with market conditions, but is an important reference for the quantity of paint available for collection in the future. Table 1 - Paint and Aerosol Sales Volumes (Litres) 2010-2014

illustrates the quantity of paint and aerosol products sold.

Table 1 - Paint and Aerosol Sales Volumes (Litres) 2010-2014



6.3 Product Collection Rates

Regulatory Requirement

39(c): the brand owner's plan for achieving a 70% reuse rate

PCA will be reporting the following on an annual basis:

- Residual Recovery Volume
- Recovery Rate

No single collection measure is considered an accurate indication of the program's performance and in some cases the performance measure is influenced by factors that are beyond the program's control, such as market conditions. Paint is a consumable product and not a durable product and should not be compared to other programs that utilize recovery rate and volumes as key performance measures.

Residual recovery volumes and recovery rates should be used as indicators and in conjunction with other metrics.

6.3.1 Residual Recovery Volume and Recovery Rate

Residual Recovery Volume represents the actual liquid quantity of paint (excluding containers), measured in litres, collected by the Program.

The Recovery Rate compares the volume of product collected in a given year to the volume of product sold in that same year (i.e., collected/sold).

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

The quantity of paint collected is known to the Program from collection and processing data. The quantity of paint sold is calculated based on sales reports provided by the Program members to the Program. The Recovery Rate is indicative of program performance only when viewed over a period of years, due to the time lag between the sale of paint and its return to the program.

6.3.2 Reuse Rate

Section 34 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.” The term “reuse” with respect to waste paint, means to process in such a way it is capable of being used by a consumer as paint. The Regulation requires that the Program must achieve an annual 70% reuse rate. This is the performance target used by the Program.

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

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

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 processed according to the available management options (i.e., reused, recycled, landfilled) in a given period. The residual recovery volume is 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.

6.4 Design for Environment

Regulatory Requirement

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

39(h): 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 of reduce/reuse/recycle. With respect to the concept of design for environment, there is limited ability for a stewardship program of this scope to influence product design. The paint industry is a consolidating industry and most brand owners manufacture for a market area that includes more than one province or country.

In general, 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
- Regulatory influences such as Environment Canada's *Volatile Organic Compound (VOC) Concentration Limits for Architectural Coatings Regulation (P.C 2009-1535)* which sets limits for VOC 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 the consumer preference for latex paint increases and technical specifications improve.

Waterborne paints now make up more than 90 percent of paint products on the market. In addition, the Program utilizes the following tools to increase the amount of reuse of leftover paint and minimize the environmental impact of residual paint where possible:

- Variable fees paid to the Program by brand owners which increase with the size of the container
- Promotion to the consumer of the "B.U.D" rule, i.e. **B**uy what you need, **U**se what you buy and **D**ispose of the remainder responsibly
- Educating the consumer on the proper storage of leftover paint
- Operation of a paint exchange program whereby leftover paint is made available to the public free of charge
- Research into alternative management options for collected materials

7. Communications and Public Awareness

Regulatory Requirement

39(e): a communications plan for informing consumers of the brand owner's paint stewardship plan and the location of return depots

7.1 Program Communications

PCA employs a number of best communications practices to communicate information about the program to the public, to increase awareness of the Program and its objectives, and to stimulate Program use.

Under the Plan, PCA commits to the following:

a) The Operation of a Program Website

The Program website at <http://www.regeneration.ca/programs/paint/new-brunswick/> will continue to provide information to NB residents on:

- Collection locations with details on hours of operation and accepted products
- Details on applicable Environmental Handling Fees
- Annual reports and other program administrative information
- Program FAQs, including information for consumers on buying the right amount of paint as well as the safe storage and handling of program products
- PCA contact information, including an in-site live chat tool
- The NB Program web section links to Recycle New Brunswick's Paint Recycling page

b) Issuing of an Annual Communication Plan for New Brunswick

PCA will supply a communications plan on an annual basis to Recycle NB by November 15th of every year during the term of the Plan to Recycle NB's. The communications plan will:

- Describe communications strategies and tactics
- Describe strategic objectives for each initiative, including target audiences

The Annual Communications Plan may employ the following channels:

- Digital and traditional advertising
- Social media engagement
- Community events
- PoS material dissemination
- Stakeholder communications
- Earned media efforts
- Contests and promotions

- Government and other partnerships
- Other opportunities as best practices dictate

7.2 Public Awareness Levels

The Program completed an initial awareness survey in 2013 to determine the level of public awareness. The results indicated that 38% of New Brunswickers are aware of the existence of a program that recycles paint. In 2015, the program conducted another awareness survey and found that 53% of New Brunswickers are aware of the existence of a program that recycles paint.

The program commits to conducting a public awareness survey every two years (i.e., 2017, 2019, and 2021) to track awareness levels and findings will be reported out in the Program’s annual report.

PCA anticipates that awareness levels will increase as communications efforts continue over the term of the Plan. The program targets to have program awareness levels of:

- 55% by 2017
- 57% by 2019

8. Collection and Transportation System

Regulatory Requirement

39(f): the establishment of return depots that will ensure reasonable and free consumer access for the return of waste paint

8.1 Collection System

8.1.1 Collection Sites and Collection Containers

The success of the program depends on consumer awareness and program accessibility, meaning convenient access to collection sites. It is an ongoing objective of the program to make it as convenient as possible for people to dispose of their leftover paint

In 2014, the Program operated 60 permanent, year round collection depots in New Brunswick to provide convenient locations for consumers to drop off unwanted program products. 30 of the collection depots were also paint exchange sites. There is no charge to drop off program products. Depots that are more capable of handling large volumes are designated as “preferred depots” for commercial painters. Advance notice of large volumes is requested to ensure proper storage and handling at the collection site.

A complete list of depots is available at <http://www.regeneration.ca/collection-site-locator/?location=New+Brunswick%2C+Canada&product=paint> . The Program supplies all collection depots with reusable plastic “tubskid” collection containers.

PCA does not directly own or manage any depots, but contracts with a variety of collection sites including Regional Service Commissions (RSCs), redemption centres, and paint retailers. The program also participates in one day collection events managed by RSCs.

The Program will commit to maintaining 60 collection sites and participating in one day events managed by RSCs. The Program will continue to analyze accessibility for residents throughout New Brunswick and where gaps are identified, will determine strategies to improve accessibility, in consultation with Recycle New Brunswick.

- The Program will continue to participate in RSC collection events
- The Program will visit all depots bi-annually to ensure adequate training

8.2 Transportation and Consolidation

An effective transportation system is required to ensure that the collection system operates efficiently. Transporters contracted by the Program attend each collection site, including SWC sites, on a regular basis to pick up full tubskids of collected paint, and to drop off empty tubskids and any related supplies.

Full paint tubskids are transported to a consolidation hub where full trailer loads are assembled for transportation to the processor, and emptied tubskids are stored for redistribution to collection sites.

8.3 Tracking and Auditing Mechanisms

8.3.1 Tracking and Audit

The Program will utilize a database tracking and control system to record and track waste materials managed from point of collection to recycling and disposal.

Data is collected to track volume of paint containers managed by the collection system. In addition, data is required of all processors and recyclers to track residual volumes collected by the Program, and how those volumes are managed, with the exception of paint aerosol residual paint volumes which are estimated based on data from other programs. This data is recorded and used to develop reports which are used for tracking and auditing purposes. The system employs best management practices and guidelines including handling and safety requirements.

8.3.2 Environmental Risk Management

A necessary element of a tracking and audit system is environmental risk management. PCA is cognizant of the need to minimize the potential for environmental incidents. PCA works with its partners (collection sites, transporters and processors) to ensure compliance with environmental regulations and best environmental practices with respect to collection, transportation and consolidation of leftover paint.

The environmental risk management system includes:

- System wide shipping documentation and tracking system

- Due diligence reviews of depots, transporters and recyclers (initial processors and downstream) to ensure compliance as well as tracking system verification, conducted by a third party auditor or in-house
- Requirement of certificates of disposal and recycling, use of only reputable recyclers
- Development of “recycler standards” as necessary
- Development of best management practices, including training, reporting and guidelines etc. for collection sites and transporters
- Maintenance of environmental impairment insurance policy

8.3.3 Clean up and Decommissioning

The Program takes a preventative approach, as detailed in the Environmental Risk Management section. From PCA’s experience, the risk of environmental impact at collection depots or consolidation points is minimal because of the following:

- Paint is generally returned to the depots in the original consumer container, on average 1/3 full
- Collection sites and transporters do not open containers
- Containers of paint are stored in leak-proof tubskids (secondary containers)
- Tubskids are stored on pavement or solid floors
- Paint tends not to migrate in the ground in the event of a spill
- Dried paint is not considered environmentally hazardous

Unless there is a major incident, the Program does not anticipate any site mitigation required for the closure of collection sites.

9. Independent Assessment of Plan Performance

Regulatory Requirement

39(g): the assessment of the performance of the brand owner’s plan by an independent auditor

PCA will provide an annual program performance assessment conducted by an independent auditor in accordance with the Program Plan.

10. Annual Report

As required by Section 45(1) of the Regulation, the Program will also report on each of the following measures on an annual basis:

- The total amount of waste paint collected in New Brunswick by the brand owner;
- The total amount of waste paint processed or in storage;
- 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;

- A description of the types of processes utilized to reuse, recycle, dispose of in an engineered landfill, recover energy from, 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 return depots;
- The location of any processing or containment facilities for waste paint;
- The types of consumer information, educational materials and strategies adopted by the brand owner;
- The annual financial statements, as 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 by an independent auditor; and
- Any other information requested by the Board that relates to the paint stewardship program.

Appendix A – New Brunswick Brand Owners

List of 60 brand owners who have appointed Product Care Association as their Agent for the New Brunswick Paint Stewardship Program, as of December 31, 2014.

1. 1439174 Ontario Ltd dba NLS Products	2. K-G Spray-Pak Inc
3. 3M Canada Company	4. Kleen-Flo Tumbler Industries Ltd.
5. Akzo Nobel Canada Inc.	6. Laurentide re-sources Inc
7. Alexandria Moulding	8. Les Produits Techni-Seal Inc.
9. BASF - The Chemical Company	10. LPS Canada - Division of LPS Laboratories
11. Behr Process Corp.	12. Martin & Associates Ind
13. Benjamin Moore & Co. Ltd.	14. Michaels Stores Inc.
15. Big Lots Canada Inc.	16. Modern Sales Co-op-Auto Sense Parts
17. Calibre Environmental	18. Peinture Laurentide Inc
19. Canadian Tire Corporation, Ltd.	20. Peintures MF Inc.
21. Cansel Survey Equipment	22. Plasti Kote Co., Inc. (Valspar)
23. Castle Building Centres Group Ltd	24. PPG Canada Inc.
25. CBR Products	26. PPG Industries Inc. (Vanex Inc)
27. Chalifour Canada Ltd	28. Princess Auto Ltd.
29. Cloverdale Paint Inc.	30. Pro Form Products Limited
31. Country Chic Paint	32. Produits de Plancher Finitec Inc
33. Denalt Paints Ltd	34. R Cameron Industries Ltd. Db a Finishes 1st
35. Ducan Products Inc.	36. RONA Inc.
37. Dynamic Paint Products Inc.	38. Rust-Oleum Corporation
39. Fastenal Canada Ltd	40. Sansin Corporation
41. Forrest Paint Co.	42. Selectone Paints Limited
43. General Paint Corp.	44. Seymour of Sycamore Inc.
45. Groupe BMR Inc	46. Sherwin-Williams Co.
47. Henry Company Inc	48. Sika Canada Inc.
49. Homax Products Inc.	50. Swing Paint
51. Home Depot of Canada Inc	52. Target Canada Co.

53. Home Hardware Stores Limited	54. Timber Pro Coatings Ltd.
55. IRL Supplies Ltd	56. TruServ. Canada Inc.
57. John Deere Canada ULC	58. WalMart Canada Corp
59. Kent Building Supplies	60. Wood Essence Distributing