

Nova Scotia Paint Stewardship Plan

For submission to:

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and Climate Change
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1 Introduction

The Nova Scotia Paint Recycling Program (“Program”) was established in 2002 pursuant to Nova Scotia’s Solid Waste Resource Management Regulations. Since inception, Product Care Association of Canada (“Product Care”) has been managing the paint recycling program and helping Nova Scotians protect the environment. The 2023-2027 Nova Scotia Paint Stewardship Program Plan (“Program Plan”) is submitted by Product Care to the Nova Scotia Department of Environment and Climate Change (“ECC”) pursuant to the requirements of Sections 18B – 18I of the *Solid Waste-Resource Management Regulations* enacted under Section 102 of the *Environment Act* (the “Regulation”). Upon approval by ECC, this plan replaces the previous approved 2018 Program Plan. This plan comes into effect on January 1, 2023, and will expire on December 31, 2027.

2 About Product Care Association of Canada

The Nova Scotia Paint Stewardship Program operated and managed by Product Care, a federally incorporated, not for profit product stewardship association formed in response to stewardship regulations and governed by a multi-sector industry Board of Directors.

Product Care also operates paint stewardship programs in seven other Canadian provinces: British Columbia, Saskatchewan, Manitoba, Ontario, New Brunswick, Prince Edward Island and Newfoundland and Labrador.

3 Program Membership and Program Funding

The Program Plan is submitted by Product Care on behalf of paint brand owners who appoint Product Care as their agent under the Regulation. The Program is open to any brand owner to join. The Program is funded by membership fees, known as “Environmental Handling Fees” (EHF), remitted to Product Care by its members based on the quantity of sales of designated paint products sold in or into Nova Scotia. The EHF is not a tax or a refundable deposit. The EHF may appear at the time of retail sale as a separate charge or be integrated into the product price. Program revenues generated by the EHF are applied towards program operations, including but not limited to:

- Administration,
- Public education and communication,
- Collection, transportation, recycling, and responsible disposal of collected products, and
- Establishing and maintaining a reserve fund.

The reserve fund is used to stabilize program funding in the case of unexpected collection volume increases, 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. EHF rates are set by Product Care and are subject to change as needed to address surpluses or deficits. Given that the Program does not have direct control over its revenue stream, EHF are reviewed on a regular basis to ensure there are sufficient funds to operate the Program and maintain the necessary reserve as per Product Care Board policy. Current EHF's for Program Products are listed on Product Care's website.

4 Product Definition and Program Products

Regulatory Requirement

18B (1) (c) "Consumer paint product" means a latex, oil or solvent-based architectural coating, including stain and paint for commercial and industrial use, but does not include a specially formulated industrial, automotive or marine coating; ...

18B (1) (f) "Post-consumer paint product" means a consumer paint product and its container that are no longer used and required by a consumer

The Program manages "post-consumer paint products" sold in the province as defined in the Regulation, regardless of brand or user.

For further clarity, the paints and coatings included in the Program are referred to as "Program Products". The list of Program Products is found in Appendix A and is subject to change by Product Care. The maximum container size accepted is 25L.

All paint aerosols (maximum container size 660g or 24oz) are included in the Program in order to harmonize with other provincial paint stewardship programs.

The Program accepts all brands of Program Products from all users in Nova Scotia including residents, businesses, commercial painters, and all levels of government.

Non-Program Products

The Program is only responsible for managing Program Products. Products that are outside of the scope of Program Products are defined as Non-Program Products. A list of examples of Non-Program Products are in Appendix A, including but not limited to industrial paints and coatings, unlabelled containers and other household hazardous waste, consistent with other Product Care paint programs.

The introduction of Non-Program Products into the collection system introduces several challenges including, but not limited to increased expenses and unfunded costs, health and safety risks, and regulatory compliance concerns.

Minimization of Non-Program Products is achieved through a comprehensive program of public education, collection site signage, and collection site staff training. In addition, an effective regulatory enforcement process is required to deter abandonment of products at or near collection sites. Any incidental Non-Program Product that enters the system is segregated at the time of processing for special handling.

5 Collection System

Regulatory Requirements

18H (1) *The owner of a return collection facility shall accept a post-consumer paint product, regardless of the identity of the brand owner of the consumer paint product from which it was generated.*

18H (3) *(b) Accept from any person any quantity of post-consumer paint products that does not exceed the maximum allowable per person daily quantity as authorized by an Administrator; and*

(c) Not charge a fee for accepting post-consumer paint products in accordance with clause (b).

The Program accepts Program Products from all sectors: residential, commercial, institutional and industrial, regardless of brand. There is no charge for dropping off Program Products at any of the Program collection sites. Product Care does not directly own or manage collection sites, but rather contracts with a variety of facilities including Enviro-Depots™, retailers and certain municipal facilities. The Program has developed and maintains an extensive province-wide collection network allowing Nova Scotians to recycle their leftover paint.

The Program commits to maintaining a minimum of 80 collection sites and utilize the following accessibility levels to continue to provide paint recycling services to Nova Scotians:

- At least 90% of the province's rural population is within a 30-kilometre radius of the nearest collection site;
- At least 50% of urban populations are within a 10-kilometre radius of the nearest collection site. Urban populations are defined as the populations in Halifax Regional Municipality (HRM) and Cape Breton Regional Municipality (CBRM);
- At least 90% of the combined (urban and rural) populations are within a 30-kilometre radius of the nearest collection site for HRM and CBRM.

A list of collection sites is included in the Program's annual report. Any significant changes in the collection network will be communicated to stakeholders in affected communities.

The Program will visit all collection sites bi-annually to ensure compliance with Product Care's operating standards, including staff training. If collection site visits cannot be conducted, the Program will conduct check-in calls in lieu.

6 Product Management

Regulatory Requirement

18B (1) (d) (ii) *“Consumer paint product stewardship program” means a program that incorporates the principles of a pollution prevention hierarchy by moving progressively from disposal to reduction, reuse and recycling and recovery of postconsumer paint products*

6.1 Design for Environment

Regulatory Requirement

18F (1) (d) *Efforts taken through consumer paint product marketing strategies to reduce post-consumer paint products and packaging waste;*

The objective of the Program is to reduce the amount of waste Program Products and to minimize the improper disposal of Program Products by providing an effective collection program and ensuring that the collected materials are either recycled or disposed of in an environmentally responsible manner, adhering to the pollution prevention hierarchy, where technically feasible and economically viable.

The ability of a stewardship program of this scope to influence product design is limited. The composition of many of the paint products covered by the Program have changed over time as a result of design for environment activity, other regulations and consumer preference. In general, there continues to be a steady shift in the marketplace from oil based (alkyd) paints to water-based 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 and require coatings manufacturers to switch to low VOC formulations.

In addition, Product Care engages in several efforts to extend product life cycle and reduce the environmental impact of Program Products:

- 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;
- Applying variable EHF, which increase with the size of the container, to encourage consumers to buy the appropriate amount;
- Making collected paint available for ReUse; and
- Seeking alternative management options for collected materials

6.2 Leftover Paint Management

Leftover paint can be managed in a number of different ways. Where technically feasible and economically viable, the Program will manage the collected Program Products in accordance with the principles of the pollution prevention hierarchy. The Program recognizes the importance of managing Program Products in accordance with the recycling hierarchy. The recyclability of Program Products depends on a variety of factors, many of which are beyond the control or influence of the program, such as the quality and condition of the collected Program Products, commodities and recycling market conditions, demand/market for the recycled material, availability of recyclers or recycling technologies, the economics and feasibility of recycling, etc.

The Program currently follows the product management options set out below, which are subject to change.

	Reuse	Recycle	Energy Recovery	Landfill
Water-based Paint	✓	✓		✓
Oil-based Paint	✓	✓	✓	
Aerosol Paint			✓	
Empty Paint Containers		✓		✓

(a) PaintShare

Product Care has implemented a PaintShare Program, which gives away better quality returned paint (water-based and oil-based) to the public, at no charge, at participating collection sites. 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. Users of the PaintShare Program are notified that the suitability of the container contents cannot be guaranteed. Users are also required to sign a waiver form prior to taking the paint away for reuse.

(b) Paint Reprocessing

While paint recycling is an option for certain types of paints, not all paint can be recycled. Paint to paint recycling is heavily dependent on whether there is demand or a market for the recycled paint. In addition, several different factors such as age, quality and physical state of the paint returned impact whether the paint is suitable for recycling or not. Other limitations include, but are not limited to:

- Limited ability to alter the colour of recycled paint;
- Additional shelf space required for recycled paint at retail versus just carrying virgin base paint and tinting it at the counter;
- Regulatory requirements, such as the Volatile Organic Compound (VOC) Concentration Limits for Architectural Coating Regulation, that impose criteria/limitations on use of ingredients and allowable concentrations.

Recycling oil-based paint back into paint is more difficult due to a number of factors:

- Hazardous waste and transportation regulations, which limit the movement of this kind of material;
- Old oil-based paints tend to be higher in VOCs;
- The chemistry of oil-based paints makes it more difficult to recycle into paint and coating products;
- The market for oil-based products is significantly smaller than that for water-based paint products and is diminishing, making it more difficult to find end markets for the recycled product.

(c) Aerosol Paint Management

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

(d) Energy Recovery

As noted above, not all paint is suitable for recycling and as such, requires alternative management options. Depending on the type of paint, paints (including water-based) typically have varying degrees of heat value, which makes them more or less suitable for energy recovery. Given its chemical composition, oil-based paint is especially suited for use as a fuel in energy recovery. Some cement kilns and incinerators have the necessary environmental approvals or permits to allow the use of alternative fuel, such as paint, in place or in conjunction with traditional fuel sources, such as natural gas.

(e) Incineration

Some older oil-based paints may have other contaminants, such as PCBs, or exist in a state that is not suitable for other management options. In such cases, the paint is sent for incineration at government licensed/permitted facilities.

(f) Disposal in Engineered Landfill

In many jurisdictions, solidifying and landfilling water-based paint is a regulatory acceptable practice. Landfilling is the least preferred option for water-based paint, but it may be a necessary option depending on market conditions and other factors including, but not limited to age, quality, and physical state of the paint.

(g) Empty Paint Containers

The Program began accepting empty paint containers as Program Product in 2018 at which time collection sites and stakeholders were notified, collection site signage and guidelines were modified, and consumer education and promotional assets were updated. Recycling options for Program Product empty containers are dependent on the availability of commodity markets and recyclers. Accordingly, the Program will endeavour to recycle Program Product containers (metal, plastic) where a recycling

market exists and is economically viable and logistically feasible. The program has historically been successful in recycling metal and plastic paint containers. However due to the current plastic recycling market conditions, beyond the Program’s influence, recycling of some plastic containers may no longer be viable or sustainable. To reduce unnecessary transportation costs, collection sites already managing scrap metal on site will be encouraged to manage empty metal paint containers with the rest of their recycled metals. Where recycling markets become unavailable or not economically sustainable or reasonable, Product Care will manage containers using the best available option, including disposal(landfilling). Should disposal be required, the program will respect Nova Scotia’s landfill ban and utilize other disposal facilities.

6.3 Paint Collection Rates

Regulatory Requirement

18(G) (1) (d) *Ensure that 70% of the reusable and recyclable portion of the post-consumer paint products collected at the return collection facility is reused or recycled.*

The Program will ensure that a minimum of 70% of the Program Products (including containers) that are reusable and recyclable, collected and processed through the Program (including PaintShare), are reused or recycled. Where recycling markets become unavailable or not economically sustainable or reasonable, Product Care may manage the product using the best available option, including disposal. Factors that can affect the amount of Program Product that is reusable or recyclable include the:

- Condition of returned Program Products;
- Capacity of recycling facilities;
- Current technology for recycling Program Products; and
- Markets for recycled Program Products.

The reuse rate is calculated as follows:

$$\text{Reuse Rate for paint} = \frac{\text{Reuse volume (PaintShare)} + \text{Recycled volume of paint processed}}{\text{Reused volume (PaintShare)} + \text{Total volume of paint processed}}$$

$$\text{Reuse Rate for containers} = \frac{\text{weight of Program Product containers processed that are recycled}}{\text{Total weight of Program Product containers generated through processing}}$$

where the total paint volume processed reflects the actual volume of paint processed according to the available management options (i.e. reused, recycled, energy recovery, incinerated, landfilled) in a given year.

7 Communication and Public Awareness

Regulatory requirement

18G (1) (b) *Implement an education and awareness program for consumers of consumer paint products that includes information respecting*

- (i) The consumer paint product stewardship program,*
- (ii) Consumer access to return collection facilities, and*
- (iii) The environmental and economic benefits of participating in the consumer paint product stewardship program;*

Product Care will continue to employ industry best practices in the promotion of the program, subject to economic feasibility, adjusting its specific mix of media channels, partners and suppliers on the basis of ongoing performance analysis and program needs. The following describes the types of communications tools and methods Product Care may employ.

(a) Program Website

Product Care offers to consumers, members and service partners online access to information about the program, including, but not limited to:

- Recycling locator with details on hours of operation for collection sites
- Information on the PaintShare program
- Description of products accepted, and not accepted, by the Program
- Details on applicable environmental handling fees
- Information for consumers on buying the right amount of paint, as well as the safe storage and handling of program products
- Insights into what happens to paint after it's dropped off
- Program FAQs for all stakeholder groups
- Annual reports, stewardship plans, reporting and remittance guidelines, regulatory, membership and bylaw information
- Dedicated website pages for both program members and service partners, designed to provide easy access to essential program information
- Program contact information (phone and email).
- A link to Divert Nova Scotia's website

(b) Paint Recycling Hotline

The Program employs a toll-free public inquiry hotline as an alternative method for consumers to obtain program information.

(c) Advertising

Product Care will make use of available media partners to promote the program throughout the province. It is Product Care's aim to ensure that the level of advertising in-market appropriately reflects our ongoing effort to increase public awareness and use of the program. Product Care will strive to employ a mix of approaches, including general messaging related to the program and targeted, geographically-focussed messaging. Advertising platforms may include any of the following in appropriate combinations:

- Print advertising (news media and community publications)
- Radio advertising
- Digital marketing (Facebook ads, YouTube ads, Google ads, app-based advertising, social media and blog content)
- Sponsorships
- Television

(d) Point of Sale (PoS) Materials

Regulatory Requirement

18G (3) *Every retailer shall provide, either at the point of display or at the point of sale, a place for the display of information [in regard to the Paint Stewardship Plan]*

The program will continue to offer point of sale information such as brochures and posters containing program information on request to retail stores and collection facilities free of charge. Product Care will make best efforts to remind retailers of their regulatory obligation to make educational material available to their customers. In addition, numerous resources (i.e. website, brochures, collection site signs and collection site guidelines) are currently available to consumers and collection sites to help identify program and non-program products. The Program will strive to continuously improve these resources and consider other options to help stakeholders determine whether a product is included or excluded from the program.

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

Consumer awareness levels vary by product type and jurisdiction. Factors that impact consumer awareness include:

- Consumer habits, including who purchases and uses the product within a household, and percentage of the population that uses the product. In the case of paint products, unlike other consumer products, paint products are primarily used by only a proportion of the population, typically on an infrequent basis. Therefore, it is reasonable to expect that only a portion of the population will be aware of the Program.

- Program characteristics including program age, product types and lifespan, and characteristics of collection systems.
- Surveying methodology including timing of the survey and method of capturing responses.

Product Care will continue to conduct a consumer awareness survey on a biannual basis, with the next planned survey occurring in 2022 and following that, in 2024 (and every even year thereafter). Results of the survey will be reported in the Program’s annual report. Product Care has seen that mature programs typically maintain a consumer awareness level of at least 75% with fluctuations occurring based on survey conditions. Based on this, the Program will aim to maintain a consumer awareness level of at least 75%, for paint products.

Product Care will contact and offer to meet and/or engage with Regional Solid Waste Coordinators (RSWC) at least once a year to discuss opportunities for collaboration such as consumer education about the Program.

8 Tracking and Auditing Mechanisms

Regulatory Requirements

18G (1) (c) *Confirm that the post-consumer paint products generated from the brand owner’s consumer paint products are recycled or reused to the maximum extent possible;*

The Program utilizes a database tracking and control system to record and track materials managed from point of collection to recycling and disposal for reporting and management purposes, including:

- Number of paint collection containers managed by the collection system,
- Residual volumes collected by the Program as reported by all processors and recyclers, and
- Details on how those volumes are managed (except aerosol residual volumes, which are estimated based on industry data such as average can sizes, volumes, and units).

The system employs best management practices and guidelines including handling and safety requirements.

9 Annual Reporting

Regulatory Requirements

18(F) (1) *Every brand owner shall, on or before June 30 in each year or on some other date agreed upon in writing by the Administrator, provide the Administrator with an annual report on their consumer paint product stewardship program during the previous fiscal year including, but not limited to, information respecting*

- (a) The total amount of consumer paint products sold and post-consumer paint products collected;*
- (b) The total amount of post-consumer paint products processed or in storage;*
- (c) The percentage of post-consumer paint products that were treated or contained, reduced, reused, recycled or recovered;*
- (d) Efforts taken through consumer paint product marketing strategies to reduce post-consumer paint products and packaging waste;*
- (e) The types of processes used to reduce, reuse, recycle or recover post-consumer paint products, including but not limited to details of efforts to incorporate the priorities of a pollution prevention hierarchy by moving progressively from disposal to reduction, reuse, recycling and recovery of post-consumer paint products;*
- (f) The location of return collection facilities or depots;*
- (g) The location of any long-term containment or final treatment and processing facilities for post-consumer paint products;*
- (h) The types of educational information and programs provided;*
- (i) The process of internal accountability used to monitor environmental effectiveness; and*
- (j) Any other information requested by the Administrator,*

And the annual report shall be accompanied by copies of the annual financial statements prepared by an independent auditor of the revenues received and the expenditures incurred.

As agreed on with ECC, the annual report will be submitted on or prior to May 31 of each year. The annual report will include the following:

- The total amount of Program Products sold in the Province
- The total amount of Program Products collected and processed by management method
- Percentage of non-program products collected
- Total number of paint containers processed
- The total amount of Program Products containers collected and processed by management method and by type processed (metal, plastic)
- Process of internal accountability
- Number of collection site visits completed/check-in calls
- Accessibility performance of collection sites
- Design for environment
- Location of the Program collection sites

- Location of processing facilities
- Communication and educational activities pursued by the Program
- Number of meetings conducted with Regional Solid Waste Coordinators
- Audited financial statement of revenue and expenses of the Program

Appendix A: List of Program Products and Non-Program Products

Program Products

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

- Paint aerosols of all types to a maximum container size of 680 grams or 24 ounces
 - ✓ Automotive aerosols
 - ✓ Craft aerosols
 - ✓ Industrial aerosols

Non -Program Products

The Program does not accept the following products:

- Unidentifiable or unlabelled containers
- Paints or wood preservatives that are registered as a pesticide under the Pest Control Products Act (has a P.C.P. Registration number) such as marine anti-fouling paint. These products are pesticides and need to be managed as pesticides
- Craft paint (non-aerosol)
- Automotive paint (non-aerosol)
- Industrial paints & finishes (e.g. baked-on, heat resistant etc.)
- 2-part or component paints containing catalyst or activator
- Roof patch or repair
- Tars
- Tar-based or bitumen based product
- Traffic or line marking paint
- Quick drying paint
- Resins
- Paint thinners, mineral spirits or solvents
- Deck cleaners
- Colorants and Tints
- Caulking compound, epoxies, glues or adhesives
- Brushes, rags and rollers
- Improperly sealed paint containers
- Paint containers with poor integrity (e.g. badly rusted cans) or leaking
- Bulging containers
- Non paint and non-coating products
- Other household hazardous waste