2021 Prince Edward Island Paint Program Annual Report

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Submitted to: Prince Edward Island Department of Environment, Energy and Climate Action

Submitted by: Product Care Association of Canada



productcare.org

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1.0 About Product Care Association of Canada

Product Care Association of Canada ("Product Care") 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. Product Care has developed and managed paint, lighting products, household hazardous waste and special waste stewardship programs since 1994.

Product Care administers and operates the Prince Edward Island (PEI) Paint Stewardship Program ("Program"). The Program is approved by the Prince Edward Island Department of Environment, Energy and Climate Action under the *PEI Materials Recycling Regulations* ("Regulation") and has been in operation since September 2012. Product Care, on behalf of its members, oversees the administration, collection, transportation, recycling, and management of all designated consumer paint products. In addition, the Program is responsible for public education and fostering consumer awareness of the Program.

Product Care's members are the "brand owners" (manufacturers, distributors, and retailers) obligated by the Regulation under the category of architectural paint. In addition, Product Care operates paint product stewardship programs in seven other provinces: British Columbia, Manitoba, Saskatchewan, Ontario, New Brunswick, Nova Scotia and Newfoundland and Labrador. Product Care also operates the stewardship program for lamps in Prince Edward Island.

1.1 Report Period

This report covers the Program's activities from January 1, 2021 to December 31, 2021.

1.2 Program Summary

The Program offers collection sites throughout the province where consumers can bring leftover household paint free of charge. Six collection sites are operated by Island Waste Management Corporation (IWMC) under contract with Product Care.

The Program is funded by Environmental Handling Fees (EHFs) remitted by Product Care's members based on the number of units of designated consumer paint products sold in or into the province (see <u>Appendix</u> <u>1</u> for a list of current EHF rates).

Product Care supplies collection sites with standard reusable collection containers, such as tubskids, boxes, 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.

2.0 Brand Owner Sales Information

Program members reported an estimated liquid volume of 1,158,562 litres¹ of Program Products sold in PEI from January 1 to December 31, 2021.

3.0 Collection

The following section provides the total amount of post-consumer paint collected in PEI, as well as the location of the Program's collection sites.

3.1 Total Amount of Post–Consumer Paint Collected

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

	Number of Tubskids ²	Number of Aerosol Drums ³	Residual Paint Volume (L) ⁴	Residual Aerosol Paint Volume⁵ (L)	Paint Share Volume (L)	Total Residual Paint Volume (L) ⁶
Post-Consumer Paint Collected	986	112	81,246	589	-	81,836

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 2021.

¹ Sales data is reported to Product Care in units. For purpose of this report, sales units are converted to litres sold using coefficients based on the volume of the most common container size in each product category.

² 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. ³ Each drum holds approximately 175 aerosol containers.

⁴ The total residual volume of paint collected is calculated based on the total number of tubskids collected multiplied by a conversion rate of 82.4 L per tubskid. The conversion rate is derived by dividing the total actual residual paint processed by the number of tubskids processed in the same year. Due to labour shortages at the processor in 2021, not all collected tubskids were processed, resulting in lower residual paint volumes.

⁵ Based on a conversion rate of 5.25 L per drum.

⁶ The values shown do not add up to the total value due to rounding.

Table 2: 2021 Paint Sales, Residual Recovery Volume and Recovery Rate

	Total
Sales (litres)	1,158,562
Residual Recovery Volume (litres)	81,836
Recovery Rate	7.1%

3.2 Collection Sites

As of December 31, 2021, six collection sites participated in the Program. All six collection sites were operated and managed by IWMC (see Table 3).

Table 3: 2021 PEI Collection Sites

Collection Site	Address	City
GreenIsle	8 Superior Crescent	Charlottetown
Brockton	2202 Dock Road Rte # 150	West Prince
New London	10142 Rte #6	Central
Murray River	378 Cape Bear Road Rte #18	South Kings
Dingwells Mills	100 Selkirk Road Rte #309	North Kings
East Prince Waste Management Facility	29786 Rte #2	Wellington Centre

4.0 Processing

This section of the report sets out the following:

- a) The total amount of post-consumer paint processed or in storage;
- b) The percentage of post-consumer 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 post-consumer 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 post-consumer paint.

4.1 Location of Processing Facilities

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

Laurentide Re-sources Atlantic Inc. 9322 Rue Main, Richibucto, NB E4W 4C7	Processing Facility
Société Laurentide Inc. 345 Bulstrode Street, Victoriaville, QC G6T 1P7	Processing Facility
GFL Environmental 17 Jones Court, Sussex, NB E4E 2S2	Processing Facility

Table 4: Location of Processing Facilities

4.2 Post-Consumer Paint Processed

In 2021, a total of 986 paint tubskids, and 112 aerosols drums were shipped to Laurentide (Richibucto) and GFL Environmental facilities for processing (see Table 4).

During the reporting period, Laurentide (Richibucto) and GFL Environmental processed (i.e., opened, sorted and bulked into shipping containers) 1,001 tubskids and 111 aerosol drums, including collection containers that remained in their inventory from 2020.

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

ltem	Number of Tubskids ⁷	Number of Aerosol Drums	Residual Paint Volume (L)	Residual Aerosol Paint Volume ⁸ (L)	Total Residual Paint Volume (L) ⁹
Shipped to Processor	986	112	81,246	589	81,836
Processed	1,001	111	82,530	584	83,113

⁷ The total residual volume of paint processed is calculated based on the total number of tubskids collected multiplied by a conversion rate of 82.4 L per tubskid. The conversion rate is derived by dividing the total actual residual paint processed by the number of tubskids processed in the same year. Due to labour shortages at the processor in 2021, not all collected tubskids were processed, resulting lower residual paint volumes.

⁸ Based on a conversion rate of 5.25 L per drum

⁹ The values shown do not add up to the total value due to rounding.

Information on the management of containers in 2021 is found in Table 6 below.

Table	6:	Container	Management	2021
Table	•••	contanter	management	

Container Type	Recycled (Tonnes)	Processor	Management Process
Metal	20.4	DR Metal Recycling, NB Nova 4 Metals, NS Aim Metal, NB, Copal Metal, QC	Mixed with other scrap metal and sold as a commodity, which is eventually sent for smelting
Plastic pails (HDPE 2)	1.9	Laurentide Re-sources Atlantic	Combined and baled with other plastics and managed as a commodity for plastics recycling or sent for reuse
Plastic paint cans (polypropylene)	11.2	Laurentide Re-sources Atlantic	Processed and managed as a commodity for plastics recycling

4.3 Disposal Method Descriptions

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

4.3.1 Reuse (PaintShare Program)

The PaintShare Program 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. Due to the ongoing COVID-19 pandemic, IWMC temporarily stopped the Program in 2020 and 2021 to limit physical contact and personal interactions with consumers at their facilities. Consequently, no paint was provided to consumers through the Program in 2020 and 2021.

4.3.2 Recycling

At the Laurentide Re-sources facilities in Richibucto, paint containers were removed from the collection containers, inspected, opened, sorted by type, colour and quality, and poured into shipping containers according to management options. Both water-based and solvent-based paints were processed in Richbucto in 2021. Bulked paint of recyclable quality was then distributed to an affiliated processor, Peintures Recuperées du Quebec (PRQ) in Victoriaville, QC, or transferred to other international recyclers.

Table 7 provides the quantity of water-based paint and solvent-based paint that was reprocessed and recycled as paint. The diminishing market for solvent-based paint has made it increasingly difficult to recycle. Consequently, the majority of solvent-based paint was sent for energy recovery and limited amounts of solvent-based paints were recycled.

Туре	Volume (L)	Percentage of Paint Recycled
Water-based Paint	62,652	93%
Solvent-based Paint	4,510	7%
Total	67,162	100%

Table 7: Quantity and Type of Paint Recycled

4.3.3 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.

4.3.4 Energy Recovery

Not all solvent-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 with demand continuing to decline.

Due to the high solvent content of solvent-based paints, these products are suitable for energy recovery. Through the process of fuel blending, solvent-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, 3,242 litres of solvent-based paint and paint from paint aerosols processing were blended with other fuels and utilized for energy value at licensed facilities.

4.3.5 Incineration

During the reporting period, no material went for incineration.

4.3.6 Landfill

The sorting and bulking of the water-based paint by Laurentide Re-sources generated 12,710 litres of nonrecyclable water-based sludge/solid, which were solidified and disposed of at a synthetic-lined landfill cell with leachate collection.

Table 8 below shows the breakdown of post-consumer paint managed by the different product management methods.

Method	Volume (L)	Percentage
Reuse	-	-
Recycle	67,162	80.8%
Energy Recovery	3,242	3.9%
Landfill	12,710	15.3%
Incineration	-	-
Total	83,113 ¹⁰	100%

 Table 8: Post-Consumer Paint by Management Method

4.4 Design for Environment

Product Environmental Impact Reduction, Reusability and Recyclability

The paint and coatings industry is proud to provide products that protect, sustain, and add value to buildings, infrastructure, vehicles, and the objects we depend on every day. This is achieved with products that are safe to handle and increasingly eco-efficient. The industry evaluates the impacts of products along their entire life cycle and continuously develops offerings to reflect the latest available science. At the same time, the industry works hard to ensure sustainable production processes, which includes the health and safety of their workforce. Beyond their basic feature of protecting our built infrastructure, coatings are essential components to the production processes of many different industries. Functional coatings can provide additional properties to materials, paving the way to upgraded infrastructure, innovative products, and resource efficiency.

The move towards a circular economy is a central concern and opportunity for the paint and coatings industry. Compliance with regulations on the management of chemicals and waste is considered a basis for doing business.

¹⁰ The values shown do not add up to the total value due to rounding.

According to industry members, the paint and coatings industry has been working to reduce the use of volatile organic compounds (VOC) and associated emissions in paint production. Over the past decade, the industry has seen a significant drop in VOCs used within the industry, with a 75% decrease reported in VOC emissions. Many paint products today contain either zero VOCs or a very low percentage. High-percentage solids coatings ensure that almost no gas emission is produced during the drying process and lasts for a very long time after application.

Additionally, companies are increasingly evaluating resource efficiency along the entire life cycle of their products, starting from the raw materials that serve as ingredients for the industry's products to the management of water, energy, and waste in production processes. A waste management practice observed in the manufacturing of paint is to reuse wash water to reduce the amount of make-up water needed in the process. Wash water and wash solvent can be redirected into low-grade products and paint can also be reworked into new batches, reducing waste and the usage of raw materials in the manufacturing process.

In terms of packaging, many paint manufacturers today are continuously researching more sustainable alternatives. As a result, we are more frequently seeing packaging on the market that is made up of up to 100% post-consumer materials.

Many companies have set sustainable goals to be achieved within the next 10 years, while some manufacturers have aligned their goals with the targets set out in the UN Sustainable Development Goals. For example, one manufacturer has reported a 24% reduction in GHG emissions in paint and coatings manufacturing since 2017.

Some manufacturers are setting renewable energy goals and are exploring a variety of renewable energy mechanisms, such as onsite renewable energy production and the use of renewable energy credits. Overall, continued innovation in manufacturing processes has led to energy and material efficiency in production.

5.0 Public Education and Communications

In 2021, in partnership with IWMC, Product Care executed a number of tactics to raise consumer awareness of the paint recycling program in Prince Edward Island, in accordance with regulatory requirements. The following section provides details regarding communication and public education program plan commitments in 2021.

5.1 Website

The Product Care website includes the following content for the Program:

- "Find a Recycling Location" tool (a searchable map displaying collection sites and drop-off events throughout the province). See <u>Appendix 2</u>.
- Collection site hours and operations
- Accepted and not accepted products

- Program member support section with news and updates
- Consumer videos showing the product management approach for paint
- Other information (e.g., a description of the PaintShare program, information about environmental handling fees (EHFs), frequently asked questions, information about buying and storing paint)

An estimated 372,774 unique visitors accessed ProductCare.org during the 2021 calendar year. The Prince Edward Island section (including sub-sections for accepted products and fee information) received 2,718 total page views. In addition, there were a total of 2,424 page views to the recycling locator from consumers in Prince Edward Island.

5.2 Program Hotline

PCA and IWMC continued to operate a toll-free "hotline" for consumers to obtain information about the Program.

5.3 Print Advertising

An inside cover print ad was featured in CPCA Insight Trade Publication. The full-page advertisement focused on informing members of the paint and coatings industry about Product Care paint programs, with 8,000 copies distributed to industry members. See <u>Appendix 3</u>.

5.4 Digital Advertising

All digital campaigns reached the entire province.

1. Google Search Advertising Campaign: A search advertising campaign served paint ads to provincial residents based on an extensive list of keyword searches relevant to the Program. These ads generated 217 impressions and 54 clicks.

2. Facebook and Instagram Content Strategy: Content focused on paint recycling, special waste and the recycling community in general.

3. Targeted blog posts: Blog posts were targeted at relevant audience members including, but not limited to, homeowners, heads of households, and environmentally-inclined individuals in Prince Edward Island. Topics included specific information on paint recycling, "do it yourself" ("DIY") content, renovation tips, and sustainability best practices. All posts included a call-to-action to find a collection site or interact with the brand on social media.

See <u>Appendix 4</u> for examples of digital advertising activities.

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

In 2021, Product Care distributed both PoS and PoR materials as requested by retailers and collection sites. The following materials are available for reorder through the online order form:

- General paint program awareness posters
- Return to Retail (R2R) and Return to Product Care posters
- Bifold paint brochures

See <u>Appendix 5</u>.

5.6 Partnerships

Product Care continued to contract with Island Waste Management Corporation (IWMC) to promote the Program in the province throughout the year by executing the following tactics:

- 1. Waste Watch News: Newsletters were distributed to Island residences (including seasonal dwellings and apartment units) in June and December through Canada Post. Residents and visitors could also pick up newsletters at the Access PEI locations and town halls. The newsletters were available in English and in French and contained a summarized sorting guide, including information on paint products and recycling. A total of 71,000 newsletters were distributed per issue of the newsletter. The newsletter is available on the IWMC website under the resources section.
- 2. Interactive Sorting Guide: The IWMC website featured a What Goes Where tool providing customers an easy access to sorting and disposal guidelines. Hard copies of the sorting guide, which included paint disposal advice and a direct link Product Care's website in the special disposal section, were made available in English, French, Mandarin, and Arabic. They were also produced in poster size for display at businesses, community organizations and multi-family dwellings. The sorting guide was also made available to new residential customers.
- **3. Business Customers:** Business Guides helped the industry, commercial and institutional sectors manage waste. IWMC included Sorting Guides when distributing the Business Participant Guide. Sorting information for the business sector was also obtainable from IWMC's website.
- 4. Customer Service Inquiries: In addition to the Program hotline operated by Product Care, IWMC's Customer Service Centre operates a toll-free line where consumers call in to request more information regarding the disposal of various recyclables, including paint. IWMC receives an average of 50,000 calls every year and also answers queries through e-mail and IWMC's Facebook page.
- Corporate Annual Report: Information on paint recycling was highlighted in the IWMC's Annual Report. The latest version of the annual report tabled in the Legislature is made available on the IWMC website.
- **6. Recycle Coach:** IWMC also offers What Goes Where interactive sorting guide as a part of mobile app Recycle Coach. In addition to the interactive sorting guide, the app features quizzes and articles on proper sorting and disposal.

7. 7. Presentations & Tours: Normally IWMC presents to audiences of every age at early childhood learning centers, schools, community college, and community groups. These presentations and community outreach activities feature information on proper recycling and special disposal, including Product Care's Light Recycling stewardship program. Unfortunately, in-person presentations and activities were not possible due to the restrictions related to COVID-19.

See <u>Appendix 6</u>.

6.0 Financial Information

A summary of the Program's financials for 2021 is provided in Table 9.

Table 9: Financial Summary

2021 Revenue and Expenses	\$'000
Total Revenue	514
Total Operating Expenses	390
Program Operations	348
Program Administration	30
Education, Public Awareness & Communications	10
Regulatory	2
Surplus / Deficit	123 ¹¹
Cumulative Surplus / Deficit	339

¹¹ Rounded values are shown in Table 9. The Surplus/Deficit value was calculated using the non-rounded values for Total Revenue and Total Operating Expenses.

Appendix 1 - Environmental Handling Fee Rates

Paint Container Size	Current Rates
100ml to 250ml	\$0.45
251ml to 1 litre	\$0.75
1.01 litres to 5 litres	\$1.75
5.01 litres to 23 litres	\$3.15
Aerosol paint (any size)	\$0.45

The following table provides the Program's environmental handling fees as of December 2021.

Appendix 2 - "Find a Recycling Location" Tool

Below is a snapshot of the "Find a recycling location" tool found at ProductCare.org:

		What are you looking to recy	cle?		
💡 PEI, Canada		Paint	~	Q Search	
		Neguac			Cap-aux-Mer
DEPOT New London, Central 10142 Route 6, Kensington, PE, COB 2A0	7.22km	Pointe Sapin			
Accepted products:		de Kent Richibucto Bouctouche	Summerside	a second a s	15 Souris
Get Directions		Shediac	Edward Isl	ornwall Montague	
Website		Moncton Salisbury			
More Details	~	toodiac o Sacky	Amherst Pugwash		
			Springhill Wentworth	gouche Pictou	Antigonish

Appendix 3 - CPCA Insight Print Advertisement

This CPCA ad was featured in CPCA's Insight Trade Publication



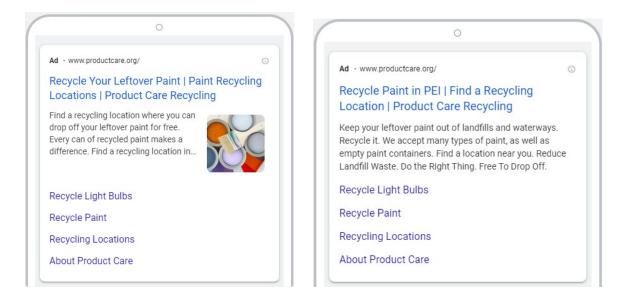
Since 1994, Product Care Recycling has worked with coatings manufacturers, fulfilling their paint recycling obligations in 8 provinces.

Website: productcare.org/cpca Toll Free: 1-877-592-2972 Email: contact@productcare.org



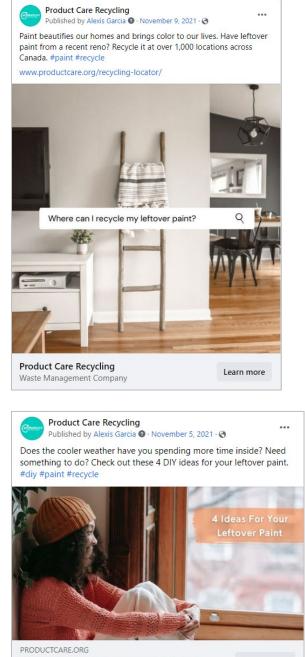
Appendix 4 - Digital Advertising Activities

Google Search Ads



Sample Facebook and Instagram Posts





4 Ideas for your leftover paint - Product Care Recycling Learn more

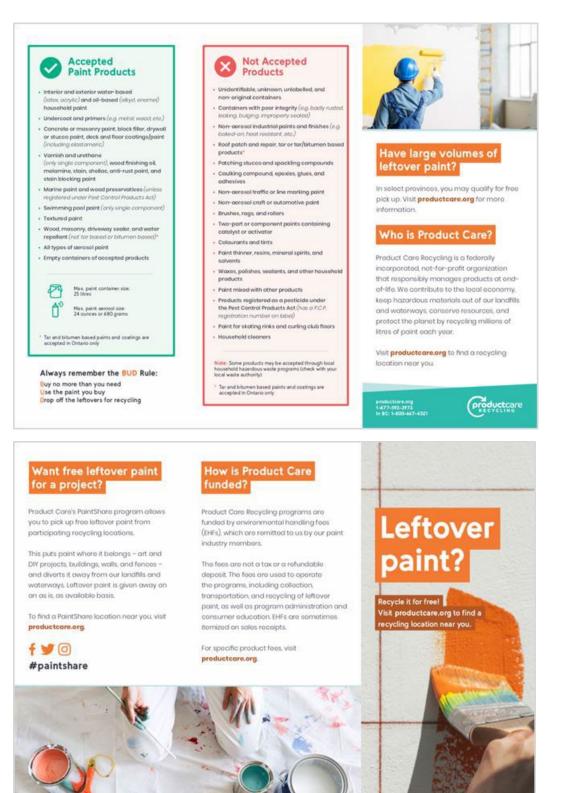
Appendix 5 - PoS and PoR Materials

PoR/PoS Posters





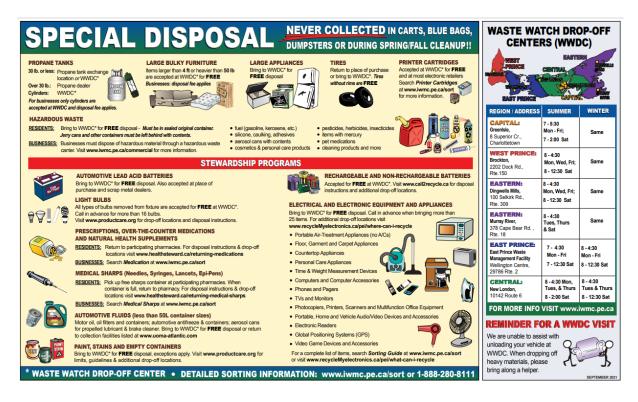
Bifold brochure



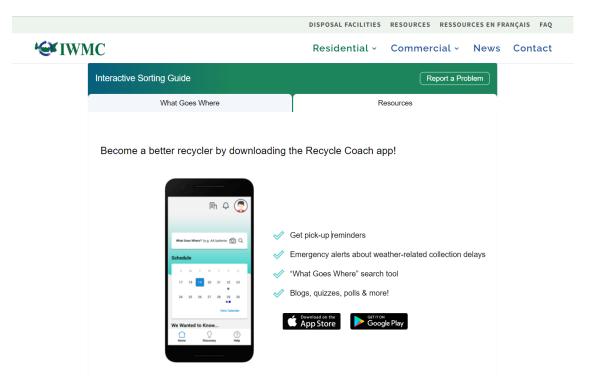
Productcare

Appendix 6 - IWMC Partnership Materials

IWMC Sorting Guide



IWMC Recycle Coach App



IWMC Interactive Sorting Guide

		DISPOSAL FACILITIES	RESOURCES RESS	DURCES EN
AC		Residential ~	Commercial	New
Interactive Sorti	ng Guide		Report a	Problem
	What Goes Where	R	esources	
	Densel for Denseling and Discourt Information	_		
(Search for Recycling and Disposal Information		earch	
	_atex Paints			
	Dil-Based Paints			
	Plastic Paint Cans			
	Empty Metal Paint Cans (Empty Paints)			
	Stains & Finishes (Paint Thinner)			
	Painting Tools & Supplies (Paint Supply)			
	e been taught to recycle. Now it's time to le actly. Download the Recycle Coach app.	Down	pload on the GET IT ON D Store Goog	e Play
Material List			Privacy Policy User A	

To use the sorting tool, enter your query and scroll down for results.

		DISPOSAL FACILITIES	RESOURCES RESSO	JRCES EN FRANÇAIS FAQ		
W IWN	1C	Residential ~	Commercial ~	News Contact		
	Interactive Sorting Guide		Report a Pr	oblem		
	What Goes Where	Re	esources			
	< Back					
	Hazardous Waste Latex Paints					
	The Paint Recovery Program accepts leftover paint and empty paint cans free of charge at any Waste Watch Drop-Center. Visit www.productcare.org for a list of paints accepted under the Paint Recycling Program. Excluded paint products are accepted at WWDCs for households only.					
	Businesses must use a hazardous waste carrier f					
	If you have more than 10 one-gallon paint cans of before arriving to make arrangements.	more than 50 spray paint ca	ans, please call			
	(*	\rangle				
	Drop Local					

IWMC Sorting Game

