Saskatchewan Household Hazardous Waste Product Stewardship Program Annual Report 2021

Submitted by:

Product Care Association of Canada



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1.0 Introduction

The Saskatchewan Household Hazardous Waste Product Stewardship Program ("Program") is operated and managed by Product Care Association of Canada ("Product Care"). 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.

This annual report is prepared in accordance with the requirements outlined in <u>The Household Hazardous Waste Products Stewardship Regulations</u> ("Regulation") issued under <u>The Environmental Management and Protection Act, 2010</u>, and the Saskatchewan Household Hazardous Waste Product Stewardship Program Plan ("Program Plan") approved by the Saskatchewan Minister of Environment on June 23, 2020. This report provides information for the period covering January 1 – December 31, 2021.

The members of the Program are the obligated "first sellers" or "stewards" (manufacturers, distributors, and retailers) pursuant to Regulation regarding the following product categories:

- Flammables materials
- Corrosives materials
- Toxics materials
- Physically hazardous materials
- Pesticides

The Program is funded by membership fees, known as Environmental Handling Fees (EHFs), remitted to Product Care by its members based on the volume of sales of designated Program Products in or into the province. In some cases, retailers recover this expense as a separate visible EHF to consumers. The EHF rates are set by Product Care. Program revenues are applied to the operation of the Program, including administration, communication and outreach, collection, transport, and processing of collected Program Products, as well as the maintenance of a reserve fund.

Product Care operates product stewardship programs for Household Hazardous Waste (HHW) in three other Canadian provinces: British Columbia, Manitoba, and Ontario. Product Care also operates programs for paint in British Columbia, Saskatchewan,

Manitoba, Ontario, New Brunswick, Prince Edward Island, Nova Scotia, and Newfoundland & Labrador; lamps in British Columbia, Manitoba, Quebec, and PEI; and alarms in British Columbia. See the Product Care website at www.productcare.org for more information.

2.0 Program Summary

Pursuant to Table 1 of the Regulations, The Program accepts the following categories of products ("Program Products"):

- i. Waste Household Hazardous Materials including
 - a. Flammable materials
 - b. Corrosive materials
 - c. Physically hazardous materials including explosives, but not including ammunition
 - d. Toxic materials; or
 - e. Environmentally hazardous materials including those materials that meet the criteria of being "toxic" and either "persistent" or "bioaccumulate"

ii. Pesticides

The Program offers collection services throughout the province where consumers can bring leftover Program Products. In 2021, the Program operated collection events throughout the province. Product Care manages the collection and shipment of collected HHW from collection events to a processor for recycling and responsible disposal.

The Program has established an advisory committee in Saskatchewan, compromised of representatives from NGOs, local governments, and industry to allow various stakeholder input and feedback.

3.0 Collection System

At the launch of the Program there were no permanent facilities in the province for the collection of HHW products. The Program recognized that establishment of collection sites would require time and committed to operating collection events in the interim. Due to the hazardous nature of some of the Program Products, siting permanent collection sites presents significant challenges and takes significant time. The collection of Program Products is best suited to sites that are already involved with waste management such as transfer stations and landfills. Unlike collection systems for other products, such as paper and packaging, the collection of Program Products has more stringent requirements such as weather protection, security, and supervised collection service. Establishing collection sites typically requires zoning approvals, local authority approvals and addressing other administrative and regulatory requirements. Whilst Product Care continues to work to establish permanent collection sites in Saskatchewan, as of December 31, 2021, there were no permanent collection sites established.

In 2021, Product Care contracted with service providers and local governments to provide collection events across Saskatchewan. Consumers were able to drop off leftover Program Products at no charge at all collection events throughout the province. Dependent of the local government, some collection events only collected Program Products, while others collected other products (Non-Program Products) in addition to Program Products. There were 38 collection events in 2021, held across 26 communities. Some communities held multiple collection events during the year. Table 1 details the communities serviced by collection events in 2021.

Table 1: Location of Collection Events held in 2021

Location of Collection Events held in 2021.						
Saskatoon	Kindersley	Fort Qu'Appelle	Warman			
Moose Jaw	Cory	Watrous	Regina			
Martensville	Weyburn	Humboldt	R.M of Edenwold			
North Battleford	Nipawin	Prince Albert	Yorkton			
Swift Current	Hafford	Vanscoy	Watson			
Wakaw	St. Brieux					

4.0 Program Products Collected

4.1 Volume Collected

Residual recovery volume represents the estimated liquid volume, measured in litres, of liquid Program Products recovered by the Program. Table 2 shows the estimated residual recovery volume of flammable, toxic, corrosive and pesticide Program Products collected in 2021. The collection, packaging and transportation of hazardous waste is dictated by Transport of Dangerous Goods Regulation (TDGR) and waste management options. As a result some product categories are comingled such as toxics and pesticides. Environmentally hazardous materials are collected and managed under other product categories such as toxics. Table 3 shows the estimated number of units of pressurized Program Products collected in 2021.

Table 2: Estimated Residual Recovery Volume of Flammable Liquids, Toxics and Corrosive Program Products Collected in 2021 (Litres)

Product Category	Total ^ı (L)
Flammables ¹	6,788
Corrosives ¹	2,536
Toxics Incl. Pesticides ¹	2,519
Total	11,843

Table 3: Estimated number of Pressurized Program Products Collected in 2021 (Units)

Product Category	Total (units)
Other Aerosol ²	16,030
Physically Hazardous Products	4,728
Total	20,758

¹ Residual volume collected is calculated by taking the weight of materials provided by the processor and removing container weights (based on standard container weights determined by Product Care). The weight of the material is multiplied by the average estimated density of the specific materials obtained from SDS specifications.

² "Other Aerosol" includes flammable, corrosive and toxic aerosols"

5.0 Product Management

The objective of the Program is to minimize the improper disposal of Program Products by providing an accessible collection system and ensuring that the collected materials are reused, recycled, or treated or disposed of in an environmentally responsible manner. Product Care strives to manage collected products in accordance with the pollution prevention hierarchy. Product management and the application of the pollution prevention hierarchy varies by product.

Processors are selected based on several factors, including regulatory compliance, location of operations, processing capacity, processing methods, competitiveness, downstream markets, and conformity with Product Care requirements. All processors are required to comply with federal and provincial regulatory requirements, as well as Product Care's requirements.

Product Care's end-of-life management protocol employs the following hierarchy to minimize impacts on the environment: reduction, reuse, recycle, and disposal in an environmentally responsible manner. Due to the wide range in composition and properties of HHW products, different management methods are used for different products.

Product Care encourages consumers to buy the right amount of consumable products for their needs in order to reduce waste. The "BUD" Rule is Product Care's primary message, where consumers are encouraged to:

- Buy no more than you need.
- Use all that you buy; and
- Dispose of leftovers safely.

The following section outlines the product management processes employed by the Program for each product category.

Flammable Materials

Given the nature and mixed composition of flammable materials, it is not economically viable or feasible to reuse or recycle flammable liquids. Instead, leftover flammable materials were blended and sent for energy recovery.

Corrosive Materials

Corrosive materials were neutralized, and chemically treated; any resulting neutralized liquid was discharged to sanitary sewer under a permit and benign solids securely landfilled. Corrosive aerosols were evacuated with propellants absorbed by activated carbon and the corrosive liquids are manage as noted above.

Toxic Materials

Toxic materials were sent for incineration at high temperature in a government regulated and permitted incinerator.

Pesticides

Pesticides were incinerated at licensed facilities and at temperatures high enough to avoid creating hazardous by-products. Pesticide aerosols were either evacuated, propellants absorbed by activated carbon, and the residual pesticides were sent for incineration.

Physically Hazardous Material (Fuel Cylinders)

Fuel from fuel cylinders was sent for energy recovery. Containers from Fuel Cylinders were sent for metal recycling.

Containers

All metal containers were recycled as scrap metal. Plastic containers containing flammable or corrosive liquids were either recycled or sent to landfill depending on the type of plastic and the condition of contamination. Plastic containers that contained toxic materials are incinerated along with their contents.

5.1 Summary of Volumes Processed by Processing Method

Table 4 summarizes the estimated amount of household hazardous waste product, by category, diverted to each of the Programs waste management processes listed in Section 5.0 Product Management

Table 4: Estimated amount of Program Product diverted to Product Management Processes

	Product Management Processes				
Product Category	Reused	Recycled	Energy Recovery	Incinerated	Solidified & Treated
Flammable Liquids & Gasoline (Litres)			6,788		
Toxics (including pesticides) (Litres)				2,519	
Corrosives (Litres)					2,536
Physically Hazardous Products (Units)			4,728		
Aerosols (Units)					16,030
Total (Litres)			6,788	2,519	2,536
Total (Units)			4,728		16,030

6.0 Public Education and Communications

The initial focus of the program is to develop and establish a collection system, followed by public outreach and public education to make consumers aware of the program and recycling services.

In 2021, the Program implemented several different strategies to raise consumer awareness, in accordance with regulatory requirements. The following section provides details regarding communications and public education tactics implemented in 2021 to fulfill commitments outlined in the Program Plan.

6.1 Program Awareness

The Program plans to conduct consumer awareness surveys once a reasonable permanent collection system has been established.

6.2 Website

The Product Care website includes the following content for the Saskatchewan HHW Program as outlined as a commitment in the Program Plan:

- Recycling locator (a map displaying the drop-off events) see Appendix A
- Events hours and operations
- Lists of accepted and not accepted products
- Program member support center with news and updates
- Consumer videos showing the product management approach for Program Products

An estimated 372,774 users accessed productcare.org during the 2021 calendar year. The Saskatchewan section (including sub-sections for accepted products, and fee information) received 16,736 total page views. In addition, there were a total of 4,043 page views to the recycling locator from consumers in Saskatchewan.

6.3 Program Hotline

Product Care continued to operate a toll-free, "hotline" for consumers to obtain information about the Program.

6.4 Digital Advertising

An annual campaign ran in Google Search to users in Saskatchewan, whilst a targeted seasonal campaign promoted events in Regina and Saskatoon across Google's Display network and Facebook's network.

6.4.1 Google Display & Discovery Advertising Campaign: October 2021

In October, display ad banners were shown across Google's Display Network and the discovery section (including YouTube and Gmail) targeting users in Saskatoon and Regina. The ads received 215,278 impressions and 1,136 clicks to the website.

6.4.2 Google Search Advertising Campaign: January to December 2021

A search advertising campaign served HHW ads to provincial residents based on an extensive list of keyword searches relevant to the Program resulting in 1,436 impressions and 237 clicks.

6.4.3 Facebook Advertising Campaign: October 2021

Events in Regina and Saskatoon were promoted through Facebook, Instagram, and Facebook's Audience Network, resulting in 97,123 impressions and 1,639 clicks.

See Appendix B for examples of digital advertising activities.

6.5 Partnerships

Product Care is a founding member and has continued to participate in Recycle Saskatchewan (RS), an informal alliance of Extended Producer Responsibility (EPR) programs in Saskatchewan connected by a shared goal to:

- Share best practices on extended producer responsibility and product stewardship with government and other stakeholders.
- Maximize the benefits and impact of joint RS initiatives.
- Increase utilization of Member programs by all Saskatchewan residents.

Product Care is an Associate Member of the Association of Regional Waste Management Authorities of Saskatchewan (ARWMAS) and participates in ARWMAS's bimonthly meetings to share updates on the Program and provide information to Saskatchewan's regional waste authorities. Product Care provided a presentation on the HHW Program at ARWMAS's annual workshop in October.

7.0 Financial Information

A summary of the Program's financials for 2021 is provided in Table 5. The financials detail the total amount of recycling fees collected to fund the Program and the amount spent to operate the Program, including communications and administration costs.³

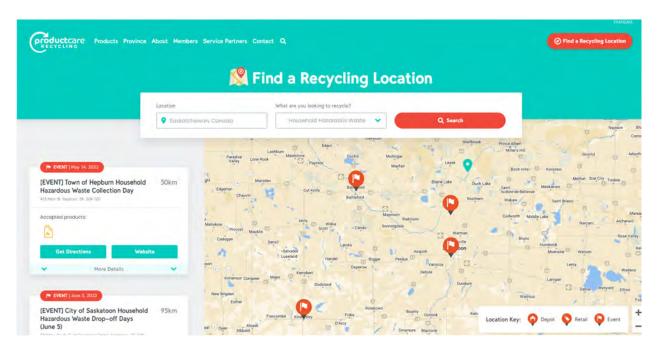
Table 5: Financial Summary 2021

2021 Revenue and Expenses	\$
Total Revenue	216,571
Program Operations	165,530
Program Administration	17,641
Education, Public Awareness & Communications	1,124
Total Operating Expenses	184,295
Surplus / Deficit	32,276
Cumulative Surplus (Reserve)	32,276

³ The Program does not utilise recycling incentives and therefore none were paid out.

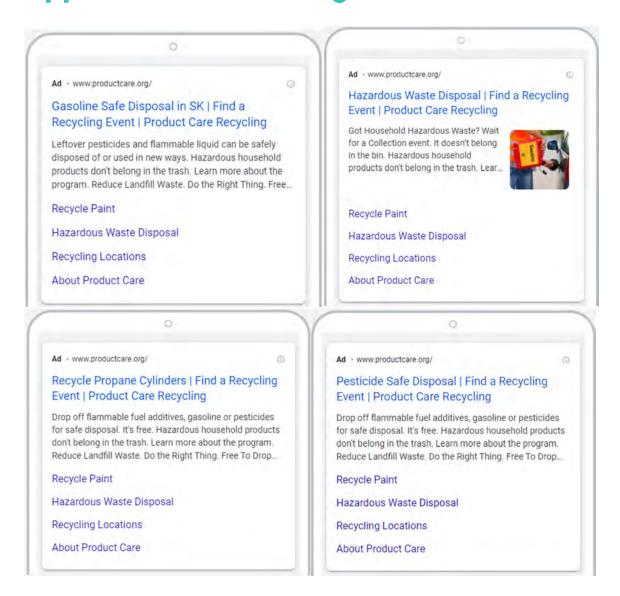
Appendix A: Recycling Locator

Below is a snapshot of the recycling locator tool found at ProductCare.org:



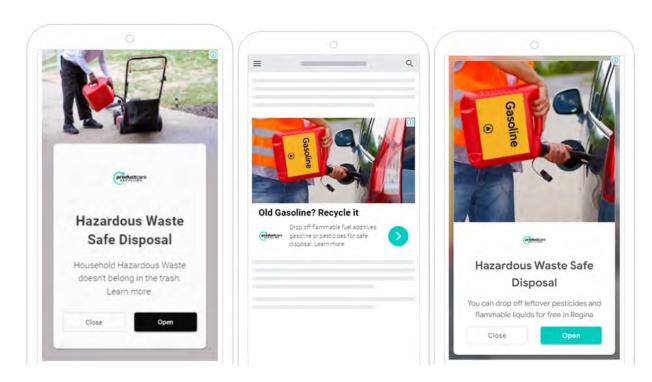


Appendix B: Advertising Materials



Google Display Ads - Dynamic*



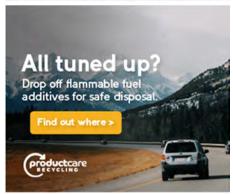


*Display dynamic ares use a mix of headlines, descriptions, images and videos to configure hundres of different versions that addpat to a wide variety of placements and according to users' behaviour. Some varietions examples:

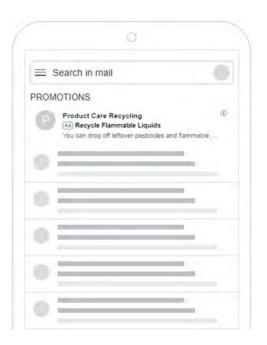
Google Display Ads – Static



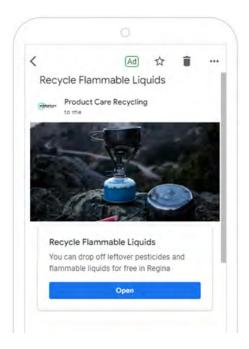




Google Display Ads - Gmail



Gmail Ad (closed)



Gmail Ad (open)

Facebook / Instagram Ads

