

HHW EPR Programs

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www.regeneration.ca



About Product Care









- Product Care Association (PCA) has managed special waste recycling programs in Canada since 1994.
- Formed in 1994 in response to Product Stewardship Regulations in BC as a Federal, not-for-profit organization
- Provides compliance for industry members whose products are designated under provincial Extended Producer Responsibility (EPR) laws; members include manufactures, retailers, distributors
- Industry-based board of directors divided into product sectors



Programs









- Operates stewardship programs in 9 provinces in Canada
- Operates LightRecycle program in Washington State in cooperation with NEMA
- Worked with PaintCare to implement the first paint stewardship program in USA (Oregon), followed by California
- Working with Mattress Recycling Council programs in Connecticut, California and Rhode Island





PCA programs











Paint: BC, Sask., Manitoba, New Brunswick, Nova Scotia, Newfoundland, PEI, Ontario



Flammable liquids (including solvents), pesticides and other HHW products: BC, Manitoba, Ontario (pending)



Lighting: BC, MB, QC, PEI, ON, in USA: WA,



Smoke and CO Alarms: BC



Small Appliances: BC (contracted by CESA)



Major Appliances: BC (contracted by MARR/AHAM)



Outdoor Power Equipment: BC (contracted by OPEIC/OPEI)











Rebranding as









"ReGeneration" for consumers



Corporate Name

• Remains as the legal name that appears on all contracts and agreements

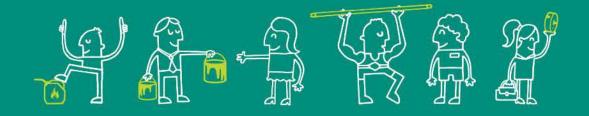


Consumer-Facing Brand

- More intuitive and engaging to consumers
- Umbrella brand under which all programs are represented (PaintRecycle, LightRecycle, AlarmRecycle etc.)







Extended Producer Responsibility (EPR)





Major EPR product categories in Canada

- Packaging and Printed Paper (PPP or "blue box")
- Beverage Containers often deposit return
- Automotive: motor oil, tires, car batteries
- Electronics computer, monitors, printers
- Appliances large and small
- Batteries single use and rechargeable
- Paint
- Household hazardous waste (HHW)
- Lights and fixtures
- Pharmaceuticals
- Outdoor power equipment
- Smoke Alarms







National EPR Action Plan (Canada)*

Phase 1 (by 2015)

- Automotive products
- Electronics and electrical products
- Household hazardous and special wastes
- Mercury containing lamps
- Packaging
- Printed materials
- Other mercury-containing products

Phase 2 (by 2018)

- Construction materials
- **Demolition materials**
- **Furniture**
- Textiles and carpet
- Appliances, including ozone-depleting substances (ODS)









HHW list from CCME*









- paints and coatings and their containers
- solvents, such as thinners for paint, lacquer and contact cement, paint strippers and degreasers, and their containers
- all batteries, including single-use, but excluding lead acid batteries
- pressurized containers, such as propane tanks and cylinders
- fertilizers and their containers
- pesticides, fungicides, herbicides, insecticides and their containers
- aerosol containers, such as hair-spray containers
- portable fire extinguishers
- pharmaceuticals and sharps, including syringes
- corrosive materials
- environmentally hazardous materials
- flammable materials
- explosives (but not including ammunition)
- toxic materials.

*Canadian Council of Ministers of the Environment





PCA HHW Program Products

Note: All products have container size restrictions and not all products are accepted in all programs.

Paint Products

All household architectural paint products including aerosols.

Flammable Liquids and Waste Gasoline

Products that display the flammable symbol and is a liquid or aerosol.

Gasoline accepted only in an approved gas can or jerry can.

Physically Hazardous

Non-refillable gas cylinders that display both the flammable symbol and explosive symbol.









ACCEPTED PRODUCTS

Pesticides

Consumer pesticides that have the poison (skull & cross bones) symbol, the Pest Control Product (PCP) number and the word "Domestic" on the label.

Toxics

Products that display the poison symbol, says "Danger" and is a liquid or aerosol.



Products that display the corrosive symbol, liquid, aerosol or solid.

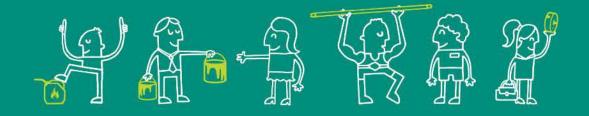








DANGER



HHW EPR Programs





Existing HHW Programs

| HHW Programs | ВС | MB | ON |
|---|----------------------|----------------------|------------------------|
| Program Start Date | 1997 | 2012 | 2008 |
| | Local Gov't, Bottle | Local Gov't, Private | Local Gov't |
| Collection System | Depots, Private | Sector | |
| | Sector, Retail | | |
| Collection Sites | 100 | 10 | 88 |
| Collection Events | Limited | 16 | >120 |
| Products | | | |
| Flammable Liquids (Solvents) | ٧ | ٧ | √ 📝 |
| Gasoline | ٧ | ٧ | |
| Pesticides | ٧ | ٧ | V |
| Corrosives | | ٧ | |
| Toxics | | ٧ | |
| Physically Hazardous/Pressurized Containers | | ٧ | V |
| Fertilizers | | | V |
| Accepted Products | | | |
| | | | Consumer/Residential |
| | | | & Small Qty IC&I |
| Generator | Consumer/Residential | Consumer/Residential | Generator |
| | 10L or Kg except | 10L or Kg except | 30L or Kg except |
| Maximum Container Size (in general) | Gasoline <25L | Gasoline <25L | Pressurized Containers |

^{*}Produces <100 kg per month of hazardous waste





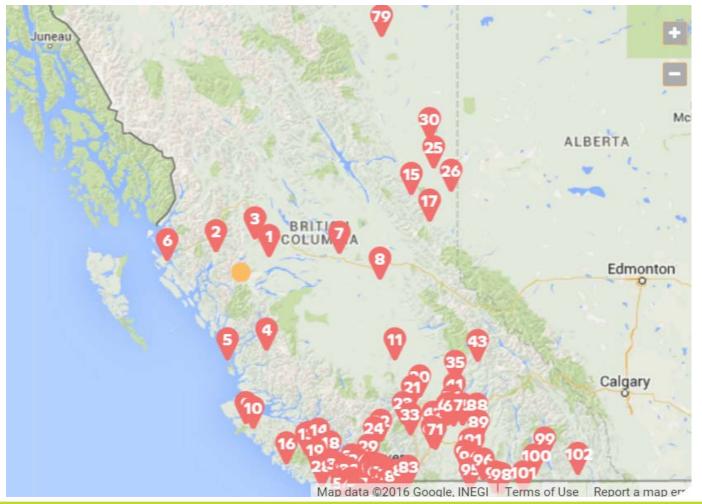
BC Collection Sites















MB Collection Sites















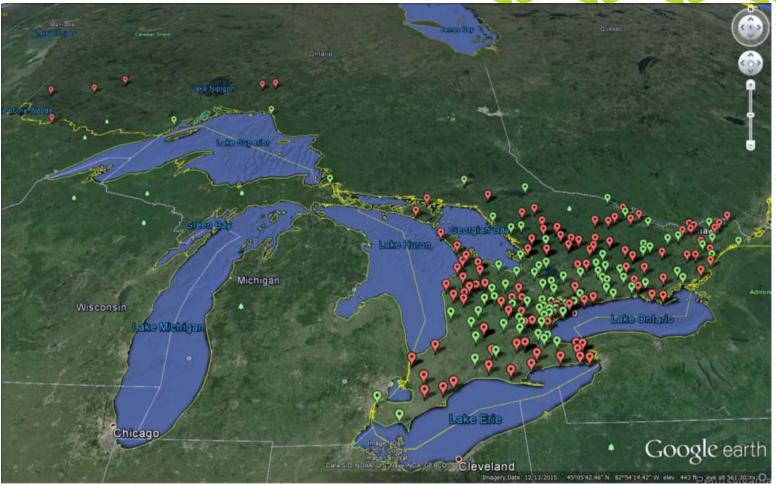
ON Collection Sites











Red = Collection Events Green = Collection Sites





Program Performance







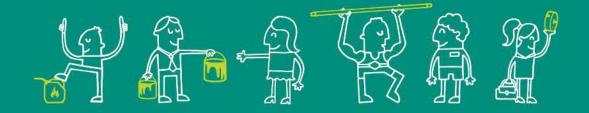


| 2014 Collection Volumes | ВС | MB | ON* |
|---|-----------|-------------|------------|
| Flammable Liquids/ Solvents (including | | | |
| Gasoline in BC&MB) | 112,478 L | 6,954 L | 291 Tonnes |
| Pesticides (including Toxic in MB) | 21,679 L | 2,529 L | 32 Tonnes |
| Corrosives | | 1,784L | |
| Physically Hazardous/Pressurized Containers | | 4,148 units | 964 Tonnes |
| Fertilizers | | | 34 Tonnes |
| * MHSW 2014 Annual Report | | | |

2014 BC Paint = 2,943,339 L 2014 ON Paint = 9,422 Tonnes







HHW Program Challenges





HHW Program Challenges









Administrative:

- Regulatory disharmony inconsistencies within provincial legislature makes it difficult for stewardship agencies to harmonize definitions and required reporting timelines
- What is the correct measure of success for consumable products is 0 litres collected the desired outcome (meaning a reduction in consumption) or is a 90% collection rate preferable (suggesting diligent recycling)?
- Disconnect between permitting, compliance & enforcement, and hazardous waste regulatory requirements and Extended Producer Responsibility requirements, resulting in inefficiencies and challenges in meeting both sets of obligations
- Low cost products limit fee rates
- Consumer products vs. commercial products















Consumers:

- Tempering consumer expectation that the program should take everything
- Consumable products, typically no expiry date
- Low volumes as compared to other stewarded products
- Products typically in smaller containers, don't take up much space; easy to fit into garbage bin
- Defining products to be easily understood by consumers, retailer and industry (technical vs SKU vs product labelling)





HHW Program Challenges









Operational:

- Collection events faster to set up but typically much higher costs vs permanent depots and less convenient
- Despite ever-expanding lists of EPR products, existing collection infrastructure remains limited and is struggling to keep up
- The problem is compounded by the fact that varied municipal bylaws, permitting procedures, consultation requirements, etc., make it difficult to set up a new collection facility
- Not homogenous product; solids, liquids, compressed gases
- Product class incompatibility; even within a product class e.g., acid and base within corrosive category





HHW Program Challenges







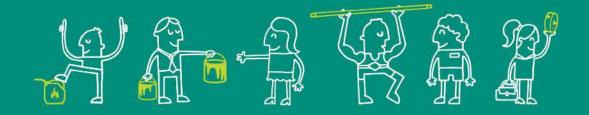


Operational:

- Collection sites subject to Hazardous Waste Regulation
- Transportation subject to Hazardous Waste Regulation and Transportation of Dangerous Goods Regulation –manifest requirement etc....
- Zoning & Fire code requirements
- Limited collection infrastructure
- Limited potential service providers for collection/transport/ processing
- Recyclability of special waste products
- No value commodity











- Defining products easily understood by consumers, retailer and industry (technical vs SKU vs product labelling) -consumer friendly
- TDG packaging standards or Equivalent Certificate from Transport Canada
- Proper staff training
 - collection site procedures/guidelines; product acceptance, classification, sorting and packaging
 - WHMIS & TDG
 - Emergency response
- Personal Protective Equipment







- Reputable and licensed/permitted service providers
- Environmental Impairment Insurance
- Spill kit(s) & Eyewash station(s)
- Emergency spill response plan
- Potential reuse with due diligence/liability waiver
- No self-drop off or self-serve
- Process to deal with unknowns
- Focus on consumer & residential products
- Temper expectations and allow sufficient timelines







- Collection site
 - Secure & weather protected
 - In compliance with Dept. Env regulations (generator registration, notification), fire code & building code, as applicable
 - Spill containment
 - Proper signage
 - Sufficient space for collection, storage and proper segregation
- Locate away from environmentally sensitive areas
- One stop shop















In Summary:

- **Complex program**
- Sufficient time for development & implementation
- Consider phased-in approach

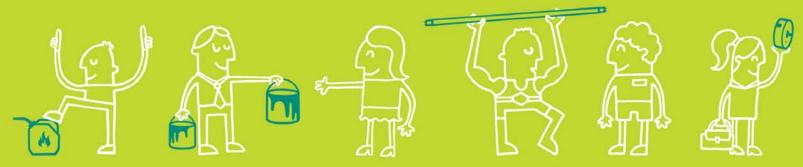




THANK YOU!

For more information, contact:

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We are all part of the ReGeneration.



