



Product Care Association

**Prince Edward Island Lamp Product Stewardship
Program Plan**

For submission to:

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1. Introduction

The Prince Edward Island (“PEI”) Lamp Product Stewardship Program Plan is submitted by Product Care Association to the PEI Department of Environment, Labour and Justice, pursuant to the requirements of the *Environmental Protection Act* R.S.P.E.I. 1988, Cap. E-9; *Materials Stewardship and Recycling Regulations* (the “Regulation”).

The stewardship plan covers the years 2015-2020.

2. Product Care Association

The PEI Lamp Product Stewardship Program (the “Program”) will be operated and managed by Product Care Association. 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 also operates lamp product stewardship programs in three other provinces: British Columbia (BC), Manitoba (MB) and Québec (QC). The BC and MB programs are known as LightRecycle while the QC program as RecycFluo. The LightRecycle name would be used for the PEI Lamp Program.

3. Program Membership and Program Funding

The plan is submitted by Product Care on behalf of the lamp product brand owners who appoint Product Care as their agent under the Regulation. The program is open to any brand owner to join. This may include the manufacturers, distributors, first importers and retailers of program products in PEI.

The program is funded by membership fees, known as “environmental handling fees”, remitted to Product Care by its members based on the quantity of sales of the designated lamp products sold in PEI. The fee rates are set by Product Care. Program revenues are applied to the operation of the program, including education, collection system, administration, transport, recycling and disposal of collected residual products as well as a reserve fund to ensure the long term viability of the Program.

Producer Compliance

In order to maintain a ‘level playing field’ for the program members, the program will actively search for, identify and recruit brand owners of program products. If a potential brand owner has not joined the program despite repeated notifications of their obligations, the program will refer the matter to the PEI Department of Environment, Labour and Justice for regulatory compliance and potential enforcement proceedings.

4. Program Products

Product Definition

The Program manages lamp products as defined in the Regulation:

- (X) “lamp product” means a light source designed to produce light from electricity including, but not limited to:
- (i) fluorescent tubes,
 - (ii) compact fluorescent lamps,
 - (iii) high-intensity discharge lamps,
 - (iv) incandescent lamps,
 - (v) light-emitting diode lamps;

Products Accepted

The program is designed to collect and manage end-of-life intact (whole) lamp products. The program will include the following common categories of lamps, whether they are marketed for residential, industrial or commercial purposes. This list is subject to change by Product Care in consultation with obligated stewards.

- Fluorescent Tubes – Fluorescent tubes come in different lengths (4 feet, 8 feet, etc.), diameters (T5, T8 and T12) and light output. Most are straight but some are curved or shaped.
- Compact Fluorescent Lamps (CFLs) – Fluorescent bulbs that are typically similar in size and intended to replace an incandescent (traditional) light bulb, including pin-type sockets, covered CLFs and various output wattages
- High Intensity Discharge Lamps (HID), non mercury and mercury containing lamps – Includes mercury vapour, metal halide, high or low pressure sodium, UV and germicidal lamps
- Incandescent and Halogen lamps – Filament lamps of all shapes, sizes and wattage
- Light Emitting Diode (LED) lamps – Solid-state lamps used for speciality purpose and conventional lighting applications

The lamp product can be sold as replacement lamps or integrated into a product intended to illuminate an area (such as a fixture, a flashlight, etc.). When sold integrated into such a product, the lamp product needs to be designed to be removed from that product, by the end user in order to be recycled. Lamps that are sold integrated into products, that meet this requirement, will be included in the program.

The Program is designed to collect and manage whole lamps and not crushed lamps. A limited amount of incidental breakage of lamps will be accepted by the program, provided the broken lamps are packaged in accordance with the requirements of the program.

The program includes lamp products manufactured by existing producers as well as orphan products (those that are no longer in production or which the manufacturer is no longer producing) if their function was the same as products in the Program.

Non Program Material

Non-program materials are products other than the lamp products listed above. Minimization of non-program material will be achieved through a comprehensive program of public education, signage, collection facility staff training, as well as effective regulatory enforcement against those who abandon products at or near collection facilities. Non program material includes but is not limited to the following:

- All type of fixtures
- Ballasts
- Any other lighting products (Products containing lights with a primary purpose that is not to illuminate or assist in the illumination of space)
- Lamps integrated into products that are not intended for removal/replacement by end users. From time to time, due to technological changes this exclusion may be subject to review.

5. Lamp product Collection, Transportation and Management

The objective of the PEI Lamp product Recycling Program will be to provide an efficient and convenient collection system and proper management of Program Products.

5.1 Collection System

5.1.1 Collection Facilities and Collection Containers

Product Care does not directly own or manage any collection facilities, but intends to work with Island Waste Management Corporation (IWMC) to utilize IWMC's six Waste Watch Drop-off Centers (WWDCs). The Program may consider supplementing the IWMC collection system with other collection methods such as voluntary return to retail or direct pickup service. There will be no charge to drop off Program Products. Before the Program launch, collection facility locations will be made available online in an interactive map on the Product Care website. See Appendix A for a list of the current WWDCs including their hours of operation and locations.

The Program will supply collection facilities with collection containers such as cardboard boxes or other collection containers. Collection sites will be required to keep collection containers in a secure location, not accessible to the public when the collection site is closed. Full collection containers will be picked up when full by the Program's contracted transporters.

5.1.2 Large Volume Users

The six WWDC sites will be able to receive and handle large volumes of lamp products, from the commercial sector. Advance notice or appointment by large volumes generators will be requested to ensure proper storage and handling at the collection facility.

5.1.3 Environmental Regulatory Requirements

The six WWDC sites already have the permit required under Section 2 of Regulation to act as collection facility for the program products. If the program expands the collection system to other collection methods, such as voluntary return-to-retail or return-to-distributors, no permits will be required under section 2 as the collection of program products is not the main business of this category of collection site.

5.1.4 Collection Facility Training

The program will visit most collection facilities to ensure adequate training of collection facility operators in conjunction with IWMC. The program will supply all collection facilities with spill kits equipped to recover and clean up any broken lamp. This is important for customer service, health and safety and environmental risk reduction.

5.2 Lamp product Management Options

Reduce and Redesign:

The environmental impact of lamps can be reduced through a reduction in toxic components, a reduction in the quantity of materials utilized in product, increase energy efficiency and increased product lifespan.

Mercury is a necessary part of fluorescent lamp technology, but manufacturers have been able to reduce the amount of mercury in the lamps. The average Canadian compact fluorescent lamp contains 3.7 mg of mercury (roughly the size of the ball in the tip of a ball point pen).¹

The Canadian Council of Ministers of the Environment (CCME) set Canada-wide standards for the amount of mercury in lamps with targets of a 70% reduction by 2005 and an 80% reduction by 2010 against the 1990 baseline of an average of 43 mg. By 2006, members of Electro-Federation Canada had exceeded the target with an 81.6% reduction in mercury content for an average of 7.9 mg per lamp (includes all fluorescent and HID lamps sold in Canada by Electro-Federation members).²

Most CFLs sold in 2003 lasted an average of 3 years but Energy Star™ rated lamps now can last up to 12 years.³ Fluorescent tubes are now available in a longer life version that provides 30,000 hours of light compared to the 24,000 hours of other lamps. In addition, fluorescent tubes are now available that are smaller in diameter (T8 or T5), providing the same or more light with about 50% less material resources by weight.⁴

Advancements in technologies such as LED will eventually displace HID lamps, fluorescent lamps and other mercury containing lamps and other technologies. In addition, federal energy efficiency standards is driving technological changes such as the phasing out of incandescent lamps.

Reuse:

The program is designed for end-of-life light products that no longer work and cannot be reused.

Recycle and Recover:

Collected Program Products will be broken down into their component parts, under a controlled environment. The resulting glass, mercury and other components will be recovered and put back into the market where possible. The program will strive to recover and recycle as

¹ European Lamp Companies Federation. *Climate, environment & health*. Accessed at http://www.elcfed.org/2_health_environment.html-materials.

² Wayne Edwards, EEMAC

³ U.S. Department of energy (2009). Energy Start® Qualified Light Bulbs 2009. Accessed at http://www.energystar.gov/ia/products/downloads/CFL_PRG.pdf

⁴ European Lamp Companies Federation. *Climate, environment & health*. Accessed at http://www.elcfed.org/2_health_environment.html-materials.

much of the components as possible as long as it is technical and economically feasible and sustainable.

Components that are not recyclable or not economically feasible may need to utilize alternative disposal methods, including but not limited to landfill

The program will ensure all materials are managed according to the requirements of all federal and provincial regulations. The final use of materials will be considered when selecting processors. Availability of options to move materials up the hierarchy will be regularly monitored.

6. Communications and Public Awareness

6.1 Program Communications

Product Care will use a number of methods to communicate information about the program to the public and to increase awareness of the program and its objectives, including:

- **Program Website** – a PEI lamp product website will provide information to PEI residents on:
 - Collection facility locations with details on hours of operation and products accepted
 - Description of products accepted and not accepted by the program
 - Information on the environmental benefits of participating in the lamp product Program
 - Description of the method for recycling lamp products
 - Reports and other program information
 - Information for consumers on safe storage and handling of program products
- **Local Partnerships**- the Program will work with Island Waste Management Corporation (IWMC) to promote the lamp product recycling program. This will include advertisements placed in IWMC's newsletter and information on their website.
- **Point of Sale (PoS) Materials** – In consultation with retailers, the Program will prepare an inventory of downloadable, digital promotional materials such as rack cards, posters, shelf talkers and other in-store materials. The materials will offer information about the importance of recycling and will include other information such as the location of the nearest collection facility and program website. The Program will deliver ready-printed materials upon request and will replenish inventory as needed, free of charge. Materials will be updated regularly and will be available for download online. See Appendix B for examples of PoS material utilized in some of Product Care's LightRecycle programs.
- **Collection Facility Materials** - the lamp product collection facilities will have point of return Program information identifying what are accepted and not accepted Program Products. Orders of these materials will be replenished upon request, free of charge, and materials will be updated regularly.
- **Social Media Strategy** – If necessary, Product Care will engage in a dialogue with PEI residents about the Program and recycling generally through the consistent, frequent posting of social media content.

7. Tracking and Auditing Mechanisms

7.1. Tracking and Audit

The Product Care 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 will be collected to track units of lamp product managed by the collection system. This data will be recorded and used for tracking, auditing and reporting purposes. The Program will prepare and submit, within 6 months of the end of each calendar year (June 30), a report on the quantity of lamp products collected by the program during the previous calendar year

7.2 Environmental Risk Management

A necessary element of a tracking and audit system is environmental risk management. Product Care is cognizant of the need to minimize the potential for environmental incidents and thus, has already developed its own 'Processors Standard' to ensure contracted processors qualification. Product Care will work with contracted program service providers (collection facilities, transporters and processors) to ensure compliance with environmental regulations and best environmental practices with respect to the collection, transportation and management of end-of-life lamp products. The environmental risk management system includes:

- system wide shipping documentation and tracking system
- due diligence reviews of collection facilities, transporters and recyclers (processors) to ensure compliance and for tracking system verification, conducted by third party auditor or in-house
- requirement of certificates of disposal and recycling, use of only reputable recyclers
- ensure contracted processors are compliant with PCA's "Processor Standard"
- development of best management practices, including training, reporting and guidelines etc. for collection facilities and transporters
- environmental impairment insurance

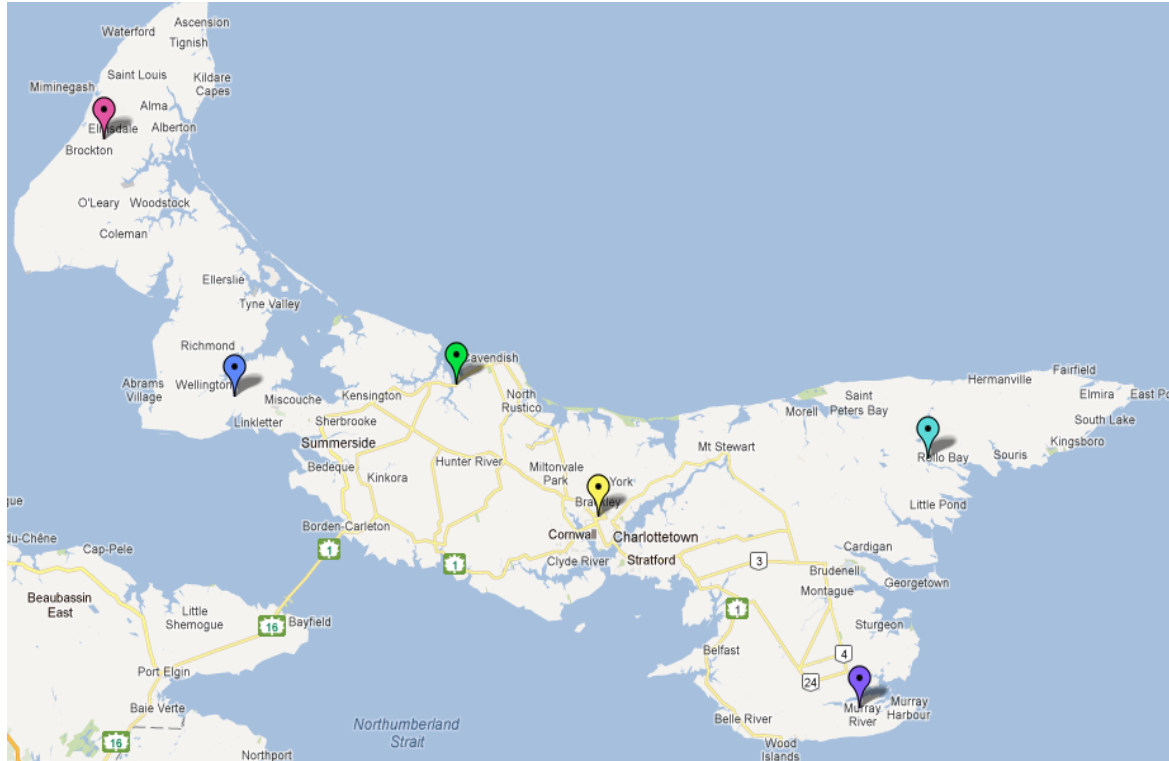
The program employs best management practices and guidelines including handling and safety requirements.







Appendices

Appendix A – List and Map of Six Potential Lamp product Collection Facilities (current WWCDs)

Current Waste-Watch Drop-off Centres (WWDCs)	Address	Hours
Brockton, West Prince	2202 Dock Road Rte # 150	Mon, Wed, Fri: 8:00am to 4:30pm Sat: 8:00am to 12:30pm
EPWMF, Wellington Centre	29786 Rte # 2	Mon to Fri: 8:00am to 4:30pm Sat: 8:00am to 12:30pm Summer Hours: (1st Mon. in May - mid-Sep.) Open at 7:00 am Mon. to Sat.
New London, Central	10142 Rte # 6	Tues & Thurs: 8:00am to 4:30pm Sat: 8:00am to 12:30pm Summer Hours: (mid-June, July & August) Mon, Tues & Thurs: 8am - 4:30pm Sat: 8am - 2:00pm
Greenisle, Charlottetown	8 Superior Cres.	Mon to Fri: 7:00am to 5:30pm Sat: 7:00am to 2:00pm* <i>*subject to change</i>
Dingwells Mills, North Kings	100 Selkirk Road Rte # 309	Mon, Wed, Fri: 8:00am to 4:30pm Sat: 8:00am to 12:30pm
Murray River, South Kings	378 Cape Bear Rd. Rte # 18	Tues, Thurs and Sat: 8:00am to 4:30pm

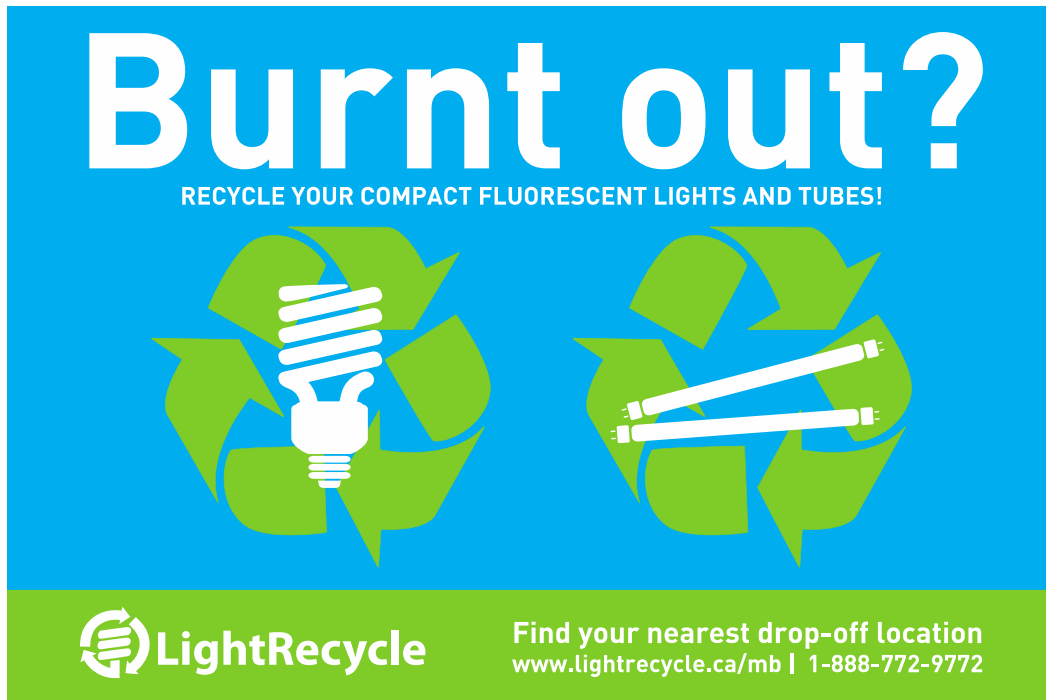
Map of Prince Edward Island Potential Lamp Collection Facilities



- 
Brockton, West Prince
 2202 Dock Rd Rte # 150
 Elmsdale, PE C0B 1K0
- 
EPWMF, Wellington Centre
 29786 Prince Edward Island Rte # 2
 Wellington Station, PE C0B 2E0
- 
New London, Central
 10142 Prince Edward Island Rte # 6
 Green Gables, PE C0A 1M0
- 
GreenIsle, Charlottetown
 8 Superior Crescent
 Charlottetown, PE C1E 2A1
- 
Dingwells Mills, North Kings
 100 Selkirk Rd Rte # 309
 Souris, PE C0A 2B0
- 
Murray River, South Kings
 378 Cape Bear Rd Rte # 18
 Murray River, PE C0A 1W0

Appendix B – Point of Sale Materials from the MB LightRecycle Program

Manitoba LightRecycle Shelf Talker with Program information

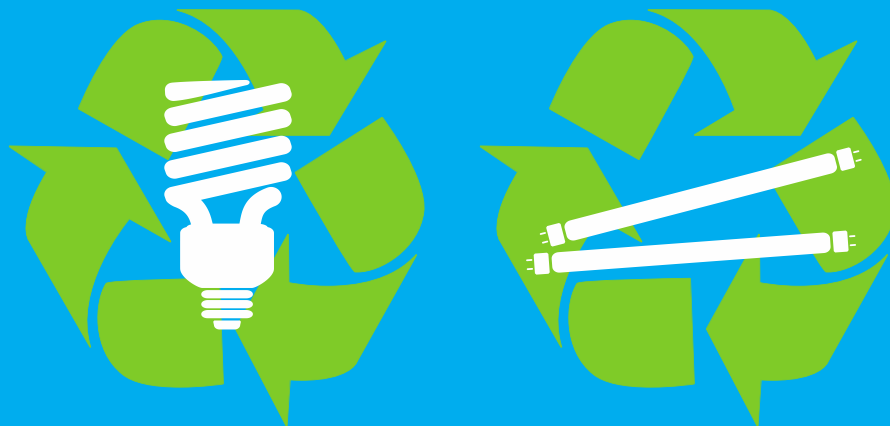


Burnt out?
RECYCLE YOUR COMPACT FLUORESCENT LIGHTS AND TUBES!

The graphic features two green recycling symbols on a blue background. The left symbol contains a white compact fluorescent light bulb, and the right symbol contains two white fluorescent tubes. Below the symbols is a green horizontal bar containing the LightRecycle logo and contact information.

LightRecycle Find your nearest drop-off location
www.lightrecycle.ca/mb | 1-888-772-9772

BURNT OUT?



Recycle your compact
fluorescent lights and
tubes here >>

Accepted Products

- Compact fluorescent lights (CFL)
- Fluorescent tubes measuring up to 8 feet
- Residential-use fluorescent lights only

Keep fluorescent lights out of the landfill.

Find your nearest drop-off location!

www.lightrecycle.ca/mb | 1-888-772-9772



No incandescent, halogen, LED or commercial-use lights accepted. The Manitoba LightRecycle program is operated by Product Care Association.

