BC Lamps and Lighting Equipment Program Collection Site Guidelines



Version 2

This manual is intended to provide practical guidance and best management practices for collection site operators regarding staff handling and storing of program products collected under Product Care Association's BC Lamps and Lighting Equipment Stewardship Program. This manual should be used by collection site operators to instruct staff in using required practices of the Program. Note that this manual must be paired with the ElectroRecycle Small Appliance and Power Tool Recycling Program Manual, as the programs are collected together.

The practices described in this manual are not intended to replace any standards, acts or regulations required under local, provincial or Federal law; nor are the guidelines intended to relieve the collection site operator or staff of requirements under the law.

Product Care Association accepts no responsibility and assume no liability resulting from the incorrect use of information contained in this manual from the use of this information in any circumstances other than those described or from not using the provided information in the appropriate situation.

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1. Program Overview

1.1. Purpose of These Guidelines

The Product Care Association's BC Lamps and Lighting Equipment Stewardship Program (the Light Fixture Program) partners with ElectroRecycle to assist in the collection and recycling of additional designated product categories. This collaboration allows for the co-mingling of residential light fixtures. As a result, these Light Fixture Guidelines are designed to be paired with the ElectroRecycle Small Appliance and Power Tool Recycling Program Manual.

1.2. The Program

Product Care Association's (Product Care) Light Fixture Program was developed by Product Care to meet the requirements of the BC Recycling Regulation. The Program was launched for small appliances on July 1, 2012.

The Light Fixture Program is designed to provide consumers with a collection system for returning lighting equipment (once those products have reached the end of life) for recycling, diverting such items from landfills.

1.3. Contact information

Light Fixtures - Product Care Association

- Phone Number: 1-877-592-2972 ext. 216
- Email: <u>bcopslights@productcare.org</u>
- Website: <u>www.productcare.org</u>

2. Eligible Program Products

Product Care may add additional product examples to the lists of accepted and notaccepted products. Please see the product updates page at <u>https://www.productcare.org/products/lights/british-columbia/</u> for a chronological list of updates. Product Care will also provide updates to your collection site on a periodic basis.



2.1. Approved and Acceptable Program Products

Residential-use electrical/electronic lighting equipment with a primary purpose to illuminate space, including hardwired, free standing, portable and solar-powered products. Also includes light fixtures designed for grow lamps. Only residential types and volumes should be accepted. Refer to the accepted products guide provided with the ElectroRecycle Manual for further information.

2.2. Unapproved and Unaccepted Items

The following types of products are not classified as a light fixture and are not included in the Light Fixture Program:

2.2.1. "Light Containing" Products:

Products containing lights with a primary purpose that is not to illuminate or assist in the illumination of space, including, but not limited to:

- Products containing lights with a primary purpose of signalling or displaying information.
- Products covered by other stewardship programs of the BC Recycling Regulation and for management in other product stewardship programs in BC.

Examples of excluded items that could contain lights that are part of a different stewardship program:

- large appliances
- small appliances
- medical equipment
- electronic products

Examples of excluded "light containing" products:

- Alarms, phones etc. for the visually impaired
- * Aquarium equipment
- × Auto fixtures
- * Back lit signs
- * Bathroom/ventilation fans
- * Black light equipment
- × Bug zapper
- * Camera and video accessories
- * Electronic billboards
- × Equipment to heat food
- Equipment to warm animals (brooder fixtures etc.)

- × Umbrellas with integrated lights
- * Garlands (with integrated lights)
- × Laser pointers
- × Lava lamps
- Light up shoes, hats, collars, clothes etc.
- * Marine/aeronautical fixtures
- × Mirror ball lights
- × Neon signs
- × Plasma ball
- * Propane and gas powered lights
- Signalling equipment (traffic lights, railway lights)



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- * Exit Signs without light heads
- Fencing with integrated lights
- Fountains with integrated lights
- Sculptures and statues

 (decorative) with one or more
 integrated lights where the
 primary purpose of the product is
 decorative and the contained
 lights are designed to light the
 decoration itself and not to
 illuminate surrounding space
- × Tanning beds

- * Strobe lights
- * Sunshine simulator
- Artificial trees with integrated lights
- Medical, dental, veterinarian lighting equipment
- × Vanity mirrors with lights
- * Watches
- Holiday decorations (other than string lights), such as jack-olanterns, decorative sculptures and plastic Santas

2.2.2. Light Fixture Parts:

Parts and accessories designed to be integrated into a complete light fixture are not part of the program.

EXCEPTION: Stand-alone lamp holders, replacement heads for track lights and egress lighting, and housing for recessed lights are considered included products.

Examples of excluded light fixture parts:

- * Table lamp sockets and replacement shades
- * Trim for recessed lights (if not sold integrated into housing)
- * Lighting tracks without heads attached
- Lamp-holders for linear fixtures that are not stand-alone and must be integrated into a linear fixture
- * Light switches and controls (dimmers, timers etc.)
- Replacement cords
- Lighting posts

2.2.3. Aeronautical, Marine and Auto Fixtures

Light fixtures designed to be integrated into an airplane, boat, automobile or other means of transportation are excluded from this program. These are light-sources that are integrated into a protective lens and/or housing and designed to function as stand-alone or replacement lighting products for automotive, marine or aeronautical purposes.

Examples of excluded aeronautical, marine and auto fixtures:

- headlights with a built in protective lens or housing designed to be integrated into an automobile
- * decorative lights
- accessory lights
- × safety lights
- trailer lights
- × tail lights
- identification lights

3. Collection



Refer to Section 5 of the Electrorecycle Manual for detailed instructions on receiving and packing light fixtures and section 5.2.2 for removing lamps (light bulbs), if present.



NOTE: String lights and small hand held products without an easily replaceable lamp (flashlights etc.) do not need their bulbs removed.

3.1. Lamp Packing Methods

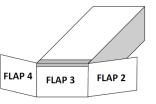


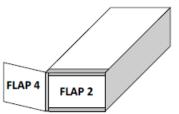
This section of the Guidelines detail how to package lamps that were removed from the light fixtures.

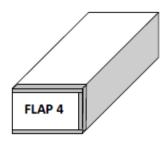
3.1.1. Packaging Assembly

Collection Box assembling instructions: 4ft and 8ft Tube boxes

- 1. Start by unfolding the flattened box into a rectangular shape.
- 2. Fold Flap 1 and Flap 3 over the box opening.
- 3. Affix two (2) strips of packing tape along the edge of the box where the flap is closed.
- 4. Fold Flap 2 over.
- 5. Affix two (2) strips of packing tape along each of three (3) edges of the box where the flap was closed.
- 6. Fold Flap 4 over.
- 7. Affix two (2) strips of packing tape along each of the three (3) edges of the box where the flap was closed.







- 8. Make sure all the open edges of the bottom of the box are securely taped up.
- 9. Open the plastic liner bag provided inside the box and fold the liner over the top end of the box.

Upon completion of steps 1-9, the box is now ready for use.



NOTE: Please follow the same procedures when using the square boxes (14"x14"x14") for lamps or shape tubes.

3.2. Handling

Once the bulb or tube is removed from the fixture it must be put immediately into the correct sized box so to avoid it getting broken.

3.2.1. Packing the Boxes

- The containers and packages must remain structurally sound and lack evidence of leakage, spillage or damage.
- Containers should be set up to be stable (i.e. they don't tip over easily)
- Lamps should be handled by their bases, not the glass portion
- All lamps should be set down gently
- Boxes should not be left on counters or places that they could easily be knocked over or down.
- Any lamp that is broken during handling must be cleaned up immediately using the spill procedure under the Clean Up Procedures in Section 5.
- Lamps are to be stored in PCA supplied containers only and handled in a way that prevents breakage.
- Do not over fill the lamps collection containers as it will be difficult and dangerous to close during shipping preparations.
- Do not force fluorescent tubes in the collection container. If a tube does not slide into place within the container, the container is full.
- Keep the bulbs and shaped tubes separate from the linear tubes.
- Do not tape lamps together or use rubber bands
- Do not leave lamps in a position or in an area where they can be easily broken
- Do not stack material on top of the collection containers

3.2.2. To Seal the boxes

- Check that the box is structurally sound and has no evidence of damage
- Check that the container is not overfilled.
- Seal the lining inside the box then the boxes with packing tape in preparation for ship-out.
- Seal the tops of the boxes as per section 3.1.1, steps 1 through 9.

4. Transportation – Lamps



Refer to Section 6 of the Electrorecycle Manual for detailed instructions on the transportation of light fixtures. This section of the Guidelines detail how to manage the transportation of lamps.

4.1. Ordering a Pick-up

You should order a pickup once half of any of your box types have been filled. Do not wait until you are down to your last box.

When you have full boxes and would like them picked up, you can call, fax or email your information to us.

BY EMAIL:

Please complete the '<u>Container Request Form</u>' in Appendix I (see example below). Please keep this form blank and photocopy as needed. Please request any supplies needed at this time using this form. Please email your Container Request form to: <u>bcdispatchlights@productcare.org</u>



BY FAX:

Please complete the '<u>Container Request Form'</u> in Appendix I (see example below). Please keep this form blank and photocopy as needed. Please request any supplies needed at this time using this form then fax the completed form to Product Care at 1-604-592-2982.

BY PHONE:

Please call PCA at 604-592-2972 or toll-fee 1-877-592-2972 ext. 223 to place your order. You can also request any supplies needed at this time

Whether you choose to phone, email or fax in your order, we will send the carrier to pick up the full boxes and deliver empty replacement ones to you.

RECYCLIN	BOL#: CARRIE DATE E.	R:	FFICE USE ONI		
		-604-592-	Container Reques 2982 or email to <i>picku</i> j		а
CONTACT NAME:	Joe Smith				
DEPOT NAME / NUMBER:	ABC Bottle Depot ABC road, Delta, BC				
ADDRESS:					
PHONE:	604-555-5	555	_{FAX:} 60	04-555-4444	4
SHIPPING HOURS:	8am - 5pm	ו Mon			
TO BE PICKED BULB BOXES (14"	and selected the second set	2	8' TUBE BOXES (96	(" x 8" x 8")	1
4' TUBE BOXES (4		1		x v x v j	
OTHER (GIVE DET					
215	100				Ļ
SUPPLIES NEEL		4			4
4' TUBE BOXES (48" x 8" x 8") 8' TUBE BOXES (96" x 8" x 8")		1	SPILL KIT PACKING TAPE		1
BULB BOXES (14":	C DAVADOLISIS VANDALISIS RE	2	FACKING TAPE		
OTHER (GIVE DET		2			
SPECIAL SHIP	PING INSTRU	CTION	S and NOTES:		
			RESET QUANTI	TIES	

4.2. Preparing for Shipment

The carrier will arrive at your location within 2-5 days of your request. They will have the shipping documentation already completed with the destination address and number of pieces they are picking up.



NOTE: You cannot ship more than the number of pieces recorded on their bill of lading.

Containers should be stored in such a way that they won't easily tip over or get damaged. Do not stack boxes of light bulbs more than 2 high because the lights on the bottom could be crushed by the weight of the pile.

4.3. Container Loading

Review the labels that the driver has brought. Confirm that both your shipping address (as the shipper) and the number of pieces are correct. It is your responsibility to make sure that the labels information including the quantity and contents are correct.

Within a few days, you should receive your EMPTY boxes. If they are not received within 5-7 business days please email <u>bcdispatchlights@productcare.org</u> Or call 604-592-2972 ext. 223 (toll-free 1-888-592-2972)



NOTE: the pickup of full boxes and the delivery of new empty boxes are not always done at the same time. Supplies may also be delivered at a separate time.

5. Procedure For a Broken Bulb Clean-up

5.1. Risks

Intact (unbroken) fluorescent lights bulbs /tubes and HIDs pose no health risk. Mercury in fluorescent lights is in vapour form and also with the phosphor powder which coats the inside of the light bulb. Broken lamps release the mercury, which can enter the body by absorption through the skin or by inhalation of the vapour. A careful and prompt cleanup of the spill by the designated worker will minimize exposure to the staff, customers and to the environment. A mercury spill must be treated as a serious safety concern. Staff must be trained in the management of broken lamps and the use of a spill kit.

5.2. Procedures

If you break an HID, CFL lamp, or fluorescent tube, follow these directions for clean-up:

LEAVE THE ROOM

- Leave the room and keep people out of the room during the clean-up process.
- Avoid stepping on broken glass
- Locate the spill kit

Ventilation

• Ventilate the room for at least 15 minutes prior to starting clean-up by opening windows and doors to the outdoors. This will ensure that the mercury vapour levels are reduced before you start cleaning.

Clean-up Directions

- Do **NOT** use a vacuum or broom to clean up the initial breakage, as it will spread the mercury vapour and dust throughout the area. Additionally, contamination may occur within the vacuum and/or on the broom.
- Wear disposable gloves provided in the clean-up kit to avoid direct contact with mercury and to reduce the risk of cuts
- Wear disposable mask provided in the clean-up kit
- Scoop or sweep up the broken pieces and debris with the two pieces of cardboard (index/file cards) provided in the clean up kit and place into the sealable plastic bag (also provided in the clean up kit)
- For large bulbs containing liquid mercury, use the eye droppers provided to pick-up the liquid mercury and place in the plastic bag with the glass
- Use packing tape to pick up any remaining fine glass or powder. **Prepare several strips of tape ahead of time** in order to avoid contaminating the roll and to make the clean-up effort easier and more efficient. Take a strip of packing tape, rolled with the sticky side out. Gently pat the contaminated area, rolling the tape to use a fresh surface each time. Phosphor powder, mercury and glass will adhere to the tape. Repeat this step as often as necessary to cover the affected area thoroughly. Place all contaminated tape into the same sealable plastic bag.
- Wipe the area with a damp paper towel, cloth or disposable wet wipe to remove any residual particles.
- Place the broken glass and clean-up materials in the plastic bag and seal it to further minimize the release of mercury vapour.

Placing the debris in the sealable plastic bag

- Place all of the debris and contaminated clean-up materials into the sealable plastic bag safe and put that bag into the box with the light bulbs for shipment to the lamp processing facility for safe disposal. Once the clean-up effort is completed, place the sealed bag into the lamps container provided by the program.
- Wash your hands after storing and disposing of waste.

5.3. Your spill kit should contain:

- 1 roll tape
- 2 eye droppers
- 5 ziplock bags
- 5 dust masks
- 5 pairs of gloves
- 10 files cards



When you have only 2 packs left in your spill kit, please indicate on your next order how many packs you require.

6. Appendix I. Container Request Form

Productcare	BOL#: CARRIER: DATE EXP:	OFFICE USE ONL
Residential Lar	nps Container Request Form	
Please fax this form to 1-604	4-592-2982 or email to pickup@lightrecycle	.ca
DATE:		
CONTACT NAME:		
DEPOT NAME /		
NUMBER:		
ADDRESS:		
PHONE:	FAX:	
TO BE PICKED UP:		
BULB BOXES (14" x 14" x 14")	8' TUBE BOXES (96'' x 8'' x 8'')	5
4' TUBE BOXES (48'' x 8'' x 8'')		
OTHER (GIVE DETAILS)		
SUPPLIES NEEDED:		
4' TUBE BOXES (48" x 8" x 8")	SPILL KIT	
8' TUBE BOXES (96" x 8" x 8")	PACKING TAPE	
BULB BOXES (14" x 14" x 14")		
OTHER (GIVE DETAILS)		
SPECIAL SHIPPING INSTRUCT	IONS and NOTES:	
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