

MB LightRecycle Collection Site Guidelines





Version 1.1 – August 2015



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This guideline is intended to provide practical guidance and best management practices for collection site operators regarding staff handling and storing of program products collected under the Product Care Association of Canada LightRecycle program. This guideline should be used by collection site operators to instruct staff in using required practices of the program.

The practices described in this guideline are not intended to replace any standards, acts or regulations required under Local, Provincial or Federal law; nor is the guideline intended to relieve the collection site operator or staff of requirements under the law.

Product Care Association of Canada accepts no responsibility and assumes no liability resulting from the incorrect use of information contained in this guideline or from the use of this information in any circumstances other than those described.



Program Overview

These Guidelines must be used to instruct workers in the correct handling and storage practices for lamp products collected under the program.

If workers have questions about subjects in these Guidelines, the best way to help them is to explain or show them the correct practice. For instance, you can teach them which lamps are accepted in the program or show them how to correctly prepare a box for shipping.

The Plan

The MB LightRecycle Program for residential use fluorescent light bulbs has been developed by Product Care Association (PCA) to meet to the requirements of the Manitoba Household Hazardous Material and Prescribed Material Stewardship Regulation of the Waste Reduction and Prevention (WRAP) Act and was approved by Manitoba Conservation on April 26,2011.

How the Program works

MB residents will bring their compact fluorescent lights (CFLs) and fluorescent tubes to approved collection sites such as yours for proper management. There is no charge for the residents to drop off these products. The collected products from the collection sites will be transported via a PCA approved transporter to a PCA approved recycler, for recycling. The program is funded by eco-fees charged on the sale of new CFLs and fluorescent tubes. This program only covers CFLs and fluorescent tubes for **residential use only** and not for industrial, institutional or commercial use (IC&I).



Safety

Fluorescent light bulbs are commonly used in households and are considered safe under normal conditions of use. However, fluorescent light bulbs do contain a very small amount of mercury, which is a highly toxic substance. The risk to health and the environment only occurs if the light bulb is broken so care must be taken in handling the bulbs to ensure they do not break.



Collection Site Guidelines

This guidebook is written for collection sites that are part of PCA's MB LightRecycle Program and is intended to ensure that fluorescent light bulbs are collected and handled in a manner that adequately safeguards the environment and worker health and safety. It provides direction on:

- How to set up a collection site
- Receiving, sorting, packaging and shipping fluorescent light bulbs
- Health and safety issues related to fluorescent light bulbs management
- Paperwork and record keeping

If, after reading this guidebook, you have any questions, please contact:



Wayne Chisholm
Service & Logistics Manager
Product Care Association of Canada
604-592-2972 or 1-877-592-2972 ext. 216
Email: wayne@productcare.org



Section 1: Program Products



Accepted Products

This program covers fluorescent light bulbs¹ marketed to residential users that are designed to be removed by the user.

Fluorescent light bulbs come in many forms, including compact, linear, circular, covered and U shaped.

There are two categories of fluorescent light bulbs generally used for residential lighting:



Compact fluorescent lights (CFL's), which fit into standard lighting sockets or may have a pin-type end to fit specific fixtures. CFL's are manufactured in a number of different shapes and a range of light output values.



Fluorescent tubes, (such as T12 Fluorescent Light bulbs, T8s, T5s, shaped or curved tubes) which require dedicated pin-type sockets. Fluorescent tubes come in different lengths, diameters and light output. Most are straight but some are curved or shaped.



¹ Note: the term "lamps" is used by the manufacturers to describe what consumers call "light bulbs".



Accepting Broken Bulbs

The program accepts intact (whole) units and does not accept light bulbs that have been crushed on purpose (i.e. by a drum-top crusher, also known as a bulb crusher) but the program will accept light bulbs that have been broken accidentally. A resident may bring their broken bulb and the materials they used to



clean it up (such as paper towel or cardboard) in a sealed plastic bag or sealed glass container. If a resident brings in a broken bulb, ensure it is in a sealed plastic bag or sealed glass container and put it in the program collection container for the CFLs.



Non-program Light Bulbs or other products

Other types of light bulbs

This program does **not** accept other types of light bulbs such as incandescent, LED's or halogens.

Institutional, Commercial and Industrial Light Bulbs

This program does **not** accept light bulbs including CFL's and fluorescent tubes from commercial, industrial or institutional users.

Advice for customers

If a customer brings in a product that cannot be accepted (called non-program) it must be refused and given back to the customer. Direct the customer to the posters and advertising provided by the program to explain the types of products that may be returned. For further information, customers may be directed to:

- PCA's website at www.regeneration.ca
- Email: info@lightrecycle.ca

Abandoned non-program material or accidentally collected non-program material should be managed separate from the program.



Light Bulb Return Limit

The following limits have been set as limits for drop off:

CFL Limit: 16 at one time Tube Limit: 16 at one time

Note: The limit is 16 CFL's and/or 16 tubes. Specifically, customers can bring in 16 of <u>each</u> lamp type and be within the set limits.

The program has been designed to meet the Manitoba Household Hazardous Material and Prescribed Material Stewardship Regulation which requires the program to be responsible for fluorescent light bulbs and lamps sold for "consumptive use". As there may be no visible difference between light bulbs sold for commercial use and those sold for residential use, a limit on the number returned at one time is needed. Eco fees are only charged on new sales of CFL's and fluorescent lamps sold for residential use and not industrial, commercial and institutional use, therefore no funding is available for the program to manage material from the IC&I sector.

If you are asked to take back over the limit, you should explain that the program is for residential light bulbs only. If the person insists that they are returning light bulbs from their (or others') residences such as apartment managers, ask them to provide some identification such as their driver's license and accept the light bulbs. Keep their name on file to ensure this does not occur often and if they return regularly, ask them to contact PCA to assist them with their needs directly.

Service Fees

Under the program, **no** fees can be charged to customers dropping off the program products. Eco-Fees which are charged at the point of purchase fund this program. The eco-fee rates vary according to the type or length of the lamp and can be found our website www.regeneration.ca.



Section 2: Collection Site Set-Up

Collection sites must meet the Collection Site Standard (Appendix A).

Providing personal service for customer drop off is preferred in order to minimize breakage and drop-off of non-program material.

If the collection site is unable to provide personal service, the placing of approved collection containers in staffed areas is required. Unsupervised collection containers located outside staffed areas (e.g. parking lots) is not permitted. The return collection station should be or have:

- Convenient and provide easy access for both customers and employees.
- Well planned and allow for efficient and safe removal of full CFL's and fluorescent light bulbs boxes. Additionally, it should also be easy to replace full boxes with empty ones.
- Easy for customers to identify as a return station.
- Secure from theft and tampering
- Protected from weather
- On impervious surfaces
- Well-ventilated
- Collection containers in staffed areas with some level of supervision





Storage Location

Once the collection boxes are full, they can be removed from the return collection station to the storage location to stage for shipping. The storage area for collected materials and should be:

- Away from high-traffic areas
- Inaccessible to the public (i.e. staff only)
- Monitored and safely maintained
- Able to provide adequate room to support at least 2 boxes for fluorescent tubes (14" x 14" x 14"), 2 boxes for 4-foot fluorescent light bulbs (8" x 8" x 48')and 1 box for 8-foot fluorescent light bulbs (8" x 8" x 96")
- Protected from the elements, away from drains and on an impervious surface
- Clean, dry, and free of debris
- Secured during non operating hours

The storage location must also be equipped with a Clean Up/Spill Kit (provided by PCA).

Security

When the site is closed, access by people or animals must be prevented to make sure that stored fluorescent light bulbs are protected from improper handling, theft, or damage. Make sure that all materials are secured inside your facility and protected from weather at all times.

Public Access

The collection sites must be open for the public to return fluorescent light bulbs during regular business hours. If customers abandon products on property while the collection site is closed, take them inside and place them in the appropriate containers if they are program material.

If they are non-program material, they should be disposed according to the recommendations of your local municipality's waste management division. They should not be knowingly placed into the collection containers provided by the program



Signage & Promotional Materials

In order to inform and make the consumers or customers aware that your site is a collection site for the program, PCA will be supplying you with signage. The signage will inform them of the following:

- Your location is a collection site under the program
- Materials that are/are not acceptable (i.e. the list of acceptable materials)

PCA will provide posters/signage and counter-cards for all sites. Some sites may require a sturdy sign for their facility.

Counter cards are to be used as a public handout and they can easily be placed on counters or brochure-racks. Retailers can place the brochures near the product display and/or the point of sale.

When you require more counter cards or replacement signage please contact us using one of these methods:

 Online: www.regeneration.ca/resources/promotionalmaterials/?location=Manitoba

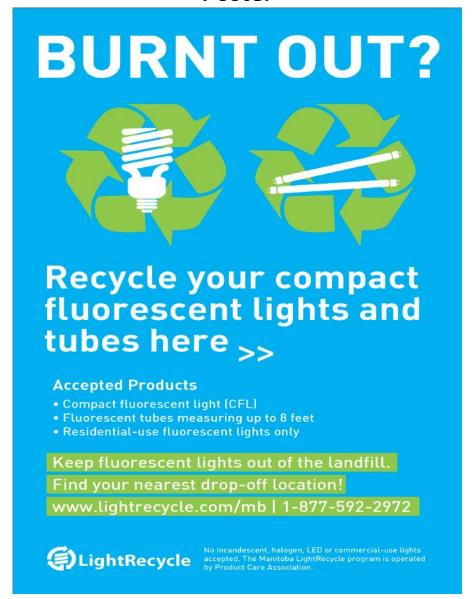
• Fax: 604-592-2982

• Phone: 1- 877-592-2972 Ext 204

• Email: mbdispatchlights@productcare.org



Poster



Rack Cards



Counter Card - Front



Counter Card - Back



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Section 3: Handling, Packing & Arranging Transport

Supplies

PCA will provide:

- Pre-labelled boxes for CFLs and shaped tubes
- Pre-labelled boxes for fluorescent tubes (4 feet or less)
- Pre-labelled boxes for florescent tubes (over 4 feet and up to 8 feet)
- Tape
- Clean Up/Spill Kit

NOTE: Boxes will require assembly prior to use.



If you need more of any of these items, please contact PCA by email at mbdispatchlights@productcare.org or by phone at 1-877-592-2972 ext. 204 or order them when you contact us for a pickup

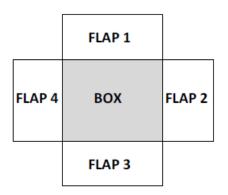




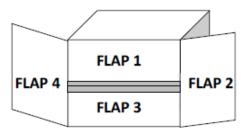
Packaging

Collection Box Assembly: CFL Bulbs

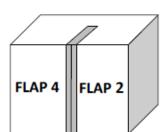
1. Start by unfolding the flattened box into a square shape.



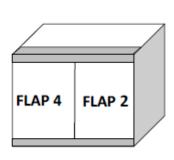
Fold Flap 1 and Flap 3 over the box opening until they meet in the middle.



2. Affix two (2) strips of packing tape down the middle of the flaps.



3. Fold Flap 2 and Flap 4 until they meet in the middle.



4. Affix two (2) strips of packing tape down the middle of the flaps. Make sure that the strips of tape reach down the side of the box at least six (6) inches (15 cm).

5. Affix two (2) strips of packing tape along each side of the box where the flaps were closed.

6. Ensure that all open edges of the bottom of the box are securely taped up

7. Open the plastic liner bag provided inside each box and fold the liner over the top of the box

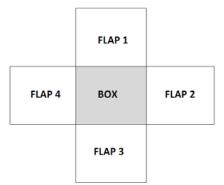
Upon completion of steps 1-8, the box is now ready for use.



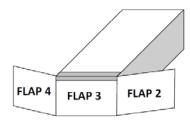
Collection Box Assembly: Fluorescent Tubes

1. Start by unfolding the flattened box into a rectangular shape.

Note: All four flaps are full flaps.

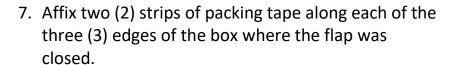


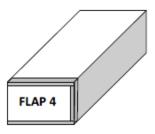
- 2. Fold Flap 1 and Flap 3 over the box opening.
- 3. Affix two (2) strips of packing tape along the edge of the box where the flap is closed.



- 4. Fold Flap 2 over.
- 5. Affix two (2) strips of packing tape along each of the three (3) edges of the box where the flap was closed.







FLAP 2

FLAP 4

- 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 each box and fold the liner over the top of the box.

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



Handling

If the Fluorescent Light Bulbs are dropped off at a customer service station or front counter, the items should be taken from the customer and placed in the collection containers provided.



If the material is not physically received by a staff person, the customer will place the light

bulb in the collection bin. CFL's should go in the smaller boxes for CFL's while tubes should be placed in the boxes for the appropriate length (Those four feet or under should go in the four foot boxes. Longer ones should go in the eight foot boxes). Tubes of unusual shapes should also go in the CFL boxes.

The following methods will ensure safe handling of the bulbs and minimization of risk:

- 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)
- CFL's should be handled by their bases, not the glass part
- All light bulbs should be set down gently
- Boxes should not be left on counters or places that they could easily be knocked over or down.
- Any light bulb that is broken must be cleaned up immediately using the spill procedure under the Clean Up Procedures.
- Light bulbs are to be stored in PCA supplied containers only.
- Light bulbs should be stored and handled in a way that prevents breakage.
- When the box if full, tie and seal the plastic liner with packing tape then close the top of the box and seal all open edges with packing tape to prevent it from opening during transportation
- Do not over fill the CFL collection containers. Overfilled CFL containers 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 CFL and shaped tubes separate from the linear tubes.
- Do not tape light bulbs together or use rubber bands
- Boxes sent by PCA have been pre-labeled with 'FRAGILE HANDLE W/CARE' stickers. Do not tamper with or remove these labels.
- Do not leave light bulbs in a position or in an area where they can be easily broken
- Do not stack material on top of the collection containers

Note: No fees can be charged to customers that drop off the program products. If your facility provides collection services for other products (non-program) other than program products and you charge a fee for that service, you may continue to charge the fees for collection of the other products but not the program products. The non-program products must go into a separate system than the program light bulbs (i.e. not be placed in PCA containers, and must be stored, tracked and transported separately.)

Accepting Broken Bulbs

The program does not accept light bulbs that have been crushed on purpose (i.e. by a drum-top crusher, also known as a bulb crusher) but will accept light bulbs that have been broken accidentally.

The Health Canada website (and others) provides information on what a resident should do in case of a broken light bulb. A resident may bring their broken bulb and the materials they used to clean it up (such as paper towel or cardboard) in a sealed plastic bag. If a resident brings in a broken bulb, ensure it is in a sealed plastic bag and put it in the program container that it fits in (usually the CFL box). Do not open this container to avoid unnecessary risk. Please let the residents know that the safe procedure for cleaning up

residents know that the safe procedure for cleaning up a broken bulb is on Health Canada's website (www.hc-sc.gc.ca/hl-vs/iyh-vsv/prod/cfl-afc-eng.php) and on the PCA website and give them a brochure with the website address.



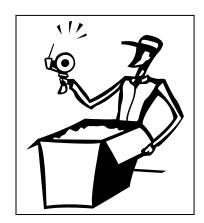


Correctly filling boxes protects against shifting and breakage during transport. Light bulbs should be stored and packaged in a way that avoids breakage:

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

To pack the boxes:

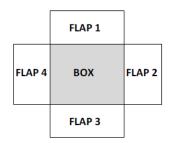
- Check that the box is structurally sound and has no evidence of damage
- Check that the container is not overfilled.
- When box is full, tie and seal the plastic liner with packing tape then close and seal the box.
- Seal boxes with packing tape in preparation for ship-out. Please see the following Taping Method for both types of boxes.





Taping Method for Full CFL Boxes

1. Once the box is full, open the flaps as shown (top view).

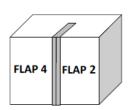


2. Fold Flap 1 and Flap 3 over the box opening until they meet in the middle.



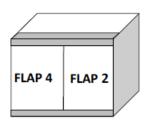
3. Affix two (2) strips of packing tape down the middle of the flaps.

4. Fold Flap 2 and Flap 4 until they meet in the middle.



5. Affix two (2) strips of packing tape down the middle of the flaps. Make sure that the strips of tape reach down the side of the box at least six (6) inches (15 cm).

6. Affix two (2) strips of packing tape along each of the box where the flaps were closed.

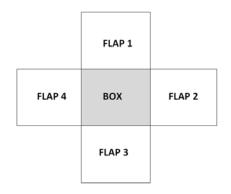




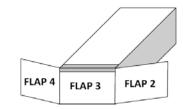
Taping Method for Full Fluorescent Tubes

1. Once the box is full, open the flaps as shown (top view).

Note: All flaps are full flaps.

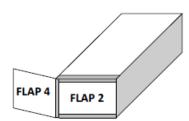


2. Fold Flap 1 and Flap 3 over the box opening.



3. Affix two (2) strips of packing tape along the edge of the box where the flap is closed.

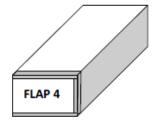
4. Fold Flap 2 (full flap) over.



5. Affix two (2) strips of packing tape along each of the three (3) edges of the box where the flap was closed.

6. Fold Flap 4 (full flap) over.

7. Affix two (2) strips of packing tape along each of the three (3) edges of the box where the flap was closed.





Arranging Transport

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 either call or fax your information to us.

BY EMAIL:

Please email mbdispatchlights@productcare.org to place your order. You can also request any supplies needed at this time as well.



OR

BY FAX:

- 1. Please complete the 'Container Request Form' as shown on the next page. The form is also found in Appendix B: Forms. Please keep this form blank and photocopy as needed. Please request any supplies needed at this time using this form.
- 2. Please fax the completed form to PCA at 1-604-592-2982.

OR

BY PHONE:

Please call PCA at 1-877-592-2972 x 204 to place your order (toll-free). You can also request any supplies needed at this time.

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



For the FULL boxes:

- a. The carrier will arrive at your location within 5 days of your request. They will have the bill of lading with them. It will already be completed with the number of pieces they are picking up. NOTE: You cannot ship more than the number of pieces recorded on their bill of lading. If you have more boxes ready to ship you will need to send in another request.
- b. Depending on the carrier, he may bring a paper bill of lading or completed barcoded labels. Review either the bill of lading or the labels that the driver has brought with him. Confirm that your address (as the shipper) is correct as is the number of pieces. It is your responsibility to make sure that that all of this information on either the bill of lading or the labels including the quantity and contents are correct.
- c. Once confirmed everything is correct, please sign as the Shipper. If there is a bill of lading the driver will sign as the Carrier and you will receive a copy of the bill of lading. If so, please keep this bill of lading on file.

Within a few days you should receive your EMPTY boxes. If they are not received within 5 business days please call 1-877-592-2972 ext. 204.

Please note: the pickup of full boxes and the drop off of new empty boxes is not done at the same time. Supplies may also be delivered at a separate time.

For Supplies:

Make sure to order any supplies that you need and at the time you place your order for pickup. These supplies may be delivered to you separately from the replacement boxes. Ensure that you place an order for supplies before you run out as it could take several days from the time you place an order to when you receive your order.

#105 West 3rd Ave, Vancouver, BC,V5Y1E6 Phone: 877- 592-2972 I Fax: 604 592-2982 **Web: www.regeneration.ca**



LightRecycle Container Request Form

Please email this form to mbdispatchlights@productcare.org or fax to 1-604-592-2982

TODAY'S DATE:			
DEPOT NAME:			
ADDRESS:			
· 			
PHONE:		FAX:	
CHIRDING HOUR	c.		
SHIPPING HOUR	S:		
TO BE PICKED UI	P:		
# OF CFL BOXES	(14" x 14" x 14")		
# OF 4' TUBE BO	XES (8" x 8" x 48")		
# OF 8' TUBE BO	XES (6" x 6" x 96")		
CLIDDLIEC MEEDE	D (please advise quantity requi	٠٥٠)،	
		-	Empty Oft haves
· 	Empty boxes CFL		Empty 8ft boxes
	Empty 4ft boxes		Posters
	Counter Cards (Bundles of 50)		Tape (for boxes)
	Spill Kit		
SPECIAL SHIPPIN	G INSTRUCTIONS:		

Please note: the pickup of full boxes and the drop off of new empty boxes is not done at the same time. Supplies may also be delivered at a separate time.



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Section 4: Clean Up Procedure for a Broken Fluorescent Light

Risks

Intact (unbroken) fluorescent lights bulbs/tubes 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 light bulbs 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 should be trained in the management of broken light bulbs and the use of a spill kit.

Procedure

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

Leave the room

- Remove people and pets from the room and keep them out of the room during the clean-up process.
- Avoid stepping on broken glass

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 for Hard and Carpeted Surfaces

- Do <u>not</u> 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 to avoid direct contact with mercury and to reduce the risk of cuts.
- Wear disposable mask.
- Scoop or sweep up the broken pieces and debris with the two pieces of cardboard provided in the clean up kit and place into the sealable plastic bag.
- 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 storage and later disposal. Once the clean-up effort is completed, place the sealed bag into the CFL box.

Washing

Wash your hands after storing and disposing of waste.



Resources

US EPA: www.epa.gov/mercury/spills/index.htm#fluorescent

Health Canada: http://hc-sc.gc.ca/hl-vs/iyh-vsv/prod/cfl-afc-eng.php

Spill Kit

The program will supply you a spill kit containing the following:

- Sealable Plastic Bags
- Packing tape
- Cardboard
- Disposable gloves
- Disposable mask

Incident Reporting

To report an incident involving 5 or more broken light bulbs, please use the form found on the next page and forward to PCA, as per the instructions on the form. Please keep this form blank and photocopy as needed. It can also be found in Appendix B: Forms.



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LightRecycle INCIDENT REPORT

Only fill out this incident report if five (5) or more lamps were broken at one time
Depot Name	
Depot Address	
Telephone Number	
Date of Incident Time	of Incident
# of Lamps Broken [] Five (5) [] Six (6	5) to nine (9) [] 10+ [] Box dropped
If the box dropped and resulted in broken glass, p	please answer the following questions:
Did any broken glass spill onto the floor?] Yes [] No
Did the box drop during: [] Packing [] In-store movement[] Shipping
Was staff wearing protective gear to clean up? [Was anyone injured?] Yes [] No [] Yes[] No
•	
If yes, please attach a copy of the WCB Form and What are your suggestions to help prevent this type	
Please complete the information and fax or mail (and of the mailing address, fax, and telephone number a	
#105 West 3 rd Ave , Vancouver, V5Y1E6	FAX: 604-592-2982
Toll Free: 1-877-592-2972 Ext 216	bcdispatchlights@productcare.org
Employee Name	Signature
Manager Name	Signature



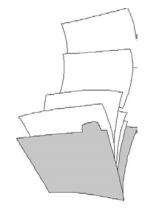
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Section 5: Record Keeping and Reporting

Bill of Lading (Waybill)

Fill this out as described in section 4. Keep these on hand in a file available for audit for at least two years.



Training Records

Ensure that documentation is kept showing that staff had been trained on the information contained in these Guidelines.

Reporting Incidents or Fines

The collection site will provide notice of the following to the program:

- Any incidents that required the assistance of first responders within 24 hours of the occurrence
- Any regulatory orders or fines within 48 hours of receiving such orders or fines.



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Section 6: Health & Safety

IMPORTANT: The Health and Safety section of these Guidelines is a supplement to your facility's existing Occupational Health and Safety Manual and is not intended to replace any standards, acts or regulations



required under Provincial or Federal legislation nor are these Guidelines intended to relieve the depot operator or workers of any obligations under this or other legislation.

The section only includes health and safety issues as they pertain to the MB Fluorescent Light Bulb Program and NOT the other services offered or activities conducted at your facility.



For further information on general health and safety issues, including accident prevention and procedures, please consult the Occupational Health and Safety manual at your facility or the Workers

Compensation Board of Manitoba.

Lifting Hazard

Moving boxes of CFLs and light bulbs requires bending and lifting which can cause injury if done incorrectly. Simple precautions should be used as a means of prevention.



- When lifting, bring objects near to the body; do not try to lift at arm's length.
- Bend your knees and keep the back straight.
- Only lift what you can manage safely; ask for assistance if it is needed.

Ensure that boxes are not overfilled to avoid unsafe lifting.



Mercury Hazards

While mercury is a highly toxic substance, only a very small amount is used in a CFL, about the amount to cover the tip of a ballpoint pen. There is no risk to your health when the light bulbs are unbroken but care needs to be taken if the bulbs are broken. The best defense is to handle the bulbs with care to avoid breakage. Should a bulb get broken, follow the Clean up procedure found in Section 4.

Broken Glass Hazard

The main risk with handling light bulbs is of getting cut with broken glass. As with the mercury hazard, preventing breakage is the most important way to avoid this. Should a bulb get broken, follow the Clean up procedure found in Section 4.

Safety Equipment

No safety equipment is required for the regular handling of intact light bulbs. The personal protective equipment (PPE) required to handle broken light bulbs is noted in Section 4 Clean-Up Procedure.



Section 7: Training

All collection site workers must understand the information provided in these Guidelines and provide a clear understanding of:

- the handling and management of light bulbs including but not limited to:
 - Potential hazards and risks associated with handling of light bulbs
 - Proper and safe handling of light bulbs
 - Ways to reduce risk
 - Safety and emergency procedures
- spill/breakage clean-up procedures and management
- the operations training program and policies/procedures set by the program
- the identification of which products are accepted and not accepted by the program
- the completion of proper shipping documentation and record keeping

Newly hired employees must also be instructed on the information in these Guidelines before they are permitted to handle light bulbs.

Collection Site Operators should schedule regular training sessions with staff members who have emergency response responsibilities. This will help staff to regularly practice the correct response actions and be informed up to date on recommended response measures.



Appendix A - Fluorescent Lamp Collection Standard

The Fluorescent Lamp Collection Standard defines the minimum requirements for business and organizations to become approved and operate as a collection site under PCA's MB LightRecycle Program. This standard intends to ensure that fluorescent lamps are collected and handled in a manner that will adequately safeguard the environment and worker health and safety. It will also ensure that data is collected in order to track the materials. PCA reserves the right to review and revise these standards on an on-going basis.

Background

Fluorescent lamps are commonly used in households and are considered safe under normal conditions of use. However, fluorescent lamps do contain a very small amount of mercury, which is a highly toxic substance. The risk to health and the environment only occurs if the lamp is broken. For this reason lamps should be handled with care and precautions taken to avoid breakage.²

Disclaimer

The Fluorescent Lamp Collection Standard is not intended to reduce or absolve collection sites from the responsibility of compliance with any federal, provincial and/or municipal legislation and regulations applicable to the management of fluorescent lamps, or the business operation of the collection site. Nor is it intended to constitute or to provide legal advice. It is the responsibility of the collection site to be aware of and abide by all such legislation and regulations.

General Requirements

All collection sites shall:

- Possess a valid business license and/or is an incorporated and/or an otherwise validly existing business or municipality under the laws of Manitoba in good standing and qualified to carry on business in Manitoba
- 2. Comply with all applicable federal, provincial and/or municipal legislation and regulations including but not limited to:
 - Waste Reduction and Prevention Act
 - Household Hazardous Material and Prescribed Material Regulation
 - MB Workers Compensation Act
 - Municipal zoning by-laws
 - Manitoba Fire Code Regulation

² Health Canada 2009. The Safety of Compact Fluorescent Lamps. http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/prod/cfl-afc-eng.php



- 3. Possess Comprehensive or Commercial General Liability Insurance including coverage for bodily injury, property damage, complete operations and contractual liability with combined single limits of not less than \$2 million per occurrence, \$2 million general liability.
- 4. Possess and maintain in good standing workers compensation coverage from WCB MB as required under the *Workers Compensation Act* of British Columbia and its Regulations
- 5. Ensure that procedures comply with the Program Training Manual and that staff follow these procedures. The program will provide the Manual.

Facility Requirements

The collection site shall:

- 1. Provide reasonable hours of operation for the collection of fluorescent lamps
- Provide personal service for customer drop off. Drop-off in supervised areas with mechanisms or systems in place to minimize breakage and drop-off of non-program material may be possible if the collection site assumes responsibility and liability for onsite activities. Unsupervised, self service drop off is not permitted
- 3. Ensure the storage area has sufficient space for safe storage, is protected from weather, and the floor is constructed of impervious material such as concrete
- 4. Ensure that unauthorized access to the premises and storage area is prohibited or restricted through security measures
- 5. Ensure the storage area is not near sensitive areas such as drains
- 6. Have appropriate signage to inform consumers that it is a collection site and have program information available for the customer
- 7. Only accept program products as defined in the Program Plan
- 8. Only accept lamps for the Program from residential customers and not from institutional, commercial and industry users
- 9. Not use onsite size reduction or processing equipment for lamps
- Provide notice of any incidents that required the assistance of first responders within 24 hours of the occurrence. Provide notice of any regulatory orders or fines within 48 hours of receiving such orders or fines.
- 11. Not charge the residential users for the program service
- 12. Keep program materials segregated from any industrial, commercial or institutional lamps that may be returned to the collection site as part of a separate service the site may offer. If the site chooses to offer a service for non-program lamps, the site assumes all liability associated with those materials.



Occupational Health and Safety

All collection sites shall:

- Comply with all applicable health and safety regulations including but not limited to Workers Compensation Act of Manitoba
- 2. Possess written procedures to systematically manage environmental, health and safety matters such as but not limited to accidents, fires and spills
- 3. Implement and maintain proper lamp handling and safe housekeeping procedures to ensure minimal risk of breakage
- 4. Provide adequate training for all employees to ensure safe and proper handling of lamps
- 5. Document health and safety training
- 6. Provide and enforce correct use of required personal protection equipment
- 7. Implement spill/breakage cleanup procedure when needed and maintain equipment/supplies according to depot manual
- 8. Implement and maintain an emergency response plan

Training

All collection sites shall ensure that all staff are trained in:

- 1. The handling and management of lamps including but not limited to:
- 2. Potential hazards and risks associated with handling of lamps
 - Proper and safe handling of lamps
 - Ways to reduce risk
 - Safety and emergency procedures
 - Emergency response plan
- 3. spill/breakage cleanup procedures and management
- 4. the operations training program and policies/procedures set by the program
- 5. the identification of which products are accepted and not accepted by the program
- 6. the completion of proper shipping documentation and record keeping
- 7. and that all such training is documented.

Record Keeping

Maintain all records and documentation including applicable manifest, bill of lading, waste records, training records, and other data as required for a minimum of 2 years



Definitions

<u>Fluorescent lamps</u> - are a low-pressure mercury electric-discharge source in which a phosphor powder transforms ultraviolet energy generated by the mercury discharge into visible light. The term "lamps" is used by the manufacturers to describe what consumers call "light bulbs".

Residential users - individuals who return lamps they have used in their residences to the program

<u>Program Products</u> - This program covers fluorescent lamps marketed to residential users that are designed to be removed by the user.

There are two categories of fluorescent lamps generally used for residential lighting:

- 1. Compact fluorescent lights (CFLs), which fit into standard lighting sockets. CFLs are manufactured in a number of different shapes and a range of light output values.
- 2. Fluorescent tubes, (such as T12 Fluorescent Lamps, T8s, T5s, shaped or curved tubes) which require dedicated pin-type sockets. Fluorescent tubes come in different lengths, diameters, and light output. Most are straight but some are curved or shaped.



Appendix B - Forms

Container Request Form

Incident Report

Please keep these forms blank and photocopy as needed.



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