

# SUSTAINABLE SOLUTIONS

## MERCURY [Hg] RECYCLING

### Introduction

Mercury is a metallic element that can accumulate in living tissue. In sufficient concentrations, mercury may cause adverse health effects. Sources of mercury in the environment from human activity include coal-burning power plants, batteries, and fluorescent and HID lamps.

Small amounts of mercury are a necessary component in fluorescent and HID lamps, but when a lamp is broken, crushed, or dispensed in a landfill or incinerator, mercury may be released to the air, surface water, or groundwater. Considering this, it is a good policy to keep the mercury in fluorescent and HID lamps out of the solid waste stream by recycling.



### Definitions of Generators

**Conditionally Exempt Small Quantity Generators** (CESQG's) are persons who generate less than 100 kilograms, or 220 lb. per months of hazardous wastes combined (not just lamps!). These generators are exempt from most of the hazardous waste regulations, which include transportation, treatment, and disposal requirements. They must dispose of their hazardous waste in facilities that are permitted or authorized to accept such hazardous or non-hazardous wastes. Many states acknowledge CESQG exemptions for paperwork, but not for disposal. Many states do not allow CESQG to dispose of hazardous waste in a solid waste landfill.

Most commercial office buildings fall within this category, as a conditionally exempt small quantity generator (CESQG).

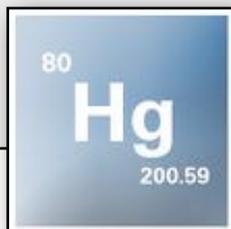
**Small Quantity Generators** (SQG) are locations that generate more than 220 lb. a month or up to 2,200 pounds annually, of hazardous waste. These generators must keep proper records of the waste, report to EPA, and follow accumulation requirements. These generators can store up to 6 months without a storage permit.

**Large Quantity Generators** (LQG) are locations that generate more than 2,200 pounds of hazardous waste per month. These generators are subject to the full hazardous waste management requirements. These generators cannot store hazardous wastes on site for more than 90 days (3 months) without obtaining a storage permit.

### Mercury Containing Items:

The following is a list of items commonly found in an office building which may contain Mercury:

- **Fluorescent Light Tubes (FLT)**
- **Compact Fluorescent Light (CFL)**
- **Batteries, both rechargeable & single use (BAT)**
- **Light Ballast (BAL)**
- **Thermostats (TMS)**
- **Thermometers (TMR)**
- **Computers (E-Waste)**
- **Certain other Electronic Components**



### Why you should not throw these items in the trash!

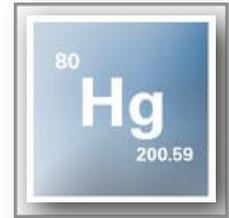
Fluorescent lamps (tubes), Compact Fluorescent Lights (CFL), Batteries, Ballast, and E-Waste contain mercury and in most cases are considered hazardous. The US Environmental Protection Agency (EPA) regulates the management of these items, as do most states, including laws that prohibit these hazardous materials from being disposed of in any landfill throughout the US.



## MERCURY [Hg] RECYCLING SOLUTIONS

### Blue Planet Environmental: Mercury Recycling Solutions

BPE recommends implementing a mercury recycling program for all mercury containing items through the following solutions:



#### FLUORESCENT LIGHT TUBES (FLT) & COMPACTS (CFL)

**CRUSHER:** BPE recommends the 'Bulb Eater' for facilities over 150,000 SF, also known as a drum top crusher, for all fluorescent light tubes (FLT). The Bulb Eater is a drum top crushing system that crushes all your FLT's, is HEPPA sealed and OSHA approved.

	Retail Cost	BPE Costs	Your Savings
Premium Bulb Eater, 55 VRSU Drum Top FLT Crusher Capacity: 925 each 4' T12, 1,350 each 4' T8, or 1,950 each 4' T5	(\$3844.00)	\$ 3,722.00	\$ 100.00 each
Standard Bulb Eater, 55 VRSU Drum Top FLT Crusher Capacity: 925 each 4' T12, 1,350 each 4' T8, or 1,950each 4' T5	(\$3650.00)	\$ 3,650.00	

**BOX PROGRAM:** BPE recommends the Easy Pack, pre-paid box program for smaller facilities, or those facilities that do not produce a high volume of FLTs.

	Retail Cost	BPE Costs	Your Savings
Standard 4' Lamp Recycling Pre-Paid Box Capacity: 36 each 4' T12 or 64 each 4' T8	(\$69.00)	\$ 67.50	\$ 1.50 each
Standard 8' Easy Recycling Pre-Paid Box Capacity: 15 each 8' T12 or 25 each 8' T8	(\$90.00)	\$ 87.50	\$ 2.45 each
Standard 4' JUMBO Lamp Pre-Paid Box Capacity: 64 each 4' T12 or 128 each 4' T8	(\$107.75)	\$ 95.00	\$ 5.95 each

In addition to your Fluorescent Light Tubes (FLT), Blue Planet recommends the following solutions for the other types of mercury containing waste:

#### Compact Fluorescent Lights (CFL)

Standard 5 gallon Easy Pack CFL Pre-Paid container	(\$139.00)	\$114.00	\$ 25.00 each
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#### Broken Fluorescent Lights

Broken Fluorescent Lamps, ONE (1) gallon Poly Pail		\$ 90.00	
Broken Fluorescent Lamps, FIVE (5) gallon Poly Pail		\$165.00	

#### BATTERY RECYCLING (BAT) - LEED REQUIREMENT (LEED EB O&M MR CREDIT)

Standard ONE (1) gallon BATTERY Pre-Paid container	(\$98.00)	\$86.00	\$ 12.00 each
Large FIVE (5) gallon BATTERY Pre-Paid container	(\$167.00)	\$155.00	\$ 12.00 each
In-Office Battery Recycling Containers (see BPE in-office recycling container options)	(see BPE's in-office recycling containers)		

#### BALLAST RECYCLING (BAL)

Standard FIVE (5) gallon NON-PCB BAL Pre-Paid containers	(\$147.50)	\$140.00	\$ 7.50 each
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#### THERMOSTATS, SWITCHES, THERMOMETERS & OTHER MERCURY ITEMS

Standard 3 gallon Recycling Pre-Paid container	(\$173.00)	\$165.00	\$ 8.00 each
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**NOTE:** Prices in parentheses are average retail costs, and are intended as informational only.



<b>Company:</b>		<b>Ship to Address:</b>	<b>Bill to Address:</b>
<b>Name:</b>			
<b>Title:</b>			
<b>Phone:</b>			
<b>E-Mail:</b>		<b>Print &amp; Sign Name:</b>	
<b>PO Number:</b>		By printing your name above you agree to the terms and conditions of this purchase.	

Mercury Recycling Solution	Cost	Quantity	Total
<b>Fluorescent Light Recycling (FLT):</b> Premium Bulb Eater, 55 VRSU Drum Crusher	\$ 3,844.00		\$ 0.00
<b>Fluorescent Light Recycling (FLT):</b> Standard Bulb Eater, 55 VRSU Drum Crusher	\$ 3,650.00		\$ 0.00
<b>Fluorescent Light Recycling (FLT):</b> Standard 4' Lamp Recycling Box (holds 36 T12 lamps)	\$ 67.50		\$ 0.00
<b>Fluorescent Light Recycling (FLT):</b> Standard 8' Lamp Recycling Box (holds 29 T12 lamps)	\$ 90.75		\$ 0.00
<b>Fluorescent Light Recycling (FLT):</b> Standard 4' Jumbo Easy Pack Recycling Box	\$ 95.00		\$ 0.00
<b>Compact Fluorescent Lights (CFL):</b> Standard 5 gallon Easy Pack recycling container	\$ 114.00		\$ 0.00
<b>BROKEN:</b> Fluorescent Lamps: ONE (1) gallon Poly Pail	\$ 90.00		\$ 0.00
<b>BROKEN:</b> Fluorescent Lamps: FIVE (5) gallon Poly Pail	\$ 165.00		\$ 0.00
<b>Battery Recycling (BAT):</b> Battery Recycling Container ONE (1) gallon Poly Pail (12 lbs)	\$ 86.00		\$ 0.00
<b>Battery Recycling (BAT):</b> Battery Recycling Container FIVE (5) gallon Poly Pail (60 lbs)	\$ 155.00		\$ 0.00
<b>Battery Recycling (BAT):</b> In-office Battery Recycling Container	\$ 42.00		\$ 0.00
<b>Non-PCB Ballast:</b> FIVE (5) gallon Poly Pail (60 lbs)	\$ 140.00		\$ 0.00
<b>Thermostats, Switches, Thermometers &amp; Other Items:</b> ONE (1) gallon Poly Pail	\$ 155.00		\$ 0.00
<b>Thermostats, Switches, Thermometers &amp; Other Items:</b> FIVE (5) gallon Poly Pail	\$ 165.00		\$ 0.00
<b>Additional 55 gallon drum</b> (for drum crusher, recommended)	\$ 85.00		\$ 0.00
<b>T5 Entry Tube</b> (for use with T5 Fluorescent Lights on the Bulb Crusher)	\$ 80.00		\$ 0.00
<b>PICK-UP &amp; TRANSPORTATION:</b> Recycling Pick-up 55 gallon drum of Crushed Lamps	\$ 365.00		\$ 0.00
<b>MERCURY SPILL KIT:</b> ONE (1) gallon Poly Pail	\$ 125.00		\$ 0.00
<b>OTHER:</b>	\$ 0.00		\$ 0.00
BPE offers the above mentioned items through a third party partnership. BPE does not guarantee or offer any warrantee with regards to these items. Furthermore, BPE is not liable or responsible for the use, or misuse, of any mercury recycling solutions.	<b>SUBTOTAL:</b>		\$ 0.00
	<b>TAX:</b>	11.00%	\$ 0.00
	<b>SHIPPING:</b>		
	<b>Insurance, Fuel (11%):</b>		\$0.00
		<b>TOTAL:</b>	\$0.00