Earth Protection Services, Inc. (EPSI) is The Premier Nationwide Recycling Service for Lighting & Electronic Products.

EPSI is dedicated to providing the highest quality, cost-effective waste management for electronic products. Our processes will return recycled materials to reusable commodities, while maintaining the highest level of professional standards and integrity, ensuring regulatory compliance and guaranteeing customer satisfaction.

Recycling Lamps

Lamps and ballasts may contain hazardous materials, such as mercury and PCBs, that require proper management and disposal according to several federal and state regulations. Lamp recycling separates these toxic substances from the glass, aluminum, and other lamp components so that they can be used in manufacturing other products.

By simply knowing more about your fluorescent lighting system and its environmental implications, you can save money, avoid potential health hazards and reduce your chance of liability. That’s where EPSI can help. EPSI is a full service recycling company committed to developing and utilizing the recycling technologies of the future. We are dedicated to protecting the environment - and your company - by providing comprehensive services to ensure environmental health and safety. If you generate or dispose of hazardous waste materials, EPSI can assist you in reducing your environmental liability. In addition, we can help promote a “greener” company by recycling any fluorescent or HID lamp regardless of whether or not the lamp tests hazardous.

EPSI On Site Retort

Earth Protection Services, Inc. has the capability to provide on-site mercury retorting services. The equipment is designed to safely process and separate mercury from fluorescent and HID lamps, and other spent mercurial products, while reducing them back to their basic components. By using advanced mechanical and thermal technologies, the unit separates and collects each of the lamp components for re-use in other commercial products. Only glass, aluminum, phosphor, and pure recovered mercury leave the unit. The recovered mercury is then further purified so it can be used again by industrial customers; therefore, no hazardous waste is generated.
Recycling Ballasts

EPSI’s ballast recycling service ensures environmentally secure disposal of PCB components, while reclaiming over 85% of the ballast metals for reuse. PCB capacitors and potting compound are removed, segregated, and shipped for incineration at an EPA/TSCA high temperature incinerator, or landfilled at a hazardous waste facility, depending on the option selected by the customer. The copper, steel, and aluminum are then reclaimed from the ballasts for use in manufacturing other products. Non-PCB ballasts may be recycled and are processed through the facility using the same exacting standards.

Recycling Electronic Products

Monitors and TVs are regulated by the EPA because of lead in the glass picture tubes. Plastic cases, circuit boards, metal components and copper wire are removed and recycled. Glass is utilized as a fluxing agent in smelting. Lead can be used as a component of new batteries.

Recent studies indicate that by the middle of this decade, over 250 million televisions will be technologically outdated. These studies also estimate that the number of obsolete computers and monitors may increase to as high as 45 million pieces per year. The development of faster, more efficient machines has left behind an enormous amount of antiquated electronic products.

Products such as monitors, televisions, telephones, keyboards, and printers, contain chemicals such as lead, mercury, cadmium, lithium, beryllium and more. EPSI recycles these electronic products in an environmentally correct manner to help protect your company’s future interests as well as our environment.

Mercury Spill Kits

Mercury Spill Kits are available to our customers for clean up of accidental Mercury spills.
Recycling Ni-Cad Batteries

EPA issued the “Universal Waste Rule” in order to reduce the amount of hazardous waste items in the municipal solid waste stream, and encourages recycling and proper disposal of nickel-cadmium (Ni-Cad) and small sealed lead-acid batteries. These batteries are found in electronic equipment, mobile telephones, portable computers, and emergency backup lighting.

Recycling Lead Acid Batteries

More than 100 million motor vehicles are registered in the USA. Each vehicle uses a lead-acid battery. Lead-acid batteries are also used in trucks, motorcycles, boats, and other motorized equipment. The average battery contains 17.5 pounds of lead and 1.5 gallons of sulfuric acid. Improperly and illegally disposed of batteries presents a threat to our health and to the environment.

EPSI also recycles other battery types such as alkaline, silver zinc, magnesium, mercury and lithium.

Packing and Transportation

EPSI is a permitted hazardous material transporter with a nationwide network providing prompt, efficient, and cost effective transportation services. With EPSI providing containers, shipping, recycling and cradle-to-grave documentation, all governmental regulations are met.

EPSI utilizes computer-based route planning and scheduling systems and on-board communication equipment to ensure that materials are picked up promptly and transported safely, efficiently and cost effectively.

EPSI will provide all the necessary containers and documentation for collecting, sorting, storing and shipping mercury containing lamps, lighting ballast, and electronic equipment.

With EPSI providing transportation and recycling services for your electronic products, you can be assured that your company is meeting governmental regulations.
**EPSI Location**  | **Telephone Number**  
--- | ---  
Phoenix, AZ | 602-353-9282  
Glendale, AZ | 623-934-4409  
Mira Loma, CA | 951-727-9121  
Tigard, OR | 503-620-2466  
Lancaster, PA | 717-239-5900  
Round Rock, TX | 512-251-4691  
Williamston, SC | 864-847-7700  
Lancaster, PA Sales | 484-322-0300  
Branford, CT Sales | 203-483-6263  
Sheridan, WY Sales | 800-588-7190  
**EPSI Web Site** | [http://www.earthpro.com/](http://www.earthpro.com/)  

**Permits**  
EPSI is a Fully Permitted RCRA/TSCA Recycler. Permits and Registrations for EPSI's Arizona Facilities include:  

- US EPA ID #AZR 000 005 454 (Phoenix)  
- US EPA ID#AZD 982 434 185 (Glendale)  
- Part B RCRA Permit – Application in progress  
- Air Permit – de minimus status  
- TSCA Commercial Storage Permit  
- National Motor Freight Traffic Association Registration  
- City of Phoenix Fire Department Hazardous Materials Permit for Storing, Handling, Dispensing, or Use  
- City of Phoenix Fire Department Permit for Liquefied Petroleum Gas  
- HAZWASTE Transporter Permits:  
  - Alabama HAZWASTE Transporter Permit AZR 000 005 454  
  - California HAZWASTE Transporter Permit #3595  
  - Florida UW & Device Transporter Permit AZR 000 005 454  
  - Georgia HAZMATERIAL Transporter Permit #10231 / 10232  
  - Maryland HAZWASTE Transporter Permit HWH 589  
  - Maine HAZWASTE Transporter Permit HWT 480 / WOT 480  
  - New York HAZWASTE Transporter Permit AZ-001  
  - Nevada HAZMAT Uniform Program Credentials UPM-677380-NV  
  - South Carolina HAZWASTE Transporter Permit SCR0000763201  
- Texas HAZWASTE Transporter Permit #85098  
- Virginia HAZWASTE Transporter Permit AZR 000005454  
- USDOT Hazardous Materials Certificate of Registration  
- New Mexico HAZMAT Registration 98780  

**Insurance**  
- Environmental Pollution Liability - $5,000,000 per occurrence/aggregate  
- Commercial General Liability - $5,000,000 combined single limit per occurrence  
- Commercial Automobile Liability with MCS-90 endorsement - $5,000,000 single limit per occurrence  
- Workmen’s Compensation – Statutory Limits  
- Employer’s Liability - $1,000,000 combined single limit per occurrence  

**Commitment to Industry & Environment**  
EPSI’s commitment to industry and to the environment is evidenced by our involvement with the following organizations:  

- Arizona Association of Industries Environmental Committee  
- Association of Lighting and Mercury Recyclers  
- Association of Professional Energy Managers  
- Charter Member, Department of Energy’s Rebuild America Program  
- Department of Energy’s Energy Star Program  
- Energy Efficiency Lighting Association Advisory Council  
- Illuminating engineering Society Legislative and Regulatory Affairs Committee  
- Institute of Scrap Recycling Industries  
- International Association of Electronics Recyclers  
- International Association of Lighting Management Companies  
- National Association for Information Destruction  
- National Association of Energy Services Companies  
- National Recycling Coalition  
- North American Hazardous Material Management Association  
- Reverse Logistics Association
HANDLING AND DISPOSAL of FLUORESCENT LAMPS

PURPOSE
To ensure that employee’s exposure to mercury is minimized and that materials containing mercury are handled and disposed of in an environmentally sound manner.

BACKGROUND
All fluorescent lamps contain elemental mercury. Mercury has a unique combination of properties that make it the most efficient material for use in fluorescent and HID lamps. The basic operating principles of fluorescent lamps depend on production of ultraviolet (UV) light and mercury is the most efficient product of the required UV.

CAUTION
Mercury and mercury contaminated materials vaporize at room temperature. Mercury vapor is extremely toxic. Mercury is the only heavy metal that is liquid at room temperature. Because of this and other useful properties it usage’s are commonplace. It is actually more harmful to inhale the vapor from a bead of mercury than to ingest the same bead. At room temperature mercury vaporizes readily into an invisible, odorless, and tasteless poison. Ambient mercury levels in the breathing zone can be controlled if personnel are aware of and trained in mercury management. Be conscious of the hazard of unseen mercury contamination in cracks, corners and untreated storage containers.

HANDLING PROCEDURES
Procedure for handling unbroken fluorescent lamps for packaging. Employee will wear the following safety equipment.

• Gloves made of leather, or equivalent.
• Safety glasses with side shields or full-face shield.
• Safety toed shoes or boots.

STEP 1
Place lamps into new or used lamp boxes (the original egg crate material does not have to be placed back into the boxes) and tape the ends shut.

• Broken or crushed lamps should be packaged in an approved container, (55 gallon drum).
• Badly damaged boxes, wet boxes, etc. will not be accepted for transport.
• Boxes must be kept in a secure, dry area.
• Palletize lamp boxes to a maximum height of 6 feet.
• Secure boxes to pallet with shrink wrap or stretch film.
• All pallets need to be labeled as Used Mercury Lamps or Universal Waste Mercury Lamps.

Required information to schedule a pickup:

• Contact person.
• Date of pickup.
• Physical address of location.
• Material location: i.e., loading dock, storage container.

STEP 2
All employees shall wash his/her hands with soap and water when beginning a work shift, before a break, and upon completion of the work shift. No tobacco materials, food, or beverages will be permitted while working with mercury lamps.

STEP 3
It is the employees’ responsibility to ensure that these handling and disposal procedures are fully carried out. The proper use of the prescribed safety equipment will protect the employee from the potential dangers of contamination from mercury.
HANDLING AND DISPOSAL of PCB & NON PCB BALLAST

PURPOSE
To ensure that employee’s exposure to PCBs is minimized and that material containing PCBs are handled and disposed of in an environmentally sound manner.

BACKGROUND
Polychlorinated bi-phenyls (PCBs) were used in the capacitors of fluorescent lamp ballasts and in the capacitors of high intensity discharge (HID) lighting fixtures. PCBs were also found in other electrical equipment including common household appliances. PCBs were used in these items as they were an excellent insulator and they would not burn.

In 1978 however, the United States Environmental Protection Agency (EPA) banned the use of PCBs as they were found to pose a health risk to humans. Mineral oils and powdered materials replaced PCBs in lamp and ballast and capacitors manufactured after 1978 and these items generally bear a label reading “No PCBs”. The majority of ballasts and capacitors you will come into contact with in your day-to-day job activities pose no health risk.

However, you may be working on ballasts and/or capacitors that contain very small amounts of PCB fluid. For handling these ballasts and capacitors, follow the handling and disposal procedures outlined below.

HANDLING PROCEDURES
Procedure for removal of ‘non leaking’ PCB capacitors from fluorescent lamp ballasts.
Employee will wear the following safety equipment:

- Gloves made of chemical resistant neoprene coated, butyl rubber, or leather.
- Safety glasses with side shields or full-face shield.
- Safety toed shoes or boots.

STEP 1
Once removed from the fixture, the Toxic Substance Control Act (TSCA) requires that PCB ballasts be stored in approved DOT drums. The drums should be stored inside the building. Outside storage is permitted if they are on an impervious surface, the drum lids are secured, and they are protected against weather and vandalism.

STEP 2
Separate ballast by type (PCB, non PCB) and visually check for leakers, and place into drums.
NOTE: Leaking PCB ballasts must be double bagged and placed in a drum containing at least 3 inches of vermiculite.

STEP 3
Properly label drums PCB or Non PCB. Secure drum lid. All protective equipment that comes into contact with any material leaking from a capacitor will be placed in proper containers for disposal. The employee shall wash his/her hands with soap and water when beginning a work shift, before a break, and upon completion of the work shift. No tobacco materials, food, or beverages will be permitted while working with lamp ballasts. It is the employee’s responsibility to ensure that these handling and disposal procedures are fully carried out. The proper use of the prescribed safety equipment will protect the employee from the potential dangers of contamination from PCBs.