

The Lamp Recycling Process

How Lamps and Ballasts Are Recycled



Step 1

RECYCLEPAK containers are delivered to Veolia by FedEx Ground for processing. Materials are received and entered into Veolia's hazardous waste tracking system.



Step 2

- Received materials are sent to processing.
- Although there are variations between the equipment used at each Veolia facility, all lamp-recycling processes utilize a dry separation process.

Step 3

- In-feed to the process consists of manually opening the packaged containers and placing the lamps into the feed mechanism. The lamps are conveyed into a chamber where a breaker performs an initial particle size reduction of the lamps.
- Broken lamp pieces are then crushed to achieve a greater particle size reduction and transferred to a primary separator to separate the larger components (aluminum end caps).



Step 4

- The remaining components are then further separated generating three process streams, glass cullet, glass fines, and phosphor powder.
- Of total bulb weight, roughly 96% is recovered as glass, 2% as aluminum, less than 2% as phosphor powder and less than 1% as mercury for refining.
- Mercury contaminated phosphor powder is retorted to reclaim mercury.

