



Lamp Ballast Packaging Guidelines

The procedures outlined in this document must be used to store and prepare lamp ballast for proper recycling. The packaging, labeling and marking requirements will be dependent on the type of ballast contained within the package. For additional information on lamp ballasts, see the Ballast Appendix. Questions regarding this document should be directed to customer service, toll-free at 1-800-556-5267. All precautions should be taken to eliminate leaking ballast. Extra charges will apply to all containers received with leaking ballast.

General Packaging Guidelines for Lamp Ballast

1. PCB containing lamp ballast must be packaged in DOT specification containers, such as a 55-gallon steel drum or a 5-gallon pail and it is recommended that all other lamp ballast also be packaged in specification containers.
2. By law, DOT specification containers must not exceed the rated capacity of the container. A standard 55 gallon drum is rated for a gross weight of 550 lb. while other drums may be rated for as much as 800 pounds. Therefore, the number of ballast per drum should not exceed:
 - a. 200 4' ballast,
 - b. 94 8' slim line ballast,
 - c. 68 8' HO ballast, or
 - d. Equivalent combination of ballast types.

A good approximation to follow is to only fill 55g drums of ballasts 2/3 full in order to avoid exceeding the DOT weight limit of the container.

3. A typical 5 gallon pail will be rated for approximately 66 pounds. Therefore, the quantity of ballast per pail should not exceed:
 - a. 16 4' ballast,
 - b. 8 8' slim line ballast,
 - c. 6 8' HO ballast, or
 - d. Equivalent combination of ballast types.
4. Drums must be labeled pursuant to applicable U.S. DOT and EPA regulations. Labels can be provided by Veolia.
5. Veolia ships empty steel drums with a cover, gasket, bolt-ring closure. Once filled, the cover, with gasket, should be secured to the drum by securing the bolt-ring closure. Closure instructions are provided for all DOT specification containers supplied by Veolia. Veolia reserves the right to refuse pickup of material that is improperly packaged or is offered in damaged packaging. A callout fee will be assessed and the pickup will be re-scheduled once the material is re-packaged by the customer.
6. Information needed to arrange the pickup of ballast include the physical location of the ballast (On a loading dock?), whether or not the truck will need a lift-gate, whether or not a drum hand-cart will be needed and pickup hours.

Labeling:

The labels required for each container of lamp ballast will be dependent on the type of ballast within the container. While in storage prior to shipment, the containers should be marked with, generator name, generator address and a description of the contents of the container. Depending on the state in which you are located additional markings and labels may be required for PCB lamp ballast. For transport the containers must also be marked and labeled according to DOT regulations. The Ballast Appendix contains additional information on marking and labeling.

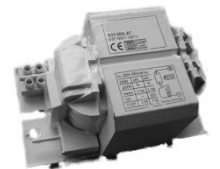
Types of Ballast



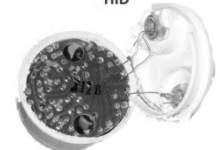
Magnetic



Electronic



HID



CFL



Ballast Appendix

Federal Regulations

TSCA stands for the “Toxic Substance Control Act”

Please note the following general information regarding lamp ballasts and the TSCA regulations:

- Lamp ballasts are devices that control the flow of electricity to fluorescent and HID lamps.
- Ballasts contain a capacitor, and a transformer. Older lamp ballasts also contain an asphalt potting compound. The potting compound is the material that holds the components of the ballast in place and provides insulation for the electrical components.
- The capacitors within the ballasts contain less than 3 pounds of dielectric fluid and are defined as small capacitors by EPA and are exempt from TSCA regulation regardless of PCB content.
- Any ballast that is leaking PCB dielectric fluid is subject to TSCA regulation.
- Ballasts manufactured before July 2, 1979 contain PCBs in the capacitor and may contain PCBs in the asphalt potting compound.
- If the manufacture date is unknown and the ballast is not marked “No PCBs”, the ballast should be assumed to have been manufactured prior to July 2, 1979.
- Ballasts that contain greater than 50 ppm PCBs in the potting compound are regulated by TSCA.
- The generator must determine if their ballasts are TSCA regulated, either through generator knowledge or testing.
- In order to reduce long-term environmental liability and preserve natural resources, all ballasts should be recycled or destroyed at a TSCA permitted incineration facility. Improper disposal, and release of PCB’s into the environment, may result in the generator of the waste being financially responsible for clean-up under the Superfund rules.

Please note the following guidelines for generators:

TSCA regulated PCB Ballast:

- Must transport on a Hazardous Waste manifest. If the generator stores ballasts the ballasts for greater than 30 they must have and use a generator EPA ID number.
- Each container must have a unique identification number (per drum) assigned by the generator and an out-of-service date (the date the first ballast in the drum was removed from service).
- Must be stored and transported in a DOT approved container. DOT approved containers will be marked with a UN specification marking.
- Each container must be marked with the TSCA PCB marker/M_L label.
- If stored for greater than 30 days, each container must be stored in a designated PCB storage area. The requirements for a PCB storage area are attached.
- TSCA regulated PCBs must be destroyed within one year of the out-of-service date. To ensure compliance, PCBs should always be shipped less than 9 months after the out-of-service date.
- Weights must be recorded and reported in kilograms.
- Must be described on the manifest using the shipping name of “Polychlorinated biphenyls, solid, 9, UN 3432, PGIII”.

Non TSCA regulated PCB Ballast:

- Transported on a Bill of Lading, rather than a Hazardous Waste Manifest (no EPA ID number required of generator), and may be transported by a common carrier
- No unique drum number, serial number, or out of service date required
- No secondary containment necessary
- No storage time limitation
- Must use proper DOT shipping containers and shipping name referenced above.

Non PCB Ballasts:

- Ballasts manufactured after July 2, 1979 may be assumed to be non-PCB
- Not TSCA or RCRA regulated
- Transported on a Bill of Lading, rather than a Hazardous Waste Manifest (no EPA ID number required of generator), and may be transported by a common carrier

State Regulations



The following states regulate PCB containing materials under their hazardous waste regulations.

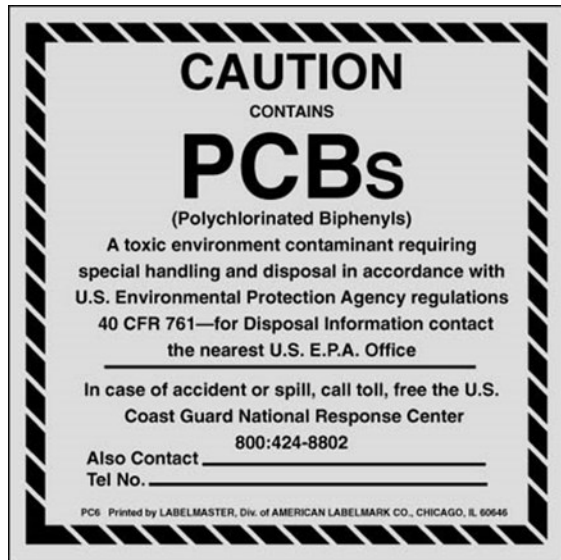
State	Waste Code	State	Waste Code
California	261	Minnesota ⁵	MN03
Connecticut ⁴	CR01	New York (500+ ppm) ³	B005
Maine ¹	M002	New York (50-499 ppm) ³	B004
Maryland (500+ ppm)	M001	Rhode Island	R007
Massachusetts	MA02	Vermont ¹	VT01
Massachusetts ²	MA99	Washington	W001

1. These states have included fluorescent lamp ballasts under their Universal Waste Rules and these waste codes only apply to leaking ballasts.
2. This waste code applies to all ballasts managed under the Massachusetts guidance.
3. These waste codes do not apply to PCB small capacitors, therefore, PCB lamp ballast are exempt from regulation.
4. Waste code applies to manifested shipments.
5. Minnesota regulations contain provisions which allow minimal quantities of hazardous waste to be excluded from the manifesting requirements.

Notes:

1. Regardless of type, all fluorescent lighting ballasts received by Veolia are properly treated and decontaminated at fully licensed facilities. See chart below.
2. Because the **small capacitors** within the ballasts are considered to be **exempt from TSCA regulation**, some generators consider the entire ballast to be exempt from TSCA regulation. This determination should technically be made by testing the ballasts or through generator knowledge of the ballasts. Others tend to be more conservative and consider the ballasts to be **TSCA regulated** because of the potential for PCB's in the potting compound. However, keep in mind the above mentioned guidelines **MUST** be followed in this situation, and Veolia can assist in providing proper labeling and shipping documentation.

Sample TSCA PCB Marker/M_L Label





PCB Storage Area Requirements

- Adequate roof and walls to prevent rain water from reaching the stored PCBs and PCB Items;
- An adequate floor that has continuous curbing with a minimum 6 inch high curb. The floor and curbing must provide a containment volume equal to at least two times the internal volume of the largest PCB Article or PCB Container or 25 percent of the total internal volume of all PCB Articles or PCB Containers stored there, whichever is greater. PCB/radioactive wastes are not required to be stored in an area with a minimum 6 inch high curbing. However, the floor and curbing must still provide a containment volume equal to at least two times the internal volume of the largest PCB Container or 25 percent of the total internal volume of all PCB Containers stored there, whichever is greater.
- No drain valves, floor drains, expansion joints, sewer lines, or other openings that would permit liquids to flow from the curbed area;
- Floors and curbing constructed of Portland cement, concrete, or a continuous, smooth, non-porous surface as defined at §761.3, which prevents or minimizes penetration of PCBs.
- Not located at a site that is below the 100-year flood water elevation.
- Marked as required in subpart C §761.40(a)(10) (marked with the PCB M_L label).
- No item of movable equipment that is used for handling PCBs and PCB Items in the storage units and that comes in direct contact with PCBs shall be removed from the storage unit area unless it has been decontaminated as specified in §761.79.
- All PCB Items in storage shall be checked for leaks at least once every 30 days. Any leaking PCB Items and their contents shall be transferred immediately to properly marked non-leaking containers. Any spilled or leaked materials shall be immediately cleaned up and the materials and residues containing PCBs shall be disposed of in accordance with §761.61. Records of inspections, maintenance, cleanup and disposal must be maintained in accordance with §761.180(a) and (b).
- Any container used for the storage of liquid or non-liquid PCB waste shall be in accordance with the requirements set forth in the DOT Hazardous Materials Regulations (HMR) at 49 CFR parts 171 through 180. PCB waste not subject to the HMR (i.e., PCB wastes at concentrations of <20 ppm or <1 pound of PCBs regardless of concentration) must be packaged in accordance with Packaging Group III, unless other hazards associated with the PCB waste cause it to require packaging in accordance with Packaging Groups I or II. For purposes of describing PCB waste not subject to DOT's HMR on a manifest, one may use the term "Non-DOT Regulated PCBs."

PCB Items shall be dated on the item when they are removed from service for disposal. The storage shall be managed so that the PCB Items can be located by this date.