

Environmental Health and Safety

Polychlorinated Biphenyls (PCBs) Sources and Handling

Potential Sources of Polychlorinated Biphenyls (PCBs)

Although no longer commercially produced in the United States, PCBs may be present in products and materials manufactured before the 1979 PCB ban. Products that may contain PCBs include:

- Transformers and capacitors
- Other electrical equipment including voltage regulators, switches, reclosers, bushings, and electromagnets
- Oil used in motors and hydraulic systems
- Old electrical devices or appliances containing PCB capacitors
- Fluorescent light ballasts
- Cable insulation
- Thermal insulation material including fiberglass, felt, foam, and cork
- Adhesives and tapes
- Oil-based paint
- Caulking
- Plastics
- Carbonless copy paper
- Floor finish

The PCBs used in these products were chemical mixtures made up of a variety of individual chlorinated biphenyl components, known as congeners. Most commercial PCB mixtures are known in the United States by their industrial trade names. The most common trade name is Aroclor.

Disposing/Recycling of PCSs

Before disposing or recycling any potential source of PCBs, contact Environmental Health and Safety (EHS) at (208) 885-6524. Older fluorescent light ballasts represent the most likely source of PCBs.

Scenarios

There are three different scenarios that need to be addressed when a fluorescent light ballast reaches the end of its life:

1. The light ballast does not contain PCBs (indicated by the words “No PCBs” printed on the ballast’s label);
2. The light ballast contains PCBs and remains intact (light ballasts that **DO NOT HAVE** “No PCBs” printed on their label must be assumed to have PCBs in them); or
3. The ballast contains PCBs (or is assumed to contain PCBs due to lack of appropriate labeling) and has breached, potentially spilling PCB oil into the environment.



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Each scenario is entirely different and requires a different disposal method.

1. **“No PCBs” Light Ballasts.** Both intact and breached light ballasts (i.e., ballasts that have the words “No PCBs” printed on their labels) can be discarded as normal trash. These ballasts do not have to be reported to EHS unless other hazardous circumstances exist.

2. **PCB-Containing Ballasts: Intact Ballasts.** An intact light ballast is one that is not (or has not been) leaking any fluids. Many light ballasts will reach the end of their service life without breaching, these are considered to be intact.

Intact fluorescent light ballasts that **DO NOT** have the words “No PCBs” printed on their labels must be assumed to contain PCBs. These light ballasts, once they have reached the end of their service life (and are still intact), must be disposed of through Environmental Health and Safety. Contact EHS for disposal instructions.

3. **PCB-Containing Ballasts: Leaking Ballasts.** If a PCB-containing ballast starts to leak or is found to be leaking, use the following procedures to correct the problem:

- a) If the liquid leaking from the ballast has come in contact with an individual, that person should seek medical attention immediately.
- b) Turn off the affected light.
- c) If possible and safe to do so, try to contain the spill and/or keep it from spreading (e.g., place a trash can with a plastic liner underneath the leaking light fixture).
- d) Call EHS at (208) 885-6524 to report the incident and provide the following information:
 - Location of breached ballast (i.e., building and room number);
 - Your name;
 - Phone number (and/or radio call name);
 - Other pertinent information
- e) Keep personnel and the public out of the area; and
- f) Wait until EHS personnel arrive on the scene to provide assistance.

Leaking PCB-containing ballasts present more of a problem than do any of the other scenarios. The ballast, light fixture, and surrounding contaminated area must be decontaminated by EHS personnel before proceeding with repairs to the light or using the area. University maintenance personnel and electricians will need to wear personal protective equipment if they plan to remove leaking ballasts before EHS personnel can decontaminate the light fixture and remove the ballast. Decontamination involves cleaning the hard surfaces (e.g., light fixture, floor, furniture, etc.) with an appropriate solvent which removes the tar and PCB oil from impervious



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materials. Carpet and very porous materials cannot be decontaminated and will have to be removed from the premises. Once decontamination has been completed, the ballast can be removed, the light repaired, and the space can be re-occupied.

EHS personnel will remove the breached ballast and cleanup debris from the area for proper disposal. New and replacement ballasts should be dated and have the words "No PCBs" printed on their labels.

