

Policy Statement

The following guidelines were developed to protect University employees and building occupants from potential exposure to hazardous materials that may be encountered during the removal of light ballasts. The guidelines for removal, personal protection, and clean-up are based on information from the Environmental Protection Agency and Occupational Safety and Health Administration. Guidelines for waste segregation and disposal are based on University policies provided by the Division of Research Safety (DRS).

Ballast-Type Identification and Disposal

Ballasts should be segregated into two waste streams and PCB contaminated debris, such as PPE and cleaning materials will constitute a third waste stream. The waste streams will be placed into containers, typically drums, that must be labeled as follows: 1) waste PCB ballasts; and 2) waste non-PCB ballasts. Electronic ballast, which are easy to identify because they are lighter and usually have a plastic casing, should be placed in the waste container labeled “waste non-PCB ballasts”. All remaining ballasts should be placed in the waste container labeled “waste PCB ballasts” unless the ballast is labeled “no-PCBs” or if the ballast has an easily identifiable manufacture date after 1980. Dates of manufacture are often difficult to determine because each manufacturer marks the date differently so if in doubt assume the ballast to be PCB-containing.

Severely breached PCB ballasts should be bagged individually in minimum 4 mil clear plastic bags no larger than 15 gallons in size with no markings. Each bag should be labeled with “PCB contaminated debris”. Double bag breached ballasts if free liquid can be seen in the first bag.

Impacted personal protective equipment and cleaning materials impacted by PCBs should be placed in a clear plastic bag, separate from the breached ballasts, labeled “PCB contaminated debris”.

Personal Protective Equipment

The minimum required PPE for University personnel removal potentially breached light ballasts is two layers of examination-type nitrile gloves and safety glasses. The outer layer of nitrile gloves should be changed after handling each breached PCB ballast and cleaning its associated light fixture.

Following good hygiene practices, such as washing your hands and face prior to eating, drinking, smoking, or applying cosmetics, is also recommended. If PCB fluid gets on you skin, remove contaminated clothing and wash impacted skin thoroughly with soap and water.

Additional PPE that can be worn include safety goggles, face shield, tyvek suit, chemical suit compatible with PCB work, boot covers, thicker chemical resistant gloves, and a respirator with organic vapor cartridges. Tyvek suits and bootcovers should be changed if they are visibly contaminated with PCB residue or at the end of the work shift. Contact the Division of Safety and Compliance (S&C) at 265-9828 before donning a respirator or choosing an alternative glove material.

Guidelines for Handling a Ballast that is Breaching

Shut off power to the ballast that is breaching, vacate the room, and notify others working in the room of the hazard. Allow room to ventilate for 24 hours. Open windows or set up fans in the room to promote better ventilation if necessary. Follow the below “Guidelines for Handling a Breached Ballast”.

Alternatively, a room may be entered after the power has been shut off and the ballast allowed to cool for a minimum 20-30 minutes if the worker conducting the ballast removal and cleaning of the fixture if the work dons a tyvek or chemical suit compatible with PCB work, and a respirator with organic vapor cartridges. Please contact S&C before pursuing this course. Once the breached ballast has been removed and the fixture cleaned according to the steps in the below "Guideline for Handling a Breached Ballast", the room may be re-occupied.

Guidelines for Handling a Breached Ballast

Place a sheet of plastic on the ground especially if the ballast is over a non-porous material such as carpet or wood. Porous materials that visibly contaminated with Turn off the light fixture and lockout power according to the University document "Lockout/Tagout Procedures for Isolating Machines and Equipment from Energy Sources". Let the ballast cool for 20-30 minutes. Remove lamps and ballasts. Remove any bulk PCB material from the light fixture using a spatula or paper towel depending on the viscosity. Clean the area using a double-wash and rinse method. The double-wash is done by cleaning the area twice with an organic solvent such as mineral spirits, deodorized kerosene, turpentine, or rubbing alcohol. Immediately follow each solvent cleaning with a water and detergent cleaning in a mix ratio of 10 to 1, or according to manufacturer recommendations. Acceptable detergents include Simple Green, Alconox, and various other commercially available detergents. Once the double wash is completed, rinse with water and dry.