A. Purpose
To ensure that all fluorescent lamp ballasts are handled in accordance with all applicable Federal, State and Local regulations.

B. Applicability Or scope
This policy applies to all employees of Columbia University that may handle fluorescent lamp ballasts including, but not limited to the following: Capital Project Managers, Facilities Operations Managers, Supervisors, and staff, Environmental Health & Safety (EH&S) staff, and all Contractors working on projects where ballasts are directly handled.

C. Definitions
Fluorescent lamp ballast - Fluorescent lamp ballasts are an electrical device that is used to start and regulate fluorescent and discharge lamps.

Polychlorinated biphenyls (PCBs) - a family of industrial compounds produced by chlorination of biphenyl, noted primarily as an environmental pollutant that accumulates in animal tissue with resultant pathogenic and teratogenic effects.

D. Responsibilities
1. EH&S is responsible for:
   a. The maintenance and enforcement of this policy.
   b. Granting access to waste storage areas for the pickup and drop-off of properly labeled containers (per the 5Ls of hazardous waste management; see references) for the collection of ballasts from project contractors.
   c. Ensuring all ballasts are disposed of in a manner consistent with all applicable regulations and University policies and procedures.

2. Contractors are responsible for:
   a. Collecting ballasts in the designated containers obtained from the waste storage area via EH&S access.
   b. Maintaining the containers throughout the duration of the project ensuring they are closed, secure, and ultimately stored in a manner that prevents release of hazardous materials to the environment.
   c. Returning containers to the waste storage area and contacting EH&S for access.

3. Facilities is responsible for:
   a. For any non-project collection, Facilities is to obtain properly labeled containers from the waste storage area.
   b. Maintaining the containers throughout the duration of the project ensuring they are closed and secure.
   c. Returning containers to the waste storage area and contacting EH&S for access.

4. Project Managers are responsible for:
   a. Coordinating with EH&S and Facilities/Contractors for the pickup of containers and drop off of ballast-filled containers from projects.
   b. Providing an account chart string to a project for EH&S to bill back to charge costs associated with disposal.
E. Procedures

1. Use and Regulation
   a. Fluorescent lamp ballasts are generated from routine re-lamping activities and construction/renovation activities at Columbia University. Ballasts manufactured before 1978 are known to contain polychlorinated biphenyls (PCBs) in the dielectric fluid or in the potting material of the ballast. All light ballasts manufactured from 1978 to 1998 are required by the EPA to be marked by the manufacturer with the words “No PCBs”. Modern electronic ballasts, while not required to have any explicit markings, can be assumed to contain no PCBs. Any questionable ballasts (e.g., appearing old and/or unmarked) should be managed as PCB ballast waste.

   b. Ballasts containing PCBs are managed at Columbia University as a regulated waste under the Toxic Substances Control Act (TSCA) and as an exempt waste according to New York State regulations (6 NYCRR 371.4). In most cases, there are no markings on a ballast to indicate that it contains PCBs. Any ballast that contains a manufacturer’s label declaring that there are “no PCBs” in the ballast or is reasonably anticipated to contain no PCBs, such as the modern electronic or magnetic ballast, shall not be handled as PCB waste.

2. Projects
   EH&S must be notified of all projects that generate ballast wastes at least 10 business days before the project starts. EH&S will coordinate with the Project Manager or Contractor for the contractor to pick-up appropriate containers for ballasts collection prior to the start of the project.

3. Handling & Storage
   a. Facilities/Contractors are to carefully remove ballasts from lamp fixtures without causing breakage/damage. If leaking ballasts are encountered by a contractor, they are to contact EH&S where a separate container is to be used to store the leaking ballasts. Facilities is to bring all leaking ballasts to the waste collection area and stored in a container labeled for leaking non-PCB ballasts.

   b. The used ballast must be placed into the correct labeled container: either “PCB-Containing Ballasts” written on a Caution Contains PCBs label, or “Non-PCB Ballasts” written on a Non-Hazardous Waste label. Containers must be closed with the proper waste container lid when not actively adding ballasts. The labels must contain the initial date of collection.

   c. For Facilities re-lamping activities, ballasts should be brought to the waste storage area and placed in the appropriate container. Facilities has access to the storage area and will not need to contact EH&S.

4. Disposal
   a. Non-PCB ballasts are to be shipped when containers are full or nearing the one year limit for non-hazardous waste. They are to be shipped on a non-hazardous waste manifest with the shipping name “Non-PCB Ballast”.

   b. Any PCB ballasts collected are to be shipped on the following scheduled Universal Waste shipment for the campus. They are to be shipped on a hazardous waste manifest with the shipping name “UN3432 Polychlorinated Biphenyls, Solid, 9, III”. Weight recorded on the manifest must be in Kilograms.
F. **Emergency contacts**  
EH&S Morningside Campus – 212-854-8749  
EH&S Columbia University Medical Center – 212-305-6780  
Nevis Laboratory – 914-591-8100  
Lamont-Doherty Safety Department – 845-365-8822

G. **Medical Surveillance**  
N/A

H. **Recordkeeping**  
N/A

I. **Appendices**  
N/A

J. **Forms**  
N/A

K. **References**  
Toxic Substances Control Act (TSCA)  
6 NYCRR 371.4  
5Ls of hazardous waste management

L. **Acknowledgements (optional)**  
N/A