



Universal Waste Management

Applicable regulations

<u>40 CFR Part 273 – Standards for Universal Waste Management</u> asu.edu/aad/manuals/ehs/ehs401.html

Applicability

Arizona State University or ASU uses a large amount and variety of electronic lamps. The spent lamps are considered by the Environmental Protection Agency or EPA to be hazardous and used lamps are known as universal wastes. Examples of common electronics lamp that are universal wastes include intact fluorescent, high intensity discharge, neon, mercury vapor, high-pressure sodium, metal halide lamps, and incandescent lamps. The hazardous constituents of concern in electronic lamps are the heavy metals used in manufacture, e.g. mercury and lead. The EPA regulates universal wastes under the Resource Conservation and Recovery Act, which is the same law that defines hazardous waste. This rule streamlines the hazardous waste regulation requirements for hazardous waste lamps. Handlers of universal wastes are subject to less stringent standards for storing, transporting, and collecting these wastes than handlers of chemical hazardous wastes. The EPA has concluded that regulating spent electronic lamps as a universal waste under 40 CFR Part 273 will lead to better management of these lamps and will facilitate compliance with hazardous waste requirements. If electronic lamps are not handled correctly, EPA and state regulators will consider unmanaged lamps to be a hazardous waste.

Proper handling of mercury containing lamps

- 1. Carefully remove lamp from light fixture.
- 2. Place the lamp into the box or sleeve that it came in –fiber drums are also provided for this purpose.
- 3. Fold over end flaps and close with tape.
- 4. Mark the container with the words: **Used Mercury Lamps**.
- 5. Carefully move the closed and labeled container to the campus universal waste accumulation point located outside Engineering Center C-wing, room 134, Tempe Campus.
- 6. To have the waste picked up by EHS, use the online waste pickup request available at cfo.asu.edu/waste-mgmt-and-shipping.

Emergency procedures

Immediately upon breakage, all lamp debris must be properly collected, packaged and disposed of as hazardous waste.

- 1. Don proper personal protective equipment i.e. Latex gloves.
- 2. Using appropriate technique to minimize dust generation, collect all glass, metal, and phosphor white dust— debris into a sturdy plastic bag. Do not use a vacuum cleaner for broken lamps.
- 3. Decontaminate all surfaces with a wet rag and place used rag and debris into the sturdy plastic bag.
- 4. Place plastic bag into a rigid container.
- 5. Seal container.
- 6. Label and mark container with a completed ASU Hazardous Waste tag.
- 7. Drop off at the Universal waste accumulation point or request a pickup by using the online waste pickup request at cfo.asu.edu/waste-mgmt-and-shipping.

Questions? Contact ASU Environmental Health and Safety at 480-965-1823 or email asuehs@asu.edu.