Environmental Health & Safety



Types of Waste

Asbestos

California State University, Fullerton has numerous locations with asbestos containing building materials. All asbestos removal operations are conducted by either trained university personnel or a state approved asbestos removal contractor.

Once asbestos has been removed from a location, it must be disposed of in an approved manner.

Batteries

Batteries come in many different types. All waste batteries should be collected for proper recycling or disposal.

Types of batteries include but are not limited to:

- Alkaline
- Nickel-Metal Hydride (NiMH)
- Nickel-Cadmium (NiCad)
- Lithium
- "Sealed" Lead-Acid
- Carbon Zinc
- Carbon Chloride
- Mercury

Environmental Health and Safety (EHS) collect batteries for proper disposal. Small amounts can be sent through inter-campus mail. For large amounts or large batteries, please fill out a Hazardous Waste Pickup form located on the EHS home page.

If any batteries are leaking, be sure to properly contain them in a clear plastic bag or other suitable container to minimize contamination.

<u>Be aware</u> that some electronic devices contain batteries (laptops, cell phones, etc.). If you plan to dispose of the electronic device, you can leave the batteries in it. Batteries should only be removed if the item is going to be used again for its intended purpose.

Extremely Hazardous Waste

Extremely Hazardous Waste Extremely or Acutely hazardous wastes are a special category in the waste regulations. The Federal regulations oversee the acutely hazardous wastes while the California regulations oversee the extremely hazardous wastes. Living in California, we

are required to follow both sets of regulations.

If a waste generator has an extremely or acutely hazardous waste, there is a limit to the amount that they can store in the lab at one time. One quart of extremely or acutely hazardous waste can be stored before disposal is required. When one quart or more of extremely or acutely hazardous waste accumulates, the waste must be disposed of within three (3) days of reaching that point. If you have less than one quart, you have 90 days to accumulate the waste (same as hazardous chemical waste).

It is suggested that if you are accumulating a waste that falls into this category, you should dispose of it before it reaches the one-quart limit. This way you will not have to be restricted by the three-day maximum time limit.

E-Waste and Appliance Disposal

All electronic devices are regulated and cannot be disposed of in a landfill. Basically anything that takes a battery, has a plug or contains a circuit board needs to be recycled. When these items are not wanted any more, they are considered electronic waste or "e-waste."

Waste electronics include but are not limited to: Computers (including keyboard, mouse, CPU, etc.), monitors, printers, fax machines, copy machines, network equipment, cables, telephones, televisions, microwaves, video games, cell phones, pagers, radios, stereos, VCRs, and electronic toys.

E-wastes may be disposed of as follows:

- Rollout computers are recycled through Information Technology (x7777).
- CD, CD-ROM, and DVDs may be disposed of through Information Technology (x7777).
- Campus cell phones should be returned to Telecommunications (x4357).
- All other electronics may be disposed of through Facilities Management (x3494).

Glass Disposal

Broken and intact laboratory glass that are not contaminated with biohazardous material, chemicals, or radioactive materials must be placed in sturdy cardboard boxes.

Boxes must be labeled with the room number and sealed with tape. Mark as "laboratory glass" or "broken glass."

Place the sealed box alongside your regular waste container for collection.

Never place broken glass into regular waste containers.

Mercury Waste Items

Put elemental mercury into a labeled glass or plastic containers and hold for the next hazardous waste pickup.

Mercury contaminated equipment or glassware must be boxed and labeled whenever possible.

If you break a mercury thermometer, immediately call EHS for cleanup at x7233.

Laboratory Chemicals

Proper handling of reaction byproducts, surplus and waste chemicals, and contaminated materials is an important part of laboratory safety procedures. Each laboratory worker is responsible for ensuring that wastes are handled in a manner that minimizes personal exposure and potential for environmental contamination.

Light Bulbs, Fluorescent Tubes, Lamps

Certain light bulbs and lamps contain toxic metals such as mercury which require special disposal. These light bulbs and lamps are regulated by the Environmental Protection Agency (EPA) as "Universal Waste."

Most of the lamps or bulbs on campus get changed out on a regular basis by Facilities relamping crew. However, some lamps or bulbs may come from equipment that is changed by the user or the vendor that services the equipment. These bulbs should be managed as universal waste when they are removed. Some examples of bulbs or lamps will include but are not limited to:

- Fluorescent tubes
- High intensity discharge (HID)
- Neon
- Ultraviolet (UV)
- Mercury vapor
- High pressure sodium
- Metal halide

Lamps that are removed from equipment by the user, should be disposed of through the EHS Hazardous Waste Program. Place the bulb in the box that the replacement bulb comes in or other appropriate container. A hazardous waste tag is not needed for lamps and bulbs because the bulbs are recycled as "Universal Waste." Give the bulb to a custodian or contact EHS.

Sharps Contaminated with Chemicals

Sharps that are contaminated with chemicals are considered hazardous waste. Chemicals should not be put into regular sharps containers. Dispose the following waste in a plastic or

other hard-sided, puncture-proof sharps container that can be sealed closed. This sharps container cannot be red in color. Cardboard containers are not allowed.

Sharps contaminated with hazardous chemicals includes needles, wires, razor blades, scalpels, pipettes, capillary tubes, etc. containing residual trace amounts of extremely hazardous chemicals.

Sharps contaminated with hazardous chemicals that are not extremely hazardous, but are still hazardous in amounts that are pourable or are visibly contaminated.

Free standing liquids are not allowed in this container.

The sharps container must not have the words "Biohazard" or "Infectious" or the biohazard symbol anywhere on the container.

No infectious material will be accepted in this waste stream.

Label the container with the contents and contact EHS for disposal.

Solid Waste

Consult with EHS at x7233.

Unknown Chemical Waste

When liquids or solids are not labeled properly or the label becomes illegible, they can become unknown to the people responsible for it. If the contents of any container in a lab or shop area are not known, it needs to be labeled as such and disposed of as hazardous waste. Unknown or unlabeled chemical waste requires analysis prior to disposal.

In the event that you find an unlabeled chemical container, make an attempt to identify its contents. Consult with your laboratory Principal Investigator (PI) and others in your lab concerning any unidentified waste. However, never guess as to the contents of a container.

EHS relies on accurate identification of chemicals to ensure safe and proper handling and disposal. If the contents cannot be identified entirely, label the container with a Hazardous Waste Tag. The "chemical constituents" section of the tag should be listed as "unknown."

Used Oil/Oily Waste Products

Consult with EHS at x7233.

Revised: 9/2018