IDENTIFICATION & SEGREGATION OF CHEMICAL WASTE

Chemical wastes must be properly identified and contained. Costs for hazardous waste disposal can be reduced by properly segregating waste prior to pickup. The guidelines below summarize safe and proper handling of chemical waste.

Identifying Chemical Waste

- Ignitable materials (oxidizers, flammable compressed gases, ethanol, xylene, hydrogen gas) with a flash point <140°F able to cause fire through friction/ moisture/ reactivity
- Corrosive materials (nitric acid, sodium hydroxide) with a pH < 2 or ≥ 12.5, corrosive to tissue or metals
- Reactive materials (nitro compounds, picrates, cyanides) that are shock sensitive or potentially explosive – if it reacts violently with air or water, or produces toxic gases when mixed with acids or bases
- Toxic materials (heavy metals, pesticides, most organic chemicals) that pose a threat to human health or the environment due to carcinogenicity, acute or chronic toxicity, bioaccumulative properties or persistence in the environment

Labeling

- All hazardous waste must be labeled with a “Hazardous Waste” label
- All portions of the label must be completed - EH&S will not accept any waste that is not properly identified

Segregation & Storage

- Segregate and dispose according to Bases (pH>10), Inorganic (Mineral) Acids (pH<4), Organic Acids (pH<4), Flammables, Inorganic Oxidizers, Organic Oxidizers, Poisons, Reactives, and Mercury Compounds
- Improper mixing of chemical waste will increase disposal cost. See Managing Chemical Waste Streams to Reduce Disposal Cost for information on managing liquid wastes
- All hazardous waste must be stored in sealed containers that are in good condition and compatible with the waste (a secondary container should be used to contain the material in case the primary container is overfilled or leaks. Leave air space in all liquid waste containers for expansion)

Accumulation Time

- Hazardous waste can be accumulated on campus for one year (60-90 days at the EH&S for processing prior to shipment, nine months in labs)
- One quart of extremely hazardous wastes (hydrofluoric acid, arsenic or cyanide-containing wastes) can’t be accumulated for more than 90 days (EH&S advises removal of all extremely hazardous wastes as soon as containers are full or at least every 90 days. If your lab generates wastes in small quantities and you wish to accumulate your waste for up to nine months, check the extremely hazardous waste list)

Visit www.ehs.ucr.edu for additional information or call EH&S at 827-5528 if you have any questions.