

VI. Waste Handling, Labeling, and Storage Requirements

If you determine, from the information in the previous section, that you do have a hazardous waste, the following handling, labeling, and storage requirements apply:

Specific requirements for the proper handling and storage of hazardous waste are set forth by the EPA and TCEQ.

The following procedures will ensure compliance with the regulations related to proper labeling and storage of hazardous waste:

A. Waste Containers

Containers used to store waste should be in good condition free from leaks or cracks with securely closed lids. The containers must be compatible with the type of waste being stored to prevent deterioration and leaks.

If a waste container begins to leak, the generator must transfer the waste into a container that is in good condition or overpack the container into a larger container with an absorbent material.

Below are the waste container labeling and storage guidelines for all hazardous waste containers:

1. All hazardous waste containers must be clearly marked with the words “HAZARDOUS WASTE” with a detailed description of the contents. Remove or cover any old labels on the container. Hazardous waste labels are on file with the SFA Printing Services (phone: 468-1796) and are the preferred method of labeling waste containers. Contact Printing Services to order “Hazardous Waste” labels for your laboratory or work area.
2. Write a description of the contents on the label. A chemical mixture may be expressed as the actual volume (in mL) of each chemical in the mixture or as a percentage of each chemical making up the waste (totaling 100%). Also include any water or solvents that makeup the waste mixture.
3. Once the container is full or no longer being used to add waste, write in the accumulation start date. Containers still being used to add waste are considered “active waste containers” and should not be dated with an accumulation start date.
4. Waste containers should be kept at or near the source of waste generation (in the lab or work area) and controlled from unauthorized access.

5. Keep waste containers closed at all times except when waste is being added. Caps or lids on waste containers must close securely to prevent leakage if the container is tipped over.



Examples of Improper Container Capping

B. Waste Accumulation Areas

Waste Accumulation Areas are designated storage rooms or other restricted areas where hazardous and other regulated wastes are properly stored until they are picked up by EHSRM staff for final disposal by an approved hazardous waste disposal contractor. The following requirements for waste accumulation areas must be met:

1. Designated waste accumulation areas should be identified for each laboratory or work area on campus and access restricted to only those people who are authorized to collect and manage waste. The waste accumulation area may be in the lab/work area or in a nearby room designated as a waste storage area.
2. A generator may store up to 55 gallons of hazardous waste or one quart of acutely hazardous waste on-site (see *Appendix C* on page 30, EPA's "P" List of Acutely Hazardous Chemicals). Notify EHSRM for pick-up at least one week prior to reaching these limits.
3. Segregate wastes and store compatible or similar wastes together.
4. Store waste in appropriate storage areas such as flammable or corrosive storage cabinets.
5. Hazardous waste should never be stored in or around drains or sinks.
6. The waste storage area should be kept clean and inspected for leaks or spills at least weekly. EHSRM staff inspects waste storage areas monthly, and will notify appropriate personnel of any violations or safety concerns.
7. Waste must never be left in a hallway or any other area where it could endanger personnel, facility safety, or the environment.
8. Do not mix incompatible wastes. Examples of incompatible chemicals are provided in the table below.

C. Examples of Incompatible Chemicals

Chemical	Incompatible with
acetic acid	chromic acid, nitric acid, perchloric acid, peroxides, permanganates
acetic anhydride	Hydroxyl-containing compounds such as ethylene glycol and perchloric acid
acetylene	chlorine, bromine, copper, fluorine, silver, mercury
acetone	concentrated nitric and sulfuric acid mixtures
alkali and alkaline earth metals	water, carbon tetrachloride or other chlorinated hydrocarbons, carbon dioxide, halogens

ammonia (anhydrous)	mercury, chlorine, calcium hypochlorite, iodine, bromine, hydrofluoric acid (anhydrous)
ammonium nitrate	acids, powdered metals, flammable liquids, chlorates, nitrates, sulfur, finely divided organic or combustible materials
aniline	nitric acid, hydrogen peroxide
arsenical materials	any reducing agent
azides	acids
bromine	see chlorine
calcium oxide	water
carbon (activated)	calcium hypochlorite, all oxidizing agents
carbon tetrachloride	sodium
chlorates	ammonium salts, acids, powdered metals, sulfur, finely divided organic or combustible materials
chromic acid and chromium trioxide	acetic acid, naphthalene, camphor, glycerol, alcohol, flammable liquids in general
chlorine	ammonia, acetylene, butadiene, butane, methane, propane or other petroleum gases, hydrogen, sodium carbide, benzene, finely divided metals, turpentine
chlorine dioxide	ammonia, methane, phosphine, hydrogen sulfide
copper	acetylene, hydrogen peroxide
cumene hydroperoxide	acids (organic and inorganic)
cyanides	acids
flammable liquids	ammonium nitrate, chromic acid, hydrogen peroxide, nitric acid, sodium peroxide, halogens
fluorine	everything
hydrazine	hydrogen peroxide, nitric acid, any other oxidant
hydrocarbons (e.g., propane, butane, benzene)	fluorine, chlorine, bromine, chromic acid, sodium peroxide
hydrocyanic acid	nitric acid, alkali
hydrofluoric acid (aqueous or anhydrous)	ammonia (aqueous or anhydrous)
hydrogen peroxide	copper, chromium, iron, most metals or their salts, alcohols, acetone, organic materials, aniline, nitromethane, combustible materials
hydrogen sulfide	fuming nitric acid, oxidizing gases

hypochlorites	acids, activated carbon
iodine	acetylene, ammonia (aqueous or anhydrous), hydrogen
mercury	acetylene, fulminic acid, ammonia
nitrates	sulfuric acid
nitric acid (concentrated)	acetic acid, aniline, chromic acid, hydrocyanic acid, hydrogen sulfide, flammable liquids, flammable gases, copper, brass, any heavy metals
nitrites	acids
nitroparaffins	inorganic bases, amines
oxalic acid	silver, mercury
oxygen	oils, grease, hydrogen, flammable liquids, solids, or gases
perchloric acid	acetic anhydride, bismuth and its alloys, alcohol, paper, wood, grease, oils
peroxides, organic	acids (organic or mineral), avoid friction, store cold
phosphorus (white)	air, oxygen, alkalis, reducing agents
phosphorus pentoxide	alcohols, strong bases, water
potassium	carbon tetrachloride, carbon dioxide, water
potassium chlorate	sulfuric and other acids
potassium perchlorate (also see chlorates)	sulfuric and other acids
potassium permanganate	glycerol, ethylene glycol, benzaldehyde, sulfuric acid
selenides	reducing agents
silver and silver salts	acetylene, oxalic acid, tartaric acid, ammonium compounds, fulminic acid
sodium	carbon tetrachloride, carbon dioxide, water
sodium nitrite	ammonium nitrate and other ammonium salts
sodium peroxide	ethanol and methanol, glacial acetic acid, acetic anhydride, benzaldehyde, carbon disulfide, glycerin, ethylene glycol, ethyl acetate, methyl acetate, furfural
sulfides	acids
sulfuric acid	potassium chlorate, potassium perchlorate, potassium permanganate (and similar compounds of light metals such as sodium, lithium)
tellurides	reducing agents