



# Instructions for Chemical Waste Disposal at University of Colorado Hospital

Contact UCH Safety Department with any questions (x8-8351)

## 1. General Chemical Waste Disposal Guidelines

- a. Waste must be collected in a chemically compatible container that is leak free and has a proper lid (corks, rubber stoppers, Parafilm, and loose fitting lids are NOT acceptable). Call UCH Safety (x8-8351) if you need an appropriate waste container. Free Waste containers will be provided if they are available.
- b. Do not fill liquid waste containers completely full. Leave an air space of 5% to 10% in the waste container to allow for expansion of the liquid.
- c. Waste containers will not be picked up if they are leaking, have improper lids, are completely full, or if the outside of the container is grossly contaminated with waste. Transfer waste to new container whenever necessary.
- d. Waste containers must be properly labeled. Place a properly completed "Chemical Waste" label on every waste container submitted for disposal. Do not use abbreviations for the chemical name.
- e. Place the chemical waste label over the existing label on the waste container. If a chemical container holds only unused original reagent and the label is intact, a chemical waste label is not required. Information on the label must match exactly the information on the waste disposal form.
- f. Separate liquids from solids. All liquids must be free of solids to facilitate the bulking of waste solvents by UCH Safety. If solids cannot be separated from liquids, the composition of the solid should be noted on the chemical waste label.
- g. All sharps, hypodermics, razors, and needles should be placed in a rigid plastic "sharps" receptacle or needle bucket.
- h. Segregate trace contaminated wastes from concentrated waste products. Trace contaminated solid wastes may be collected in a durable plastic bag. Write the chemical name(s) on the waste and use "trace" for the concentrations.
- i. Schedule waste pickups well before exceeding 55 gallons of toxic waste or 1 kilogram of acutely toxic waste. Call UCH Safety immediately (x8-8351) if you have exceeded these threshold amounts.

## 2. Filling Out the Chemical Waste Request for Disposal Form

- a. Fill out the form completely. Improperly filled out or illegible forms will be returned for corrections.
- b. **Chemical Name:** Write out the complete chemical name. List all components of the waste along with their concentration in percentage by weight or volume. Unknown waste materials cannot be picked up until they are properly identified. Call UCH Safety office for procedures for handling unknown wastes.
  - Example #1: Do not write; "aqueous Etrb waste," write; "aqueous ethidium bromide," 100 mg/L.
  - Example #2: If several different solvents have been commingled in the same container write the name and concentration of each component; "phenol-25%, chloroform-25%, water-50%, 4 liters."
  - Example #3: If a trade name material such as; "Kodak Photographic Fixer," is all the information available, a material safety data sheet (MSDS) MUST be consulted to provide the ingredients. Call the manufacturer or contact the UCH Safety office (x8-8351) to see if an MSDS is available. Include a copy of the MSDS along with the request for disposal.
  - Example #4: Do not list common names such as "Monsel's Solution," as the identification of the waste. Write out the complete chemical name of each component of the reagent along with the percentage.
- c. **Percent Concentration:** For pure materials write; "100%," for the concentration. For chemical mixtures write the percent concentration for each component present. For wastes in concentrations of less than 0.01% list concentrations in milligrams per liter or micrograms per liter. For trace contaminated wastes write "Trace" for the concentration.
- d. **Total Volume:** Write the total quantity of waste to be disposed. Write total in gallons, liters, kilograms, or grams. If there are three 4 liter bottles of the same waste, enter one waste entry along with the total volume.
- e. **Physical State:** Designate the waste as being a solid (S), liquid (L), or gas (G).
- f. **Contaminants Present?:** Indicate if the waste contains any infectious agents (e.g. human serum), radioactive isotopes, heavy metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, uranium, etc.), PCB's, dioxin, asbestos, water reactive drying agents (e.g. sodium hydride), or other significant contaminants. If waste contains none write "no." If contaminants are present write "yes" and include a note with the name and concentration of the hazardous material present. Tape a copy of the note to the waste container.
- g. For empty chemical containers write "empty container" under chemical name, number of containers under percent concentration, and sizes of containers under total volume.
- h. If you have large quantities of very small chemical containers, such as a full box of small amino acid reagents, call the UCH Safety office (x8-8351) before completing the paperwork. UCH Safety may be able to simplify the disposal process.
- i. **Waste Pick-up Scheduling:** Chemical wastes are generally picked up as needed. You should not have to wait more than two to three days from when your waste form was received by the UCH Safety office to when the waste is picked up. If you have any waste pick-up restrictions regarding time or access, write instruction in the comments section of the waste form.