



Guidance Note: Chemical Waste Disposal Procedure

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HSD - HWG- 008

This information is for your internal use and as a way of providing consistent information. There is no response required.

Chemical Waste Disposal Procedure

The UCHSC Health & Safety Division's (HSD) Hazardous Waste Section is responsible for picking up chemical waste containers from the laboratory. Researchers need to submit a completed "UCHSC Chemical Waste Disposal Form" through the campus mail (send to Waste Manager, box C275) to request chemical waste containers to be removed from the laboratories at either campus (Fitzsimons or 4200 9th ave.). If you have any questions regarding the disposal of chemical wastes call the UCHSC Hazardous Waste Manager at (303 315-7895) for assistance.

Routine chemical wastes are usually picked up from the laboratory by HSD personnel within 10 working days after HSD receives the Chemical Waste Disposal Form through the campus mail. A copy of the Chemical Waste Disposal Form and instructions for completing the form are attached to this guidance note. Make sure that you read the instructions prior to completing the form.

Researchers are responsible for certifying on the "contaminants" column on the waste form whether their chemical waste containers contain any infectious agents, radioactive isotopes, heavy metals or other materials. For example, if your solvent wastes contain human serum which is potentially infectious, write this information down under the "contaminants" column of the waste form. If your waste containers do not have any contaminants present, write "none" under the contaminants column of the waste form. Make sure that you read the instructions in section 2(f) so that the "contaminants" column of the waste form is completed for each waste container being picked up.

HSD is responsible for picking up all empty chemical reagent containers from the laboratory that previously held a hazardous material (flammable, corrosive, reactive, toxic). Read the instructions in section 2(g) for requesting empty chemical reagent containers to be removed from the laboratory.

Whenever researchers have large numbers (large chemical cleanout > 25 containers) of chemical reagent containers to be picked up, it will not be necessary to submit the UCHSC Chemical Waste Disposal Form to HSD. For large chemical cleanouts, call the UCHSC Hazardous Waste Manager (303 315-7895) to set up an appointment to have the chemicals removed from the laboratory.



UCHSC CHEMICAL WASTE DISPOSAL FORM

Health & Safety Division, Office of the Vice Chancellor for Research (x57895). Read the instructions before completing the form. Improperly filled out forms may be returned. **Send the completed form through campus mail to: Waste Manager, Box C-275.**

Your Name (print) _____ Phone Ext.: _____ Box No: _____

Your Signature: _____ Date: _____

Name of Principal Investigator: _____ Phone Ext.: _____ Department: _____

Location of Waste: Building name and Room #: _____

Location within Room: _____

					H&S USE ONLY	
Chemical name (no abbreviations)	Percent Concent.	Total volume (litres,grams)	Physical State (S, L, G)	Contaminants present?	HC	RCRA
Draw a line between different containers of waste.						

Comments:

Date Form received by H&S : _____ Date waste picked up: _____



Instructions for chemical waste disposal at the UCHSC

(Questions? call x57895)

1. General Chemical Waste Disposal Guidelines

- a. Chemical wastes will be collected inside an empty chemical reagent container that is chemically compatible with the wastes. Container must be in good condition (no leaks or cracks) and have a proper fitting lid (corks, rubber stoppers, Parafilm and loose fitting lids are not acceptable).
- b. Do not fill liquid waste containers completely full. Leave an air gap of five to ten percent in the waste container to allow for expansion of the liquid. Call Health and Safety (x57895) for free waste containers, lids and green UCHSC chemical waste labels.
- 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 spilled chemical waste. Transfer chemical waste to new container whenever necessary.
- d. Waste containers must be properly labeled. Place a properly completed green "UCHSC Chemical Waste Label" on every waste container as soon as the first drop of waste is added to the container. Do not use abbreviations for the proper chemical name.
- e. Place the UCHSC 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. Green UCHSC Chemical Waste labels are available from Health & Safety for free.
- f. Separate liquids from solids. All liquids must be free of solids to facilitate bulking of waste solvents by Health & Safety. If solids cannot be separated from liquids, tape a note to the waste container stating the composition of the solid.
- g. Segregate sharps, hypodermics, razors, and needles from all waste products and place them in a rigid plastic 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) of the waste and use "trace" for the concentration.
- i. Schedule waste pickups well before exceeding 55 gallons of toxic waste or 1 quart of P-coded acutely toxic waste. Call UCHSC Health & Safety immediately (x57895) if you have exceeded these threshold amounts.

2. Filling Out the Chemical Waste Disposal Form

- a. Fill out the form completely. Improperly filled out forms will be returned for corrections.
- b. **Chemical name.** Write out the complete chemical name (do not use abbreviations). 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 Health & Safety (x57895) for the procedure 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 inside the same waste container write the name and concentration of each component, phenol - 25%, chloroform - 25%, water - 50%.
 - 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 chemical ingredients. Check the manufacturer's web site to obtain an MSDS or call the manufacturer's Technical Services department for the MSDS. The UCHSC Health & Safety homepage has links to MSDS databases on the internet. Include a copy of the MSDS along with the UCHSC Chemical Waste Disposal Form.
 - Example #4: Do not list common names such as "Nessler's reagent as the identification of the waste. Write out the complete chemical name for each component of the reagent along with the percent composition.
- c. **Percent concentration.** For pure materials write "100" percent for the concentration. For chemical mixtures write the percent concentration for each component present. For wastes in concentrations of less than 0.01% list concentration 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, make one waste entry along with total volume (3 x 4 liters).
- 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 materials, heavy metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, uranium, etc.), PCBs, dioxin, asbestos, water reactive drying agents (e.g. sodium hydride), or other significant contaminants. If waste contains no contaminants write "none". If contaminants are present write "yes" and write the name of the contaminant on the Chemical Waste Disposal Form and on the UCHSC Chemical Waste Label on the outside of the waste container.
- g. For **empty chemical containers** write "empty containers" under chemical name, number of containers under percent concentration, and sizes of the containers under total volume. Estimate the number of containers on hand that are smaller than 4 liters.
- h. If you have **large quantities of very small chemical containers**, such as a box full of tiny amino acid reagents one gram or less in size, give Health & Safety (x57895) a call before filling out paperwork. We may be able to simplify the disposal process.
- i. **Waste pickup scheduling.** Mail the completed form to Waste Manager, Box C-275. Chemical wastes are generally picked up by Health & Safety personnel within 10 days after receiving the form. If you have any waste pickup restrictions regarding the date, time or access limitations, write these instructions in the "comments section" of the waste form.