

Chemical Waste Disposal

Summary/Purpose: The Chemical Waste Disposal Policy details the minimum requirements and procedures to dispose of Chemicals and Hazardous Waste.

Disposal Information and Procedures

Chemical Waste Disposal

DISPOSAL OF HAZARDOUS CHEMICALS - THE BASICS

The disposal of hazardous chemicals is strictly regulated under the Resource Conservation and Recovery Act (RCRA), the Mississippi Hazardous Waste Management Regulations, and the Environmental Protection Agency (EPA) regulations [CFR 40, parts 100 - 399](#). Individuals who do not follow procedures in complying with state and federal regulations are individually responsible for possible fines and/or imprisonment.

No Hazardous Chemical Substance shall be disposed of into the sanitary sewer (sink), into the atmosphere (vent hood), or into the normal University trash (dumpster).

Chemicals must be disposed of only through the Laboratory Services (LS). This will normally be done at no cost to the generator if the following procedures are strictly adhered to. The transport of waste chemicals to the LS facilities by persons other than the LS employees is prohibited.

Waste Chemicals are normally picked up on Monday, Wednesday and Thursday, weather permitting.

- What you need to know ...
- When it is raining, bottles get slippery, your waste will not be picked up.
- When the temperature outside is below 20 degrees or over 95 degrees, your waste will not be picked up.
- There are several hundred areas on the campus that utilize LS Chemical Disposal Services, chances are that when you call for a pick-up, you will not be the first person on the list.
- Calls are usually serviced in the order received, unless several requests can be serviced in one area / floor. There may be delays of up to a week or more depending upon prior calls received, end of semester lab cleanouts, unforeseen emergencies, and other incidents that take precedent to disposal requests.
- You should prepare your area to hold no less than three times your normal production of waste. For example, if you normally call when you have five gallons solvents, you should be prepared to collect as much as an additional 10 gallons of waste materials prior to pick up.

Do not wait until all of your waste containers are full before you call. You will probably be disappointed. No, we will not drop everything that we have scheduled to come and get your waste.

1. CONTAINERS

Laboratories that collect more than 4 gallons of mixed solvents on a regular basis (weekly) will need to use 5 gallon carboys or Jerri cans for waste solvent collection. LS will no longer pick up large amounts of solvents packaged for disposal in glass containers.

Chemicals for disposal must be placed in a nonreactive, sealed container with a screw type cap.

- What you need to know ...
- Waste containers must be closed, except when adding or sampling materials. A funnel in the top of a waste container is not considered "closed".
- If you place chemicals in reactive containers (Hydrochloric acid in a steel can), your materials will not be picked up.
- The outside of the containers must be clean and free of chemical contaminants and residues.
- Containers must not be overfilled. Liquid containers filled past the necks of the bottles or carboys will not be picked up.
- Liquid waste should not contain solids. Pipettes, stirring bars, glass rods, etc., should be removed from waste containers. Liquid containers found to contain large amounts of solids will not be accepted.
- Containers that will be lab packed will not be returned. Consult with LS before you use an expensive container (Stainless Jar, vacuum flask, etc.) for waste collection.
- Bulk liquid containers in good condition will be returned. If a Bulk Container is anyway disfigured, bulging or cracking, it will not be returned. LS will dispose of the unacceptable container. LS does not supply replacement containers.
- Containers with cracked or corroded caps will not be accepted.
- Containers with cork stoppers, rubber stoppers, "Parafilm" or duct tape tops will be rejected.
- Containers with multiple labels, unclear labels, abbreviated chemical names, or chemical symbols only will be rejected.
- Incompatible wastes (materials that can have a potentially dangerous reaction, explosion, or release of toxic gases, vapors, or fumes during the waste handling process) shall not be placed or mixed in the same container, see [THE TABLE OF COMPATIBLE CHEMICALS](#) in the Appendix of the Chemical Safety Manual for more information.
- A ["Notice of Rejection of Waste"](#) will indicate when materials and/or forms are unacceptable.

2. LABELS

All Chemical Waste containers must be conspicuously labeled with the following information:

- a. "Hazardous Waste",
 - b. Full name(s) of chemical contents and approximate % if necessary. IUPAC and common names are acceptable, abbreviations or chemical formulas **are not** acceptable,
 - c. Responsible Person or Supervisor, and,
 - d. Building, room number and contact phone number.
- What you need to know ...
 - If you have a container that holds **only unused materials**, an original Manufacturer's label is acceptable for disposal.
 - Containers with multiple labels, unclear labels, chemical formulas, or abbreviated chemical names will be rejected.
 - A second copy of the original disposal request form can be affixed to the container and used as a label.

3. REQUEST FOR HAZARDOUS MATERIALS DISPOSAL (LS-4)

When a chemical cannot be reused or exchanged, then a Request for Disposal of Hazardous Chemicals must be filed with LS using Form LS-4. A chemical and physical description or analysis of the material must be submitted with the form. A manufacturer's MSDS, attached to Form LS-4, can be substituted for a complete chemical breakdown.

- What you need to know ...
- Quantities of mixtures must be indicated in percent (% , ppm.) or in percent ranges. Ratios (10:2:23:4) of materials are not acceptable.
- Forms with abbreviated chemical names, "trade names" or chemical symbols only, will be rejected.
- Forms with nonspecific names (halogenated solvents, HPLC waste, acid waste, etc.) are not acceptable.
- ALWAYS indicate the presence of acids or bases in mixtures, even trace amounts.
- Collection of hazardous chemical waste will be completed by LS employees.
- If you need assistance in filling out a disposal request form, call the LS at 5433.
- If you tape the disposal request form to the bottle, your waste will not be collected. However, you can make a second copy of the disposal request form, and affix it to the container as a label.
- If you fold your disposal request form in the shape of a scroll and squeeze it into the handle of the bottle, your waste will not be collected.

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- If your disposal request form is contaminated with chemical residues, if your form has acid burns, if your form has been previously wet with solvents, your waste will not be collected.
- No containers of chemical waste will be removed LS, unless the containers are properly labeled and a completed Form LS-4 has been filed and reviewed by LS.
- Chemical Wastes must be nonpathogenic, noninfectious, non-compressed, nonexplosive, and nonradioactive.

4. REQUEST A PICK UP.

Call LS at (915) 5433 when you have Hazardous Waste materials for disposal.

Call LS between the hours of 8:00 AM and 5:00 PM, Monday through Friday.

Be prepared to tell the operator what chemicals you have for disposal and what amounts you have prepared. It is essential that you know the amounts of materials as well as any unusual hazards involved in handling the waste materials. Just as many materials cannot be combined in a single container, many materials cannot be transported at the same time. If safety regulations or concerns arise, your material(s) may be removed over several days/visits.

- What you need to know ...
- If you do not call, your materials will not be picked up.
- Do not call for a pick up until your paperwork is completed.
- Do not call unless your containers are ready.
- If you call for a pickup and your materials are not ready, **you will** have to call again

5. STORAGE OF HAZARDOUS WASTE AWAITING DISPOSAL

Satellite Storage Areas - Federal regulations ([40 CFR 262.34\(c\)\(1\)](#)) allow a generator to accumulate as much as 55 gallons of non-acute hazardous waste or one quart of [acutely hazardous waste](#) in containers at or near any point of generation where wastes initially accumulate, provided that :

The storage area is under the control of the operator of the process generating the waste.

The waste must be placed in containers that are in good condition,

The waste must be compatible with the containers,

The containers must be marked with the words "Hazardous Wastes" and other words that identify the contents, and,

The containers are covered when the generator is not adding or removing waste."

Any accumulation of hazardous waste at a satellite area in excess of 55 gallons, or one quart of any acutely hazardous waste must be marked with the date the excess amount began accumulating, and must be moved into to the Hazardous Waste Storage Facility within three days.

- What you need to know ...
- Segregate waste chemicals by [compatibility](#)
- Designate a single location for the storage of hazardous waste.
- Find a location out of the way of normal lab traffic, but still accessible to employees.
- Whenever possible, keep hazardous waste in secondary containers (trays, buckets, etc.)
- Fume hoods should not be used as designated waste storage areas.

6. EMPTY CONTAINERS

Empty containers of five (5) gallons or less may be placed in dumpsters if they meet the definition of the Resource Conservation Recovery Act (RCRA) empty container rule. Any container that previously held a hazardous chemical or waste is defined as empty if:

- (I) No hazardous materials can be poured, pumped or drained from the container, AND,
- (II) No hazardous materials remain in the container that can be feasibly removed, AND,
- (III) The walls of the container must not contain any significant residual materials, AND,
- (IV) The label is removed or defaced, AND,
- (V) The lid is removed, AND,
- (VI) The container is placed **directly into** a dumpster.

Triple-rinsing is not required to comply with the RCRA empty container definition.