## Chemical Waste Disposal

**Summary:** Hazardous waste is defined as a waste, or combination of wastes, which because of its quantity, concentration, or physical or chemical characteristics may pose a substantial present or potential threat to human health or the environment when improperly treated, stored, disposed of, transported, or otherwise managed.

<table>
<thead>
<tr>
<th>What to do?</th>
<th>Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>For a poster to use in your lab for guidance on chemical waste management, go to:</td>
<td><a href="http://web.stanford.edu/dept/EHS/prod/enviro/waste/hazwaste.pdf">http://web.stanford.edu/dept/EHS/prod/enviro/waste/hazwaste.pdf</a></td>
</tr>
</tbody>
</table>
Follow the General Waste Management Practices:

1. All faculty, students, and staff who generate hazardous waste must complete the training course entitled, “Chemical Safety for Laboratories”; EHS-1900.
3. The online hazardous waste tag system is found at [http://wastetag.stanford.edu](http://wastetag.stanford.edu)
4. All lab wastes containing chemical constituents are presumed by the State of California to be regulated hazardous wastes.
   - EH&S has determined that certain dilute mixtures are not hazardous wastes. See [http://nonhazardouswaste.stanford.edu](http://nonhazardouswaste.stanford.edu) to discover if your waste is non-hazardous.
   - If, due to your own knowledge and experience, you believe your waste may be non-hazardous, but it is not on the list, contact EH&S for a waste determination.
5. Reagent chemical containers that are in **good condition and have a readable original manufacturer’s label** are considered surplus chemicals. Lab personnel must affix a surplus sticker before requesting pickup by EH&S, but do not need a hazardous waste tag.
6. Do not dispose of hazardous chemicals or solutions containing hazardous chemicals in any sink or floor drain. Aqueous solutions containing **only** acids or bases and no toxic metals may be drain disposed if the pH is greater than 5.5 and less than 11.0. The first rinseate from chemically contaminated glassware must be collected as hazardous waste. Subsequent rinseates may be drain disposed.
7. Do not dispose of any hazardous materials in the solid waste containers (trash cans, dumpsters), which go to the landfill.
8. Chemical waste must be under the “control” of the person generating the waste at all times and must not be stored in general traffic locations such as halls or other areas with general public access.
9. Common areas may be used for collection of laboratory hazardous waste under the following restrictions.
   - No maintenance or other non-lab waste may be accumulated.
   - No more than 55 gallons may be accumulated.
   - The area must be as close as practical to the waste generating locations.
   - Access must be restricted to trained and authorized personnel.
| Segregate Waste as follows: | 1. Segregate incompatible wastes from each other utilizing separate storage provisions such as individual secondary containers.  
2. Do not mix incompatible wastes in a waste container.  
3. Use the [Stanford Chemical Safety Database](#) and [Storage Groups](#) to determine if chemicals are compatible. |
|---------------------------|---------------------------------------------------------------------------------------------------------------|
| Accumulate Waste as follows: | 1. No waste containers may accumulate in the lab for longer than 9 months.  
2. Waste containers must be chemically compatible with the waste.  
3. Keep containers tightly closed at all times except when transferring waste. If using a funnel, the funnel must be removed and a tight fitting lid affixed as soon as you have completed the addition of waste.  
4. All wastes must be secondarily contained while in storage.  
5. Unless you have established a “Waste Accumulation Area” through EH&S, never accumulate more than 55 gallons of chemical waste at any time.  
6. EH&S provides 1, 3, and 5 gallon poly containers free of charge upon phone request (x5-7520). |
| Label Waste as follows: | 1. Waste containers must be labeled when waste begins to be collected, e.g.; as soon as the first drop of waste is put in the container, not when the container becomes full.  
• Reaction residues become wastes as soon as they are removed from the experimental equipment.  
• Samples and working solutions become wastes when they are no longer needed. Lab personnel make this determination.  
2. Label all chemical waste containers using the online Stanford Hazardous Waste Tag. [Click here](#).  
• List all constituents including water.  
• Do not use abbreviations or chemical formulas. If using a trade name, you must have a MSDS for the material available.  
• Estimate the concentration of each constituent. |
| Submit Request for Removal of Waste as follows: | 1. A waste pickup request must be submitted once a waste container is eight months old, or becomes full, whichever occurs sooner.  
2. Submit an on-line pickup request at: [http://wastetag.stanford.edu](http://wastetag.stanford.edu) |