Waste exhibiting any of the following characteristics (outlined by category) - Ignitable/flammable, Corrosive, Reactive, and Toxic - is considered hazardous according to the Environmental Protection Agency (EPA) and California Code of Regulation 22CCR Chapter 11 Section 66261.21 to 66261.4.

Refer to the guide below to collect liquid and solid chemical waste streams according to the categories listed above.

<table>
<thead>
<tr>
<th>Type</th>
<th>Category</th>
<th>Examples</th>
<th>Suggested Waste Container(s)/Comment(s)</th>
</tr>
</thead>
</table>
| Solid Chemical Waste | Gels | • Acrylamide  
• Ethidium Bromide | HDPE drum or containers |
| | Contaminated Debris | • Gloves  
• Paper towels, Kimwipes | Poly bags or HDPE containers |
| | Unwanted Chemicals | • Sodium Cyanide | Original container |
| | Empty Chemical Containers | | Refer to the [Chemical Hygiene Plan](http://ehs.usc.edu) (CHP), Table 9.3, for more detailed information on disposal. |
| Liquid Chemical Waste | Non-Halogenated Organic Solvent | • Acetone  
• Hexanes  
• Alcohols | Poly safety can or 4-L amber bottles |
| | Halogenated Organic Solvent | • Chloroform  
• Dichloromethane  
• Chlorobenzene | Poly safety can or 4-L amber bottles |
| | Sulfur-containing Organic Solvent | • Dimethyl Sulfoxide (DMSO)  
• Sulfolane | 4-L amber bottles or HDPE containers |
| | Aqueous Acid (or oxidizers) | • Hydrochloric Acid  
• Nitric Acid  
• Sulfuric Acid | 2.5-L thick-walled acid bottle or HDPE containers |
| | Organic Acid | • Acetic Acid  
• Trichloroacetic Acid  
• Acetic Anhydride | 4-L amber bottles or HDPE containers |
| | Aqueous Base | • Alkali Hydroxides or Carbonates  
• Ammonia | HDPE containers |
| | High hazardous liquid chemical wastes requiring special caution | • Piranha solution  
• Hydrogen Peroxide  
• Aqua Regia | Refer to the [Chemical Hygiene Plan](http://ehs.usc.edu), Section 9 for more information. |
| | Old/Expired Chemicals | • Peroxide-forming Chemicals  
• Picric Acid | Notify Lab Safety ([labsafety@usc.edu](mailto:labsafety@usc.edu) or [hazmat@usc.edu](mailto:hazmat@usc.edu)) to dispose of peroxide-forming chemicals. |
| | Miscellaneous/Other | • Paints  
• Pump oil  
• Silicone oil | 4-L amber bottles or HDPE containers |

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1 Refer to the [Sharps & Broken Glass Disposal Guide Sheet](http://ehs.usc.edu) for disposal of chemically-contaminated sharps. 2 High density polyethylene. 3 Unwanted chemicals in good condition may be donated to other labs. 4 Sink disposal of liquid chemical hazardous waste is NOT permitted. 5 Maximum 10% chloroform in mixed halogenated solvents. Higher percentages of chloroform (e.g., phenol chloroform) should be aggregated separately. 6 Oxidizer - DO NOT mix with flammables and/or combustibles.
HAZARDOUS WASTE LABELING
Follow steps outlined in the Hazards Waste Labeling Guide Sheet for complete information on hazardous waste labels and how to fill them out properly.

HAZARDOUS WASTE STORAGE
1. Ensure all hazardous waste containers are sealed/capped when not in use.
2. Place all labeled, glass or plastic waste bottles in plastic secondary containment (e.g., HDPE tub).
   - NOTE: Ensure that the volume of the secondary containment exceeds the combined capacity of waste bottles to capture contents in the event that one or more bottles break (e.g., during an earthquake).
3. DO NOT colocate containers with incompatible waste types (e.g., acids and bases). Store separately.
4. DO NOT store on floor or egress paths.
5. Submit a chemical waste pickup via EHSA within 270 days/nine (9) months of the waste’s accumulation start date.

HAZARDOUS WASTE PREP AND STAGING
Follow steps outlined in the Hazardous Waste Prep and Staging Guide Sheet to prepare hazardous chemical waste for pick-up by the Hazardous Materials Division. Note that unusual waste streams may require further segregation such as phenol-chloroform, highly toxic elements (Cr(VI), Cd, Hg, As, Sb, Pb, Tl, Se, Te), cyanide, and azide waste. Mercury-containing waste should be segregated by itself.

HAZARDOUS WASTE PICK-UP REQUEST
- Request a Hazmat pick-up through EHSA.
- Reference the EHSA SOP Waste Pickup + Supplies for more detailed information.
  - Additional hazardous waste supplies (e.g., hazardous waste labels, solid chemical waste bags/containers, chemically contaminated sharps, and bulk liquid chemical waste containers) may be requested through EHSA.

Questions? Contact Lab Safety labsafety@usc.edu or (323) 442-2200.

REFERENCES
Chemical Hygiene Plan Section 9, Chemical Waste Disposal
Hazardous Materials Division - Hazardous Waste Management