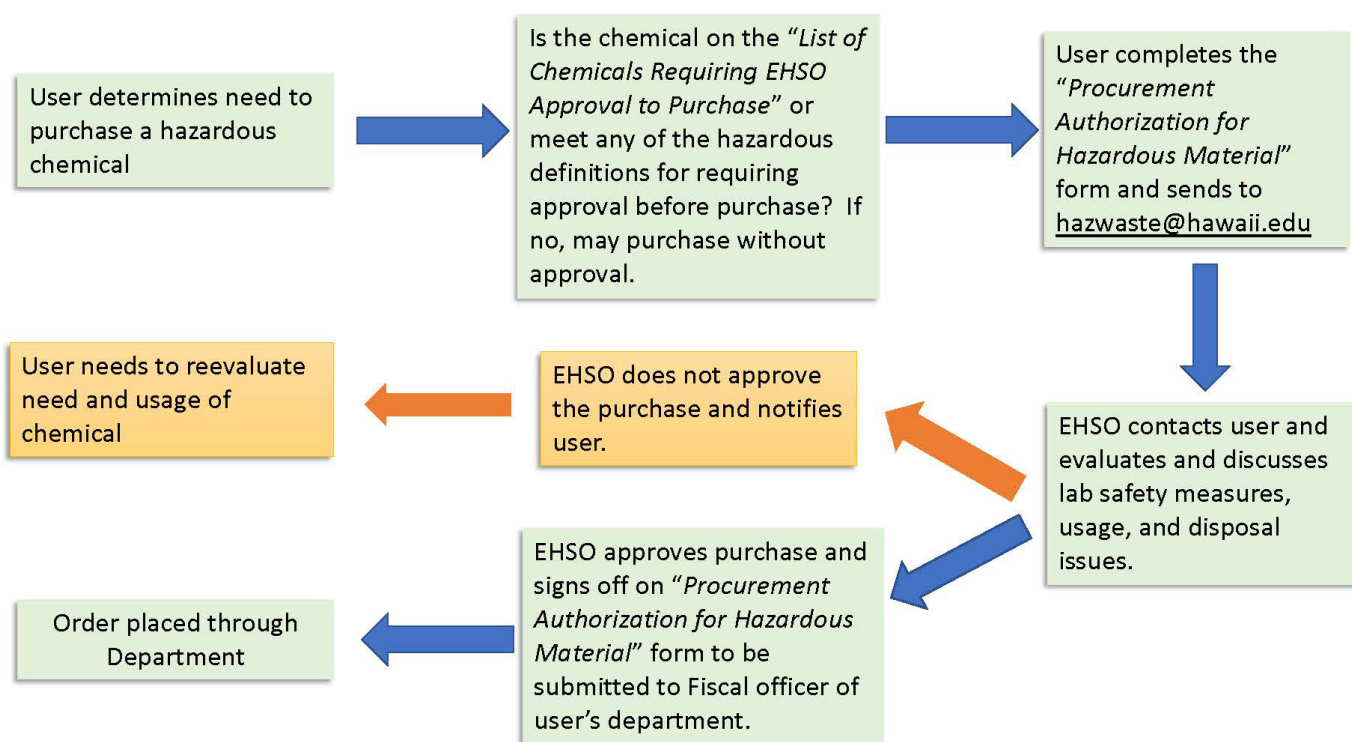


## ATTACHMENT 1

### HAZARDOUS CHEMICALS REQUIRING ENVIRONMENTAL HEALTH & SAFETY OFFICE (EHSO) APPROVAL TO PURCHASE

Chemical users at UH Manoa need to evaluate and determine the need to purchase certain hazardous chemicals because some of these chemicals are highly toxic, explosive, water or air reactive or for other reasons very difficult and expensive to dispose of.

It is important to note that the list (next page) must not be considered "all inclusive". Many other chemicals that are not listed may also possess extremely hazardous properties so please refer to the SDS of the chemical and contact the Hazardous Materials Management Officer at EHSO (x63198) if further information is needed.



**LIST OF CHEMICALS REQUIRING ENVIRONMENTAL HEALTH &  
SAFETY OFFICE (EHSO) APPROVAL TO PURCHASE**

Acrolein	Methyl fluorosulfonate
Arsine	Methyl Lithium
Boron Trichloride	Methyl mercaptan
Boron Trifluoride (compounds)	Nickel carbonyl
Bromine Chloride	Nitric Acid - concentrated only ( $\geq 68\%$ )
Butyl Lithium	Nitric Oxide
Calcium Hydride	Nitrogen Dioxide
Carbon Monoxide	Nitrogen Trifluoride
Carbonyl Sulfide	Phosgene
Cesium	Phosphine
Chlorine	Phosphorus
Chlorine Trifluoride	Picric Acid
Chloropicrin (Picfume)	Picryl Sulfonic Acid
Cyanogen	Picramide
Cyanogen Chloride	Potassium
Diazomethane	Rubidium
Diborane (gas)	Silane
3,5-Dinitrophenol	Silane Dichloride
2,4-Dinitrophenylhydrazine	Sodium (metal)
Ethylene Oxide	Sulfur Dioxide
Fluorine	1H-Tetrazole
Hydrogen Bromide	Thorium Compounds
Hydrogen Chloride	Trinitroaniline
Hydrogen Cyanide	Trinitrobenzene
Hydrogen Fluoride	Trinitrocresol
Hydrogen Sulfide	Trinitronaphthalene
Lithium	Trinitrophenol
Lithium Aluminum Hydride	Trinitrotoluene
Lithium Hydride	Uranium Compounds
Methyl Bromide	Urea Nitrate
<b><u>Other chemicals requiring approval:</u></b>	
-Explosives	
-Poisonous, Flammable and/or Corrosive gases (cylinders)	
-Pyrophoric chemicals	
-Chemicals with high degree of acute toxicity	
-Peroxide Formers	
-Controlled substances/DEA listed items	
-Any material listed as a Packing Group I material (refer to SDS)	
-Laboratory synthesized chemicals for which a Safety Data Sheet does not exist and there is no hazard information available	