Hazardous Materials Management and Labeling, Chemicals Security, Chemical Inventory, Solutions Labeling, Glassware Cleaning.

Hazardous Materials Management and Labeling:

Hazardous Materials Collection – Any material added should be listed on the waste label.

Five Waste Streams in Department:

- 1. Non-halogenated Flammable Organic (note each item added to collection on label)
 - a. Acetone
 - b. Toluene, hexanes, ligroin, etc.
 - c. Methanol, ethanol, isopropanol, etc.
 - d. Ethyl acetate
 - e. Ether
 - f. Acetonitrile
 - g. Other non-halogenated organics
 - h. May contain some water—but not much

REPORT sink contamination

Acetone should NEVER be

poured into a sink!

(Use the Acetone wash containment in HH-324 & HH-325 labs)

- 2. Halogenated Organic (note each item added to collection on label)
 - a. Methylene chloride (dichloromethane)
 - b. Chloroform
 - c. Other halogenated organics
- 3. Flammable-Halogenated Organic (mixture of #1 & #2.....try not to do this)
- 4. Organic Solids
- 5. Aqueous Metal ion solutions

THESE WASTE STREAMS CANNOT BE MIXED!

All materials must be identified as they are properly disposed.

All materials must be retained in a **closed**, **identified** bottle.

All full containers must be stored in the satellite facility found in each room.

Waste materials cannot be moved from room to room.

- Other Hazardous Waste Streams should also be labeled:
 - 1. Broken Glassware and used glass pipets (do not include solid chemical waste) Dispose only in appropriate (labeled) boxes.
 - 2. Sharps—should only be placed in approved waste containers **NEVER** in the trash.

Chemicals Security:

*All chemicals are available only on an "as needed" basis.

Any chemical not in immediate use must be stored in a secure area: stockroom or locked cabinet. Any unclaimed chemicals in a non-secure location must be returned to a secure location.

- *The stockroom doors must not be propped open.
- *Guests must be monitored.
- *Missing chemicals must be reported.

Chemical Inventory:

- *All commercial chemical bottles have a chemical inventory label attached.
- *Commercial bottles that are missing inventory labels must be identified by placing them in the appropriate temporary inventory location (stockroom).
- *Empty commercial bottles with their inventory label must be placed in the appropriate temporary inventory location (stockroom).

Solutions Labeling:

All solutions or compounds placed in non-original containers MUST be labeled with the following:

- 1. Compound
- 2. Solution concentration or pH
- 3. Class or Mentor
- 4. Date

Glassware cleaning:

- 1. Wash per teacher instruction.
- 2. Use deionized water for the last rinse only.
- 3. Dry as per teacher instruction.