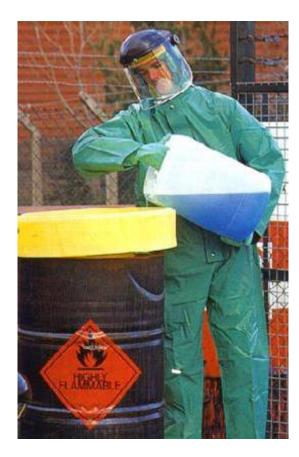
Chapter 9 Dispose Dangerous Materials





Waste Disposal

- <u>Discard waste as needed</u>, during and at the end of each laboratory period.
- First ask your Instructor where/how to dispose of waste.
- Never pour anything down the drain unless you are told to do so.
- A waste bottle will be supplied for substance that cannot go down the drain





The following waste handling procedures are mandatory when preparing chemicals for disposal:

- Restrictions
- Containers
- Labels
- Storage





Restrictions

- Chemical wastes sent for disposal should not be mixed with biohazardous or radioactive wastes.
- Hazardous liquids must not be flushed down drains as a method for disposal. This practice is illegal and may lead to dangerous reactions and damage to the draining system as well as create a potential hazard to trades personnel working on the system.
- Solid or liquid waste chemicals must not be mixed with general garbage.
- In order to avoid explosions, fires or spills, **incompatible** combinations of chemicals must not be mixed in a single container.





Restrictions

- The waste generator bears the primary responsibility for proper packaging and labeling.
- If the Manager, Environmental Protection (Hazardous Materials) overseeing the collection has any doubts about proper labeling or packaging techniques, waste will not be removed until it is properly prepared.
- Materials requiring special handling include organic peroxides, PCBs [polychlorinated biphenyls] and explosives. Before disposing these materials, consult the coordinator and/or the Hazardous Waste Management. 5





Labels

- To prevent the mixing of waste which could create an incompatible reaction, all materials must be clearly identified by means of standard Chemical Waste labels provided by the Hazardous Waste Management.
- The following information must be provided:
 - Specific generic names of the components in the container along with approximate percentages of each component present must be listed.
 - No abbreviations or trade mark names are to be used.
 - Vague categories [eg. solvent waste] are not acceptable.
 - Building name, room number and individual to contact.
 - The general hazards can be indicated by marking the appropriate boxes on the Chemical Waste Label.
- If the waste is not identified, the containers will not be removed.

Storage

- Waste chemicals should, if possible, be stored in a central waste-holding facility of the building.
- Should such a facility be non-existent, the chemical waste should be temporarily stored in the generator's laboratory.
- All safety precautions required for handling and storage of chemicals will also be observed with generated wastes.
- It is recommended that waste be segregated according to compatibility groups.





Scheduling

- If a building has a central waste-holding facility, the individual managing the area is responsible for scheduling collection.
- If chemical waste is stored in an individual's laboratory, it is the responsibility of the Hazardous Waste Management to schedule a waste collection.
- Chemical waste must not be allowed to accumulate. The frequency of collection is dependent upon the type and amount of waste generated.
- Waste or empty gas cylinders generally can be returned directly to the supplier. If this is not possible, contact the Hazardous Waste Management.





Segregation of Incompatible Chemical Waste

- Waste chemicals should be stored according to the following groupings based on chemical reactivity's. For any waste that cannot be classified according to these groups, the Hazardous Waste Management should be consulted.
- Materials requiring special handling include organic peroxides, PCBs [polychlorinated biphenyls] and explosives. Before disposing these materials, consult the Hazardous Waste Management.



