Chemical and Hazardous Waste Management

Hazardous chemical waste includes but is not limited to, out of date chemicals, waste from laboratory processes, as well as waste from maintenance and construction activities. All hazardous chemical waste must be reported to the Office of Environmental Health & Safety to ensure proper handling and disposal. The chemical waste management plan includes:

- Identification of waste
- Waste collection and pickup
- Proper disposal according to federal, state, and local regulations

Defining Hazardous Chemical Wastes

- Chemical wastes are considered hazardous waste if they appear on one of the lists published in the US EPA regulations or if they meet one or more of the following defined characteristics:
  - Toxicity, Ignitability, Corrosivity, Reactivity
(Please see 40CFR Part 261 for definitions of listed and characteristic hazardous chemical waste).

- Chemicals, which are no longer used or have missing, obliterated or corroded labels, are considered to be "inherently waste like." Stored chemicals should be inventoried and inspected regularly. Unwanted or unusable chemicals should be removed and sent for disposal.
- Typical non-hazardous wastes include starches, sugars, naturally occurring amino acids and salts, etc.

The following procedures must be used when accumulating hazardous chemical waste:

Containers

- Containers used to collect chemical wastes must be compatible with the substance they contain. Glass or nalgene jars are appropriate for most laboratory waste.
- Containers reused for waste must have the original label defaced to avoid confusion regarding container contents.
- Do not use soda bottles, food containers, or other containers that could be confused with consumer products for chemical wastes.

Labeling

- Important! Used chemical substances designated as “hazardous waste” must be labeled with, or placed in, a container featuring the words “Hazardous Waste”.
- Preprinted “Hazardous Waste” labels containing required EPA/state information are recommended. These can be obtained from the Environmental Health and Safety (EHS) Office by calling ext. 4268.
- Chemicals that are to be reused for another purpose (e.g., as in using alcohol for cleaning) should be clearly labeled to avoid confusion with true “hazardous waste”, i.e., that which is intended for disposal.
- Labels must be clearly written, in English, avoiding abbreviations and structural formulas.
**Container Management**
- Hazardous waste containers must be stored in designated Satellite Accumulation Areas and kept closed unless waste is being added. Containers must be kept in good condition and must not be corroded, leaking, or encrusted with residue.
- Containers stored adjacent to sinks and drains must be stored in secondary containment such as a tray, basin, or tub.
- Waste must be segregated from other incompatible waste.
- When containers become full, arrange for removal with EHS Office within 3 days.

**Drain Disposal**
- Drain disposal of certain non-hazardous chemicals is permitted. Dilute, common mineral acids and dilute, common alkalis are permitted, but only in small quantities, and accompanied by copious amounts of running water. Drain disposal of concentrated acids and bases is prohibited.
- Flammable materials are prohibited from sinks and drains. This includes alcohols, acetone, ethers and glacial acetic acid. Miscibility with water is not justification for drain disposal. No liquids of any type are to be disposed in wastebaskets or dumpsters.

Please contact the Office of Environmental Health & Safety at ext. 4268 or 5400 for assistance with chemical waste disposal.

**Other Laboratory Wastes**
- Waste originating in Biological or Clinical laboratories may fit the criteria of "Regulated Medical Waste" as defined by state and local statute. RMW must be collected in labeled containers and disposed thru the EHS Office.
- Sharps such as scalpels, razor blades or syringes, used or unused, must be collected in special "sharps containers" and also disposed as Regulate Medical Waste. Contact EHS to obtain empty sharp containers.
- Empty bottles must be drained, internally rinsed three times with water or other appropriate solvent, and labels removed or defaced. They should then be boxed and labeled "glass" and disposed as regular trash.
- Disposal of radioactive materials must be in accord with Nuclear Regulatory Commission and N.Y.C. Department of Health regulations. Disposal arrangements are to be made in advance of the ordering of material, in consultation with the Radiation Safety Officer by calling ext. 4268.
- Fluorescent lamps, mercury-containing devices (e.g. thermometers, thermostats, sphygmomanometers) and batteries (wet and dry cell) also cannot be discarded as regular trash and have special disposal requirements as Universal Waste. Contact the EHS Office to arrange for disposal of these wastes.
- Used electronic devices (computers, CRT's, printed circuit boards) must be disposed thru the Office of Property Management for recycling.

To dispose of chemical waste, or unwanted and unusable chemicals, please contact the Hazardous Materials Manager at ext. 4268. A waste management and disposal policy, a laboratory closeout policy, and other chemical hygiene procedures have been developed to facilitate regulatory compliance. These are part of the written Chemical Hygiene Plan. If you have not received a copy, or if you need assistance, please contact The Office of Environmental Health & Safety at ext. 5400 or 4268.