

SYNOPSIS OF CHEMICAL SAFETY REGULATIONS

The regulations and procedures in the University Chemical Safety Manual (UCSM) apply to all persons who procure, receive, possess, use, generate, or dispose of hazardous chemicals on the University of Mississippi, Oxford Campus. The following highlights the contents of the manual. Consult the full text in the manual for specific statements and/or exclusions.

The Department of Health and Safety (DHS) is responsible for the control and for the disposal of all hazardous biological and chemical substances on the campus.

Chemicals must be disposed of only through the Department of Health and Safety. Individuals who do not follow procedures in complying with state and federal regulations are individually responsible for possible fines and/or imprisonment.

The DHS will provide training of new employees, annual training of employees and training of employees whenever a new hazard is introduced into the work area. Individual supervisors are responsible for requesting training for their employees. Supervisors as well as department heads must insure that personnel working for them are fully informed about procedures for the safe handling and use of hazardous chemicals. The University requires work units or departments to provide any safety equipment necessary to use a given hazardous chemical. It is the duty of unit supervisors to insure that personnel use safety equipment properly. These items may include, but are not limited to, fume hoods, gloves, safety glasses, respirators, etc.

A hazardous chemical is one that poses a danger to human health or to the environment, if improperly handled. Common classes of hazardous materials are Ignitable Materials, Corrosive Chemicals, Reactive Chemicals, Toxic Chemicals

The following materials pose unusual hazards and have additional restrictions placed upon their purchase and use: Carcinogens, Perchloric Acid (in 72 % or greater concentration), Radioisotopes.

Phone numbers for the laboratory chain of command shall be posted within the laboratory, on the door facing the hallway, and in the departmental office for emergency use.

If a release of toxic fumes can occur, the work must be done in a hood.

Personnel must wear appropriate clothing and personal protective equipment in laboratories.

Supervisors may set aside a clearly defined area within the laboratory where EATING, STUDYING AND OTHER SOCIAL ACTIVITIES are permissible. The supervisor will prohibit these activities outside this area. The H&S discourages the use of the laboratory for these purposes as much as possible. Under no circumstances are eating or drinking to be allowed in undergraduate academic laboratories.

Specific no-vent goggles or their equivalent must be used while wearing contact lenses. Without these goggles, the wearing of contact lenses by persons in laboratories using or storing chemicals will be forbidden.

Children, under the age of 16, are prohibited from being in any area where chemicals are used or stored.

Chemicals must be identified, labeled and stored properly. Separate incompatible materials (substances that can react together) according to the compatibility chart, Appendix A, of the UCSM.

Keep a separate record of time-limited chemicals, (Ethers, etc.). Ethers should be ordered in small quantities so the material is used quickly. The container must be dated when received, and discarded through the DHS after six (6) months from the date the material is opened. Unopened containers should be discarded twelve (12) months after the material is received.

Materials that may have become unstable, such as old ethers, must be brought to the attention of the DHS as soon as they are discovered. The DHS will arrange the safe removal of the materials. Prompt notification is emphasized.

Standard refrigerators and freezers must not be used for the storage of flammable liquid. REFRIGERATORS INTENDED FOR LABORATORY USE, INCLUDING STORAGE OF CHEMICALS, FLAMMABLE MATERIALS, ETC., MUST NEVER BE USED FOR THE STORAGE OF FOOD PRODUCTS BY LABORATORY PERSONNEL!

High pressure gas cylinders (>240 psig) must be secured by chains or straps in an upright position at all times. Transportation of cylinders must always be done with the cap attached and only when using a cylinder cart. Cylinders must not be used without a regulator valve.

Corrosive chemicals should always be transported in unbreakable safety carriers. Chemical splash goggles, aprons, and rubber gloves must be worn when handling corrosive chemicals.

NO hazardous chemical substance shall be disposed of into the sanitary sewage system, into the atmosphere, or into the normal University

trash system.

When a chemical cannot be reused or exchanged, a completed form for disposal must be filed with the DHS using Form DHS-4.

NO CONTAINERS OF CHEMICAL WASTE WILL BE REMOVED BY THE CHEMICAL SAFETY COORDINATOR UNLESS THEY ARE PROPERLY LABELED ACCORDING TO THE UCSM AND A COMPLETED FORM DHS-4 HAS BEEN FILED AND REVIEWED BY THE DEPARTMENT OF HEALTH AND SAFETY. CHEMICAL WASTE MUST BE NONPATHOGENIC, NONINFECTIOUS, NONEXPLOSIVE, NON-COMPRESSED, AND NONRADIOACTIVE.

Incompatible wastes shall not be placed or mixed in the same container, see the compatibility table in the UCSM.

Disposal of unknown chemicals will be handled by the DHS, on a case by case basis, provided the department submitting the chemicals for disposal are willing to assume financial responsibility for the associated costs.

All laboratory personnel must familiarize themselves with the proper emergency procedures for those materials with which they work before an incident occurs.

In the event of a fire of any but the smallest size, where you are confident that it can be put out without risk of spreading or danger to yourself, call 9-911 and report the fire. The building is to be evacuated. The fire department will notify the DHS.

Accidental spills, injury of personnel, or releases to the environment involving a hazardous chemical must be reported to the DHS within three (3) working days

Minor spills should be cleaned up immediately by laboratory personnel, providing the material is not immediately dangerous to life and health (IDLH) and equipment is available. Always use appropriate protective equipment as directed by your supervisor, or consult with the DHS for additional information or assistance. Don't leave materials used to clean a spill in open trash cans in the work area, or in any manner that may cause an unnecessary exposure to a fellow employee.

For spills of moderate size, call the DHS at 5433 (days) or 7234 (evenings and weekends). Evacuate the immediate area. DHS personnel will provide technical assistance and guidance in cleaning up spilled materials. For moderate to large spills of dangerous materials, evacuate the building, either personally or through the building alarm system, call 5433 to report the incident or call the University Police Department at 7234 and report the incident.

If a volatile, flammable, or toxic material is spilled, immediately warn everyone to extinguish flames and turn off spark producing equipment such as brush-type motors. Shut down all equipment and vacate the room until it is decontaminated. If necessary, notify the DHS at 5433 (days) or 7234 (evenings and weekends) to supervise the decontamination.

These substances are very hazardous and cleanup should be handled by the DHS:

aromatic amines	ethers	bromine		
organic halides	carbon disulfide	perchloric acid	cyanides	picric acid

Mercury vapor is highly toxic. Spilled mercury should be immediately and thoroughly cleaned up using an aspirator bulb or vacuum device. The DHS should be called at 5433 if you require either specific instructions, supervision or assistance with a cleanup of spilled mercury.

Monitors for most materials are available for determining the effectiveness of spill cleanups from the DHS.

WHEN AN EMERGENCY OCCURS :

1. DO WHAT IS NECESSARY TO PROTECT LIFE WHILE WAITING FOR ASSISTANCE.
2. If you are directed to leave the room, stop the experiment, turn off all burners or other energy-producing and energy-consuming devices (if practical), and immediately evacuate the area.

All references to Environmental Safety (ESO) should be changed to the Department of Health and Safety (DHS).

Departmental announcements and the full copies of all current Health and Safety regulations are located at the DHS web page :
http://www.olemiss.edu/depts/environmental_safety/index.html