

UNIVERSITY OF MARYLAND CENTER FOR ENVIRONMENTAL SCIENCE

CHESAPEAKE BIOLOGICAL LABORATORY

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SOLOMONS, MD 2688

LABORATORY STANDARD OPERATING  
GUIDELINES AND PROCEDURES

## Foreword

Overall safety in the lab is EVERY LAB USER'S responsibility. Each individual has an obligation to maintain, to the best of their ability, a safe work environment. It is suggested that one method of maintaining a safe work place is to actively incorporate these safety practices into your laboratory activities. As a guide, these practices will help identify potential hazards in the lab, and will provide a reminder of routine safety requirements.

The Laboratory Standard Operating Guidelines contains general guidelines. Specific Laboratory Standards and Policies should be developed by each laboratory and PI to properly document the protocols and necessary procedures based on the type of work conducted in the area.

Usage of the laboratories by students for their research is considered to be a privilege, not a right. Every laboratory is supervised by a faculty member. Therefore, rules for laboratory and equipment use will vary from lab to lab. It is the responsibility of the student or lab staff member to obtain permission from the appropriate faculty member to use a laboratory facility, learn the rules that have been established for that particular laboratory, follow these rules, and work in as safe of a manner as possible. Violations of safety or other usage rules in a particular laboratory will result in suspension of user privileges, either for a specific laboratory or the facility as a whole. Keep in mind that all rules established are intended to keep everyone safe.

## SAFETY CHECKLIST FOR LABORATORY USERS

Please read the following questions and think carefully about your answers.

1. Do you wash your hands before leaving the laboratory?
2. Do you wear appropriate attire in the laboratory (lab coat, safety goggles, gloves, shoes)?
3. Are the appropriate hazard signs and emergency numbers posted on the outside of the laboratory door?
4. Are all containers in your lab properly labeled? Do you know how to interpret these labels?
5. Do you know where to find Safety Data Sheets (SDSs) for all chemicals used in your laboratory?
6. Are the chemicals in your lab properly stored?
7. Have you been instructed in the proper use and handling of the chemicals in your laboratory?
8. Have you been instructed in the location and use of safety devices (safety showers, eye washes, laboratory hoods, etc.) in your laboratory?
9. Are you aware of emergency procedures in the event of a chemical exposure, spill, fire or explosion?
10. Do you know how to properly segregate and dispose of chemicals you will use?
11. Are all mechanical engineering controls (e.g., fume hoods) operating properly?
12. Do you know who to notify if working in a laboratory alone after normal hours?
13. Have you attended laboratory specific training provided by your Laboratory Supervisor?
14. Do you know where your laboratory Standard Operating Procedures (SOP) are stored and how to use them?
16. Are you familiar with the protocol you are following? Do you feel comfortable performing the procedure without additional information or demonstration?

If you answered NO to any of these questions, read this laboratory safety guide and if you still have questions, see your laboratory supervisor.

## GENERAL LABORATORY SAFETY PRACTICES

The purpose of this guide is to promote safety awareness and encourage safe work practices in the laboratory. These are guidelines; they should serve as a reminder of things you can do to work more safely. Although these guidelines are applicable to all research, teaching and academic laboratories at the CBL, your lab may require more specialized rules that apply to specific materials and equipment. Please see your Laboratory Supervisor (LS) or Principal Investigator (PI) for more information before beginning work in the lab.

### A. Awareness

- \* Be alert to unsafe conditions and actions, and call attention to them so that corrections can be made as soon as possible.
- \* Label all storage areas, refrigerators, etc., appropriately, and keep all chemicals in properly labeled containers.
- \* Date all bottles of chemicals when received **and** when opened.
- \* Note expiration dates on chemicals.
- \* Note special storage conditions.
- \* Be familiar with the appropriate protective measures to take when exposed to the following classes of hazardous materials. Information is available from your lab supervisor.
  - Flammables
  - Radioactive Compounds
  - Corrosives
  - Biohazards
  - Toxics
  - Carcinogens
  - Reactives
  - Compressed Gases
- \* Segregate chemicals by compatibility groups for storage.
- \* Be aware of the potential interactions of lab furniture and equipment with chemicals used or stored in the lab. (i.e., are oxidizers stored directly on wooden shelving?)
- \* Post warning signs for unusual hazards such as flammable materials, biohazards or other special problems. (i.e., ethidium bromide)
- \* Pour more concentrated solutions into less concentrated solutions to avoid violent reactions (i.e., always add acid to water; not water to acid).
- \* Avoid distracting any other worker. Practical jokes or horseplay have no place in the laboratory.
- \* Use equipment only for its designated purpose.
- \* Position and secure apparatus used for hazardous reactions in order to permit manipulation without moving the apparatus until the entire reaction is complete.
- \* Be sure to perform all potentially hazardous activities in a fume hood.

## B. Personal Safety

### 1. Respiratory and Body Protection

- \* Use fume hoods whenever possible.
- \* Splash proof safety goggles should be worn at all times in the chemical laboratory.
- \* Laboratory coat/apron should be worn in the laboratory.
- \* Appropriate gloves should be worn as needed.
- \* Appropriate closed-toed shoes and attire should be worn in the laboratory.
- \* Keep exposed skin covered. **Shorts, sleeveless or short sleeve shirts, skirts or open-toe shoes should not be worn in the laboratory.**

### 2. Personal Hygiene

- \* Wash hands before leaving laboratory.
- \* Launder clothing worn in laboratory separately from other clothing.
- \* Never mouth pipette anything in the lab.
- \* Never eat, drink or apply cosmetics in a laboratory or areas where chemicals/hazardous agents are stored. (Smoking is prohibited in all areas of University of Maryland buildings, including laboratories.)
- \* Never store food in a refrigerator located in a laboratory.
- \* Never heat food in a laboratory oven or furnace.
- \* Never eat or drink from laboratory glassware.
- \* Avoid wearing contact lenses in the laboratory.
- \* Avoid situating long hair, loose sleeves/cuffs, rings, bracelets, etc. in close proximity to open flames or operating machinery.

Refer to: [CBL Personal Protection Equipment Hazard Control Policy](#) for detailed information

## C. Fire Prevention

- \* Be aware of ignition sources in lab area (open flames, heat, electrical equipment).
- \* Purchase and store flammable reagents in the smallest quantities available.
- \* Store flammable liquids that require refrigeration in explosion-proof refrigerators.
- \* Store flammable liquids in appropriate safety cabinets and/or safety cans.
- \* Do not store incompatible reagents together (e.g., acids with flammables).
- \* Do not store ethers or conjugated dienes for extended periods of time as explosive peroxides could form. Date ethers when received and opened.
- \* Make sure that all electrical cords are in good condition. All electrical outlets should be grounded and should accommodate a 3-pronged plug. Never remove the grounding prong or use an adapter to bypass the grounding on an electrical cord.
- \* Remain out of the area of a fire or personal injury unless it is your responsibility to meet the emergency responders.
- \* Meet emergency responders from a safe location.
- \* Be aware of the condition of fire extinguishers. Report any broken seals, damage, low gauge pressure or improper mounting to the Facilities Department. If the seal has been broken, assume that the fire extinguisher has been used and

must be recharged. (NOTE: Do not use fire extinguishers unless you are trained and feel confident to do so.) Report ALL fires by phoning 911.

- \* Automatic fire sprinklers must remain clear and unblocked to function properly. Do not store materials within 18" below the sprinkler head.

Refer to: [CBL Fire Safety Policy](#) for detailed information

#### D. Housekeeping

- \* Eliminate safety hazards by maintaining laboratory work areas in a good state of order.
- \* **Maintain at least two clear passages to laboratory exits.**
- \* Always keep tables, fume hoods, floors, aisles and desks clear of unnecessary material.
- \* Wipe down bench tops and other laboratory surfaces after each use with an appropriate cleaning or disinfecting agent.
- \* All equipment should be inspected before use.
- \* Use borosilicate glassware for laboratory work. If dichromate/sulfuric acid glass cleaner is used in your laboratory, make sure that cleaning is confined to the fume hood as toxic chromyl chlorides are released from the dichromate/sulfuric acid solution. Better yet, switch to a non-chromate cleaning solution. (i.e., No Chromix®) which will also minimize hazardous waste generation.
- \* If experiments must be left unattended, place a note next to experimental apparatus indicating the chemicals involved, your name and a number where you can be reached in case of an emergency.
- \* Keep the laboratory floor dry at all times. Immediately attend to spills of chemicals or water, and notify other lab workers of potential slipping hazards.
- \* All machinery under repair or adjustment should be properly tagged prior to servicing. All service work should be performed by authorized personnel.
- \* Sink traps and floor drains should be flushed and filled with water on a regular basis to prevent the escape of sewer gases or the release of chemical odors in the event of an emergency.
- \* All compressed gas cylinders should be securely chained or clamped to a rack or fixed stationary piece of lab furniture. Mark empty cylinders, but use all safety precautions as if the cylinder were full.

#### Emergency Procedures

- \* In the event of an emergency, remember one number: 911. By calling this number, all necessary emergency response departments can then be alerted to your needs.
- \* Be familiar with the emergency evacuation plan for the building.
- \* Be sure the names and phone numbers of lab personnel to be contacted in an emergency are posted in the lab or outside of the door.
- \* Be familiar with the location, use and limitations of the following safety devices:
  1. safety shower
  2. eye wash station
  3. protective respiratory gear

4. fume hood
5. spill cleanup materials
6. first aid kit
7. fire alarm
8. fire extinguisher

Refer to: [CBL Emergency Eyewash & Drench Shower Policy](#) for detailed information

- \* Clean up all small spills immediately. If a large chemical spill occurs, contact the Facilities Manager immediately. Be prepared to provide information about the magnitude of the spill. If you are unable to reach the Facilities Department, call 911. If the spill poses a hazard to individuals outside of the laboratory, follow the laboratory's emergency standard operating procedure. Stop current reactions or equipment if possible, activate the building fire alarm, exit the building, call 911 to report the emergency and stand by at a safe distance to provide information to emergency response personnel.
- \* If volatile, flammable, or toxic materials spill, shut off flames and spark-producing equipment at once and evacuate.
- \* In the event of fire or explosion, activate the building fire alarm, exit the building, dial 911 to report the emergency and standby in a safe location to meet emergency responders.
- \* Do not cover windows of laboratory doors, except for special experimental requirements. This allows passers-by to notice if anyone is in need of emergency assistance.
- \* Maintain a clear path to all safety equipment at all times.

Refer to: [CBL Chemical Hazard Plan](#) for detailed information

#### F. Waste Disposal

- \* MINIMIZE WASTES at the source by limiting the quantities of materials purchased and used.
- \* Segregate and prepare chemical wastes for disposal in accordance with the procedures for Chemical Waste.
- \* Dispose of all waste in designated containers properly. There are many different types of containers used at CBL for the collection of wastes. Know which ones are appropriate for the wastes you generate.

Refer to: [CBL Hazardous Waste Policy](#) for detailed information

#### G. Miscellaneous

- \* Children and pets should never be brought into the laboratory
- \* If work is being conducted after hours, let other laboratory personnel know of your presence. Make sure that the person that is checking on you knows what to do if you can't be reached. If possible, avoid carrying out experimental laboratory work in an unoccupied lab.

## **SAFETY EQUIPMENT**

An expanding array of federal, state, and local laws and regulations make the protection of worker health and safety a legal requirement as well as an economic necessity. In the final analysis, personal and laboratory safety can be achieved only by informed, responsible individuals. This section summarizes various forms of personal and laboratory safety equipment. Based on this information, knowledgeable choices for appropriate personal protection in the laboratory can be made.

### **A. Personal Protective Equipment (PPE)**

Personal protective equipment includes such things as gloves, eye protection, and respirators. Each individual laboratory should establish rules concerning required PPE based on the activities that will be performed in that laboratory. It is up to each individual user to learn about the chemicals they will be using and the best PPE for those activities. Questions about appropriate PPE for your activities should be directed to the laboratory PI.

Personal and laboratory safety can only be achieved by informed, responsible individuals. This means reading and understanding the SDS for the chemicals that you use, discussing any potential hazards with your supervisor if you have any further questions concerning proper PPE for your activities in the laboratory.

#### **1. Eye Protection**

Splashing chemicals and flying objects are possible at any time in the lab environment. For this reason, eye protection is an important consideration. Protective eyewear for personnel and visitors should be splash proof. They must meet ANSI (American National Standards Institute) specifications. Approved eyewear usually bears an ANSI approval stamp on the lens or eyepiece of the eyewear.

You should have the appropriate eye protection available to you when you are working in the laboratory. If you don't have safety glasses, tell your supervisor. They can be purchased from any safety supply company.

#### **Contact Lenses**

Contact lenses are not recommended for use in the lab environment and should not be routinely worn in the laboratory. Laboratory personnel who insist on wearing contact lenses while performing laboratory work should be aware of the following potential hazards:

- \* It may be impossible to remove contacts from the eyes following entry of some chemicals into the eye area.
- \* Contact lenses will interfere with emergency flushing procedures.
- \* Contacts may trap solid materials in the eyes.
- \* If chemicals contact the eye area and the laboratory worker is unconscious, rescue personnel may be unaware that contact lenses are present.

Use of contact lenses should be considered carefully, with extra consideration given to choosing eye protection that fits snugly over the eyes and around the face.

## 2. Protective Clothing

### Lab Coat

The lab coat is designed to protect the clothing and skin from chemicals that may be spilled or splashed. It should always be properly fitted to the wearer and is best if it is knee length. There are several different types of lab coats for different types of protection.

### Aprons

Aprons provide additional protection when using particularly corrosive or irritating chemicals. An apron should be worn over garments that cover the arms and body, such as a lab coat

### Hand Protection

Gloves are used in laboratories to protect workers from accidental spills or contamination. No gloves are available to protect laboratory personnel against all potential chemical exposures

### Foot Protection

Foot protection is designed to prevent injury from corrosive chemicals, heavy objects, electrical shock, as well as giving traction on wet floors. If a corrosive chemical or heavy object were to fall on the floor, the most vulnerable portion of the body would be the feet. For this reason, shoes that COMPLETELY COVER AND PROTECT the foot are recommended.

Fabric shoes, such as tennis shoes, absorb liquids readily. If chemicals happen to spill on fabric shoes, remove footwear immediately.

When selecting footwear for the lab, choose sturdy shoes that cover the foot. These will provide the best protection.

The following shoe types should not be worn in the laboratory:

- \* sandals – flip-flops, Texas, etc.
- \* clogs – including Crocs
- \* high heels
- \* shoes that expose the foot IN ANY WAY

### Skin Protection

Keep exposed skin covered.

**Shorts, sleeveless or short sleeve shirts, skirts and dresses should never be worn in the laboratory**

### Hearing Protection

Ear protection should be worn where the noise level is above 85 decibels (dBA). Areas where excessive noise is present should be posted with signs indicating ear protection is required. Ear protectors should be readily available and rated for sufficient noise reduction.

Refer to: [CBL Personal Protection Equipment Hazard Control Policy](#) for detailed information

## **Laboratory Safety Equipment**

### Laboratory Chemical Fume Hoods

Chemical fume hoods capture, contain, and expel emissions generated by hazardous chemicals. In general, it is a good idea to conduct all laboratory chemical experiments in a fume hood. While you may be able to predict the release of undesirable or hazardous

effluents in some laboratory operations, "surprises" can always happen. Therefore, the fume hood offers an extra measure of protection.

Fume hoods are located in most all of the labs. Motion detectors have been installed. When no one is in the room, the hoods go into a power saving mode to reduce electricity use. As soon as someone enters the area around the hood, the hood automatically returns to the appropriate face velocity.

All laboratory workers with access to a fume hood should be familiar with its use. Use the following guidelines when performing procedures in a fume hood:

- \* Verify from the digital control pad that the face velocity measures about 100 linear feet/minute.
- \* Do not place your face inside the hood. Keep hands out as much as possible.
- \* Keep sources of emission **6** inches inside the hood.
- \* Do not use the hood for storage of chemicals. Clean up spills immediately.
- \* Keep the sash as low as possible in order to use the sash as a safety shield.
- \* Prepare a plan of action in case of an emergency, especially when using extremely hazardous chemicals or acids.
- \* Only work the sash at the proper operating level (do not move the preset stops).
- \* Always wear appropriate personal protective equipment when using chemicals in the hood (i.e., gloves, apron, labcoat, face shield, safety goggles).
- \* Don't sit down at the hood, it puts your face directly in the fume path.
- \* Contact the Facilities Department if you suspect that a fume hood is not working properly.

Refer to: [CBL Fume Hood Safety Policy](#) for detailed information

#### Chemical Storage Cabinets

- \* Storage of flammables and corrosives in the lab should be limited to as small a quantity as possible.
- \* Flammable materials should only be stored in the cabinets that are located below each fume hood or in cabinets specifically designed for flammable materials.

Refer to: [CBL Chemical Hygiene Plan](#) for detailed information

#### Refrigerators

While domestic refrigeration units are appropriate for keeping foods cold, they are not designed to meet the special hazards presented by flammable materials. Therefore, laboratory refrigerators should be carefully selected for specific chemical storage needs. To prevent potential safety hazards, the length of storage of any material should be kept to a minimum. In addition, refrigerators should be periodically inspected. Refrigerators used to house flammable materials must be approved for such use by FM® (Factory Mutual) or UL® (Underwriters Laboratory).

#### Eyewash Stations

- Eyewash stations provide an effective means of treatment when chemicals come in contact with the eyes. Eyewash stations are located in the laboratories. Acquaint yourself with the location of the eyewash facilities in the laboratory and how they are operated **before** they are needed. Be prepared to help someone else wash their eyes quickly in the event of an accident since they might not be able to find or operate the station.

- If you accidentally get something in your eyes, go directly to the nearest eyewash station and flush your eyes with water for **15** minutes. Be sure to hold your eyes open with your fingers and aim the water streams at the base of your nose (not directly at your eyeball).
- Don't rub your eyes. You may scratch or embed particles in your eyes.
- Once you have flushed your eyes, seek immediate medical attention. Make sure that emergency response personnel know the chemical(s) involved.

### Safety Showers

- Safety showers provide an effective means of treatment in the event that chemicals are spilled or splashed onto the skin or clothing. Safety showers are located near each laboratory. Do not ever pull shower handles unless needed.
- When someone has been the victim of a body splash, the person(s) should be removed or remove themselves from the spill area. Individuals should remove contaminated clothing, including shoes and jewelry, while under an operating shower (not a time to be modest). Flood the affected area(s) with water for at least 15 minutes or longer if pain persists. Wash skin with mild soap and water – do not use neutralizing chemicals, creams, lotions or salves. Contact emergency response personnel and ensure that they know the chemical(s) that were involved

Refer to: [CBL Emergency Eyewash & Drench Shower Policy](#) for detailed information

### Fire Safety Equipment

#### Types of Equipment

- \* Fire Alarms are designed so that all endangered laboratory personnel and building occupants are alerted by an audible warning. Fire alarm activations must be reported to Emergency Assistance (911) from a safe location. All employees/students should become familiar with the **EXACT LOCATION** of the fire alarm pull stations nearest to their laboratory.
- \* Fire Extinguishers are spaced and located as required by current fire codes and standards. Multi-purpose fire extinguishers can be found in hallways and in most laboratories.  
Only use a fire extinguisher if the fire is very small and you have received fire extinguisher training. If you can't put out the fire, leave immediately. Make sure the fire department is called even if you think the fire is out.  
  
Units that are missing, have broken seals, low pressure or visible damage should be reported to the Facilities Department immediately for replacement.
- \* Sprinklers are designed to enhance life safety by controlling a fire until the fire department arrives or, in many cases, completely extinguishes a fire.

Sprinklers are automatically activated, and laboratory workers should not attempt to shut off or tamper with the system

Refer to: [CBL Fire Safety Policy](#) for detailed information

## FIRST AID AND EMERGENCY PROCEDURES

The first aid and emergency procedures detailed in this section could be life-saving. Become familiar with the information described below, so that disasters can be speedily contained. It is the responsibility of the injured employee or student to report bodily injury or property damage to CBL even if a police report is filed.

**Supervisors of injured employees must complete the "Workers Compensation Employer's First Report of Injury or Illness" form to report on-the-job injury. Required forms and instructions can be obtain from the Human Resource Office.**

### A. First Aid

#### Wounds

- Direct pressure -- place sterile pad over wound and apply pressure evenly with the opposite hand.
- Elevation -- if direct pressure does not control bleeding, raise the area above the level of the heart.
- Cleanse area with soap and water.

#### Significant bleeding

- Call Emergency Rescue (911).
- Direct Pressure -- place sterile pad over wound and apply pressure evenly with the opposite hand.
- Elevation -- if direct pressure does not control bleeding raise the area above the level of the heart.

#### Burns

Apply cold water applications and/or immerse in cold water for at least 10 minutes. Seek further medical treatment as needed.

Second and third degree burns are characterized by red or mottled skin with blisters (second degree), white or charred skin (third degree).

First aid procedures for second and third degree burns are as follows:

- a. Call Emergency Rescue (911).

#### Chemical Burns

If hazardous chemicals should come into contact with the skin or eyes, follow the first aid procedures below.

- a. Skin
  - Remove victim's clothes -- don't let modesty stand in the way.
  - Remove victim's shoes -- chemicals may also collect here.
    - Rinse the area with large quantities of water for at least 15 minutes (sink, shower, or hose).
  - DO NOT apply burn ointments/spray to affected areas.
  - Call Emergency Rescue (911) without delay.
- b. Eyes (acid/alkali, e.g., HCl, NaOH)
  - Call Emergency Rescue (911) without delay.
  - Rinse area of eyes, eyelids, and face thoroughly with lukewarm water for at least 15 minutes at the eye wash station.

### Ingestion of Chemicals

- Call Emergency Rescue (911) IMMEDIATELY.
- Call the Maryland Poison Center at 1-800-222-1222 for advice on appropriate actions to be taken while awaiting emergency medical assistance.
- If the victim is unconscious, turn their head or entire body onto their left side. Be prepared to start CPR if you are properly trained.

### Inhalation of Chemicals

- Evacuate the area and move the victim into fresh air.
- Call Emergency Rescue (911) without delay.
- If the victim is not breathing and you are properly trained, perform CPR until the rescue squad arrives.
- Treat for chemical burns of the eyes and skin as noted above.

### **First Aid Kits**

First aid kits are fully stocked and available in every building.

No oral medication (including aspirin) should be dispensed or stored in the first aid kit.

### **CPR & AED**

Multiple staff are trained at CBL to perform CPR and have been trained to operate the AED (Automated External Defibrillator).

Refer to: [CBL First Aid Plan](#) for detailed information

## **UMCES Right To Know Hazard Communication Plan**

### **Safety Data Sheets (SDS)**

Safety Data Sheets (SDS) are chemical information sheets prepared by the manufacturer or distributor of any chemical or mixture that contains a hazardous chemical as 1% or more of its content (or 0.1% if the hazardous chemical is carcinogenic). The manufacturer or distributor is required to supply a SDS with the initial shipment of each chemical. A copy of the SDS must be maintained by the employer for each hazardous chemical within a laboratory. The supervisor is responsible for assuring SDSs are available for chemicals listed on each work area's CIL.

### **Access to Information**

Access to the list of chemicals per lab as well as the SDS sheets must be made available to employees, employee representatives, emergency and medical service providers, and regulators upon request.

SDS are available from a variety of campus sources on a 24 hour basis:

Through the UMCP web site:

***<http://www.inform.umd.edu/CampusInfo/Departments/EnvirSafety/rtk/msds.html>***;

Through the Vermont SIRI (Safety Information Resources on the Internet) web site

***<http://hazard.com/msds/>***

a site searchable by manufacturer, chemical name, trade name and Chemical Abstracts Series (CAS) number (a number of links to MSDS and other safety related sites are available using this web site);

Through Fisher Scientific's web site ***<http://www.fisher1.com>*** (Fisher chemical MSDS's only);

Each laboratory must maintain copies of SDS's for the hazardous chemicals located within their laboratory.

### **Training**

Information and training is provided to all UMCES employees by an online tutorial sent directly to employees from the UMCES Safety Officer within two weeks of employment. If you do not receive an email regarding RTK training, please contact Sherry Pike Saville at the Horn Point Campus. Her email is [spike@umces.edu](mailto:spike@umces.edu)

Employee RTK and general safety training is provided free of charge. Supervisors are required to allow employees time to attend RTK and safety training.

### **Supervisors/Academic Advisors shall:**

- 1) Compile a Chemical Information List (CIL) of all chemicals used in the workplace;
- 2) Assure that employees are aware of the hazards or potential hazards associated with the chemicals in the work area under their control.
- 3) Assure that employees know how and where to access SDS's for the listed chemicals and under their control during the hours in which the employee works.
- 4) Develop and implement standard operating procedures (SOP's) and engineering controls to promote safe practices when dealing with hazardous chemicals in the workplace to protect the employees.

- 5) Provide the appropriate personal protective equipment (e. g., gloves, goggles) as necessary to promote safe practices when employees must deal with hazardous chemicals in the workplace.
- 6) Report any problem associated with implementation of the RTK program in their work area to the UMCES Safety Officer.
- 7) Assure that hazardous chemicals used in the workplace are labeled per the requirements of this program.
- 8) Maintain the Chemical Information List (CIL) current within 30 days.
- 9) Assure that all employees who work with or around hazardous chemicals in the course of the performance of their normal job duties attend Employee RTK training. Allow all employees, regardless of hazardous chemical contact, to attend RTK training.
- 10) Assure that all employees who are required to perform non-routine tasks are informed of the associated hazards and provided with associated chemical information before being required to perform such tasks.

### **Employees shall:**

- 1) Perform work in the safest manner possible.
- 2) Follow all SOP's developed by the supervisor.
- 3) Comply with all applicable provisions of the RTK program:
  - a) Attend required RTK training and be familiar with the RTK information
  - b) Shall not remove or deface labels on containers and assure that damaged labels are replaced or repaired.
  - c) Ask for further information about chemicals or procedures not fully understood.
  - d) Report new chemicals/products discovered in the workplace to the supervisor so that they may be included on the Chemical Information List and a SDS acquired.
  - e) Report any existing health or safety hazard to the supervisor.
  - f) Identify hazards before you work with a hazardous material.
  - g) Not to be afraid to ask questions.
  - h) Use protective clothing and equipment.

### **Employee Rights:**

You have the right by law to:

- 1) See the Chemical Information List and Material Safety Data Sheets within one day of your request.
- 2) Be trained on the hazards of the chemicals in your workplace, the appropriate equipment and methods to use to protect you from the hazards and emergency procedures.
- 3) Refuse to work with a specific hazardous chemical if you are denied access to information about that chemical.
- 4) Refuse to work with hazardous chemicals if your employer has not provided the proper personal protective equipment.

Refer to: [\*Right To Know Policy\*](#) for detailed information