UF | UNIVERSITY of FLORIDA

General Chemical Hygiene Plan

Reviewed: January 2021
Revised: January 2021

UF Environmental Health and Safety
UNIVERSITY of FLORIDA

Table of Contents

Introduction

The purpose of the Chemical Hygiene Plan (CHP) is to familiarize students, volunteers and employees with the University of Florida's safety and health policies in regards to chemical use. By authority delegated from the University President, the Vice-President for Business Affairs is responsible for the safety of all University facilities. Under this authority, policies are developed to provide a safe teaching, research, services, housing and recreational environmental. The CHP is a written policy which sets forth engineering controls, procurement controls, work practices, personal protective equipment and procedures that:

1. Are intended to protect individuals from the physical and health hazards presented by hazardous chemicals use in laboratories and research.
2. Meet the requirements of the Occupational Safety and Health Administration's (OSHA's) standard on Occupational Exposure to Hazardous Chemicals in Laboratories (29CFR1910.1450).

The complete Chemical Hygiene Plan for all University of Florida research spaces consists of the University of Florida General Chemical Hygiene Plan and a Laboratory-Specific CHP.

The CHP must be made readily available to all employees, students, and affiliates working with or handling chemicals in a laboratory/research space. The General CHP will be reviewed annually by Environmental Health and Safety (EH&S) and revised as necessary. Records of the review will be kept on file at EH&S. The Principal Investigator and lab staff shall review and update the Lab-Specific CHP on an annual, and as needed, basis.

Laboratory Specific Chemical Hygiene Plan

Each Principal Investigator must complete a Laboratory-Specific Chemical Hygiene Plan to document potential hazards specific to their lab and safety procedures required to reduce exposure to these hazards. The Lab-Specific CHP is completed and updated annually, or as the scope of work changes, through the Laboratory Assessment, Training, and Chemical Hygiene (LATCH) module in Gator TRACS and must contain the following elements:

- Lab roster with designation of roles
- Training records for lab personnel
- Completed hazard assessment approved by the Principal Investigator
- Signatures from all personnel on the roster certifying their knowledge and compliance with the risk assessment and SOPs prior to working with the hazard and if/when the scope of work changes.
- Standard operating procedures (SOPs) for each specific lab activity involving hazards. EH&S provides SOPs templates and examples on the website.

The remainder of this document primarily highlights the University's General CHP.

Assignment of Responsibility

Environmental Health and Safety shall be responsible for working with faculty, staff, students, and others to develop and implement appropriate safety practices and procedures. EH&S appoints a **University Chemical Hygiene Officer (CHO)** responsible for providing guidance in the development and implementation of the CHP. The responsibilities of EH&S and the CHO include (but are not limited to):

- Developing, implementing, and managing a comprehensive safety program for the University;
- Facilitating the campus community's understanding of, and compliance with, required chemical health and safety regulations;
- Updating the general CHP on an annual, and as needed, basis;
- Providing resources and guidance to Principal Investigators and laboratory staff on the development and implementation of Laboratory CHPs;
- Maintaining the Laboratory Safety Manual;
- Overseeing the university-wide research safety inspections;
- Assisting Principal Investigators in the selection of appropriate laboratory safety practices, personal protective equipment, and engineering controls;
- Offering safety training and educational services;
- Coordinating and implementing hazardous waste disposal;
- Providing spill control and clean-up assistance;
- Providing information and guidance through a variety of platforms including the EH&S website;
- Investigating all reported incidents which result in the exposure of personnel or the environment to hazardous chemicals.

The **Departmental Chairperson or Director** shall be responsible for all personnel within their department engaged in the laboratory use of chemicals as follows:

- Providing budgetary resources to ensure health and safety of the departmental personnel, visitors, and students;
- Providing training to PIs and staff members or allowing time for necessary training;
- Working with EHS as needed to address reoccurring violations or unsafe conditions;
- Ensuring all faculty, students and staff are following the University's General CHP.

Research laboratories on non-UF property, but associated with UF, must complete all UF required safety training and be familiar with the University's General CHP.

The **Principal Investigator** has the primary responsibility for providing and maintaining a safe work environment and for ensuring compliance with all elements of the University and Laboratory CHPs within their own research spaces. The Principal Investigator must:

- Develop and implement the Laboratory CHP through the Gator TRACS website;
- Review and approve SOPs, ensuring that PPE, engineering controls, and work practice controls described within the SOPs provide adequate protection to staff;

- Ensure that PPE and required safety equipment are available and in working order and that laboratory staff is trained in their use;
- Determine training requirements for laboratory workers based on their duties and ensure appropriate safety training specific to laboratory/research area operations has been provided;
- Ensure that staff are knowledgeable on emergency response plans, including fires, equipment failure, chemical exposures, and chemical spills;
- Provide access to manufacturers' Safety Data Sheets (SDSs), the University and laboratory-specific CHPs, the laboratory safety manual and other safety-related information;
- Maintain up-to-date chemical inventories;
- Correct or arrange for the correction of any unsafe conditions identified within the work space through either self-inspections or inspections by EHS or other authorized safety professionals;
- Contact EHS on any work-related injury/illness, exposure or near-miss incidents;
- Ensure proper disposal of hazardous materials according to University procedures;
- Investigate the circumstances surrounding a workplace accident and take steps to avoid recurrence;
- Maintain compliance with UF policies and procedures.

Individual laboratory workers are responsible for their safety and the safety of their co-workers and visitors to their laboratories. All staff must demonstrate this responsibility in their actions and attitudes. It will be each laboratory worker's responsibility to:

- Follow campus and laboratory practices, policies, safety manuals and SOPs as outlined in the University and Laboratory CHPs;
- Attend all safety training as required by EHS, the Principal Investigator and/or designee;
- Perform procedures and operate equipment that they have been explicitly authorized to use and trained to use safely;
- Wear appropriate lab attire and PPE;
- Develop good laboratory hygiene habits such as handwashing, housekeeping, maintaining PPE in good condition, etc.;
- Dispose of hazardous waste according to university procedures;
- Report unsafe acts, injuries, spills, and near-miss incidents to the Principal Investigator.

Hazard Identification

As defined by the Occupational Safety and Health Administration's (OSHA's) Hazard Communication publication, a hazardous chemical is "any chemical which can be classified as a health hazard, a physical hazard, a simple asphyxiant, a combustible dust, a pyrophoric gas or a hazard not otherwise categorized." The Globally Harmonized System (GHS) of the Classification and Labeling of Chemicals was developed by the UN, and adopted by OSHA in 2012, to ensure the safe production, transport, handling, use and disposal of hazardous materials. The system provides a simplified approach of communicating hazards in a uniform

way through the use of 9 pictograms, 2 signal words, 72 hazard statements and 116 precautionary statements.

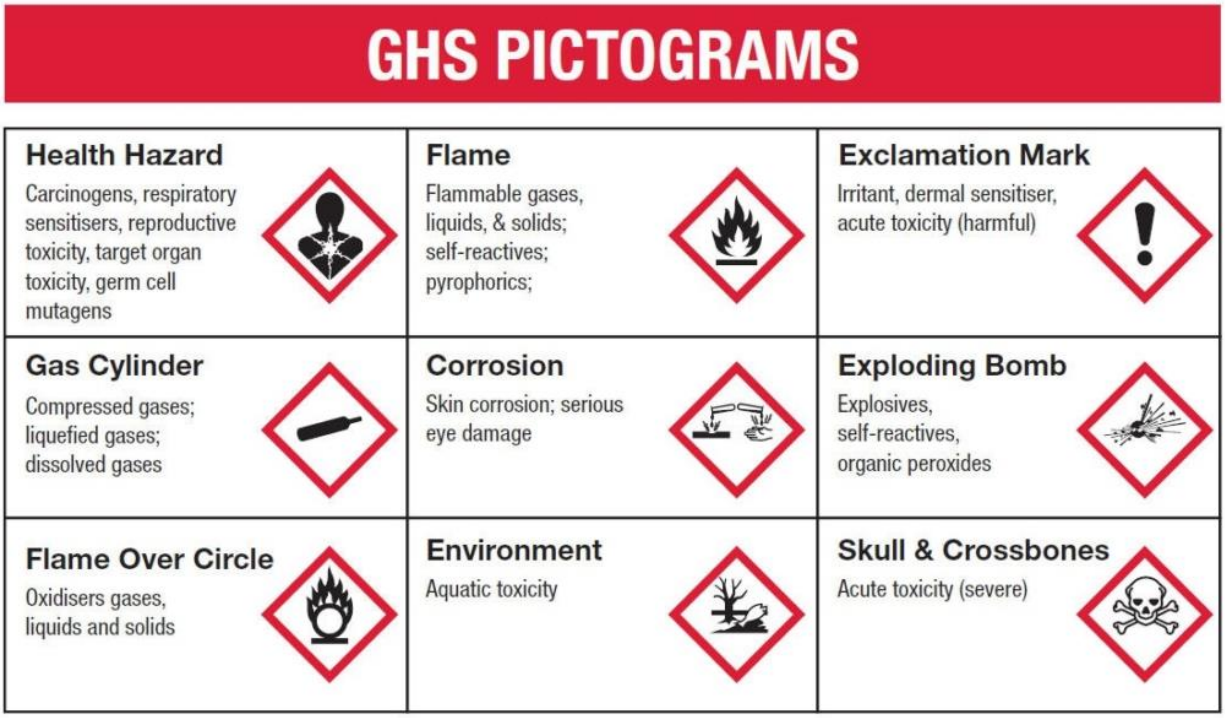

Figure 1. GHS Pictograms

Labels

Chemical manufacturers are required to use the GHS labeling system for the primary chemical container labels. There are six elements required in a GHS label:

1) The signal word ‘Danger’ or ‘Warning’ indicating the hazard level
2) Applicable GHS pictograms
3) Manufacturer information
4) Precautionary statements describing general preventative, response, storage or disposal precautions
5) Hazard statements that describe the nature of the hazardous products and the degree of hazard
6) Product name

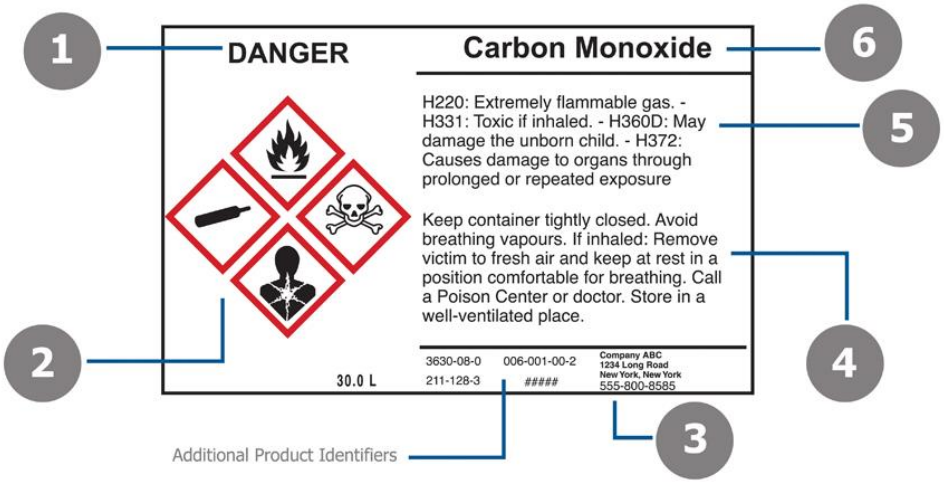

Figure 2. GHS Label

All substances transferred from an original container to a secondary container must be clearly labeled, including, flasks, beakers, etc. If abbreviations are used, a reference list of the abbreviations must be posted in the lab.

Safety Data Sheets

The Safety Data Sheet (SDS – formerly known as MSDS) is divided into 16 sections providing important information about hazards and safety precautions of a specific chemical or mixture. The 16 sections include:

- Section 1: identification of the chemical and supplier information
- Section 2: hazard identification
- Section 3: composition and ingredient information
- Section 4: first-aid measures
- Section 5: fire-fighting measures
- Section 6: accidental release measures
- Section 7: handling and storage
- Section 8: exposure control and personal protection
- Section 9: physical and chemical properties
- Section 10: stability and reactivity
- Section 11: toxicological information
- Section 12: ecological information
- Section 13: disposal considerations
- Section 14: transport information
- Section 15: regulatory information
- Section 16: other information

As required by OSHA's Hazard Communications Standard, an SDS must be available for each chemical used or stored in the laboratory. These can be accessible online, in a shared folder/drive, through the inventory management system or via hard copies for laboratory staff to

review at any time. The SDSs must meet the GHS formatting. Old Material Safety Data Sheets (MSDS) are not acceptable.

Section 2 includes information on GHS's standardized system of dividing chemicals into classes and categories. Each class (flammable, carcinogen, oxidizer, etc.) has one or more associated categories indicated by a number or letter (refer to Figure 3 for example). Lower numbers indicate a higher hazard. Detailed information on the hazard classes and categories are found the official GHS website.

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE GASES - Category 2
GASES UNDER PRESSURE - Liquefied gas
ACUTE TOXICITY (inhalation) - Category 4
SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1 AQUATIC HAZARD (ACUTE) - Category 1

Hazard Classification

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : Flammable gas.
May form explosive mixtures with air.
Contains gas under pressure; may explode if heated.
May displace oxygen and cause rapid suffocation.
Harmful if inhaled.
Causes severe skin burns and eye damage.
Very toxic to aquatic life.

Precautionary statements

General : Read and follow all Safety Data Sheets (SDS'S) before use. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction. Always keep container in upright position. Approach suspected leak area with caution.

Prevention : Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing gas. Wash hands thoroughly after handling.

Figure 3: Example SDS – Section 2

Notice Boards

Laboratories, chemical storage areas and other potentially hazardous work areas shall have a notice board at all entrances into the workspace. These notice boards shall have stickers identifying the categories of potentially hazardous materials found in the lab and be considered a warning of the potential hazards. An emergency contact information sticker shall also be attached and completed to identify at least 2 individuals to contact in case of emergency. This Emergency Call List shall provide the names and after hours phone numbers of those

individuals who will know the chemicals, gases and other hazards that may be affected by an emergency in the laboratory.

Hazard Assessment

Each Principal Investigator will be responsible for assessing the hazards in the work space by completing the LATCH assessment in Gator TRACS. The PI may assign a designee to complete the hazard assessment, but the assessment must be approved by the PI overseeing the space.

The assessment will identify the potential hazards associated with the work and provide suggested methods used to mitigate the hazard. Once the hazards are identified, it is important to determine the associated risk. For example, the risk associated with using 1 mL of hydrochloric acid will be different than the risk involved with using 500 mL of hydrochloric acid. The risk assessment matrix below may assist with determining the level of risk associated with an activity.

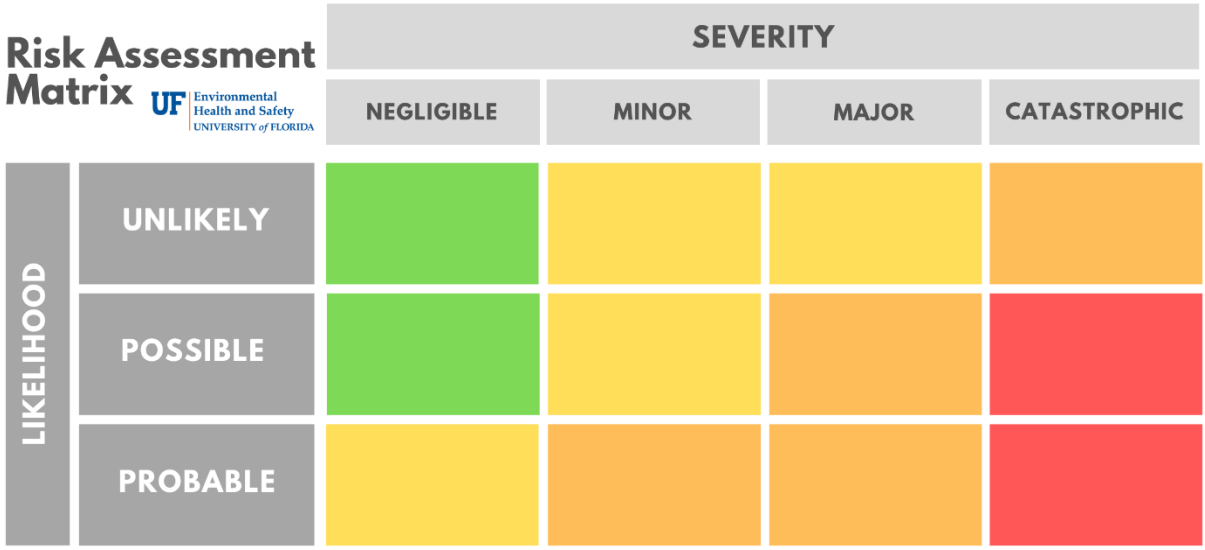

Figure 4.Risk Assessment Matrix

Any new potential hazards associated with the change of scope of work must be assessed and documented in Gator TRACS by completing a new LATCH hazard assessment. It is expected that the lab will also conduct a new risk assessment.

Hierarchy of Controls

Once the hazard and risks have been identified, the next step is to determine the appropriate control methods. The hierarchy of controls classifies control methods from most effective to least effective. When the use of hazardous chemicals is necessary, the preferred controls are those which remove the hazard from the workplace or place a barrier between the worker and the hazard (engineering controls) followed by work practices and then PPE.

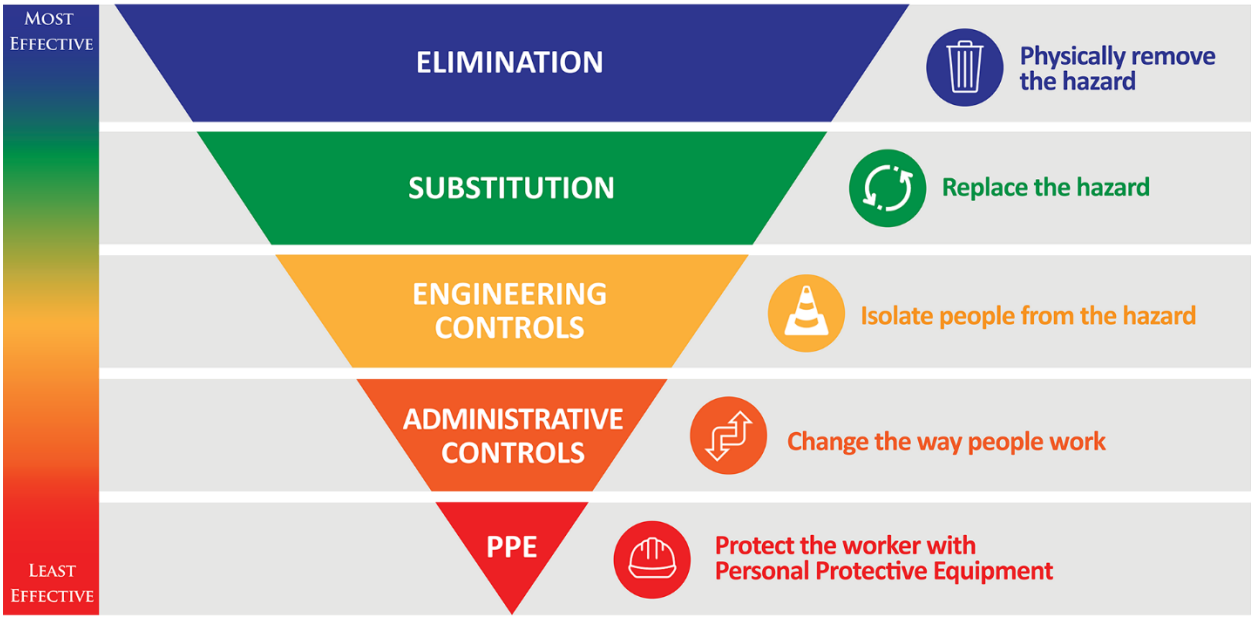

Figure 5. Hierarchy of Controls

Elimination/Substitution of Hazards

When planning research or clinical laboratory activities, consider the hazards of the chemicals that will be used. If possible, select an alternative procedure that uses an alternate, less hazardous chemical or that substitutes a less hazardous form of the same chemical. In addition, limit the quantity of chemicals used when possible; small scale or pilot experiments are preferred.

Engineering Controls

Devices or systems which remove the hazard from the workplace or place physical barriers between the staff member and the hazard, known as "engineering controls", will be employed to minimize or eliminate potential hazards in all labs. These may include fume hoods, biological safety cabinets, glove boxes, shields, increased ventilation, point source vapor collection, etc.

Chemical fume hoods are the primary engineering control devices used to protect personnel and the laboratory environment from hazardous or irritating chemicals that may become airborne through volatilization or aerosolization. All work shall be performed a minimum of 4 inches back from the front edge of the hood. The sash should be lowered to the prescribed height as designated on the EH&S hood profile sticker attached to the face of the hood. The sash must be fully closed when there is no activity happening in the fume hood.

EH&S will profile all fume hoods at least annually to ensure that the required face velocity and airflow are functioning as required. If, for any reason, the hood is not working correctly, all work in the hood must cease until the hood has been repaired. If the hood is not functioning properly, a work order shall be submitted to IFAS Facilities Operations, Health Center Facility Services, or the Work Management Center depending on the location of your fume hood. The lab staff is responsible for clearing of all chemicals and equipment from the hood and cleaning any contamination from the hood's surfaces prior to repairs. Facilities Services may not be able to

repair the fume hood if proper cleaning and decontamination has not been conducted by the lab.

Administrative and Work Practice Controls

Administrative controls are work procedures and policies designed to lessen the threat of a hazard.

Standard Operating Procedures (SOPs) complement the risk assessment with written procedures that explain how to utilize and manage hazardous materials and procedures to prevent and minimize health and safety concerns. Once the hazards are identified, the risk is calculated, and the control measures are determined, the information must be documented in a SOP as part of the lab-specific chemical hygiene plan. SOP templates and examples can be found on the EH&S website. Particularly hazardous substances require additional planning and considerations. OSHA defines particularly hazardous substances as carcinogens, reproductive toxins, or substances with high acute toxicity. The table below includes a list of particularly hazardous chemicals, as defined by EH&S, which necessitate additional requirements for SOPs. These requirements include establishment of a designated area, use of containment devices such as fume hoods or glove boxes, procedures for safe removal of contaminated waste and decontamination procedures.

Table 1. Particularly Hazardous Chemicals

Criteria for Particularly Hazardous Chemicals Based on GHS* Labeling – found in Section 2 of the SDS	
Select Carcinogens	• GHS Carcinogenicity category 1A or 1B • IARC** Group 1 • NTP's*** "Known to be Human Carcinogens" • OSHA-listed carcinogens • GHS category 2 AND IARC Group 2 (A or B), AND NTP "Reasonably Anticipated to be Human Carcinogens"
Reproductive Toxins	• GHS Category 1A or 1B
Chemicals Having High Acute Toxicity	• Acute toxicity by inhalation or dermal exposure GHS category 1 or 2 • Acute toxicity by oral exposure GHS category 1 • Specific Target Organ Toxicity—Single Exposure GHS category 1
Reactive & Explosive Chemicals Considered Particularly Hazardous	• Oxidizing liquid or solid GHS category 1 • In contact with water releases flammable gas GHS category 1 or 2 • Pyrophoric liquid or solid GHS category 1 • Explosives—unstable or divisions 1.1—1.3 • Explosive when dry, or explosive with or without air contact • Self-reactive or organic peroxides—Type A or B • Self-heating category 1

*GHS = Globally Harmonized System
**IARC = International Agency for Research on Cancer
***NTP = National Toxicology Program

Training - All employees, students, and affiliates of research spaces must complete required training at the time of initial assignment to the lab and prior to assignments involving new exposure situations. Some training courses may require regular updates or renewals. EH&S training is registered and completed using the MyTraining platform. A list of EH&S training can be found here. Additionally, lab staff must receive lab-specific training conducted by the Principal Investigator (or another designated and knowledgeable individual). A suggested lab-specific training checklist can be found here.

Rules and Policies –The Laboratory Safety Manual dictates the rules, policies, and expectations for working in a scientific laboratory at UF. Additionally, you may find on the EH&S website the Biological Safety Manual, the Laser Safety Manual, and the Radiation Control Guide.

Procurement Controls involve controlling personnel exposures by making chemical purchasing decisions that enhance workplace safety. For example, labs shall:

- Order only needed amounts – order an amount that will be used in the foreseeable future and avoid ordering larger quantities merely for the bulk discount. Having a larger amount on hand increases the risks to health, the environment, or property in the event of an incident.
- Order a less hazardous form of the same chemical – Use the logic below to help choose the least hazardous physical form that will work for your application.
    - Dilute solutions are generally safer than more concentrated solutions.
    - Aqueous solutions are generally safer to handle than powders requiring reconstitution.
    - Pellets, tablets, granules, or flakes are generally safer to handle than powders.
- Purchase the chemical in a safer container – order chemicals in shatter-resistant containers or other containers that enhance workplace safety.
- Check existing inventory before ordering.
- Check with the EHS sponsored Chem Swap program for unused chemicals that are available free-of-charge.

Standard Operating Procedures (SOPs) complement the risk assessment with written procedures that explain how to utilize and manage hazardous materials, processes, and procedures to prevent and minimize health and safety concerns. They are a required element of the lab-specific chemical hygiene plan.

Proper Lab Attire and Personal Protective Equipment (PPE)

Proper lab attire and PPE for work with hazardous chemicals includes lab coats, suitable/compatible gloves, eye protection, sturdy, full coverage shoes and clothing that fully covers the legs. Additional PPE shall be worn depending on the hazard and risk assessment and will be described in the work area-specific SOP. PPE shall be used by staff members as a final means of barrier protection against hazards. The PPE shall be fit to the individual and be specific for the hazard. Staff members must be trained in the use and wearing of the PPE. PPE may include specific gloves, safety glasses/goggles, face shields, flame retardant lab coat,

gowns, aprons, and under special conditions, respirators. Manufacturer's glove compatibility charts must be consulted to ensure that the gloves that are intended to be worn will protect the wearer. The Principal Investigator and lab staff are responsible for PPE maintenance including inspection, care, cleaning, repair, and proper storage. PPE that is not performing up to manufacturer's specifications, such as eye wear with scratched lenses that have lost their ability to withstand impact, must be discarded.

If there are any concerns about the need for a respirator, please contact EH&S so an evaluation may be made. If there is a need for a respirator, the individual(s) will be placed into the Respiratory Protection Program. This will require a medical evaluation, proper fit testing of the respirator and training on use, care and maintenance of the respirator.

Chemical Storage and Transport

The following sections highlight general rules for storing and transporting chemicals. Please refer to the Laboratory Safety Manual for more detailed information.

General Rules for Chemical Storage

- Do not store liquid chemicals above shoulder height of the person utilizing the chemical.
- Flammable chemicals in amounts exceeding 10 gallons must be stored in flammable storage cabinets or safety containers.
- Containers of liquids may not be stored on the floor unless they are placed in tubs or other leak-proof secondary containment.
- Excessive chemical storage in hoods is not acceptable; this practice interferes with the airflow in the hood and reduces the available workspace.
- Store chemicals in compatible storage groups, and away from incompatibles – compatibility information should be included on the chemical's SDS. Refer to the Laboratory Safety Manual for more guidance.
- Flammable materials may only be stored in refrigerators or freezers designed for flammable storage.
- Chemical waste shall be placed at the designated accumulation area, in appropriate receptacles, properly labeled and segregated by hazard class.
- Due to the lack of ventilation/recirculated ventilation, cold rooms cannot be used for the storage of hazardous chemicals or asphyxiants.
- Compressed gas cylinders must be secured by use of chains, straps, racks, base plates or carts (regardless of cylinder size) anytime they are in use, being moved or stored.

Chemical Transport within the Lab

- Containers and bottles must always be labeled.
- Always use appropriate chemical resistant gloves and eye protection.
- Large containers or especially hazardous chemicals must be carried in a secondary container.
- Never move visibly degrading chemicals and containers. Report these to your lab supervisor or PI. Contact EH&S Hazardous Materials Management at 392-8400 for advice or disposal.
- Be aware of your surroundings: potential trip hazards, other workers, etc.

- Spill absorbent materials and SDS for the chemicals must be available at all times.

Chemical Transport from Lab to Lab

In addition to the parameters listed for general chemical transport, the following protocols apply for transport of chemicals outside of the lab environment.

- Use sturdy carts for transporting multiple, large, or heavy containers; the cart shall have wheels large enough to negotiate uneven surfaces without tipping or stopping suddenly.
- Carts used for secondary containment must have a liquid-tight tray with lips on four sides.
- Chemicals should not be transported during busy times, such as during class changes, lunch break, etc.
- Hazardous chemicals should be transported on freight elevators, wherever possible to avoid exposure to persons on passenger elevators.
- As a general rule, gloves are not to be worn outside the lab. However, if gloves are necessary for transport, wear gloves on one hand only and use the ungloved hand to open doors and push elevator buttons, etc.
- Never leave chemicals unattended.
- Materials that are unstable, explosive, or extremely or acutely hazardous must not be moved before contacting EH&S.
- Transport cylinders only on a hand truck or other cart designed for such purpose; cap valve must be in place and secured when transporting cylinders.

Chemical Inventory

Tracking chemical use in the workplace reduces waste and associated chemical waste-handling costs for the University. Emergency responders need to know what hazardous chemicals are stored in UF facilities when responding to a fire or spill. During emergency events, EH&S responders will provide chemical inventory data to emergency responders. Additionally, accurate inventories of hazardous chemicals are required for compliance with regulatory agencies such as the Dept. of Homeland Security, Environmental Protection Agency, US Dept. of State, and the Florida Dept. of Environmental Protection. For these reasons, laboratories, shops, and studios must maintain an accurate inventory of all chemicals in the Gator TRACS Chemical Inventory module and the inventory will be reviewed at the time of the safety survey.

Chemical Waste Disposal and Spill Control

EH&S will dispose of hazardous chemical and radioactive waste. A pick-up request must be submitted, with a listing of the substances that will be disposed. Labs must adhere to the Satellite Accumulation Area Requirements for hazardous wastes paying special attention to waste labeling. Hazardous waste labels are available through EH&S at no charge. Label all containers accurately, indicating the constituents and approximate percentage of each and marking the category of hazard(s) present. The concentration of the constituents must add up to 100%. Should you use your own label, mark all containers conspicuously with the words “HAZARDOUS WASTE” and indicate the category of hazard(s) present (i.e. Flammable, Oxidizer, Corrosive, Reactive, Toxic). Spills and contaminated areas should be cleaned by lab staff if they have the correct spill control material, have been trained in proper and safe handling

of the spilled material and can perform the cleanup safely. If there is any concern about the spill clean-up, the lab staff shall call EHS to have the spill and area cleaned. All lab staff generating hazardous waste must take the Hazardous Waste Management training (EHS809) on a yearly basis. The assigned hazardous waste manger must take the instructor-led version annually.

Monitoring of Hazardous Exposures

Personnel monitoring shall be performed if there is reason to believe that the exposure level of any chemical that may exceed the action level or Permissible Exposure Limit (PEL). Monitoring will be performed by EH&S staff or their designee. Results of the monitoring will be discussed with the affected individual(s).

Medical Consultation and Examinations

Always call 911 for a medical emergency. Non-emergent medical attention or medical monitoring is available to all who work with hazardous chemicals in the laboratory, under the following circumstances:

- Whenever signs or symptoms associated with exposure to a hazardous substance develop;
- When exposure monitoring reveals an exposure level above the action level for an OSHA regulated substance for which there are exposure monitoring and medical surveillance requirements;
- Whenever an event takes place where employees are exposed to hazardous substances (i.e. - chemical spill, release, explosion, etc.);
- Whenever an eyewash or safety shower has been used as the result of a spill or splash;
- When there is the need to wear a respirator or when there is potential animal contact.

For non-life threatening work-related injuries or illnesses involving chemicals, employees shall call AmeriSys at 1-800-455-2079. AmeriSys is the State of Florida's medical case management provider and charged with directing injured workers towards the proper care facility. Treatment for any non-life threatening work-related injury or illness must be authorized by AmeriSys prior to obtaining medical treatment. Self-identify as either an employee or UF Volunteer and provide your UF ID number. It is highly recommended that you bring with you a copy of the safety data sheet, concentration, and volume of the chemical hazard when you visit the care provider in order to expedite treatment.

The medical consultations and examinations will be provided at no charge to the employee, without loss of pay and at a reasonable time and place.

Accident Reporting

In a medical emergency, please call 911. Please note that all lab staff should know the physical address of the building and lab room number. It is recommended that this information be posted near the lab's phone. Notify your supervisor immediately. Accidents can be reported to EH&S by the submission of the Injury Investigation Report form.

Failure to Comply

EH&S will conduct a Safety Survey of each research area or laboratory on a periodic basis (typically once a year). The survey will evaluate chemical, physical, radiological, biological and general safety in addition to a LATCH review. During this survey, any safety deficiencies will be noted in Gator TRACS by the surveyor and explained to lab staff. A link to the inspection report is then sent to each Principal Investigator identifying any concerns and the required corrections. The survey report and corrective actions will also be posted in Gator TRACS for all roster members to review. Corrective actions need to be addressed within 3, 7, 14 or 30 days depending on the severity of the deficiency. Follow-up surveys may be performed.

The following steps will be taken if the safety deficiencies are not addressed in a timely manner (extensions may be granted on a case-by-case basis):

- Once a corrective action is 15 days past due, the EH&S Coordinator who conducted the safety survey will send an email reminder with instructions on how to close open items. If more time is needed to address the issue, the lab may request a deadline extension through Gator TRACS.
- After one week, the program manager will send an additional email reminder if the corrective action has not been addressed or a deadline extension has not been requested.
- If there is still no response or extension request after an additional week, the Associate Director for Research Services will email a final reminder to the Principal Investigator. The issue will be referred to the Department Chair if there is no response after that point.