I affirm that I have read the laboratory's Chemical Hygiene Plan and the laboratory's Safety Operating Procedures, and received the Research Laboratory Training

Principal Investigator ____

Printed Name	Signature	Date

Chemical Hygiene Plan

Chemical Hygiene Plan for:

Building and Room Number(s):_____

Principal Investigator: _____

Contact Numbers: _____

Department: _____

Street Address: _____

Division of Environmental Health and Safety
4202 E. Fowler Ave, CRS 104
Tampa, FL 33620
(813) 974-4036
September 2009

Preface

The University of South Florida's Laboratory Safety Task Force (LSTF) was formed by the Provost and given the responsibility to advise the University administration on all matters pertaining to safety in research and teaching laboratories. While the University of South Florida is not governed by Occupational Safety and Health Administration (OSHA), the task force used the *Occupational Safety and Health Standards: Occupational Exposure to Hazardous Chemicals in Laboratories* (29CFR1910.1450(e)(3) and Appendix A) as a resource to revise the University of South Florida's Chemical Hygiene Plan.

The Chemical Hygiene Plan presents a broad outline of chemical safety practices, and will be supplemented with other documents. These supporting documents will be narrow in scope and provide much more detail. They will cover such items as waste procedures, how to use safety equipment, and what to do in the event of an emergency. Additional documents will be provided as needed.

CHEMICAL HYGIENE PLAN

Everyone that participates in laboratory activities at the University of South Florida has a responsibility to apply safe laboratory practices. Hazardous chemicals, if used inappropriately, could cause harm to laboratory workers, custodial staff, maintenance workers, and students. The Chemical Hygiene Plan's goal is to inform laboratory workers as to the dangers associated with hazardous chemicals, and how to avoid harmful incidents. Laboratory personnel should minimize their exposure to all chemicals since few chemicals are without hazard. After reading the Chemical Hygiene Plan and associated documents, laboratory workers will be better prepared to work safely with hazardous chemicals.

A Chemical Hygiene Plan (CHP) specifies procedures, laboratory equipment, personal protective equipment and work practices that minimize risk for employees, laboratory personnel, students, and volunteers from the health hazards associated with the use of hazardous chemicals in the workplace. *Hazardous chemicals* are any substance that has chemical or physical properties that can produce harm to persons or property. Hazardous chemicals include, but are not limited to toxins, carcinogens, toxicants, reproductive toxicants, irritants, sensitizers, hepatotoxicants, nephrotoxicants, neurotoxicants, embryotoxicants, agents which act on the hematopoietic systems, and agents which damage the lungs, skin, eyes, or mucous membranes. Hazardous chemicals also include flammables, corrosives, combustibles, water and air reactives, and pressurized gases.

The CHP applies to all "chemical" laboratories, as well as the individuals working or studying in these laboratories. A chemical laboratory for the purposes of the CHP is defined as any facility designated for use in teaching, research or service activity, where chemical agents are used, or stored. Examples of such facilities would be research laboratories using or storing chemicals; art studios that use paints and solvents; ceramic studios, teaching laboratories that use or store chemicals; and photography dark rooms. If the activities in the room are not specifically named in this list, but similar activities occur, then the CHP applies.

The CHP addresses chemical safety on campus including receiving, use, storage, and disposal. Not all laboratory safety concerns deal with chemicals, therefore, it is important for laboratories to adhere to established University of South Florida policies, practices, and program materials regarding biological, radioactive, physical, and electrical hazards. Contact the Division of Research Integrity and Compliance (DRIC) Biosafety Office regarding infectious agents, biological toxins, Select Agents and Toxins, and recombinant DNA work; the DRIC Radiation Safety Office for research concerning radioisotopes, and the DRIC Institutional Animal Care and Use Committee (IACUC) for research incorporating animals. Contact the Division of Environmental Health and Safety for information regarding physical and electrical hazards.

The Chemical Hygiene Officer (CHO) is the individual within Environmental Health and Safety (EHS) responsible for laboratory safety. The CHO can delegate duties to

individual(s), Safety Supervisors, designated by the Dean within a University unit. The CHO then works with the Safety Supervisors to implement the provisions of the Chemical Hygiene Plan. The responsibilities of the Chemical Hygiene Officer are fully described in section VI of this document.

I. Laboratory Chemical Safety Training

Minimally three types of laboratory safety training must take place. The first two types of training are to prepare research laboratory personnel to work safely in the laboratory. The third type of training prepares students to safely participate in teaching laboratories. Safe Laboratory Practices Training will be conducted by the Division of Environmental Health and Safety on an annual basis, and provide materials and information ensuring safe laboratory practice. Research Laboratory Safety Training is the responsibility of the Principal Investigator, and involves items specific to the laboratory and the chemicals used in that laboratory. Teaching Laboratory Safety Training will be given to students participating in laboratory classes by the Teaching Assistant or Instructor.

- Safe Laboratory Practices Training: On an annual basis, Principal Investigators, research laboratory personnel and teaching assistants/instructors must attend a training session conducted by the Division of Environmental Health and Safety. This training session will inform them of best laboratory safety practices including personal protective equipment, mechanical control, chemical use and storage procedures, chemical waste procedures, and emergency incident procedures. EHS will maintain a database of those individuals completing the training, and share that information with the Safety Supervisor.

- Research Laboratory Safety Training: This training must be conducted by the Laboratory Supervisor or Principal Investigator, or his/her designee. Each laboratory worker must receive training at the time of their initial assignment to the laboratory, or prior to assignments involving new exposure situations. All laboratory personnel must be informed of the hazards presented by the chemicals used in the laboratory.

  Research Laboratory Safety Training will inform laboratory personnel of the physical and health hazards associated with chemicals in the laboratory, as well as signs and symptoms associated with exposure to these chemicals. Additionally, this training will provide laboratory personnel with measures to protect themselves from these hazards, including appropriate work practices, emergency procedures, and personal protective equipment. At this time the PI must also inform the laboratory personal of building evacuation procedures. Research Laboratory Safety Training requires that laboratory personnel read the Chemical Hygiene Plan and Safety Operating Procedures for their respective laboratory.

Upon completion of the Research Laboratory Safety training the laboratory worker must sign and date the Training page located at the front of the Chemical Hygiene Plan.

- Teaching Laboratory Safety Training: The Teaching Assistants or Instructors of laboratory classes must provide a training session to their students during the first class meeting. They should use the guidelines located in Appendix I as the basis for their presentation. Students must sign the guidelines for each class in which they are enrolled. The signed guidelines are to be kept for one year within the Department, and be provided to EHS upon request.

II. Safety Operating Procedures and Safe Laboratory Practices

Each Principal Investigator (PI)/ Laboratory Manager holds the responsibility of preparing written Safety Operating Procedures (SOP) for laboratory activities involving hazardous chemicals. SOPs can be procedure or process specific (ex. distillations, reactions, synthesis); or hazardous chemical specific (ex. Hydrofluoric acid, formaldehyde, benzene); or hazard class specific (ex. acids, bases, flammables, reactives, oxidizers). The Chemical Hygiene Officer (CHO) will work with the PI/ Laboratory Manager and the Safety Supervisor in determining if a SOP is needed. One tool that will be used for this determination will be the Hazardous Inventory Tracking System. In the event of a new procedure or a change in procedure involving chemical use, a new SOP must be written or the previous SOP must be revised.

Instructors must provide teaching assistants with SOPs regarding experiments conducted in class, and this information must be passed on to the students. This is particularly important in the event that a student may have particular health issues that need addressing.

Examples of SOPs are available for use on the EHS web site, and a SOP form is provided in Appendix II. Specific items in the SOP may include, but are not limited to:

- Names of the chemicals used in the procedure
- Research procedures when using hazardous chemicals
- Hazards associated with exposure to chemical
- Personal hygiene procedures to reduce exposure
- Engineering controls to include ventilation requirements and the presence of eyewash and emergency shower stations
- Use of personal protective equipment
- Hazardous waste handling and disposal procedures (Chemical Waste Addendum)
- Laboratory personnel training
- List of all emergency equipment, their locations, and emergency contacts
- Decontamination procedures in case of a spill or exposure
- Extremely hazardous chemicals are to have access restrictions and special training for those with access.

SOPs must be made available to laboratory personnel. New laboratory personnel must read the SOPs specific to the activities they will be conducting. New laboratory personnel must be informed of hazards that exist in the laboratory, and participate in both annual Safe Laboratory Practices training and Research Laboratory Safety training.

Extremely Hazardous Chemicals

In some instances, the CHO may determine that a particular chemical is extremely hazardous. These chemicals include but are not limited to "select carcinogens," reproductive toxicants and substances which have a high degree of acute toxicity. In such instances the SOP must:

- Restrict access to extremely hazardous chemicals to a designated area.
- Require notices be posted on laboratory entrances when extremely hazardous chemicals are in use.
- Require other individuals in the laboratory be warned that an extremely hazardous chemical is in use.
- Require individuals using extremely hazardous chemicals have special training in use of the chemical.
- List the appropriate engineering control devices and personal protective equipment.
- List waste removal procedures.
- List decontamination procedures in the event of a spill.
- Consider limiting use of extremely hazardous chemicals to peak working hours. In the event of an accident, others are available to help.

Safe Laboratory Practices

In addition to the SOPs, these safe laboratory practices must be followed.

- Environmental Health and Safety must be informed if the Laboratory owns any chemicals that have the potential to become unstable or explosive over time. EHS can be contacted at (813) 974-4036.
- Lab workers must wear appropriate Personal Protective Equipment such as lab coat, goggles, face shield, and gloves when working with chemicals.
- No eating or drinking will be allowed in the laboratory. Also food and drinks are not to be stored in the laboratory.
- No mouth pipetting allowed.
- A chemical inventory must be kept for each laboratory. The Hazardous Inventory Tracking System (HITS) is currently being implemented by Environmental Health & Safety. HITS will provide an online inventory of the chemicals contained within the laboratory. Until HITS is fully implemented, the laboratory will be responsible for maintaining a paper copy of their chemical inventory. (See the Environmental Health & Safety Web Site for examples).

- Laboratory personnel must have access to Material Safety Data Sheets (MSDS) for each chemical used in a procedure. Assume that any mixture will be more toxic than the most toxic component. MSDS are available from the manufacturer. MSDS in electronic format are also available through HITS.
- Laboratory personnel must know where the safety equipment is located and how to use the safety equipment. Safety equipment includes, but is not limited to fume hoods, eyewash stations, first aid kits, spill kits, gloves, lab coats, goggles, and fire extinguishers (See sections III and IV). Locations of safety equipment, if not visible must be posted. Any hazardous equipment or unusual hazardous areas must be posted.
- Emergency telephone numbers for Principal Investigators and supervisors must be prominently posted.
- All containers, including chemical waste receptacles must be labeled describing the contents of the container.
- Chemical spills and accidents must be reported to the supervisor (see Chemical Spill Addendum, Student Injury Addendum, and Worker's Compensation Addendum). The supervisor must contact Environmental Health & Safety. All accidents must be reported to Environmental Health & Safety within 24 hours, and the appropriate forms filled out. Forms are located on the Environmental Health and Safety web site.

III. Control Measures to Reduce Exposure

An important aspect to providing a safe laboratory environment requires the recognition of hazardous chemicals before accidents and injuries occur. This includes knowing what hazardous chemicals are in the lab as well as what precautions to take in using, storing and disposing of them. The first step is the maintenance of a chemical inventory. The Chemical Hygiene Officer will then work with the Principal Investigator or the Safety Supervisor to recognize what substances are hazardous, and make decisions for appropriate use, storage and waste procedures. An SOP must exist for these situations. The Hazardous Inventory Tracking System (HITS) will be used to assist in the recognition of hazardous chemicals. Laboratories must provide immediate access to Material Safety Data Sheets (MSDS), Chemical Hygiene Plan, and Safety Operating Procedures. MSDS can either be in a print or electronic format as long as everyone in the laboratory can access them. MSDS are available electronically through HITS.

The Chemical Hygiene Officer will assist the Principal Investigator in determining the safety needs such as choosing personal protective equipment, waste disposal, and decontamination procedures. Additional documentation that further clarifies the above conditions and requirements can be obtained from the Division of Environmental Health and Safety.

IV. Fume Hoods and Other Protective Equipment

Fume hoods and other protective equipment are referred to as engineering controls. They are utilized by laboratory personnel to minimize or eliminate potential hazards when working with chemicals.

Fume Hoods

Fume hoods will be inspected annually by Environmental Health and Safety to ensure that the average face velocity is greater than minimum standard of 80 feet per minute. Test results are posted on the fume hood along with the last test date. If it is suspected that there is inadequate face velocity, then work in the hood must stop and EH&S must be contacted immediately. Likewise, if the low flow alarm is sounding or the continuous monitoring device is showing "low flow," Physical Plant or EH&S must be contacted.

The following apply to the use of fume hoods.

- The fan must be kept on whenever a chemical is inside the hood, whether or not any work is being done inside the hood.
- The hood sash should be kept closed at all times, unless manipulations of chemicals are being done within the hood.
- Work should be performed a minimum of 6 inches from front edge of fume hood.
- Chemicals, equipment and other materials should not be stored in hoods. This can cause blocked vents or alter airflow patterns which will affect the hood's overall performance.

Safety Showers and Eye Wash Stations

Eye Wash stations and safety showers should be accessible in 10 seconds or less. For strong acids or caustics, eyewash fountains should be adjacent to or within 10 feet (3 meters) of the hazard. Access to eyewash fountains and safety showers must not be restricted or blocked by temporary storage of objects or in any other way. If eyewashes and safety showers are not readily available, difficult to access, or inoperable Physical Plant should be contacted.

Eyewash units should be flushed weekly by lab personnel to test functionality and clear contaminants from the water lines. Safety showers are activated periodically by Physical Plant personnel to ensure adequate performance. Documents posted by the eyewash stations and showers must be dated and initialed upon testing. These documents can be obtained from EHS.

Additional Safety Equipment

In addition to fume hoods, eye wash stations, and safety showers, the laboratory should have available the following items:

- First aid kit
- Appropriate Spill Kit
- Appropriate personal protective equipment such as gloves, goggles, face shields, lab coats.

Further information is available on the Environmental Health and Safety web site and through EH&S training programs.

Under ordinary conditions, respirators should not be necessary in the laboratory. Consult with Environmental Health and Safety before using respirators, including "dust masks." For some respirators the wearer may need to enroll and complete the mandated physical exam, fit testing and training. If a respirator is thought to be needed, call Environmental Health and Safety to request a hazard assessment.

V. Emergency Procedures, Medical Consultation, and Medical Examination

If there is a serious incident such as injury, fire, or chemical spill, call 911 immediately. If the incident is not considered serious, contact your Laboratory Manger or Principal Investigator. If they are not available, then contact your Departmental or College Safety Person, and also call Environmental Health and Safety.

For further clarification on emergency procedures please see the following addendums:

- Worker's Compensation Addendum (employee injury)
- Laboratory/Studio and Field Incident Report Addendum
- Chemical Spill Addendum
- Hurricane Preparedness Addendum
- Emergency Evacuation Addendum

All employees who work with hazardous chemicals have the opportunity to receive medical attention, including follow-up exams, under the following circumstances:

- When an employee develops signs or symptoms associated with a hazardous chemical that they may have been exposed to, they should receive an appropriate medical exam.

- When an event such as a spill, leak, or explosion occurs resulting in the likelihood of a hazardous exposure, medical consultation should be provided to determine the need for a medical examination.

For further clarification on this subject see the Environmental Health and Safety's Worker's Compensation web site.

VI. Implementation of Chemical Hygiene Plan

Environmental Health and Safety (EHS) has the responsibility to monitor compliance and implementation of all safety and environmental regulations. This will include, but is not limited to regulation interpretation, implementation of programs, planning reviews, facility surveys, and training and educational services.

The Chemical Hygiene Officer (CHO), an individual within EHS, is a key component in ensuring the adoption of the Chemical Hygiene Plan throughout the University. The Chemical Hygiene Officer (CHO) is qualified by training or experience, to provide technical guidance in the development and implementation of the provisions of the University of South Florida's Chemical Hygiene Plan. The CHO advises laboratory supervisors and Principal Investigators on safety matters, and in general serves as a focus for the safety concerns of the laboratory staff and students. The CHO also has the capacity to delegate duties to the Safety Supervisor to maintain laboratory safety within the campus units. Duties of the Chemical Hygiene Officer are:

- Provide technical guidance to administrators and other employees to implement the CHP.
- Monitor procurement, use, and disposal of chemicals used in the laboratories (Oversee HITS implementation, training, and maintenance).
- Ensure that safety audits are performed periodically, safety equipment is present and in working condition, chemicals are stored appropriately, and waste maintenance is occurring appropriately.
- Ensure safety training courses are provided on a regular basis.
- Examine circumstances surrounding accidents and work with the Laboratory Supervisor/Principal Investigator to prevent recurrence.

The CHO works closely with the campus units' Safety Supervisor in fulfilling the above responsibilities, and to provide a safe laboratory environment.

The Laboratory Supervisor/Principal Investigator has the overall responsibility to maintain and provide a safe laboratory in respect to hazardous and extremely hazardous chemicals. Duties include:

- Complete Safety Operating Procedures (SOPs).
- Instruct laboratory personnel on potential hazards.
- Provide laboratory personnel with Research Laboratory Safety Training (section I).
- Correct work errors and dangerous conditions.

- Provide proper personal protective equipment, and ensure this equipment is used appropriately.
- Keep a record of safety training attendance.

The Laboratory Supervisor/Principal Investigator has a responsibility to mentor laboratory workers and students in safe laboratory practices. University laboratories not only serve as areas of research, but also training grounds of future researchers.

Laboratory workers have the responsibility of following safe laboratory practices as presented to them by the Chemical Hygiene Plan, the Chemical Hygiene Officer, and their Laboratory Supervisor/Principal Investigator. They have the responsibility to attend training sessions and read the Material Safety Data Sheets for the chemicals they are using. Any conditions deemed unsafe must be reported to the Laboratory Supervisor/Principal Investigator, Safety Supervisor, or Chemical Hygiene Officer. Such reports, suggestions, complaints, or compliments are made with protection of the reporting individual.

The Division of Environmental Health and Safety will be available to assist in the development and implementation of all aspects of the Chemical Hygiene Plan.

Appendix I

Teaching Laboratory Safety Guidelines

University of South Florida
Teaching Laboratory Safety Guidelines

The following Safety Guidelines are to be strictly adhered to in all teaching laboratories. These rules apply to students, teaching assistants, and instructors.

- No food, drinks, or smoking in labs.
- Goggles are to be worn when any chemical, in any amount, is used including preservatives and stains. Goggles must be worn when there is the possibility of an object impacting the eye.
- Appropriate footwear must be worn at all times. The feet must be adequately covered (the foot must be totally covered up to the ankle). Therefore sandals, backless and open-toed shoes are not acceptable.
- Clothing appropriate for laboratory safety must be worn. Clothing (pants or skirt) must be worn which completely covers the entire leg from the waist to the ankle. Clothing (shirt, blouse, etc.) must be worn which completely covers the torso from the waist to the neck. Shoulders must be completely covered and sleeves must be worn that cover the arm from the shoulder to at least halfway to the elbow. Therefore, tank tops, halters, shorts, cutoffs, etc. are not acceptable. Some labs may require the use of a lab coat and/or gloves.
- Long hair should be tied back when using a Bunsen burner.
- Jewelry, particularly dangling necklaces or earrings with the potential to interfere with or be contaminated by an experiment should not be worn.
- Backpacks should be placed in the designated area provided.

Safety Guidelines for Instructors

- Materials are to be disposed of immediately after use and in the proper containers.
- All bottles, flasks etc. are to be labeled completely with full chemical names.
- Never leave an experiment unattended.
- Never leave a solution on a hot plate unattended.
- Hotplates that have been turned off, but are still hot, should have a warning note in front of them.

IF THERE IS A SERIOUS INCIDENT, CALL 911 IMMEDIATELY.
OTHERWISE CONTACT THE TEACHING LAB MANAGER.

I have read the safety guidelines listed above and understand that non-compliance will result in my dismissal from the laboratory until I do comply, and I will not be allowed to make-up missed work resulting from that dismissal.

Sign_____ Course #_____

Print Name_____ Section #_____

Revised4/19/2006

Appendix II

Safety Operating Procedure Template

Safety Operating Protocol

1. Process:	
2. Hazardous Chemical\Class of Hazardous Chemical:	
3. Personal Protective Equipment:	
4. Engineering \ Ventilation Controls:	
5. Special Handling Procedures Storage Requirements	
6. Spill Containment\ Accident Procedures:	
7. Waste Disposal	
8. Special Precautions\ Animal Use:	
9. Required Approvals:	
10. Decontamination:	
11. Designated Areas:	

Example Safety Operating Protocols are available on the Environmental Health and Safety Website

Laboratory/Studio and Field Incident Report Addendum

University of South Florida
Laboratory/Studio and Field Incident Report

This report is to be completed by the Lab Manager/Teaching Assistant/Instructor for any incident that occurs in any University of South Florida affiliated teaching or research laboratory/studio or field research project. An incident means any unplanned event within the scope of a procedure that causes, or has the potential to cause, an injury or illness and/or damage to equipment, buildings, plants or the natural environment. All incidents need to be reported whether they are near misses, serious injuries, or emergencies such as fires and chemical spills. A near miss is an event or situation that could have resulted in an accident, injury or illness, but did not, either by chance or through timely intervention. The completed form must be submitted to Environmental Health & Safety within 24 hours of the incident. This report will be used by the University Laboratory & Field Safety Committee and Environmental Health and Safety (EH&S) for training purposes only. This report provides information to take corrective action with laboratory procedures to prevent reoccurrences of similar incidents. As part of this report, EH&S will complete an incident investigation. **Due to medical privacy concerns, no personal identifying information of the person involved in the incident shall be entered or submitted with the form.**

Completed form must be submitted within 24 hours to EH&S; address CRS 104; phone (813)974-4036; fax (813)974-9346.
Due to medical privacy concerns, no personal identifying information of the person involved in the incident shall be entered or submitted with the form
Circle one: Teaching Lab/Studio Research Lab Field Activity Other

Date of Incident: _____ Time of Incident: _____ Location of Incident: _____

Preparer's name: _____ Phone: _____

(1) Incident Description
Describe the circumstances of the incident.

(2) Injury/Illness/Damage to Equipment, Building, Environment
Describe the extent of injuries and/or damage. Exactly where on the body did the injury occur?

(3) Actions Taken: Response/Treatment/Cleanup
a. Describe the nature of the emergency action taken.

b. Did the person seek medical treatment? Yes or no, explain.

c. Were emergency personnel contacted? Yes or No, EH&S, Fire, Hazmat, Police, Medical (Circle one or more choices)

(4) Corrective Action Taken
a. By Preparer.

b. By EH&S.

_____ _____
Date Reviewed by EH&S Name of Reviewer

Chemical Spill Addendum

Hazardous Material Spills/Releases

For the purpose of this protocol the following definitions are provided:

- *Incidental Release(s)*: these are small isolated chemical spills that generally do not present the immediate potential to cause injury/illness or require evacuation other than from the immediate release area and can be contained and cleaned up by staff (Category I) or EH&S (Category II).
- *Emergency Release*: an incident that involves a large quantity of one or more chemicals that have the potential to cause personnel injury/illness, and/or have the potential to cause environment damage.

Category I: is any incidental spill that is contained and of minimal amount and/or low hazard (according to NIOSH pocket guide and/or MSDS, additional valid documentation, etc.) normally to be cleaned up by the work center. Workers are familiar with the material. A Category I Spill is a chemical release in which:

- Material presents no harm to occupants of room and/or work area (building, campus, etc.)
- Lab/work area is equipped with fully stocked spill kit.
- Employee(s) have the appropriate PPE available.
- Employee(s) have been instructed on proper spill cleanup (clean up procedures provided in a formal, documented setting either in the lab or work site or provided by EH&S.)
- Ventilation in the area is maintained.

Note: EH&S will respond to site if doubt exists about severity of the incident and evaluate.

Category II: is a large quantity and/or high hazard chemical release that EH&S staff can safely and effectively remediate. Category II Spills are chemical released in which:

- Material requires that special protective measures must be taken in order to abate.
- Ventilation may be compromised.
- Work area employees are unfamiliar with material.
- Work area is not equipped with necessary clean up tools (absorbent, neutralizer, etc.)
- Work area employees are unfamiliar with clean up procedures.
- Material is able to be detected by available instrumentation and EH&S staff member has been fully trained in its use.
- EH&S staff members are trained on spill cleanup procedures and are currently certified with 40-hr HAZWOPER and/or other necessary instruction as defined by department.
- Upon arrival EH&S may recommend or execute the following:
    - Activate the fire alarm for immediate evacuation of the building.
    - Call 911 for public emergency response services.
    - Recommend University Police notify neighboring buildings of chemical release.
    - Take other appropriate measures necessary to remediate the situation.

Note: EH&S will respond to site, evaluate, advise, cleanup and/or advise and contact other campus department if necessary (when appropriate, staff members will don appropriate PPE).

Category III: is any chemical spill or release beyond the ability of EH&S to handle and will be cleaned up by an outside public agency -- Tampa Fire Rescue- Hazardous Materials Response Team. Category III Spills are chemical releases in which:

- Material requires specialized equipment and/or instrumentation.
- EH&S staff member is unfamiliar or uncertain of material and/or is not fully trained and/or instructed to handle situation.
- Large quantity and/or high hazard (according to NIOSH pocket guide and/or MSDS, additional valid documentation, etc.)
- EH&S staff does not have access to appropriate PPE.
- Ventilation is compromised.
- Situation requires additional assistance from emergency response agencies.
- EH&S will request the following:
    - Activation of the fire alarm for immediate evacuation of the building.
    - Call 911 for public emergency response services.
    - Recommend University Police notify neighboring buildings of chemical release.
    - Take any other appropriate measure necessary to remediate the situation.

Worker’s Comp Addendum

University of South Florida
Worker's Compensation

Contact Information

WC Specialist
Phone: (813)-974-5775

All employees who work with hazardous chemicals have the opportunity to receive medical attention, including follow-up exams, under the following circumstances:

- When an employee develops signs or symptoms associated with a hazardous chemical that they may have been exposed to, they should receive an appropriate medical exam.

- When an event such as a spill, leak, or explosion occurs resulting in the likelihood of a hazardous exposure, medical consultation should be provided to determine the need for a medical examination.

How to Report a Work Related Injury or Illness

Effective January 1, 2009, all work related injuries or illnesses are to be reported by the supervisor or department designee by telephone to:

OptaComp
1(877)518-2583 (toll free)

The injured or ill employee should be present for the call so the employee's injuries or illness may be triaged and the appropriate medical care provided.

In case of emergency, call 911 for immediate medical care for the injured or ill employee. Then, the supervisor or department designee must call OptaComp at 1 (877) 518-2583.

Employee's Responsibility

When an incident occurs, the employee must report all injuries or illnesses to his/her supervisor or department designee immediately (**no exceptions**).

Supervisor's (or Department Designee's) Responsibility – What to Do

1. Call OptaComp at 1(877) 518-2583 to report the injury or illness. Except in cases of emergency, the injured or ill employee must be present with the supervisor when the injury or illness is reported.

2. Complete the Accident Investigation Report for Supervisors (http://usfweb2.usf.edu/usfpers/Forms/Employee_Relations/Accident%20Report.pdf)

3. Have the completed Accident Investigation Report for Supervisors and the following information ready when you call OptaComp to report an injury:
· Injured/ill employee's home address and home telephone number.
· Injured/ill employee's date of birth and social security number.
· Injured/ill employee's date of employment and salary.

4. Once OptaComp has taken the required information from you over the telephone, the intake specialist will assess the employee's medical needs and refer the injured/ill employee to a medical facility as appropriate.

5. Within 24 hours of the injury or illness occurring, send the completed Accident Investigation Report for Supervisors to Human Resources, SVC 2172, Attn: Meica Elridge by campus mail or fax (813) 974-7535.

6. An OptaComp nurse case manager will obtain the results of the initial medical visit including diagnosis, treatment plan and any injury or illness related restrictions. This information will be provided to the supervisor immediately after the initial medical visit. Be prepared to speak with the nurse case manager regarding return to work restrictions.

7. Take prompt action to correct any safety hazards.
For questions regarding the workers' compensation reporting process, contact HR Workers' Compensation Insurance Specialist at (813) 974-5775

SUPERVISOR'S ACCIDENT INVESTIGATION REPORT

TO BE COMPLETED BY THE SUPERVISOR AND FORWARDED TO THE WORKERS' COMPENSATION INSURANCE SPECIALIST IN HUMAN RESOURCES WITHIN 24 HOURS OF THE INCIDENT

USF DEPARTMENT _____

CAMPUS ADDRESS _____

1. Name of Injured: _____GEMSID#_____

2. Sex: ☐M ☐F Date of Birth: _____ Work Telephone #:_____

3. Date of Accident: _____ Time of Accident: _____ AM/PM

4. Employee's Job Title: _____ Length of Experience on Job: ____ (yrs)_____(mos)

5. Location where Accident Occurred: _____ Is it a Laboratory? ☐Yes ☐No

6. Injury Type: ☐ **First Aid** (no medical treatment) ☐ **Medical** (medical treatment required)

7. If applicable, where was medical treatment sought? _____

8. Describe the Accident and how it occurred: _____

_____
_____

9. Describe the injury and part of body affected: (sprain, cut, burn, right, left, arm/foot)
_____
_____

10. Cause of the accident
_____

11. Was Personal Protective Equipment required ? ☐Yes ☐No Was it provided? ☐Yes ☐No

12. Was it being used? ☐Yes ☐No If "No" explain: _____

_____

13. Was it being used as trained by supervisor or designated trainer? ☐Yes ☐No

If "No" explain _____

14. Safety Training provided to the injured? ☐Yes ☐No

If “Yes” date training was completed: _____ If “No” explain_____

_____

15. List Witness(es):_____

16. Interim corrective actions taken to prevent recurrence:_____

_____

Report Date: _____ Prepared by: (print) _____

Title_____

Supervisor Name (print)_____ Phone # _____

Supervisor Signature: _____

Date_____

TO BE COMPLETED BY SAFETY COORDINATOR
Status and follow up action taken by Safety Coordinator:_____
_____
_____

Permanent corrective action recommended to prevent recurrence:
_____
_____
_____

Safety Coordinator Signature: _____Date _____

INJURIES OCCURRING AS A RESULT OF IMPROPER USE OF PERSONAL PROTECTIVE EQUIPMENT OR LACK OF TRAINING CAN RESULT IN A 25% REDUCTION IN YOUR WORKERS COMPENSATION BENEFITS.

MAIL FORM TO WORKERS’ COMPENSATION, SVC 2172, OR FAX TO (813) 974-7535

Revised 1/09

Hurricane Preparedness for Laboratories

Hurricane Preparedness for Laboratories

As you are preparing to leave your laboratory in the event of a hurricane or other natural disaster, USF Environmental Health and Safety recommends the following minimum guidelines:

Chemical Safety

- Label and cap all chemical containers including waste containers.
- Move all chemicals to appropriate storage locations.
- Store water reactives in tightly sealed, waterproof containers.
- Place flammable materials in approved flammable cabinets.
- Remove chemicals from upper shelves and limit storage on bench tops.
- Cap gas cylinders and secure to a permanent fixture using a cylinder strap or chain.
- Ensure refrigerators containing critical temperature-sensitive research materials are plugged into outlets with emergency generator back up.

Fume Hoods

- Close fume hood sashes completely. If the building experiences a complete loss of power, fume hoods may become inoperable.
- Remove all chemicals from fume hood and secure in appropriate storage area.

Equipment

- Unplug all non-essential equipment (i.e. hotplates, heat mantles, vacuum pumps, magnetic stirrers, etc.)
- Turn refrigerators/freezers to coldest setting.
- Ensure that all bench-mounted gas fixtures are in the off position.

Security

- Close and lock all laboratory doors.
- Avoid blocking exits and hallways.
- Update and post emergency contact information for laboratory personnel.

Please protect your laboratory and research equipment. During hurricane season, it is imperative that employees and departments protect and secure their areas. This will minimize damage and loss of research should a hurricane strike the area.

For assistance or additional information, please contact the Division of Environmental Health and Safety at **974-4036.**

Emergency Evacuation Addendum

Emergency Situation

I. In case of fire or emergency situation, call 911 and or use emergency blue phone immediately to notify the fire emergency services and campus police.

Observe the following procedures:

- Know the locations of fire exits in the building. Know the location of fire extinguishers and alarm systems and know how to use them. Fire Safety Training and information is available through Environmental Health & Safety.

- If a minor fire appears controllable, immediately Dial 911 and or use the emergency blue phone to alert campus police. If a person decides to fight the fire. Then promptly locate a fire extinguisher using the P-A-S-S method and direct the agent of the extinguisher toward the base of the flame. (P-A-S-S: pull the pin; aim the nozzle at the base of the flame; squeeze the handle; and sweep the extinguisher from side to side.) If others are with you, have one person make the emergency call while another uses the fire extinguisher. Evacuate all rooms and close the door(s) behind you to confine the fire and reduce the oxygen.

- If an emergency exists, activate the building alarm, yell or shout "fire, fire, fire" and dial 911 and or use the emergency blue phone.

- For large fires do not attempt to fight or extinguish the fire, evacuate all rooms and close all doors to confine the fire and reduce oxygen. Do not lock the doors. Dial 911

- When a building evacuation alarm is sounded, an emergency situation exists. Walk quickly to the nearest exit and alert others to do the same.

- Assist the physically disabled in exiting the building. **Do not use the elevators during a fire.** Smoke is the greatest danger in a fire, so stay low near the floor where the air will be less toxic.

- Once outside, move to a clear area at least 500 feet away from the affected building. Keep streets, fire lanes, hydrants and walkways clear for emergency vehicles and crews. In an evacuation, report to your designated building assembly location. Stay there until an accurate headcount is taken.

- Assist emergency crews as requested.

II. In the event of an actual fire or explosion, EH&S will respond as soon as possible and ensure the following:

- Fire alarm has been activated for immediate evacuation of building.
- If the facility does not have a fire alarm, building occupants are notifying other occupants by yelling "Fire! Fire! Fire!"
- University Police has been called (911)

III. Additionally, EHS will:

- Provide assistance at site of emergency to University Police. The Protocol for EH&S response is as follows:
    - If first to arrive on site, DO NOT attempt to extinguish the fire unless **trained to do so**. If trained, operate the extinguisher using P-A-S-S: pull, aim, squeeze, and sweep (Do not put your life in danger trying to fight a fire above your capabilities.)
    - Assist in assembling all evacuees in an area UPWIND from the hazard unlikely to be used for emergency response activities
    - Assist mobility-impaired persons in evacuating the building
- Provide information regarding fire to State Fire Marshall
- Assist State Fire Marshall in fire investigation
- Advise Risk Management of Property Damage
    - Will notify State of Florida Department of Risk Management for Insurance purposes
    - Will evaluate damage and take digital photos to document event