Grambling, LA 71245

General Safety Manual (Plan)
Revised: October 2019

Table of Contents

Introduction 3
Management Policy Statement 4
General Safety Program 6
Safety Responsibilities 7
Safety Inspections 10
Grambling State University ..... **Error! Bookmark not defined.**
Incident/Accident Investigation 13
Safety Meetings 16
Safety Rules 19
Emergency Preparedness 21
Employee Safety Training 22
Procedures for Setting up a Training Program 23
Sample Lesson Plan 28
Required Records 30
First Aid Requirements 31
Emergency Phone Numbers 33
First Aid Outline 34
Control of Hazardous Materials 41
Driver Safety Program 78
Bonds & Crime 80
Boiler and Machinery 86

Introduction

Grambling State University, in its efforts to provide safe and efficient services to its students, faculty, staff and visitors, has developed and implemented a sixteen-point operational safety and loss prevention plan. This safety plan is detailed in this loss prevention manual. This manual includes information, policies and procedures designed to assist Grambling State University as it complies with LA R.S. Title 39, Section 1543-4.

Many of the safety concepts, policies and procedures contained in this manual were developed in part or totally from information contained in the Loss Prevention Manual developed by the Division of Administration, Office of Risk Management, and Office of the Governor as revised January 1, 2000.

GRAMBLING
STATE UNIVERSITY
GRAMBLING, LOUISIANA

Office of the President

GENERAL SAFETY MANUAL MANAGEMENT POLICY STATEMENT

A major goal of Grambling State University is to provide efficient services to its students, employees and visitors by providing a safe environment. The responsibility for administration of the safety policies and procedures is a function of managers and supervisors a the various levels. However, all employees must take personal action and responsibility for their own safety and well-being. All individuals must follow safety rules, use safety devices, support safety programs, and offer constructive suggestions for improving the safety program.

Grambling State University must adhere to and comply with all state, federal and local safety requirements, codes and standards. Managers will implement a safety program with your protection in mind. This task is accomplished with the assistance of the safety officer and the safety committee through training and safety education. Employees and students are expected to report all accidents to responsible personnel. Managers are also required to report, investigate and document the circumstances of accidents and "near misses" in their areas.

It is the intention of the university to provide excellent supervision, effective training and safe equipment on the job. The success of Grambling State University's safety and loss prevention program depends upon the efforts of all employees.

Richard J. Gallot, Jr.
President

General Safety Program

Grambling State University's general safety program is designed to meet the requirements of a Class B Agency and prescribed by the Louisiana Workman Compensation Rule 15 and conforms to the 16-point operational safety plan mandated by the Office of Risk Management in its Loss Prevention Manual. It also incorporates requirements for controlling hazardous materials as required by federal and state rules and regulations. This 15-point safety program is organized in accordance with the following elements:

1. A management safety policy statement
2. Assignment of safety responsibility
3. Inspections program
4. Job safety analysis
5. Investigation program
6. Safety meetings
7. Safety rules
8. Employee safety training
9. Record keeping
10. First Aid
11. Housekeeping program
12. Hazard control program
13. Equipment management program
14. Driver safety program
15. Bonds and crime program

Safety Responsibilities

A. ***Executive Management*** - The President & Vice Presidents

1. Responsible for safety of all employees.

2. Assigns safety responsibilities and delegates authority required to implement the safety program.

3. Approves safety policies as formulated by the safety officer.

4. Participates in the safety program as recommended by the safety officer and committee (conducts safety tours, approves safety contracts, reviews and responds to safety reports, ensures safety awareness among key management personnel, evaluates safety programs, and reviews safety audits).

B. ***Director of Safety & Risk Management***

1. Develops and implements a comprehensive safety program which provides the following:

a. Investigation of employees, students, and visitors job related accidents/incidents.
b. Safety and training programs for supervisors, employees, faculty and students

2. Reports to the executive management on a quarterly basis concerning the status of Safety programs, concerns and problems

3. Maintains accident records.

4. Submits information requested by the Office of Risk Management of all losses.

5. Chairs the University Safety Committee.

6. Maintains current safety manual and distributes new safety information of the university.

7. Conducts educational activities.

8. Responsible for the overall safety program of the university.

9. Has primary responsibility for coordinating the safety operations of the university.

10. Checks for compliance with applicable safety laws and codes.

11. Communicates with building coordinators.

C. ***Facilities, Management and Campus Services***

1. Serves as member of safety committee to ensure safe work conditions

2. Executes work orders promptly.

3. Maintains a regular maintenance schedule on all equipment and keep maintenance records.

4. Makes regularly scheduled inspections and keeps records of inspection.

5. Develops and implements a boiler/machinery preventative maintenance program.

D. ***Department Heads/Supervisors and/or Foremen***

1. Implement safety programs within assigned areas.

2. Provide new employees with job safety requirements and procedures.

3. Enforce safety rules and work regulations within assigned area of responsibility

4. Set a good example through proper attitude, discussions, and observance of safety rules and regulations

5. Inspect work area for compliance with safe work practices and safety rules.

6. Obtain prompt first aid for the injured employees.

7. Report and investigates accidents and works with safety officer to determine cause and correct problem.

8. Serves on Safety Committee when requested.

9. Ensure that only trained employees operate equipment.

10. Provides necessary personal protective equipment (PPE) to meet OSHA requirements.

E. ***Instructors***

1. Advise students of safety rules, regulations, and standard operating procedures.

2. Ensure good housekeeping practices and strict adherence to lab and classroom safety requirements.

3. Serve as a good role model for students under their instruction.

F. ***Building Coordinators***

1. Coordinate fire and emergency drills with the safety officer.
2. Report any potentially hazardous condition in building to Facilities and Safety office.
3. Insure that emergency numbers are posted on near telephones and throughout assigned building.

G. ***Safety Committee***

1. Reviews written safety instructions and/or policies and makes recommendations for improvements.
2. Makes recommendations concerning reports summaries of incident/accident reports and other reports.
3. Promotes safety awareness to the entire campus community.

H. ***Employees***

1. Work in accordance with accepted safety practices.

2. Report unsafe conditions and practices

3. Observe all safety rules and regulations

4. Make safety suggestions

5. Attend safety meetings and safety training as required

6. Attends safety meetings and safety trainings as required.

7. Serve on safety committee when requested.

Safety Inspections

The safety inspection program includes general housekeeping safety, rules and procedures for conducting safety inspections. Safety inspections shall be conducted on a regular basis even if a problem has not been reported. If hazards exist, corrections should be made immediately utilizing the TMA work order system. Mandatory safety inspections shall be conducted on a quarterly basis. University/Contracted personnel conducting these inspections shall utilize the safety inspection checklist approved and issued by Safety & Risk Management. A completed checklist shall be made for each safety inspection and shall be sent directly to the Office of Safety & Risk Management within seven (7) days of the completed inspection. The Office of Safety & Risk Management or appointee shall conduct scheduled and unscheduled safety standards and regulations. All University facilities – building and grounds – are subject to safety inspections.

A. ***Area Inspections***

1. Laboratories – GSU's Laboratory Inspection Report provides detailed information on conducting lab inspections. Because of the number of students and instructors using these areas and the greater potential for safety hazards, supervisors/deans will insure that quarterly inspections and that immediate action is taken to correct unsafe conditions.

2. Buildings - The building coordinators and/or Office of Safety & Risk Management will conduct inspections of buildings on a quarterly basis. Problems will be noted with recommendations for corrective action.

3. Work/Construction – Facility planner and facility maintenance supervisors will inspect work/construction areas to ensure personnel are wearing prescribed safety clothing and following safety procedures as outlined in the GSU Contractor Safety Handbook. A report will be made if any problem is not corrected in a timely manner and sent immediately to the Office of Safety & Risk Management.

4. Grounds/Common Areas – The grounds supervisor will inspect grounds and common areas on a quarterly basis. Unsafe conditions will be corrected immediately. Any condition not corrected in a timely manner shall be reported to the Director of Facilities Management.

5. Central Receiving – The property manager will make quarterly inspections and will report any missing or vandalized equipment and/or supplies.

6. Offices and Classrooms – Office of Safety & Risk Management will inspect their areas on a quarterly basis and will take immediate action to correct any problem noted. A report will be made if delays are encountered in having problems corrected.

7. Dormitories – Housing Directors/Supervisors will inspect their residence hall on a quarterly basis or more often if unsafe conditions persist. Problems will be noted with recommendations for corrective action. Reports will be forwarded to Safety & Risk Management.

B. All employees are responsible for reporting any potentially hazardous conditions or practice they find. University employees will utilize the Facilities Management and Campus Services work order system to report hazards or unsafe conditions. If the hazard cannot be corrected in 30 days, report it to the Office of Risk Management-Loss Prevention on a Hazard Control Log (Form HC-1-90).

Note: Inspection Checklist will be retained for two (2) years.

A complete list of Inspection Forms are listed in Appendix

Incident/Accident Investigation

When an accident occurs, medical aid should be requested immediately for the injured person. All accidents, including those to non-employees, will be investigated by Office of Risk Management. "Near misses" should be investigated as thoroughly as an accident that results in personal injury or property damage. The Director of Safety & Risk Management is primarily responsible for conducting the accident investigation. Upon discovery of an incident/accident, immediately notify the University Office of Safety & Risk Management and Campus Police.

A. Occupational Injury or Disease

When an employee is injured, he/she must report his supervisor as soon as practical, at least before the end of the shift during which the accident occurred. An incident report is filled out and submitted to the Office of Risk Management. It is the responsibility of the employee to contact the Human Resources in order that an Employer's Report of Occupational Injury or Disease Form (DA 1973) can be completed.

B. ***Accident Investigation***

After acquiring necessary medical aid for injured persons, the supervisor should follow the following steps investigating accidents:

1. Notify Human Resource Office and Office of Safety & Risk Management.

2. If possible, ask the person or persons involved to describe what happened. Do not fix blame or find fault; just get the facts.

3. Survey the accident scene for information. Assemble any objects that might have contributed to the accident.

4. Determine if there were any witnesses to the accident and get their accounts of the incident.

5. Take whatever steps are necessary to prevent recurrences until the condition can be permanently corrected.

6. Complete the Incident/Accident Investigation Form (DA 2000).

7. Cooperate with Office of Safety & Risk Management to complete investigation.

8. If injured person is a student, visitor, or non-employee, supervisors are to notify Office of Safety & Risk Management and complete Form (DA 3000).

C. ***Worker's Compensation***

Worker's Compensation Insurance is provided to employees to cover payment of medical expenses and partial salary continuation in the event of a work related accident or illness. No claims for payment of medical bills or any other forms of compensation are made until all required documents are submitted to Human.

1. An "Employer's Report of Occupational Injury or Disease" Form (DA 1973) must be completed on each employee who is injured on the job.

2. Employee's supervisor must sign the report and/or designated officials as well as showing the date and official's title. All items must be filled in with requested information. If an item is not applicable, please show "N/A".

3. Any accident involving death or serious injury must be reported the same day it occurred.

4. Employees must submit all medical bills to Human Resources immediately upon their receipt, when such bills are the result of a job-related accident or injury with notation showing worker's compensation and the date of accident and/or injury.

5. Human Resources will submit a "Employer's Supplemental Report of Injury" the same day the employee returns to duty in typed form to Human Resources.

6. Employees who required medical care as a result of their injury must have a doctor's release prior to returning to duty. This is regardless of the amount of time off for the injury.

Job Safety Analysis

Another component of incident/accident investigation is job safety analysis which will be developed by Office of Safety & Risk Management. Job Safety analysis is a procedure used to review work methods and uncover hazards that may result in incidents/accidents. The hazards might have been overlooked in the design of the building, workstation, equipment, tools, or processes. The hazards may have developed after the work procedure was designed, or they may be the result of a change in the work procedure or personnel.

Job safety analysis is one of the first steps in hazard prevention, incident/accident analysis and safety training because a hazard must be recognized before it can be eliminated. Therefore, job safety analysis should be performed on all tasks that have resulted in a trend, death, or a change in job procedures or equipment. There are three objectives in job safety analysis:

1) To systematically evaluate jobs and work methods to eliminate hazards and potential hazards;
2) To develop a tool to assist in the teaching of safe work procedures, and
3) To provide a framework for incident/accident analysis.

The job safety analysis is an incident/accident investigation tool. When incident/accidents occur involving a job for which an analysis has been performed, the analysis should be reviewed to determine if proper procedures were followed or if the procedures should be revised.

Safety Meetings

Quarterly safety meetings are required for all employees of each work unit. Quarterly meetings are required. A record must be kept showing the topics discussed and persons attending.

Safety meetings vary from from presentations to informal discussions of safety problems. The meetings should educate, inform, motivate, and examine work practices for potentially unsafe acts that could produce bodily injury and provide a method to preclude recurrences. Workers' suggestions at safety meetings have often resulted in the implementation of new safety policies and procedures that have reduced hazards, increased productivity, and improved work methods.

A. Required Meetings

1. ***All employees*** will attend ***safety meetings quarterly***. This section contains a suggested procedure for conducting safety meetings and a copy of the Louisiana Safety Meeting Report (Form SM-1-86), which can be used to document safety meetings.

2. University Safety Committee

a. The University Safety Committee will hold ***semi-annually meetings*** to facilitate communication of safety ideas and problems and to provide education sessions for departmental safety representatives about safety and safe practices in the workplace.

b. The meetings shall be announced by the Office of Safety & Risk Management at least one (1) week prior to the meetings. The announcement shall be in writing to every safety committee member.

c. The University Safety Committee meeting shall include:

1. Reports of injuries since the last meeting and a discussion of accidents that occurred and safety inspections conducted.

2. Discussions about how and where safety can be improved.

3. Lectures, demonstrations, or visual-aid presentations on appropriate safety topics.

d. Each safety, in addition to quarterly safety meetings online, committee representative is encouraged to conduct safety meetings with employees in his or her department. The representative should chair the meetings. The meetings should address topics that are pertinent in that area regarding safety.

e. All committee meetings should be followed with a report in writing, listing the items discussed and action taken. Prepared minutes of these meetings shall be filed with the Office of Safety & Risk Management. These meeting records shall be kept for ***one (3) years*.**

f. The Director of Safety & Risk Management shall make recommendations or suggestions to the Executive Staff about actions that are warranted from a safety aspect.

B. Suggested Procedure for Conducting Safety Meetings

1. Prepare for Meeting

a. Conduct frequent inspections of the various areas; note any unsafe activities that need to be eliminated. Select an unsafe behavior or activity, a new job, procedure, or change in an operation as the safest meeting topic.

b. List the behavior or activity that should be changed

c. Anticipate reasons for this unsafe activity and determine how to resolve the problem

Example: Employees are not wearing safety glasses because they become foggy when the temperature is high. Solution: Look at alternative safety glasses; select one suitable for high temperatures/high humidity rise.

d. Determine how to eliminate the unsafe act or conditions and record in this section.

Example: Discontinue purchasing present safety glasses; select alternative brand within 30 days.

2. Conduct the Meeting

a. Discuss only one topic per meeting

b. Allow employees to discuss why the situation occurs and what can be done to control or eliminate it.

c. Reach agreement with employees on how to eliminate or control the situation

3. Complete the Safety Meeting Report

a. Complete Sections 1, 2, and 3 before and during the meeting.

b. After the meeting, complete Section 4 showing action that must be taken to ensure recommendation is implemented.

Example: Alternative safety glasses will be given to employees to determine suitability prior to purchase.

c. Record additional comments in section 5.

Example: Reaction to new eye protection is positive. John Doe will test different types of glasses.

4. Keep Records of the Meeting

Copies of safety meeting reports will be sent to the University Safety Officer and Safety Committee representative; originals will be kept by the supervisor.

Safety Rules

The following safety rules are to be adhered to:

1. Smoking is prohibited in all university buildings.

2. Horseplay and fighting will not be tolerated in the work place.

3. Possession of unauthorized weapons and firearms, alcoholic beverages, illegal drugs, or unauthorized medically prescribed drugs will not be tolerated in the work place. Inform your immediate supervisor if you are required to take medication during work hours. Written medical evidence stating that the medication will not adversely affect your decision making or physical ability may be required.

4. Before beginning work, notify your supervisor of any permanent or temporary impairment that may reduce your ability to perform in a safe manner.

5. Use protective equipment to protect yourself from potential hazards that cannot be eliminated.

6. Do not operate equipment or machines without proper training and authorization.

7. Inspect the workstation for potential hazards and insure that it is in safe operating condition before using it.

8. If there is any doubt about the method of work to be used, consult the supervisor.

9. Follow recommended work procedures outlined for the job.

10. Return all tools and equipment in a designated place after use. Put scrap and waste material in a designated refuse container.

11. Report any smoke, fire, or unusual odors to your supervisor.

12. Use proper lifting techniques. For object exceeding 50 pounds in weight, specific methods for safe lifting must be determined by the immediate supervisor.

13. Do not throw objects or attempt to catch a falling object.

14. If your work creates a potential slip or trip hazard, correct the hazard immediately or use safety tape or "wet floor" sign to identify the area before leaving it.

15. Fasten seat belts before starting any motor vehicle.

16. Comply with all traffic signs, signals, markers, and persons designated to direct traffic.

17. Know departmental rules regarding first aid, evacuation routes, and fire department notification.

18. Jewelry, neckties, scarves, and other wearing apparel should be secured when working around equipment that may grab them.

19. Notify your supervisor of any breakage or malfunction of machinery or equipment.

20. Wear eye protection, respirators, or protective clothing in regulated areas or during functions requiring protective gear.

21. Report frayed electrical cords immediately.

22. Do not use electrical extension cords as a permanent electrical line.

23. Never turn on an electrical switch unless you know what it operates and have had the adequate training on that piece of equipment

24. Keep flammable items away from electrical outlets, cords or other electrical apparatus.

25. After working on equipment always replace all covers to factory specs.

Note: Employees who do not comply with university safety rules may be subject to disciplinary action.

Emergency Preparedness

Grambling State University (GSU) must be prepared to effectively cope with the unique problems that arise in an emergency situation. Emergency preparedness is critical to protect employees, citizens, clients, students and property against all natural disasters and other incidents such as fires, bomb threats, sabotage, and civil disorder. Effective planning for emergency situations can minimize the interruption of operations by providing a logical course of action during the emergency.

Emergency preparedness requires a system for the prompt recognition of a serious situation; the availability of a well-publicized, flexible, and tested plan; and clear delineation of the responsibilities of employees. GSU stresses the importance of being prepared in emergencies. Instruction for emergency situations should be posted in each facility and office. Emergency procedures should be established, implemented, and monitored by the Office of Safety & Risk Management.

The purpose of the Emergency Preparedness Program is to ensure that GSU develops a plan for the safe evacuation of all persons in the affected area and the rapid control of hazards during life threatening situations. A copy of the Emergency Disaster Response Manual can be located at www.gram.edu, GSU.net, Safety & Risk Management.

Employee Safety Training

Safety training is required for each new employee and for current employees who must perform new task or operate any new equipment or whose safety performance is not satisfactory. The training, whether conducted by a supervisor on the job or by a training specialist, must include instruction in correct work procedures, use of safety equipment, and availability of assistance. Training is most effective when aimed at defined needs when analysis shows the problem to be lack of knowledge or lack of skill.

Supervisors must also be trained in their safety responsibilities. Supervisors have five (5) basic responsibilities:

1. To establish work methods
2. To give job instructions
3. To assign people to jobs
4. To supervise people at work
5. To maintain equipment and the work place

Where supervisors perform these basic responsibilities properly, the result is a safer work environment. New supervisors must also be made aware of their specific safety responsibilities including conducting safety meetings, inspecting the work area, investigating accidents, planning safe work methods, training employees in safe work methods, analyzing jobs for safety, and demonstrating leadership skills in safety. See Appendix for procedure for setting up a training program.

Procedures for Setting up a Training Program

The purpose of employee safety is to establish a systematic method of teaching employees to perform the required tasks in a safe and efficient manner. There are four primary objectives in employee safety training:

1. To teach employees hazard recognition and methods or corrective action

2. To involve employees in accident prevention

3. To motivate employees to accept their safety responsibilities

4. To provide employees information on accident causes, occupational health hazards, and accident prevention methods.

Steps in Conducting Employee Safety Training

1. Develop a Task Matrix table (EP-1-86 and EP-2-86).
   The task matrix shows which employees will need safety training in specific tasks

2. Select appropriate training topics and schedule training by priority. Eleven training topics are recommended as essential to each agency or facility:

   Safety Program Objectives

   Rights and responsibilities of the employee
   Authority and responsibilities of the supervisor
   Safety policies/rules
   Accident and near miss accident reporting procedures
   Job safety analysis
   Accident experience and trends

   Hazard Recognition and Control

   Types of hazards
   Preventive measures
   Inspection procedures
   Recording and reporting
   Immediate temporary controls

   Emergency First Aid Procedures

   Recognizing first aid emergencies
   Gaining control

Emergency Care

Emergency Response Procedures

Alarm systems
Evacuation routes
Fire extinguisher training

Personal Protective Equipment

What to use
When to use
Storage area
How to check, inspect, and maintain

Material Handling

High risk jobs
Proper lifting
Proper caring

Slips, Trips, and Falls

Recognizing potential problems
Minimizing exposure

Unsafe Environmental Conditions

Outside (heat, cold, winds, rain, hurricanes, tornadoes)
Inside (noise, dust, vapor, fumes)
Other (fire, bomb threats)

Good Housekeeping Practices

Tools an equipment
Vehicles
Yard

Work from Elevations/Use of Ladders

Preventing a fall
Falling safely

Safe Vehicle Operation

Pre-operational inspection
Control of common hazards
Rules of the road

3. Develop a lesson plan for each training session. A complete lesson plan should include the following:

Title:

Clearly identifies the topic

Objectives:

State what the trainee should know or be able to do at the end of the training period. A well-written objective limits the subject matter, is specific, and stimulates thinking on the subject.

Estimated Time of Instruction:

State the length of the training session. Ample time should be allowed to thoroughly cover the subject.

Materials:

State material to be used in training including equipment, tools, charts, slides, films, etc.

What the Instructor Will Do:

Give the plan of action. Indicates the method of teaching (lecture, demonstration, class discussion, etc.) Provides directions for instructor (show chart, write keywords on chalkboard, etc.)

What the Employee Will Do:

Indicate how employees will apply the material in the training session.

Evaluation:

Establishes an assessment method (test, discussion, demonstration) for determining whether the training objectives are achieved.

Safety Training for Supervisors

The immediate job of preventing accidents and controlling work hazards falls upon the supervisor because safety and production are part of the same supervisory function. Some objectives of safety training for supervisors are as follows:

1. To involve supervisors in the agency's accident prevention program
2. To establish the supervisor as the key safety person in each unit
3. To help supervisors understand their safety responsibilities
4. To provide supervisors with information on causes of accidents and occupational health hazards and methods of prevention
5. To help supervisors gain skill in accident prevention activities

<u>Suggested Safety Topics for Supervisors</u>

Safety and the Supervisor

Relationship between safety and productivity

Know Your Accident Problems:

Elements of an accident (unsafe acts, unsafe conditions), accident investigations, measurements of safety performance, accident costs

Human Relations:

Employee motivation, basic needs of workers, supervisor as a leader, alcohol and drug problems.

Maintaining Interest in Safety:

Committee functions, employee relations, supervisor's role in off–the-job safety analysis

Instructing for Safety

Job instruction training, procedure for conducting job safety analysis

Industrial Hygiene:

Environmental health hazards (lighting, noise, ventilation temperature)

Personal Protective Equipment

Use of Eye protection, face protection, foot and leg protection, respiratory protection, and protection against radiation

Industrial Housekeeping:

Results of good housekeeping, responsibility of the supervisor

Material Handling and Storage:

Lifting and carrying, handling specific shapes, hand tools for material handling, motorized equipment, hazardous liquids and compressed gases

Guarding Machines and Mechanisms:

Principles of guarding, benefits of good guarding, types of guards, standards and codes

Hand and Portable Power Tools:

Selection and storage, safe use of hand tools and power tools

Fire Protection:

Recognizing fire hazards, understanding fire chemistry, setting up fire brigades, supervisor's role in fire safety.

Sample Lesson Plan

Title: Personal Protective Respiratory Equipment

Objective: Employee will be able to properly use and maintain respiratory equipment

Estimated Time of Instruction: ½ - 1 hour

Materials Needed:

1. Operating instruction manual
2. Respiratory equipment
3. Work area diagram
4. Job safety analysis requiring use of respirators

What the Instructor Will Do:

1. Identify on the work area diagram where and when respiratory equipment is needed
2. Demonstrate
   a. Proper method of wearing respiratory equipment
   b. Procedure for replacing filter (if appropriate)
   c. Procedure for cleaning and maintaining equipment

3. Discuss
   a. Capabilities and limitations of equipment
   b. Gas inhalation symptoms
   c. Filter replacement – when and where
      1. Difficult breathing
      2. Periodic
      3. Safe area – refer to work area diagram

What the Employee Will Do:

1. Understand when respiratory equipment is necessary

2. Understand gas inhalation symptoms and the capabilities and limitations of the equipment

3. Put on and remove respiratory device

4. Replace filter

5. Clean respiratory equipment

Evaluation:

1. Employee should explain
   a. Capabilities and limitations of equipment
   b. Where equipment is stored
   c. When to wear respiratory equipment
   d. When to change filter

2. Employee should demonstrate
   a. Adjustment of straps
   b. Sealing the mask
   c. Filter not leaking
   d. Cleaning of faceplate

Required Records

The following safety records should be kept for at least one (1) years, or for varying periods as noted below. Copies of forms are included with exhibits describing the specific procedures as noted.

1. Inspection Reports: Completed quarterly in each work unit following a general safety inspection. The completed form is retained in the area it covers and should be made available to the agency head and the Office of Risk Management upon request.

2. Hazard Control Log: Facilities Management and Campus Services work order system is used in lieu of placing the log in the various work centers. The Office of Safety and Risk Management will forward any item that is not corrected in 30 days to the Loss Prevention as required by the Loss Prevention Manual.

3. Employer's Report of Occupational Injury/Illness: Completed for each accident requiring medical treatment. The reports are filed by year of occurrence.

4. Incident/Accident Investigation Report: Completed for each accident or near miss. Attached to the Employer's Report of Occupational Injury/ Illness, when an injury has resulted. The supervisor retains the original. Copies are sent to the department head and the University Office of Safety and Risk Management.

5. Job Safety Analysis: Completed by supervisors in each work units. Supervisors are expected to perform at least one job safety analysis each month. Job safety analysis forms are kept in a file in the originating area. The documents should be readily accessible to employees and there should be an index naming the task and date the job safety analysis was completed or revised.

6. Safety Meeting Record: Completed quarterly in each unit following safety meeting and maintained in the operating area for one year. Copies should be sent to the University Office of Safety and Risk Management.

7. Training Documentation: Completed following training sessions and maintained in the operating area for one year.

8. All completed Form DA 3000 will be on file in the Office of Safety & Risk Management.

First Aid Requirements

A. **Posted Information**

A list with telephone numbers and addresses of approved doctors, hospitals and ambulances has been posted in all work areas. The attached First Aid Outline has also been posted in all work areas.

B. **Requirements for First Aid**

1. All employees must report any injury to his supervisor as soon as practical, no later than the end of the shift during which the accident occurred. An incident report must be completed by the immediate supervisor and submitted to the Office of Safety & Risk Management. It is the responsibility of the employee to contact the Human Resources in order than an Employer's Report of Occupational Injury or Disease Form (DA 1973) can be completed.

2. The University's Infirmary Unit will treat minor injuries and the employee will be returned to work. The employee must sign a statement that the injury was the result of an on-the-job accident. A description of the accident and names of witnesses (if any) are included in the statement.

3. If a physician is needed, the employee will be given authorizations for treatment to be given to the attending physician.

4. The employee will provide Human Resources and his supervisor with a the treating physician's diagnosis of the injury and the length of time that he or she is expected to be unable to work.

5. If a visitor or student is injured, the nearest supervisor to where the incident happened should be notified as well as the Office of Safety & Risk Management. If consent is given by them to treat their injuries, they can be treated by qualified personnel with first aid and/or the University Infirmary Unit. Post incident a DA 3000 will be completed by the Office of Safety & Risk Management.

C.. **First Aid Log**

The First Aid Log (FA-1-86) will be maintained by each facility that provides first aid care. The logs should be maintained for at least five (5) years.

E. **First Aid Kit and Inventory**

A first aid supply kit will be issued to and maintained by a trained first aid attendant. If a trained first aid attendant is not available, contact GSU Infirmary at 318-274-2630 for treatment..

F. **Employee Safety Guidelines**

1. Report all injuries and near miss accidents immediately to a supervisor.

2. Get advice and treatment from a trained first aid attendant.

3. Do not move him or her until the full extent of the injury is known, first aid has been given, and emergency transport assistance has arrived.

4. Do not attempt to perform regular job functions if abilities have been impaired by an injury.

5. Report any sickness to your immediate supervisor.

Emergency Phone Numbers

University Police Department	274-2222
Foster-Johnson Health Center	274-2638
Facilities Management & Campus Services	274-6162
University Safety and Risk Management	274-3174
City of Grambling Police Department	274-3771
Ruston Police Department	274-4141
Lincoln Parish Sheriff's Department	251-5151
State Police	(318) 345-0000
Local Ambulance Service	255-3301
Lincoln General Hospital	255-5780

Note: ***Emergency 911*** cannot be accessed from the University's telephone system ***Call 9-911***.

First Aid Outline

(To be posted in all work areas)
Certified Employees Only

First Aid is immediate care given to a person who has been injured or who has suddenly become ill. When properly administered, first aid can mean the difference between life and death, between a temporary and a permanent disability or between rapid recovery and long hospitalization. This outline is designed to make employees aware of first aid procedures. It is not a complete first aid guide. First aid attendants should refer to Red Cross first aid guides and other sources of current information for administering procedures as CPR. The following are some of the most common first aid procedures:

A victim must give consent to an offer of help before a person trained in first aid begins to help him or her. You should also make a reasonable attempt to get consent from the parent or guardian of a victim who is a minor or who is mentally or emotionally disturbed.

Always use the emergency action principles:

1. Survey the scene
   Remember: is it safe – stay clear of danger

2. Do a primary survey of the victim
   Ask victim "are you ok"
   Monitor: **A – airway**
   B – breathing
   C – circulation
3. Phone the emergency medical services (EMS) system for help

Note: the Red Cross or equivalent should train the first aid attendant(s) in CPR and first aid. The American Red Cross CPR certificate is good for one year (1) and standard first aid certificate is good for three (3) years.

A. **Artificial Respiration**

Artificial Respiration is the process of causing air to flow into and out of a person's lungs when natural breathing ceases.

1. Causes of respiratory failure
    a. Anatomic obstruction (tongue drops back and obstructs throat, asthma, swelling caused by injury)
    b. Mechanical obstruction (foreign object, fluid accumulation, vomit)
    c. Air depleted of oxygen or containing toxic gas
    d. Electrocution
    e. Drowning
    f. Shock
2. The normal breathing process
    a. Inhalation (chest expands, air flows in)
    b. Exhalation (chest returns to normal size, pressure increased and air flows out)
    c. Approximate rate for an adult – 12 to 15 times a minute or every 4 to 5 seconds
3. Mouth to mouth breathing procedure
    a. The procedure must begin within four (4) minutes after the blood supply is cut off
    b. The objective is to open the airway and restore breathing
    c. Procedure
        1. Determine consciousness by asking, "Are you okay?"
        2. Tilt head back
        3. Look at victim's chest. Listen and feel for air being exhaled.
        6. Pinch nostrils shut
        7. Take a deep breath
        8. Seal your mouth around victim's mouth
        9. Blow two quick, full breaths into his mouth

10. Check for pulse. If there is a pulse, give breath every five seconds.

If there is no pulse, start CPR. (See first aid guide)

d. Continue procedure until victim breathes on his own or until medical help arrives.

e. How to remember: "A Quick Check"

A - - Airway, tip the head and check for breathing
Quick - - Give four quick, full breaths
Check - - Check for pulse and breathing

B. **Bleeding Control**

Different methods are recommended to control bleeding depending upon the source of blood and severity of the wound.

1. **Identify source of bleeding**

a. Bleeding from artery - - blood spurts and pulsates and is bright red

b. Bleeding from vein - - blood flows in a steady stream and is dark red

c. Bleeding from capillaries - - blood oozes. (Since blood loss will be small, there is little cause for alarm.)

2. **Methods for controlling bleeding**

a. Direct pressure

1. Don't waste time.

2. Place sterile pad over wound and press firmly. If no pad is available, use your hand directly.

3. If blood soaks through pad, do not remove it. Add another one.

4. Make sure the pressure applied does not interfere with normal circulation.

b. Elevation

Raise injury above the level of the victim's heart unless there is evidence of a fracture

c. Pressure points (indirect pressure)

1. When direct pressure on the wound and elevation are not enough to stop bleeding, put additional pressure on the affected blood vessel.

2. Blood vessels are like soft rubber tubing; they may be squeezed shut. The vessel passes close to the skin over a bony structure at a pressure point. Squeeze the vessel against the bone.

a. The brachial artery is located midway between the armpit and the elbow. Use the inside surfaces of the fingers to squeeze it against the bone.

b. The femoral artery is located against the pelvic bone. Place the victim on his back and press with the heel of your hand holding your arm straight.

C. Shock

Shock is a depressed state of many vital body functions.

1. Causes of shock

a. Severe injuries of all types
b. Lack of oxygen
c. Pain, rough handling, and delay in treatment

2. Signs of shock

a. Pale, cold, clammy skin
b. Weakness and apathy
c. Rapid and faint pulse
d. Increased rate of breathing
e. Dilated pupils

3. Treatment

a. Keep victim lying down to improve the blood circulation
b. Cover the victim only enough to prevent him from losing body heat
c. Raise victim's feet

D. Choking

Choking can be caused when any foreign particle becomes lodged in a victim's windpipe. Swallowing un-chewed food is a primary cause. Drinking alcoholic beverages can aggravate a choking problem because the victim's sensations are diminished.

1. Signs of choking

a. Attempting inhalation
b. Face turning blue
c. No breathing
d. Unconsciousness

2. What to do when the victim is conscious

a. Encourage coughing
b. Use abdominal thrust

    1. Place the side of your fist in the middle of the victim's abdomen between the waist and the rib cage
    2. Place your other hand on top of your fist and quickly press inward and upward
    3. Repeat as often as needed if the victim remains conscious

3. What to do when the victim is unconscious

a. Tip the head back and check for breathing.
b. Try to give breaths if air will go into the lungs. Give two quick breaths and continue mouth to mouth breathing.
c. Check pulse and breathing.
d. If air will not go into lungs, re-tip head and try again.
e. If air will not go into lungs, attempt the following:

    1. Roll victim toward you and do four back blows.
    2. Kneel astride or alongside victim and do four abdominal thrusts.
    3. Grasp the victim's tongue and lower jaw and use index finger to sweep his mouth.
    4. Try again to give breaths.
    5. If unsuccessful, repeat entire procedure.

E. **Heat Illnesses**

Heat stoke is a response to heat caused by extremely high body temperature and a disturbance of the sweating mechanism.

1. Signs of heat stroke

a. Body temperature is high
b. Skin is dry (no sweating)
c. Victim has a rapid and strong pulse

2. What we do

a. Cool the body quickly.
b. Do not give stimulants.

Heat cramps are a response to heat involving muscular pains and spasm largely due to the loss of salt.

1. **Signs of heat cramps**

Cramping of the muscles in the legs and abdomen. What to do

a. Gently massage the pain.
c. Replace lost body fluids.

Heat exhaustion is a response to heat characterized by fatigue, weakness, and collapse.

1. **Signs of heat exhaustion**

a. Approximately normal body temperature
b. Pale and clammy skin
c. Profuse perspiration
d. Tiredness
e. Nausea

2. **What to do**

a. Replace lost body fluids.
b. Have the victim lie down.
c. Loosen the victim's clothing.
d. Apply cool wet cloths.

F. **Poisoning**

Poisoning substances may enter the body through the mouth, by absorption, by inhalation, and by injection. For specific treatments, consult first aid guide of product label.

Contact with poisonous plants can cause headaches, fever, itching, and rashes. The reaction may appear from within a few hours to 48 hours after contact. Treatment is as follows:

1. Remove contaminated clothing
2. Wash all exposed areas
3. Seek medical advice if reaction is severe

G. **Insect Bites**

Apply cold compressors to minor bites.

For severe reactions, the following treatment may be necessary:

1. Administer artificial respiration if needed
2. Keep the affected part of the body lower that the rest of the body

H. **Chemical Burns**

You should keep flushing a chemical burn with water until EMS arrives and provides further care.

Remove any affected clothing and/or jewelry
Check for shock:
Monitor: **A – airway**
B – breathing
C. circulation

Control of Hazardous Materials

The handling and disposal of hazardous waste must be conducted in strict compliance with regulation prescribed by Louisiana's DEQ and U.S. Environmental Protection Agency. Civil penalty can be assessed for each day of continued noncompliance with hazardous waste regulations. Criminal penalties can result in fines for each day of violation and a prison sentence imposed for knowingly falsifying a label, manifest, record or report; or transport waste to a facility that does not have a permit; or treats, stores or disposes of hazardous waste without a permit. The University has established a program for controlling all hazardous materials used by or housed in any facility of the University which includes proper storage, use, and disposal of hazardous waste. Details on this program are found in the appendix to this section.

1. General Policy

   All employees responsible for hazardous materials will rigorously enforce safety regulations governing the handling and storage of such materials, will be maintained, and safety inspections will be conducted monthly to ensure compliance with safety regulations.

2. Definitions

   A hazardous chemical is one that poses a danger to human health or to the environment, if improperly handled. The EPA has divided hazardous chemicals into several categories, including:

   a. Ignitable Materials

      These materials give off heat, smoke, soot, and may disperse toxic pollutants and by-products into the air. Such materials have a flash point below 60 degrees C (140 degrees F). For example, gasoline.

   b. Reactive Chemicals

      These materials can explode or produce poisonous gases when exposed to light, air, water, etc., such as oxidizers and sulfides.

   c. Toxic Chemicals

      These materials can cause serious illness or death when inhaled, ingested or absorbed through the skin. The EPA definition of a toxic chemical is a materials that possesses an LD50 RAT (orally)< MG/KG, and LD50 RAT (inhalation)<200 PPM, or an LD50 RABBIT (dermally)<200 MG/KG.

   d. Corrosive Chemicals

The materials can cause injury to the skin or body, or destroy their own containers or other materials and can be released into the environment. For example, sodium hydroxide.

e. Listed Waste

Materials regulated by U.S. EPA as hazardous waste.

3. Laboratory/Chemical Safety in Workplace

The way that the research project is conducted in a laboratory is an important factor in laboratory safety. Simply stated, it is the attitude of employees in a laboratory that plays a major role in chemical safety. Everyone must be cooperative and take responsibility for safety in the lab. Failure to follow regulations, could lead to disciplinary action under the university's disciplinary rules as well as State and Federal regulations. Every university department with chemical laboratories or using chemicals must establish a chemical safety committee or appoint someone to be responsible for the safety program within that department. It is the responsibility of immediate supervisors and department heads to insure employees working within their department are fully informed with regard to the procedures for safe handling and use of hazardous chemicals.

4. Storage of Hazardous Chemicals

Prior to storing a chemical, it must be properly labeled with permanent pressure sensitive label and information must be legible and either typewritten or in indelible ink. The label should include the following:

a. The chemical name of the material
b. The date received or produced
c. Hazardous properties such as whether flammable, toxic, etc.

Note: Storage of food in refrigerators intended for laboratory use, including storage of chemicals, flammable materials, etc., must never be used for the storage of food by laboratory employees.

5. Disposal of Hazardous Chemicals

a. The disposal of hazardous chemicals is strictly regulated under U.S. EPA and Louisiana's DEQ.

b. No hazardous chemical substance shall be disposed of into the sanitary sewage system, into the air, or into the university's normal trash system. Containers of chemical waste will be removed by the designated

university representative and only when the containers are properly labeled.

c. The disposal containers should be clean, nonreactive, sealed, and labeled:

   a. Waste
   b. Chemical name or names
   c. Responsible person/department
   d. Date container was filled, and
   e. Appropriate hazard warnings

d. Incompatible wastes shall not be placed or mixed in the same container.

e. Departments with unknown chemicals for disposal shall assume the financial responsibility for the costs of the analysis to determine the identity or composition of the material.

6. Chemical Spills

a. Minor spills should be cleaned up immediately by laboratory personnel, using proper procedures for the chemicals involved, and providing the material is not dangerous to life and health.

b. For moderate to large spills of dangerous materials, e.g. acid, etc., evacuate the building by going room to room or by the building alarm system. Call Campus Police to report the incident and request Campus Police to notify the appropriate Local and State Agencies.

c. Incidents involving fire(s) of any size, but the smallest size where you are sure you can put out the fire without spreading the fire of causing injury to yourself, call Campus Police, 274-2222, to report the fire. The building should be evacuated.

7. Spills on Clothing

a. All contaminated clothing must be removed immediately and the skin should be washed with soap and cool water. Flush the skin with cool water for no less than fifteen (15) minutes. The University's Hazardous Material Director/Safety Director and/or Local or State Hazardous Material Agency should be consulted before contaminated clothing is reused, laundered or discarded.

8. Responsibilities

a. Users (generators) will be responsible for the proper storage, control, use, and disposal of all hazardous chemical waste they may use or generate.

b. Deans, Grant Directors, Chairpersons and appropriate Vice Presidents shall determine that all hazardous chemical wastes generated in their areas are to be disposed of according to Federal and State Law as well as University Policy. The transportation of hazardous materials in personal vehicles is prohibited. The university will not take responsibility for persons who carry hazardous materials in vehicles not owned or operated by the university.

c. The supervisor of each operating unit will:

1. Make an exhaustive search of his area to ensure all hazardous materials are reported. If any unidentified substance or material is discovered during this inventory, the University Safety Officer should be contacted for assistance in identifying and material for handling and disposition instructions.

2. Ensure all hazardous materials are properly labeled.

3. Inventory and maintain an up-to-date list of all hazardous materials in his/her area of responsibility

4. Identify the types and amounts of hazardous material on hand is required for the intended purpose of operation.

5. Provide safety instructions to employees/students covering proper handling, health considerations, storage, emergency response and disposition of hazardous materials

6. Ensure appropriate MSDS information is readily available to personnel in the area where hazardous material is used/stored.

d. The University Safety Officer will:

1. Maintain a complete list of all hazardous materials on campus by location

2. Provide overall direction to the Campus Safety Committee in administering the Hazardous Materials Management Program at the University

3. Conduct unscheduled inspections to ensure hazardous materials are used/stored in accordance with prescribed safety regulations

e. Record Keeping

Safety Data Sheets shall be maintained on all hazardous or toxic materials used at the University and will include as a minimum the following:

1. The chemical and/or common name of substance
2. The known acute and chronic health risks
3. The way(s) it enters the body and symptoms that appear when exposed to it,
4. The chemical and physical characteristics of the material,
5. The necessary precautions, handling practices, protective equipment and other safety procedures used to limit potential exposure to the materials,
6. The emergency treatment when exposed to materials
7. The emergency procedures for spill, fire and disposal and
8. The known potential health risks posed by the material.

A. Emergency Notification

Who to Contact and What to Do in Case of a Chemical Emergency

1. Chemical Spills:

   Call Office of Safety & Risk Management – Ext. 274-3174

   After hours, call University Police Ext. 2222.

2. Chemical Fire

   Call University Police – Ext. 2222

3. Chemical Ingestion/Contact:

   Go to Foster-Johnson Infirmary-Seek medical aid.

   After hours call University Police – Ext. 2222

4. CHEMTREC - 1-800-424-9300

5. Poison Control Center – 1-800-222-1222

B. Definition of a Hazardous Chemical

Any chemical or material that has the potential to be harmful to humans or the environment shall be considered hazardous. Examples: toxic, flammable, reactive, corrosive materials.

Consult Safety Data Sheets, which shall be maintained by your supervisor. Call 274-3174 for more detailed information.

C. Responsibilities

The purpose of the safety program is to prevent injury to personnel and loss or damage to property. This is achieved by the planning of all work based on your understanding of the hazards involved and utilization of safe working procedures.

This manual of safety in chemical research is based on the premise that the responsibility for safety follows line organizations as presented below.

1. Department Head and Faculty:

This person (s) has the responsibility for safety pertinent to the personnel and facilities under his/her supervision. The department head and faculty will make sure:

a. that personnel under his/her supervision are familiar with safe work practices

b. that personnel are informed of the hazards of the chemicals in their work area

c. that training and supervision are given so that personnel have knowledge and experience to handle chemicals safely.

d. that chemical safety guidelines are developed for laboratories under his/her direction.

2. Individual Personnel/Staff:

a. shall follow prescribed safety guidelines

b. shall report to supervisor any hazards as they appear

c. shall report to supervisor any accident or change in health status if it is due to a job-related chemical exposure.

3. Safety Officer/Committee:

a. conducts annual lab safety inspections

b. conducts semi-annual checks of chemical fume hoods.

c. maintains safety data sheets on all hazardous chemicals used at the university and provides this information to any employee or student upon request

d. Provides technical assistance for the collection and disposal of hazardous chemical waste

D. Right-To-Know

Each individual has the right to know about potentially hazardous chemicals in the work environment. Every chemical should be considered equally dangerous until the properties of that agent or chemical is known. The following are sources available to you to help in the education process:

1. Safety Data Sheets:

Each Department that maintains chemicals will keep current Safety Data Sheet (MSDS) on file for all chemicals used by that Department. These MSDS are available for review by any student or employee.

2. Chemical Labeling:

Refer to the manufacturer's label on the container for information regarding the hazardous properties of the chemical.

3. Training:

Each department that maintains chemicals will provide training for all employees as required by the Right-To-Know Law to include the following:

a. How to use Material Safety Data Sheets (MSDS)
b. Explanation of the labeling system
c. General training on the hazards associated with flammable, corrosive and toxic chemicals
d. Review of hazardous chemical waste manual
e. Complete Global Harmonization System (GHS) training through Office of Safety & Risk Management.d

Each department will ensure that all employees and students, working with hazardous chemicals are trained. This training will be documented and for maintained by the department.

E. Rules for Handling Chemicals

The following general guidelines are to be used when handling any chemicals. All laboratory personnel are expected to know these general rules, plus any other rules that apply to the specific chemical that is being used.

1. Personal Safety

a. Allow only authorized personnel in the laboratory. Avoid all distractions. Make sure that someone knows that you are conducting an experiment using hazardous chemicals and what to do in case of an emergency.

b. When in the laboratory, do not:
    1. Store food in refrigerators designated for chemical storage
    2. Eat
    3. Drink
    4. Chew tobacco
    5. Chew gum
    6. Smoke
    7. Apply cosmetics

2. Proper Clothing

   a. Wear a lab coat or safety apron at all times during experimental procedures.

   b. Wear chemical resistant eyewear when working with chemicals.

   c. Do not wear contact lenses in the laboratory.

   d. Do not wear sandals or open-toed shoes when handling chemical solutions.

   e. Confine long hair when working around mechanical equipment or ignition sources.

   f. Wear the proper type of gloves when working with chemicals that can be absorbed by the skin.

   g. Always wear appropriate (issued) radioactive monitoring devices when working with radioactive materials.

   h. Work in a fume hood when working with volatile chemicals.

3. Contact with Chemicals

   a. Use mechanical pipetting aids for all pipetting procedures (Do not pipette anything by mouth).

   b. In the event of contact:

      1. Flush the skin or eyes with water and remove any contaminated clothing.

      2. Report to hospital if eye contact or serious skin contact with chemicals occurs.

      3. Clean up any small chemical spills immediately and properly dispose of the waste materials

4. Important Precautions:

   Always:

a. locate and be familiar with the proper use of emergency showers, fire extinguishers, blankets, and eye wash fountains.

b. Conduct always work with hazardous chemicals under in a properly functioning chemical fume hood.

c. Read labels on chemical bottles before using them

d. Consider any unlabelled chemical solution hazardous until it is identified and disposed of in the proper manner.

e. Discard any chemicals that have changed in color or appearance

f. Remember, when diluting acids, add strong to weak.

g. Assemble apparatus so the control valves and switches will remain accessible should a fire occur

h. Use approved cabinets for storing of chemicals.

i. Observe and comply with all safety and warning labels or signs

j. Store heavy pieces of glassware on lower shelves, and light pieces on upper shelves. Store tall pieces at the back and smaller ones toward the front of the shelf.

k. Use electrical equipment with grounded plugs (3-pronged)

l. Use explosion-proof electrical equipment in working with flammable chemicals

m. Maintain good housekeeping throughout the laboratory

n. Keep aisles free of obstructions

o. Keep laboratory sink, work benches, etc., clean

p. Store flammable liquids in an appropriated explosion-proof refrigerator

5. Never:

a. Work alone in the laboratory when conducting test involving hazardous chemicals

b. Inhale chemical vapor directly; if it is absolutely necessary to smell a chemical, wave your hand over container opening

c. Leave experiments running unattended.

d. Use flammables around sources of ignition

e. Pick up a piece of equipment that is suspected of being hot with your bare hands.

f. Use chipped or broken glassware

g. Use a towel to clean up broken glass

h. Store glassware higher than a person can reach

i. Use frayed or damaged extension cords

F. Ordering and Storing Chemicals

The quantities, types, and storage of chemicals are major issues to be considered in laboratory safety. A few basic rules will greatly reduce risks in the laboratory. Note: Always insure MSDS is included with each order of chemicals.

1. Guidelines for Ordering:

Always order small amounts of the needed chemicals – a six month supply is plenty. Check your inventory regularly and dispose of outdated or unnecessary chemicals. Avoid a stockpile of unused chemicals

Consider ordering solvents in safety tins rather than glass bottles. The metal containers are more expensive, but do provide protection against breakage and spillage. Such purchase orders should state that more expensive containers are requested for safety purposes.

2. Guidelines for Labeling:

Indicate on the chemical container:

a. Date received

b. Date container was first opened

Label all secondary containers (outside containment canister) with the following information:

c. Identity of chemical and solvent

d. Concentration

e. Date prepared

f. Initials of the person who prepared the solution

3. Storage Locations:

Every chemical should have a specific site of storage in accordance with its specific storage requirements and should be returned immediately after use. Be sure to read the label on every container for storage instructions and follow those instructions accurately.

Approved storage cabinets for flammable liquid storage should be labeled "Flammable – Keep Away From Fire.

In flammable liquid storage, mechanical ventilation should be sufficient to remove vapors before they reach a hazardous concentration.

The following guidelines should be used when storing chemicals:

a. Store flammable liquids in approved safety cabinets/refrigerators. Label each safety cabinet with the maximum gallon capacity

b. Do not use a chemical fume hood as a storage area for chemical or solvents. The cabinet below the fume hood is suitable for storage of some flammable chemicals if it is vented and labeled for flammable storage.

c. Do not use open bench tops as storage locations

d. Do not store acids and bases together. Store them near the floor

e. Segregate highly toxic chemicals and carcinogens from all other chemicals. Store them in a well marked, ventilated area. After opening, reseal the original container with tape and place it in an unbreakable secondary container.

f. Store perchloric acid in a metal tray. Never store perchloric and sulfuric acids together.

4. Storage System:

The following method for storing chemicals is suggested so chemicals will be easy to locate. Maintain an alphabetical inventory list. This inventory should be placed on computer to facilitate easy updating.

The following information should be listed for each inventory item:

a. Name of chemical

b. Amount of chemical

c. Date received

d. Ordering information

e. Hazard profile

f. Storage location

With this retrieval system, incompatible chemicals will not be placed next to each other. Thus, chemicals can be shelved, placed in a safety cabinet, desecrator, refrigerator or freezer, and be found easily when needed.

Example:

Aniline

Amount Stored: 1 gallon

Date Received: November 15, 1999

Ordered: October 15, 1999 from Dow Chemical
1915 Milam Street
Shreveport, LA 71103

Hazards:
1. Incompatible with nitric and hydrogen peroxide
2. Readily absorbed through skin, wear gloves

Location: Shelf #5, Cabinet B

G. Storage of Flammable and Combustible Liquids

The following definitions and storage requirements are in accordance with National Fire Protection Association's National Fire Codes and Standards. (Vol. 3, 30-12, 30-13, 30-50)

1. Definitions:

A. Flammable Liquid – a liquid having a flash point below 100 degrees Fahrenheit (37.8 Centigrade) and having a vapor pressure not exceeding 40 pounds per square inch (absolute) at 100 degrees F and shall be known as a Class I liquid.

Flammable liquids are divided as follows:

Class IA shall include those having flash point below 73 degrees F and having a boiling point below 100 degrees F.

Class IB shall include those having flash points at or above 73 degrees F and having a boiling point at or above 100 degrees F.

Class IC shall include those having flash points at or above 73 degrees F and below 100 degrees F.

B. Combustible Liquid – a liquid having flash point at or above 100 degrees F.

Combustible liquids are subdivided as follows:

Class II liquids shall include those having flash points at or above 140 degrees F.

Class IIIA liquids shall include those having flash points at or above 140 degrees F and below 200 degrees F.

Class IIIB liquids shall include those having flash points at or above 200 degrees F.

2. Storage Requirements

All flammable or combustible liquids in laboratories and other points of use shall meet the following storage requirements:

a. No container for Class I or II liquids shall exceed a one-gallon capacity.

b. No more than 10 gallons of Class I and Class II liquids combined shall be stored outside of an approved storage cabinet or approved storage room.

c. Quantities of liquids in excess of those set forth in this safety standard shall be stored in an approved, inside of or outside, storage room.

H. Maximum allowable size of container

1. Container Size and Type:

		Flammable Liquids		Combustible Liquids
Container Type	Class IA	Class IB	Class IC	Class II
Class	1 pt.*	1 qt.*	1 gal.	1 gal.
Metal**	1 gal.	5 gal.	5 gal.	5 gal.

*Class IA and Class IB liquids may be stored in glass containers of not more than 1gal capacity if the required liquid purity (such as ACS analytical reagent grade or higher) would be affected by storage in metal container and if the liquid would cause excessive corrosion to metal container.

** Other than D.O.T. drums or approved plastic.

2. Classification of Common Flammable and Combustible Liquids:

Class IA
Collogion
Diethyl Ether
Diethyl Sulfide
Ethyl Ether
Methyl Ethyl Ether
Petroleum Ether
Propylene Oxide

Class IB
Acetone
Acetonitrile
Benzene
Iso-Butyl Acetate
Cyclohexance
1,2-Dichloroethane
Di-isoprophy Ether
1,4-Dioxane
Ethanol
Ethyl Acetate
Heptane
Hexane
Methanol
Methyl Ethyl
Keytone
Paramount
2-Propanol
Pyridine
Toluene
Triethylamine

Class IC
n-Butyl Acetate
n-Butyl Alcohol
Xylene

Class II
Acetic Acid (Glacial)

Dibutylamine
Isopentyl Alcohol
Propionic Acid

I. Storage of Compressed Gases

For the purposes of safety, all volatile materials and mixtures packaged in cylinders will be considered compressed gases.

The handling of compressed gases must be considered more hazardous than the handling of liquid and solid materials. The increased risk is attributable to the unique properties of compressed gas: pressure, diffusiveness, low flash points, low boiling points, and no visual and/or odor detection of many hazardous gases. In order to reduce the possibility of an accident, the following standards regarding the use, storage, and handling of compressed gases must be followed.

1. Use of Compressed Gases

   a. Cylinders should be clearly marked with the identity of the gas. Cylinder color should not be relied upon for content identification.

   b. Cylinder cap should be kept in place until time for connecting cylinder to equipment.

   c. Connections that do not fit should not be forced.

   d. Regulators, gauges, hosed and other appliances provided or use with a particular gas or group of gases should not be used on cylinders containing gases having different chemical properties unless information obtained from the supplier indicates that this can be done safely.

   e. Do not attempt to repair or alter cylinder, valves or attachments. This work should be done by the manufacturer.

   f. Cylinder valves should be opened slowly with the valve outlets and face of the gauge pointed away from you and other persons.

   g. A cylinder valve should never be forced. If a valve cannot be opened by hand, the cylinder should be returned and another obtained.

   h. A cylinder not having a handwheel valve should be opened with a spindle key, special wrench, or other tool provided or approved by the gas supplier.

i. Connections to piping, regulators and other appliances shall be kept tight to prevent leakage. If leakage occurs, first close cylinder valve tight before attempting to stop leak.

j. Before connecting a valve gauge or other fitting to a cylinder valve outlet, "crack" the valve for an instant to clear the opening of particles of dust or dirt.

k. Never tamper with safety devices in valves or cylinders.

l. Before a regulator is removed from a cylinder, the cylinder valve shall closed and the pressure removed form the regulator/gauges.

m. Once a cylinder is empty, it should be marked empty immediately and reported for removal.

2. Storage of Compressed Gases:

a. All cylinders (empty or full) shall be secured in an upright position.

b. Cylinders shall be grouped by types of gas, and the groups are arranged to take into account the gases contained.

c. Full and empty cylinders shall not be stored near combustible substances.

d. Cylinders shall not be stored near combustible substances.

e. Cylinders shall not be stored near flammable liquids.

f. Cylinders shall not be stored near corrosive chemicals.

g. Oxygen cylinders and other oxygen apparatus shall be kept free from oil or grease.

h. Cylinders shall not be stored near exits, stairways, or areas normally used or intended for the safe exit of people.

i. Do not store cylinders where they can become part of an electrical circuit.

j. Cylinders can be stored on cylinder carts as long as they are secured and the cart is placed in a safe location.

k. Empty cylinder shall be removed from work areas and returned to vendor in a timely manner.

3. Handling of Cylinders:

a. The valve-protection cap should be placed on the cylinder before transporting it, and left on until it has been secured and is ready for use.

b. Cylinders should not be moved by dragging or sliding. The user should use a suitable hand truck or similar device with the cylinder secured for transporting.

c. Cylinders should not be dropped or permitted to strike against each other or other surfaces violently.

d. Cylinders should not be moved with the cylinder valve open, and/or regulator or gauges attached. Always close the cylinder valve when not in use.

J. Incompatible Chemicals

Common Incompatible Chemicals

The following is a partial list of the more common incompatible chemicals. Reaction of such chemicals may produce:

- Toxic or flammable gases,
- Explosions, or
- Spontaneous ignition

Substances in the left column should be stored or handled in a manner that avoids contact with those listed in the right column.

This Chemical	Is Incompatible With
Acetic acid	Chromic acid, nitric acid, hydroxyl compound, ethylene glycol, peroxide, perchloric acid, permanganates
Acetone	Concentrated sulfuric and nitric acids
Acetylene	Chlorine, bromine, copper, fluorine, silver, mercury
Alkaline metal as powdered (aluminum or magnesium, sodium, potassium)	Water, carbon tetrachloride, or other chlorinated hydrocarbon, carbon dioxide, the halogens

Ammonia anhydrous	Mercury (in manometers), chlorine, calcium hypochlorite, hydrofluoric acid (anhydrous), bromine, iodine
Ammonium nitrate	Acids, metals powders, flammable liquids, chlorates, nitrates, sulfuric finely divided organic or combustible materials
Aniline	Nitric acid, hydrogen peroxide
Bromine	Same as for chlorine
Carbon, activated	Calcium hypochlorite, all oxidizing agents
Chlorates	Ammonium, salts, acids, metals, powder
Chlorine	Ammonia, acetylene, butadiene, butane, methane, propane (or other petroleum gases), hydrogen, sodium carbide, turpentine, benzene, finely divided metals
Chlorine dioxide	Ammonia, methane, phosphine, hydrogen sulfide
Chromic acid	Acetic acid, naphthalene, camphor, glycerin, turpentine, alcohol, flammable liquids in general
Copper	Acetylene, hydrogen peroxide
Cumin hydroperoxide	Acids, organic or inorganic
Cyanides	Acids
Flammables liquids	Ammonium nitrate, chromic acid, hydrogen peroxide, nitric acid, sodium peroxide, the halogens
Fluorine	Isolate from everything
Formic acid	Oxidizing agents
Hydrazine	Oxidizing agents
Hydrocarbons (butane, propane, benzene,	Fluorine, chlorine, bromine, chromic acid,

gasoline, turpentine, etc.	sodium peroxide
Hydrocyanic acid	Nitric acid, alkali
Hydrofluoric acid, anhydrous	Ammonia, aqueous or anhydrous
Hydrogen peroxide	Copper, chromium, iron, most metals or their salts, alcohol, acetone, organic materials, nitromethane, ailine, flammable liquids, combustible materials.
Hydrogen sulfide	Fuming nitric acid, oxidizing gases
Iodine	Acetylene, ammonia (aqueous or anhydrous), hydrogen
Mercury	Acetylene, fulminic acid, ammonia
Nitric acid	Acetic acid, aniline, chromic acid (concentrated), hydrocyanic acid, hydrogen sulfide, flammable liquids and gases.
Oxalic acid	Silver mercury
Oxygen	Oils, grease, hydrogen, all flammable
Perchloric acid	Acetic anhydride, bismuth and its alloys, alcohol, paper, wood
Picric acid	Metals, ammonia (avoid shock)
Potassium	Carbon tetrachloride, carbon dioxide, water
Potassium chlorate	Sulfuric and other acids
Potassium perchlorate (see also Chlorate)	Sulfuric and other acids
Silver	Acetylene, oxalic acid, tartaric acid, ammonium, compounds
Sodium	Carbon tetrachloride, water, carbon dioxide
Sodium peroxide	Ethyl or methyl alcohol, glacial acetic acid, acetic anhydride, benzaldehyde, carbon disulfide, glycerin, ethylene glycol, ethyl

	acetate, methyl acetate, furfural
Sulfuric acid	Potassium chlorate, potassium pershlorate, potassium permanganate (or compounds with similar light metals, such as sodium, lithium)
Water	Alkali metals, sulfuric, thionyl chloride

K. Chemical Fume Hoods:

A chemical fume hood is a cabinet used for exhaust of contaminated air. Protection from chemical vapors and gases is provided by sufficient velocity of air entering at the front and exhausting through the back and top. If a fume hood is not operating properly, or if it is misused, the airflow will be insufficient to capture and remove contaminants, thereby reducing the protection factor of the hood.

The face velocity of a chemical fume hood may be variable at times due to air disturbances caused by:

a. Location of the hood in regard to open windows or doors

b. Room air supply inlets

c. Heavy traffic areas in the room

Normally, a chemical fume hood system consists of:

d. Cabinet with sliding safety glass sash or viewing panel

e. Duct work

f. Exhaust blower

1. Malfunctioning Hood:

Immediately report any malfunction with the fume hood in your laboratory area by calling the Facilities, Management and Campus Services at ext. 2367. The Facilities Department will ensure that safety is provided to both laboratory and personnel.

2. Proper Use:

When using a chemical fume hood, follow these guidelines:

a. Maintain the sash at the recommended operating height

b. Keep the inside of the hood clean and uncluttered

c. Make sure that any large objects that must be in a hood (e.g., water bath) are raised to allow airflow on all sides

d. Perform all procedures at least six inches behind the plane of the sash.

e. Do not place your face inside the fume hood

f. Do not rely on the fume hood exhaust to protect you from projectile or solid objects

g. Wear safety glasses and gloves

3. Inspection:

Chemical fume hoods are inspected semiannually by the Facilities Maintenance Department. The exhaust velocity is measured and the optimum sash height is determined. In meeting the face velocities for certification, the sash cannot be lower than eight inches above the work surface.

4. Certification:

If certification criteria are met, the hood will be labeled designating the classification of the hood and the sash height which will produce the optimum operating conditions. If the certification criteria cannot be met with minor adjustments, the hood will receive a label which reads "Danger-Hood Not Working – Do Not Use."

5. Biological Hood:

A biological hood is a cabinet designed to filter infectious and some toxic agents by means of High Efficiency Particular Air (HEPA) filters.

a. All new biological hoods and hoods that have been relocated in the facility must be certified before use.

b. Annually, all biological hoods must be recertified by an outside vendor. Purchasing will be notified when time for recertification.

L. Corrosive Chemicals

Corrosive Chemicals are commonly thought of as acids and bases, but dehydrating agents and oxidizing agents can also be corrosive. Listed below are several types of corrosive chemicals and some examples of each, as well as guidelines for use of corrosive chemicals.

Types of Corrosive Chemicals

Acids	**Bases**
(sulfuric, nitric hydrofluoric)	(sodium hydroxide, ammonia)
Dehydrating Agents	**Oxidizing Agents**
(sulfuric acid, sodium hydroxide, phosphorus pentoxide, calcium oxide)	(picric acid, chromic acid perchloric acid, peroxides, nitrates, nitrites)

1. Hazards of Personal Exposure:

    a. Strong acids and bases may cause serious damage to the skin and eyes

    b. Inhaling the vapors of corrosive chemicals can cause severe bronchial irritation

    c. Seek emergency car in the event of an inhalation accident.

2. First Aid Procedures:

    If exposed to a corrosive chemical:

    a. Wash the affected area with copious amount of water

    b. Remove any contaminated clothing immediately

3. Guidelines for Storage:

    Follow these guidelines to properly store corrosive chemicals:

    a. Strong oxidizers such as pershloric acid present fore and explosion hazards when in contact with organics. Store in glass containers in a metal tray; away from organic flammable, dehydrating or reducing agents.

    b. Store ALL corrosives on a lower shelf near the floor level

4. Guidelines for Protective Clothing

    When using corrosive chemicals:

    a. Always wear rubber apron, gloves, and goggles or a face shield.

b. Never wear – contact lenses. Contact lenses should not be worn by laboratory personnel because of the increased risk of eye injury from the chemicals. Chemical liquids, vapors or solids may become trapped under the lenses and cause serious damage to the eye before the lenses can be removed and the eye properly washed. In addition, the contact lenses can be damaged from exposure to some chemicals which in turn, could damage the eye.

5. Guidelines for Accident Prevention:

Remember:

a. When diluting strong acids, add the acid slowly to the water to reduce the reactive effect.

A-	A-	A
Always	Add	Acid to the water

b. Use corrosive chemicals ONLY in a fume hood.

Do not:

c. Mix acids and bases together.

d. Use corks or rubber stoppers with strong oxidizing agents.

M. Solvents

Organic solvents constitute one of the major hazards in a laboratory. Many are highly volatile or flammable, such as ether, alcohol, or toluene.

Chlorinated solvents such as chloroform are non-flammable, but when exposed to heat or flame, may produce carbon monoxide, chlorine, phosgene, or other highly toxic gases.

All volatile and flammable solvents should be used in a properly functioning chemicals fume hood. Never use ether or other highly flammable solvents in a room with open flames present, such as Bunsen burner.

1. Exposure Hazards:

Skin contact may produce defatting and drying. The paraffin series and the saturated hydro-carbon solvents are stronger skins irritants than those of the aromatic series.

Ingestion of a solvent could result in severe physiological effects.

Inhalation of solvent vapors may cause bronchial irritation, dizziness, central nervous system depression, nausea, headache or coma. Prolonged exposure to high concentrations of solvents may result in liver or kidney damage.

NOTE: Consumption of alcoholic beverages will accelerate these effects.

In case of skin contact, ingestion or inhalation of solvents, seek medical aid.

2. Respiratory Hazards:

A property of the following chemicals is that the odor threshold is higher than the acceptable exposure limit:

- Chloroform
- Benzene
- Carbon tetrachloride
- Formaldehyde

Therefore, if you can smell it, you may be overexposed. All four of the above solvents are suspected of being carcinogenic.

Substitution:

Substituting a solvent of lesser toxicity or hazard whenever possible is the best way to decrease the effects of solvent exposure. For example, two solvents may be equally toxic, but the one with a warning property, such as odor, is less hazardous.

Using a less volatile solvent is also a good substitution. The perfect all-around solvent is water, use it whenever possible. Examples of possible substitutions are listed in the following table.

Instead of Using	Substitute
Benzene	Cyclohexane, toluene, or exlene
Carbon tetrachloride	Methylene chloride or 1,1,1-trichloreoethane
Chloroform	Methylene chloride or 1,1,1-trichloroethane
Aromatic hydrocarbon	Aliphatic hydrocarbon
Trichloroethylene	1,1,1-trichloreoethane

n-hexane	Pentane
Diethyl ether	Petroleum ether

3. Disposal:

List A	List B	List C
Peroxide Hazard from Storage (Discard at 3 months)	Peroxide Hazard from Concentration (Discard at 12 months)	Hazard from Peroxide Initiation of Polymerization (Discard at 12 months)
Isopropyl ether Divinyl acetylene Vinylidene Chloride	Ethyl ether Tetrahydrofuran Acetyl	Styrene Butadiene* Vinyl acetate
Potassium metal Sodium amide	Dicyclopentadiene Diacetylene Cumene Cyclohexene	Vinyl chloride Chlorophrene* Tetrafluoro-ethylene

* When stored as a liquid, the peroxide-forming potential increases and the chemical should be a List A compound.

4. DMSO-Dimethyl Sulfoxide:

Dimethyl Sulfoxide (DMSO) is another organic solvent that is very popular, but which requires special handling procedures. DMSO can serve as either an oxidizing or a reducing agent. It is readily absorbed through unbroken skin and is rapidly distributed throughout the body. DMSO will facilitate the skin absorption of other chemicals.

Appropriate protective gloves should always be worn when using DMSO to avoid inadvertent exposure from hazardous chemicals dissolved in this solvent.

N. Reactive/Explosive Chemicals

Certain chemicals are considered reactive because they are sensitive to friction or shock, or because they react with water or air.

An explosive is a substance or mixture that decomposes or burns very rapidly when subjected to shock or flame. Large volumes or gases and extreme heat are produces simultaneously, resulting in tremendous pressure which causes an explosion. Highly reactive chemicals with explosive properties require special storage, handling and disposal procedures.

1. Ether:

   Ethyl ether, isopropyl ether, dioxin, and many other ethers absorb and react with oxygen in air to form unstable peroxides. The peroxides formed may explode if made concentrated by evaporation or when exposed to unusual heat or shock. Once an ether container has been opened, peroxide formation occurs rapidly.

   Always order ethers in small-sized containers, such as ¼ - lb. Or 1 – lb. cans. Store in a cool place, such as an explosion-proof refrigerator. Otherwise, store ether in an open, well-ventilated location where vapors may be dispersed easily and diluted. Never keep ether more than twelve months, even if it has not been opened.

   Due to the high flammability and the hazard of peroxide formation, special requirements must be taken in the storage and use of ethers.

   a. Appropriate storage area for all containers of ether that have been opened is an explosion-proof refrigerator which is so labeled by the manufacturer. Ether shall not be stored in a standard refrigerator.

   b. The quantity of ether purchased by a laboratory should be limited to the minimum amount required.

   c. Ether shall be used only in an appropriate hood and not on bench tops. All ether shall be kept away from sources of ignition.

   d. Laboratories routinely using ether shall place a sign on the door stating: "Caution: Ether in Use – No Smoking."

   e. Call the Facilities Office, ext. 2367 for disposal.

2. Mercury:

   Mercury, or quicksilver, is the only metal that is a liquid at room temperature. Its is widely used in scientific and medical equipment such as:

   - Thermometers
   - Barometers
   - Sphygmomanometers
   - Mercury vapor lamps

- Some feeding tube tips
- Coulter counters
- Electron microscopes

a. Ingestion of elemental mercury from a broken thermometer constitutes little danger because this form of mercury is not readily absorbed from the gastrointestinal (GI) tract. However, in the event of a spill or an accident, mercury can present a potential hazard due to its highly toxic vapor.

The most important route of absorption of mercury is the respiratory tract. Mercury has a highly toxic vapor pressure, and at room temperature the equilibrium concentration of mercury vapor would be 20 mg/m3 or 200 times the ceiling level established by Occupational Safety and Health Administration (OSHA).

b. General precautions to observe when handling elemental mercury are:

1. Make sure the area is adequately ventilated
2. Have any mercury spills or leaks collected immediately
3. Do not smoke or eat in an area where mercury is being used

c. All mercury spills should be reported to the Facilities Planning Office, Ext. 2367, immediately. The area in which the spill occurs should be isolated to the greatest degree possible until clean-up can be accomplished. A small mercury spill that occurs as a result of a broken thermometer should be cleaned up with the aid of a mercury spill kit.

3. Osmium Tetroxide:

Osmium tetroxide is a volatile solid whose vapor is extremely irritating to the eyes and respiratory system. The time weighed average (TWA) threshold limit value for exposure to Osmium Tetroxide is 0.2 ppb for an eight-hour workday. It is possible to purchase purified Osmium tetroxide as a 4% solution pre-packaged in 2 ml ampoules.

a. Use:

Some possible uses of OsO4 (osmium tetroxide include:

1. catalyst in the dehydrogenation of organic materials,
2. stain for histological examination of tissues,
3. oxidizing agent (support combustion),
4. fixative for tissues in electron microscopy

b. Precautions:

Osmium tetroxide should Only be used:

1. in a properly functioning chemical fume hood,
2. while wearing protective goggles and gloves

4. Perchloric Acid:

Perchloric acid is a colorless, fuming, oily liquid. When cold, its properties are those of a strong acid but when hot, the concentrated acid acts as a strong oxidizing agent.

a. Hazards:

Aqueous perchloric acid can cause violent explosions if misused, or when in concentrations greater than the normal commercial strength. Anhydrous perchloric is unstable even at room temperature and ultimately decomposes spontaneously with a violent explosion. Contact with oxidizable materials can cause immediate explosion.

b. Precautions:

1. Perchloric acid shall be used in a fume hood.
2. Safety eyewear shall be worn at all times when working with perchloirc.
3. A direct flame or oil bath shall not be used for heating perchloric acid.
4. Use quartz glassware in order to reduce chances of breakage and spills.
5. Use only explosion-proof electrical equipment around acid.
6. Avoid using more than 20 ml of perchloric per sample.
7. Do not allow perchloric acid samples to boil dry.
8. Identify location of nearest safety shower, eyewash, and fire extinguishers before using percholoric acid.
9. Each laboratory shall store no more than 1-lb. (450g) bottles of perchloric acid.
10. Separate perchloric acid from all organic materials and flammable compounds.
11. Do not allow perchloric acid to come in contact with strong dehydrating agents.
12. All stored perchloric acid should be checked monthly for discoloration; if any is noted, the acid should be discarded in accordance with government guidelines.
13. Report all spills to Facilities Planning office, Ext. 2367, immediately. Do not mop up spills; the acid must first be neutralized.

O. Criteria for Definition and Classification of Hazardous Waste

This policy shall apply to those materials carrying a hazard rating of two or higher in any class.

1. Ignitable

A waste will be considered a moderate ignitable hazard if a representative sample of the waste:

a. is a liquid and has a flash point less than 140 degrees F determined by the methods cited in American Society for Testing Materials (ASTM) D-98-72 or ASTM 3278.

b. not a liquid and is subjected to cause fires through friction, absorption or moisture, spontaneous chemical changes, or retained heat from manufacturing or processing.

c. is an ignitable compressed gas as defined in 49 Code of Federal Regulations (CFR) 173.300 (b).

d. is an oxidizer as defined in 49 CFR 173.51.

Levels of Ignitability and Degree of Hazard

Hazard Level	**Description**
0	None, material does not burn
1	Minor, material must be preheated to burn
2	Moderate, some heating is required for ignition and volatile vapors are released (flashpoint of 140 degrees)
3	Severe, material ignites at normal temperature
4	Extreme, very flammable substance that readily forms explosive mixtures

2. Corrosivity

A waste is a moderately corrosive hazardous waste if a representative sample of the waste:

a. is aqueous and has a pH less than and equal to 2.5 of greater than or equal 5. to 12.5.

b. corrodes steel 9SAE 1020 at a rate greater than 0.250 inches per year at a test temperature of 130 degrees F.

Corrosivity

Hazard Level	Description
0	None
1	Minor
2	Moderate
3	Severe

3. Reactivity
A waste substance is classified as a reactive waster of moderate hazard if a representative sample of the waste is:

a. is normally unstable and readily undergoes violent chemical change without detonating; reacts violently with water, forms potentially explosive mixtures with water; or is a cyanide or sulfide bearing waste which generates dangerous quantities of toxic gases, vapors or fumes when exposed to mild acid or basic conditions.

b. is capable of detonation or explosive reaction but requires a strong initiating source or which must be heated under confinement before initiation can take place, or which reacts explosively with water.

c. is readily capable or detonation or of explosive decomposition or reaction at normal temperatures and pressures.

e. is a forbidden explosive as defined in 49CFR 173.52, a Class A explosive as defined in 49 CFR 173.58. Note: Such waste includes pyrophoric substances, explosive, autoploymerizable materials and oxidizing agents. If it is not apparent whether a waste is a hazardous waste after applying this description, then the methods cited below or equivalent methods can be used to determine if the waste material should be categorized and treated as hazardous.

f.

Levels of Reactivity and Degree of Hazard

Hazard Level	Description
0	None, stable when exposed to fire
1	Minor, unstable at high temperatures or pressures and may react as noted above with water or mild acids or bases
2	Moderate, unstable but does not explode; may form explosive mixtures or noxious fumes with water or mild acids or bases.
3	Severe, explodes if heated or water added or forms toxic fumes with water, mild acids or bases.
4	Extreme, readily explosive under normal conditions or forms highly toxic fumes with water, mild acids or bases

4. Toxicity

The following chemical species shall be considered to offer at least a potential toxicity hazard requiring management:

a. Designated heavy metals in elemental form, in salts, or organic compounds; in particular, antimony, arsenic, beryllium, boron, cadmium, copper, chromium, lead, mercury, nickel, selenium, silver, and thallium. These compounds constitute a risk of metabolic harm to higher animal life and when released in concentrations or quantities above a designated threshold must be managed carefully.

b. Toxic anions, such as arsenate, arsenate, chromate, cyanides, fluoralumniates, fluorides, phosphides.

c. Extremely dangerous poisons including cyanogen, phosgene, hydrogen sulfide along with the dangerous poisons such as acetone, cyanohydrin and irritating substances such as brombenzyl cyanide and chloracetonephenon.

d. Commercial poisons including fungicides and pesticides including DDT,

aldrin, chlordane, endin and toxaphene. The threshold of moderate hazard for these and other uncharacterized toxic chemicals (acute and chronic) shall be taken as equivalent to Toxic Hazard Rating Materials.

Levels of Reactivity and Degree of Hazard

Hazard Level	Description
0	None, stable when exposed to fire
1	Minor, unstable at high temperatures or pressures and may react as noted above with water or mild acids or bases
2	Moderate, unstable but does not explode; may form explosive mixtures or noxious fumes with water or mild acids or bases.
3	Severe, explodes if heated or water added or forms toxic fumes with water, mild acids or bases.
4	Extreme, readily explosive under normal conditions or forms highly toxic fumes with water, mild acids or bases

5. Toxicity

The following chemical species shall be considered to offer at least a potential toxicity hazard requiring management:

a. Designated heavy metals in elemental form, in salts, or organic compounds; in particular, antimony, arsenic, beryllium, boron, cadmium, copper, chromium, lead, mercury, nickel, selenium, silver, and thallium. These compounds constitute a risk of metabolic harm to higher animal life and when released in concentrations or quantities above a designated threshold must be managed carefully.

b. Toxic anions, such as arsenate, arsenate, chromate, cyanides, fluoralumniates, fluorides, phosphides.

c. Extremely dangerous poisons including cyanogen, phosgene, hydrogen

sulfide along with the dangerous poisons such as acetone, cyanohydrin and irritating substances such as brombenzyl cyanide and chloracetonephenon.

d. Commercial poisons including fungicides and pesticides including DDT, aldrin, chlordane, endin and toxaphene. The threshold of moderate hazard for these and other uncharacterized toxic chemicals (acute and chronic) shall be taken as equivalent to Toxic Hazard Rating Materials.

Levels of Toxicity and Degree of Hazard

Hazard Level	Description
0	None
1	Minor
2	Moderate (indicated test); can cause temporary incapacitation or injury
3	Severe; short exposure may cause serious injury
4	Extreme; short exposure may cause death

P. Hazardous Waste Disposal Program

Collection of Hazardous Waste Procedure

1. A department having hazardous waste to be collected will contact the Safety Officer at Ext. 3174. At that time the Safety Officer will make the necessary arrangements for transporting and disposal of the waste.

3. Each container of waste must have a label, as shown below, filled out and placed on it. Labels can be obtained from the Safety Officer.

Chem _____
Dept. _____
Location _____
Name _____
Flamm. _____ Acid _____
Toxic _____ corros _____
Reactive _____

Explanation of Label

Chem. – proper name of chemical
Location – room number of label in which waste was generated
Name – name of Instructor or Laboratory Technician
Flamm., acid, corros., reactive – proper classification of waste.

4. The generating section will also present the Safety Officer with a Hazard Material and Hazardous Waste Record Card filled out with the correct information. The instructor will also be required to maintain a copy on file in his or her laboratory.

Q. Emergency Plan for Chemical Spills

Notification:
1. Safety Officer – 274-3174
2. After hours, weekends, etc., notify University Police at ext. 2222, who will contact Safety Officer on call.
3. If University Police are unable to locate Safety Officer, call the Grambling Fire Department and request assistance.

Spill Clean-up Procedures:

1. First response will be to confine spill and identify chemical involved.
2. No one shall enter spill area without proper safety equipment
3. When a flammable liquid is spilled or a flammable gas cylinder is leaking, all sources of ignition in the area shall be extinguished
4. Clean-up procedures will be based on chemical and degree of hazard associated with chemical and amount spilled.
5. The Safety Officer will oversee all clean-up procedures
6. All contaminated material will be placed in 55 gallon drums and labeled to identify content.
7. This material will then be disposed of by the Safety Officer through a licensed hazardous waste vendor.

R. Conclusion

Grambling State University personnel will be fully compliant to the manufactures guidelines on the Safety Data Sheets as to use, store, dispose of, and lastly, use the proper P.P.E. when handling any potentially hazardous material. Any questions concerning this should be directed to the employee's immediate supervisor. If Grambling State University does not have the proper handling equipment and or P.P.E. that is required by the manufacture and S.D.S sheets we will not use such chemicals. If the employee has not been properly trained on how to use required P.P.E. he/she is to report this to the immediate supervisor to properly receive training as how to use P.P.E. and how to properly handle the chemicals.

Strict adherence to the guidelines prescribed in this manual will place Grambling State University in full compliance with Federal Environmental Protection Agency requirements for safe handling and disposal of hazardous substances. It will also help to ensure a safe campus environment for students, faculty, and staff. The maintenance of a safe campus environment is not and cannot be the sole responsibility of one individual. The combined effort, concern and cooperation of the entire GSU family is needed in order to protect our campus from the often detrimental effects of careless handling of hazardous waste. Thus, it is imperative that we learn and abide by the guidelines set forth in this manual.

Driver Safety Program

Introduction

Grambling State University is committed to ensuring a safe workplace for all employees and the entire University community. GSU is required to develop a comprehensive loss prevention program to comply with Louisiana Revised Statute Title 39, Section 1543 (R.S. 39:1543). The GSU Driver Safety Program is one component of the University's comprehensive loss prevention program. The goal of the GSU Driver Safety Program is to reduce accidents, injuries, and property damage that could be caused by motor vehicles. The GSU Driver Safety Program is enacted to ensure compliance with Louisiana law to ensure that all vehicles operated on official University business are operated as safely as possible.

Applicability

The GSU Drivers Safety Program requirements are applicable for all employees of Grambling State University who operate/drive motor vehicles on official University business in the course of their employment. For the purpose of this policy, a STATE VEHICLE is any licensed vehicle owns, leased, and/or rented by the State of Louisiana /Grambling State University. The GSU Safety Drivers Program applies to all Drivers of State Vehicle, private vehicles used on official university business, operated on University property. The GSU Driver Safety Program is applicable to all employees but not limited to: all faculty and staff, adjunct faculty, full time employees, part time employees, probation/temporary employees, casual wage employees, and graduate assistants. This program applies to anyone who receives a paycheck from the university and who drives a motor vehicle on official University business as part of their employment.

A. Driver Authorization

University employees using university vehicles or privately owned vehicles for school business are required to obtain a driver authorization upon employment and each year, thereafter. An Authorization and Driver History Form must be completed with employee's signature and appropriate vice president's signature before authorizations to drive vehicles on university business can be issued. All driver licenses will be checked annually.

B. Driver Training

The Director of Safety and Risk Management is responsible for teaching and maintaining records for defensive driving training at Grambling State University.

C. Accident Reports

Each employee using a university vehicle is furnished a Louisiana State Driver Program Accident Report with instructions for completing, as well as additional information concerning not leaving the scene of the accident until all required information is obtained.

D. Definitions

1. ***Accident*** is defined as any incident in which the vehicle comes in contact with another vehicles, person, object, or animal, which results in death, personal injury, or property damage, regardless of who was injured, what was damaged or to what extent, where it occurred or who was responsible.

2. University Vehicle (State Vehicle) means any vehicle owned, leased and/or rented by Grambling State University. It also includes any privately owned vehicle used in due course and scope of employment.

E. Criteria for Driver Authorization

The following criteria will be used to determine employee's eligibility for driver authorization:

1. Valid organizational need
2. Individual's physical and attitudinal suitability to operate the specific type vehicle
3. Individual's training qualifications to operate the specific type vehicle
4. Operator Driver Record (ODR)
5. Valid motor vehicle operator's license

F. High Risk Drivers Policy

To maintain compliance with the State of Louisiana Office of Risk Management's Driver Safety Program, the Office of Safety and Risk Management annually reviews the driving records all persons authorized to drive university owned or personal vehicles on university business. If an employee or authorized driver is found to violate the provisions of the Office of Risk Management Policy, they will not be allowed to drive a university or personal vehicle on university business until such time as they meet the provisions of the policy. The department of the effected driver will receive a copy of the notification. Quoted below is the Office of Risk Management Policy:

"It is Grambling State University's responsibility to designate which employees are authorized to drive vehicles on state business. The authorization process shall include a review of the employees ODR and their respective class of license. GSU will also determine when driving responsibility must be taken away from an employee because of reckless operation of a vehicle or traffic violation. Driver's must retake the Defensive Driver's Course upon one traffic violation. Upon the third traffic violation, the driver will be removed from the Authorized Driver's List for a period of six months. Anytime a DUI or DWI is issued, the driver will be removed from the Authorized Driver's List until the

office of Safety & Risk Management receives documentation of removal of the DUI/DWI from the driver's record. In addition, the driver must report to Human Resources upon notification for possible disciplinary action. Only individuals possessing a current and proper class driver's license may be authorize by GSU to drive a motor vehicle on state business. ***High Risk Driver*** are those individual having three or more convictions, guilty pleas and/or nolo contendere pleas for moving violations or individuals having a single conviction, guilty plea or nolo contendere plea for operating a vehicle while intoxicated, hit and run driving, vehicular negligent injury, reckless operation of a vehicle or similar violation, within a one-year period.

If for privacy or any other reason, an individual wishes to relinquish their driving privileges, they may request in writing that their name be removed from the authorized driving list. Anyone found in violation of the above policy, anyone not having completed the driver safety program or anyone removing their name from the authorized list will not be permitted to drive a university or personal vehicle on university business.

G. Accident Report

If an employee driving a university vehicle is involved in an accident, he/she will immediately notify the police. He/she will not leave the scene of the accident until all required information is obtained and/or provided to the police.

1. ***Within 24 Hours:*** Employee having accident will complete and submit the Accident Report to his supervisor. If the driver is not able to complete the Accident Report, his supervisor will complete it for him.
2. ***Within 48 Hours of Receipt of Accident Report:*** Supervisor will review and verify the accuracy of the Accident Report. The Supervisor will then forward the report to the Director of Safety and Risk Management, who will submit the report to the Claim Department of the State of Office Risk Management.

H. Renewing Your Driving Authorization

GSU employees (including student workers or graduate assistants) who have a Louisiana driver's license shall be authorized no longer than a three year period. This three year period shall expire three years from the date that the defensive driver training was completed. Employees should submit all required documentation to the GSU Office of Safety & Risk Management at least forty – forty five (45) days prior to your existing authorization expiring. This will ensure that there is no lapse in your authorization.

Bonds & Crime

Loss Control Program

The Bonds/Crime Loss Control Program has been developed to protect Grambling State University from financial and/or property losses resulting from any act and/or omission by any employee in the performance of his/her respective duties. Implementation of the program is mandatory.

The purpose of the Bonds and Crime Comprehensive Loss Control Program is to:

1. Assign responsibility for developing and managing fiscal controls
2. Establish each employee's accountability for the performance of his/her duties in compliance with the university's internal fiscal control program
3. Reduce the Grambling State's University exposure and losses and to safeguard State's assets
4. Maintain the public's confidence in the state officials' appointees and employees' ability to conduct to Grambling State University business in an honest and professional manner.
5. Protect assets against robbery.
6. Preserve and safeguard Grambling State University's assets and financial resources.
7. Comply with all applicable statutory requirements; both State and Federal, and the regulations established by the Office of Risk Management are essential. The Office of Risk Management was create by the Louisiana Legislature, to procure coverage for exposure risks of all agencies (See Louisiana Revised Statues 39:1527, et. seq.

A. <u>Bonds/Crime Coverage</u>

Fidelity Bonds

The employees' Faithful Performance Blanket Bond covers loss sustained by University employees because of dishonest or fraudulent acts of employees. "Faithful Performance" provides coverage for loss caused by failure of employee to perform

his/her duties faithfully. This bond is required by the Legislative Auditor. There is a $1000.00 deductible for this coverage. Coverage is also provided against loss through forgery or alteration of checks drawn by the University.

Property Manager Bond

This bond covers dishonest or fraudulent acts or failure to faithfully perform duties, in connection with handling and control of University property, resulting in loss to the institution. This bond is required by revised statutes. There is a $1000.00 deductible for this coverage. This exposure is covered by Fidelity Bonds.

Notary Bond

This bond guarantees that a notary public will comply with applicable laws and regulations. This bond is required by revised statute. There is a $1000.00 deductible for this coverage. This exposure is covered by the above stated Fidelity Bonds.

Postal Bond

This bond guarantees that a post office contract, branch or station located at a university or college shall faithfully discharge all duties required under rules and regulations of the U.S. Post Office Department. It must account for, deliver, and pay over monies, mail matters, and other properties that come in its possession to the proper post office official. There is no deductible for this coverage.

Public Official Bond

Such a bond is required by law for persons elected or appointed to fill positions of trust. It protects against dishonest and fraudulent acts as well as a person's failure to perform duties required. There is a $1000.00 deductible for this coverage. This exposure is covered by the above stated Fidelity Bonds.

Crime – Inside/Outside Premises; Money and Securities; Depositors Forgery (Usually Secured by Combination Crime Policy)

This policy covers all perils except those that are excluded by the policy on money and securities within premises and outside premises while conveyed by messenger. Property other than money and securities is insured against robbery (not theft) or safe burglary. Coverage is provided against loss through forgery or alteration of checks drawn by the University. There is a $1000.00 deductible for this coverage.

B. Program Goal

The goal of the Bonds and Crime program is to provide a comprehensive system of internal fiscal controls at Grambling State University that will assign responsibility and accountability for performance of duties by employees at the lowest possible cost.

Policies and Procedures for Special Accounts for Grambling State University

Departments should not collect cash and checks as a routine procedure (only authorized departments.) The collection of cash and checks is the primary responsibility of the Comptroller's Office and all payments for University provided goods and services should be collected by the Comptroller's Office when practical. It is appropriate, in limited situations, that other departments within the University collect monies. In such cases, prior authorization by the Vice President for Finance, Comptroller, and President are required.

1. All funds received by mail are logged on an Incoming Check Transmittal Form by the Comptroller's secretary each day. The name of the individual(s) or agency making payment, check or money order number, date received, and amount of payment is recorded.

2. A copy of the Incoming Check Transmittal Form and the payment are delivered to the cashier in the Cashier's Office.

3. All requests for refunds must be submitted and approved by the comptroller or designee on a Direct Payment Form. The request must include the name, social security number, address of person requesting the refund, the account number to be charged, the amount of refund, the reason for the refund, and the supporting documentation. Upon approval by the Comptroller, the refund request will be submitted to the Accounts Payable Department for the check to be written. Refund checks are distributed from the Cashier's window (student refunds) or the Comptroller's Office (employees or vendors).

4. All special account funds collected by a department or organization of the University must be deposited to a University account.

C. Internal Control Procedures

1. Affixing signatures on a blank check is strictly prohibited.

2. All payment requests should be supported with invoices, receipts and/or other documentation as requested.

3. Checks, receipts, etc. must be maintained in a secure location and all deposits must be submitted in a timely manner.

4. The current balance of all operating funds (book balance) must be maintained at all times

3. An employee other than the employee receiving funds or writing check will be designated to reconcile all bank and book accounts monthly to include:

   e. determining that all checks are pre-numbered and accounted for;
   f. investigating the validity of all check that are made payable to individuals;
   g. determining whether all voided checks have been accounted for and filed.

6. The functions of receiving and depositing monies shall be separately maintained and the responsibilities assigned to different employees as appropriate.

7. The collection of cash is discouraged. Collection is accepted by check, personal check providing Telecheck guaranteeing agency approves it, money orders or other such negotiable instruments are encouraged. Checks received by the respective departments must be sent to the Comptroller's Office for processing and depositing to the appropriate account(s).

6. If items are sold, receipts, and beginning and ending inventory are to be immediately reconciled.

9. No campus unit or other University entity will establish bank accounts off-campus. All accounts will be established through the Comptroller's Office of the campus.

D. Cash Receipts Procedures

1. Issue numerical receipts for all cash payment.

2. Reconcile collections for sales, membership registration, etc., with receipts timely, being careful to account for all receipts.

3. Utilize more than one person in the collection of payments and recording of receipts. Supervisor and the cashier verify and acknowledge the accuracy of report and the deposit at the end of the day before submission is made to the bank for deposit.

E. Loss of Money, Securities or Property

1. A written report is required to report any theft or disappearance of university money, securities, property or equipment immediately upon discovery of such loss.

2. All thefts or suspected thefts of university funds, security or property must be immediately reported to the Supervisor, Department Head, Risk Manager, Vice President, Internal Auditor, President and University Police Department.

3. A complete investigation is made and a police report is issued to document the circumstances involved in the loss. Appropriate external authorities are notified of the reported loss in accordance with university policy and procedures.

F. University Police Procedures

To provide a safe and secure environment for students, faculty, staff and visitors throughout the Grambling State University campus.

G. Property Control Policy

Purpose

All offices throughout the university and all other university organizational units served by Property Management Department are required to observe the policy set forth herein. All employee's of the university are considered custodians of university property. The appropriate Deans, Chairpersons, Directors, Department Heads and Vice Presidents are responsible for ensuring that all employees in their units are familiar with the Property Control Policy.

Grambling State University has developed and implemented a written Bonds/Crime Loss Control Program which should include:

1. Guidelines designating those employees who will be assigned to manage assets and property and the fiscal control system to minimize potential losses

2. Implementation of training programs for employees

3. Conduct regular audits at the various stages of the process

4. Investigations procedures of incidents involving losses to include corrective action which will prevent recurrence

5. Policies that outline the responsibilities and accountability of managers, supervisors, and employees who have duties requiring Bonds/Crime coverage

These policies and other general procedures have been given to all employees and form the basis of the Bonds/Crime Program. Only those individuals authorized and trained to manage or handle cash, property, stamps, fees, licenses, permits, securities and other State assets have been assigned to those duties.

Boiler and Machinery

A. Program Components

1. **Agency Maintenance Policies and Procedures**

   The University is responsible for implementing a viable boiler/machinery maintenance program. This program shall include designating personnel who are responsible for specific maintenance areas. Policies must outline the roles and responsibilities of managers, supervisors and employees within the maintenance department. These policies should be made available to all maintenance personnel. The Bureau of Risk Analysis and Loss Prevention provides guidance and direction to agencies in developing an effective boiler/machinery loss control and maintenance program.

2. **Communication/Organization**

   The Bureau of Risk Analysis and Loss Prevention will work with the University in setting up the program, and in identifying systems and objects to in incorporated into the maintenance program. The observation of the commercial insurance carrier, together with recommendations for corrective action, will be reported in writing to the Office of Risk Management.

3. **Maintenance Contracts**

   The State Loss Prevention Officer will be notified of all commercial maintenance/service contracts in force during periodic visits.

B. Audits and Record Keeping

The Bureau of Risk Analysis and Loss Prevention will assist the University in reviewing and analyzing boiler/machinery maintenance programs to determine that they are properly designed. Records of all equipment should include, but not be limited to, preventive maintenance schedules, testing results, repair documents, replacement documents, and all completed service documents. Annual audits will be conducted upon request from the Facilities Director.

C. Responsibility

1. The Bureau of Risk Analysis and Loss Prevention will assist the University in organizing and implementing a maintenance program that minimizes the adverse impact of boiler/machinery failures.

2. The University is responsible for the implementation of a boiler/machinery program for the particular type equipment used. This program will include, as minimum responsibilities, what equipment is to be maintained, how maintenance is to be performed, and how records will be maintained.

4. Commercial Insurance Carriers will perform on-site inspections to insure that the University is operating within the prescribed boiler/machinery code/law. A copy of this report to the Office of Risk Management.

Appendix

Grambling State University Safety & Risk Management

Appendix A: Laboratory Safety Inspection Form…….pg 110-114

Appendix B: Work Area Inspection Report……..pg 115-125

Appendix C: Receiving Area Inspection Reports……..pg 125-129

Appendix D: Office/Classroom Inspection Report……pg 130-133

Appendix A

Grambling State University

Laboratory Safety Inspection Form

****

****

1. Are emergency phone numbers and procedures posted?

   Yes___No___N/A___

2. Is the emergency evacuation route posted in the room?

   Yes___No___N/A___

3. Are safety instruction signs properly used? (Signage)

   Danger, Caution, Radiation warnings, Directional Yes___No___N/A___

4. Are exits clearly marked and unobstructed? Yes___No___N/A___

5. Is emergency equipment available (clearly marked and unobstructed)?

   Fire extinguishers (date of last inspection) Yes___No___N/A___

6. Is emergency equipment inspected periodically?

Yes___No___N/A___

7. Is there personal protective equipment (PPE) in the area?

Face shields, splash goggles, ear protection, hand protection

Yes___No___N/A___

8. Is it the proper PPE for the type of hazards? Yes___No___N/A___

9. Is the PPE in good condition? Yes___No___N/A___

10. Are all chemicals stored safely?

Properly labeled, in approved containers? Yes___No___N/A___

Away from hoods? Yes___No___N/A___

Is food stored in same area with chemicals? Yes___No___N/A___

11. Are cylinders of compressed gas secured to the wall?

Yes___No___N/A___

12. Are hot plates unplugged when not in use? Yes___No___N/A___

13. Are work areas, passageways, store rooms, service rooms in clean orderly and sanitary condition? (General Housekeeping)

Yes___No___N/A___

14. Are troughs and sinks clean and free of debris?

Yes___No___N/A___

15. Are broken glass boxes in use?

Yes___No___N/A___

16. Are sharps containers in use? Yes___No___N/A___

17. Is a spill clean-up kit available and well stocked? Yes___No___N/A___

18. Is there evidence of food or drink in the lab? Yes___No___N/A___

19. Are hoods functional?

Is sash kept at proper level? Yes___No___N/A___

Last inspection date: _____

If any no answers were checked, please explain on next page. Also please record any suggestions and recommendations to remedy the problems. Please use the following space to write your comments:

Submitted by: _____ Date: _____

Reviewed by: _____ Date: _____

Department Head/Supervisor: _____

Reviewed by: _____ Date: _____

Dean: _____

Copy to Environmental Health and Safety Office

Appendix B

Grambling State University

Work Area Inspection Report

Campus Location/Building: _____ Room: _____

Department: _____ Date: _____

Time: _____

****

****

Power Equipment

1. Is equipment checked for exposed wiring, frayed cords, deteriorating insulation, proper grounding on a "per use" basis? Yes___ No___ N/A___
2. Are all guards in place? Yes___ No___ N/A___
3. Are operating switches and safety switches in working order? Yes___ No___ N/A___
4. Are breaking mechanisms in working order? Yes___ No___ N/A___
5. Are cutting blades sharp? Yes___ No___ N/A___
6. Are nuts, bolts, and other connectors snug and fast? Yes___ No___ N/A___

7. Is hydraulic equipment regularly inspected for proper fluid levels, leaks, proper connections, etc? Yes___ No___ N/A___

Hand Tools (hammers, chisels, etc.)

Maintenance

8. Are cutting edges sharp? Yes___ No___ N/A___

9. Are handles not split or cracked? Yes___ No___ N/A___

10. Are hand tools protected from damage during transport to job site or when stored?

Yes___ No___ N/A___

11. Are hand tools stored properly when not in use? Yes___ No___ N/A___

Grinders/Cutting Tools

12. Are the wheels covered? Yes___ No___ N/A___

13. Is the power switch labeled and easily accessible? Yes___ No___ N/A___

14. Is it securely fastened? Yes___ No___ N/A___

15. Do safe guards meet the minimum standards?

Do they prevent workers body parts from making contact with moving parts?

Yes___ No___ N/A___

Do they prevent objects from falling into the moving parts? Yes___ No___ N/A___

Do they permit relatively easy operation of the device? Yes___ No___ N/A___

Wheelbarrows/Hand trucks

16. Handles are not cracked or broken? Yes___ No___ N/A___

17. Are all body bolts secure? Yes___ No___ N/A___

18. Are pneumatic tires properly inflated? Yes___ No___ N/A___

Garbage Containers

19. Are they properly stored when not in use? Yes___ No___ N/A___

20. Are handles and lids free of cracks? Yes___ No___ N/A___

21. Are containers free of sharp/jagged edges? Yes___ No___ N/A___

Chemicals

22. Are chemicals properly stored (cool, dry, isolated) Yes___ No___ N/A___

23. Is personal protective gear used when people are exposed to chemicals? (gloves, goggles, respirators, aprons) Yes___ No___ N/A___

24. Is the protective gear in good condition? Yes___ No___ N/A___

25. Are warning labels properly followed? Yes___ No___ N/A___

26. Are leaks or other hazards promptly identified and reported? Yes___ No___ N/A___

27. Are MSDS sheets for all chemicals, being stored and used at each site, available at each job site? Yes___ No___ N/A___

Personal Protective Equipment

28. Is appropriate protection provided for each type of job? Yes___ No___ N/A___

Eye protection – with side shields

Footwear – no sandals or tennis shoes

Shirts – no tank tops

Hearing protection – malleable throw away plugs

Breathing protection – dust masks, respirators

General Safety

29. Is the supervisor aware of an active written safety program, and has he taken steps to implement it? Yes___ No___ N/A___

30. Does the supervisor inspect his area and equipment on a regular basis? Yes___ No___ N/A___

31. Is equipment used in a proper manner as not to make it unsafe to use? Yes___ No___ N/A___

32. Does the supervisor coordinate with other departments to report damaged, faulty, or unsafe equipment and or unsafe practices? Yes___ No___ N/A___

33. Is "horsing around" prohibited around equipment and other work areas? Yes___ No___ N/A___

34. Are procedures for receiving first aid and emergency notification posted? (names and phone numbers of who is to be contacted) Yes___ No___ N/A___

If an explanation is needed for any of the above responses (either Yes or No), place comments on the space provided below. Also please record any suggestions and recommendations to remedy the problem. Please use the following space to write your comments:

Submitted by: _____ Date: _____

Reviewed by: _____ Date: _____

Department Head/Supervisor: _____

Reviewed by: _____ Date: _____

Dean: _____

Copy to Safety Office

****

****

Power Equipment

1. Is equipment free from gasoline and/or oil leaks? Yes___ No___ N/A___
2. Are all guards in place? Yes___ No___ N/A___
3. Are gas throttles in working order? Yes___ No___ N/A___
4. Are breaking mechanisms in working order? Yes___ No___ N/A___
5. Are cutting blades sharp? Yes___ No___ N/A___
6. Are frames in good order? Yes___ No___ N/A___
7. Are nuts, bolts, and other connectors snug and fast? Yes___ No___ N/A___

Yes___ No___ N/A___

Hand Tools (shovels, spades, blades, etc.)

Maintenance

8. Are cutting edges sharp? Yes___ No___ N/A___

9. Are handles not split are cracked? Yes___ No___ N/A___

10. Are Hand tools protected form damage during transport to job site or when stored?

Yes___ No___ N/A___

11. Are Hand tools stored properly when not in use? Yes___ No___ N/A___

Grinders

12. Are the wheels covered? Yes___ No___ N/A___

13. Is the work rest adjustable and secure? Yes___ No___ N/A___

14. Is it securely fastened? Yes___ No___ N/A___

15. Are work rest no farther than 1/8 " from wheel? Yes___ No___ N/A___

Wheelbarrows/Hand trucks

16. Handles are not cracked or broken? Yes___ No___ N/A___

17. Are all body bolts secure? Yes___ No___ N/A___

18. Are pneumatic tires properly inflated? Yes___ No___ N/A___

Garbage Containers

19. Are they properly stored when not in use? Yes___ No___ N/A___

20. Are handles and lids free of cracks? Yes___ No___ N/A___

21. Are containers free of sharp/jagged edges? Yes___ No___ N/A___

Chemicals

22. Are chemicals properly stored (cool, dry, isolated) Yes___ No___ N/A___

23. Is personal protective gear used when people are exposed to chemicals? (gloves, goggles, respirators, aprons) Yes___ No___ N/A___

24. Is the protective gear in good condition? Yes___ No___ N/A___

25. Are warning labels properly followed? Yes___ No___ N/A___

26. Are leaks or other hazards promptly identified and reported? Yes___ No___ N/A___

27. Are MSDS sheets for all chemicals, being stored and used at each site, available at each job site? Yes___ No___ N/A___

Personal Protective Equipment

28. Is appropriate protection provided for each type of job? Yes___ No___ N/A___

Eye protection – with side shields

Footwear – no sandals or tennis shoes

Shirts – no tank tops

Hearing protection – malleable throw away plugs

Breathing protection – dust masks, respirators

General Safety

29. Is the supervisor aware of an active written safety program, and has he taken steps to implement it? Yes___ No___ N/A___

30. Does the supervisor inspect his area and equipment on a regular basis? Yes___ No___ N/A___

31. Is equipment used in a proper manner as not to make it unsafe to use? Yes___ No___ N/A___

32. Does the supervisor coordinate with other departments to report damaged, faulty, or unsafe equipment and or unsafe practices? Yes___ No___ N/A___

33. Is "horsing around" prohibited around equipment and other work areas? Yes___ No___ N/A___

34. Are procedures for receiving first aid and emergency notification posted? (names and phone numbers of who is to be contacted) Yes___ No___ N/A___

If an explanation is needed for any of the above responses (either Yes or No), place comments on the space provided below. Also please record any suggestions and recommendations to remedy the problem. Please use the following space to write your comments:

Appendix C

Grambling State University

Receiving Area Inspection Report

Campus Location/Building: _____ Room: _____

Department: _____ Date: _____

Time: _____

Small equipment and hand tools

1. Is equipment checked for exposed wiring, frayed cords, deteriorating insulation, other obvious damage? Yes___ No___ N/A___
2. Are hand tools checked for cracks, breaks, chips, etc.? Yes___ No___ N/A___
3. Are hand tools, and other types of equipment stored properly when not in use? Yes___ No___ N/A___

Wheelbarrows/Hand trucks

4. Handles are not cracked or broken? Yes___ No___ N/A___
5. Are all body bolts secure? Yes___ No___ N/A___
6. Are pneumatic tires properly inflated? Yes___ No___ N/A___

Chemicals

7. Are chemicals properly stored (cool, dry, isolated) i.e. flammable stored in designated Flammable Storage Area Yes___ No___ N/A___

8. Is personal protective gear used when people are exposed to chemicals? (gloves, goggles, respirators, aprons) Yes___ No___ N/A___

9. Are flammable substances stored away from heat and spark sources? Yes___ No___ N/A___

10. Are warning labels properly followed?

11. Are leaks or other hazards promptly identified and reported?

12. Are MSDS sheets for all chemicals, being stored and used at each site, available at each job site? Yes___ No___ N/A___

Storage Areas

13. Are stored materials stacked to a safe manner? (safe height, not extending into aisles) Yes___ No___ N/A___

14. Are floors, aisle ways and inside passage ways kept clean and dry? Yes___ No___ N/A___

15. Are areas maintained to minimize slip and fall hazards? Yes___ No___ N/A___

16. Are roll up doors working properly? Yes___ No___ N/A___

17. Is the lighting in the area proper for the work being done? Yes___ No___ N/A___

18. Are the light fixtures, ceiling tiles or other fixtures securely fastened? Yes___ No___ N/A___

19. Are all access routs to and from this area secured and checked daily? Yes___ No___ N/A___

General Work Rules

20. Have all employees been trained, and do they practice Safe Lifting Techniques? Yes___ No___ N/A___

21. Do employees use stools or platforms to move things to and from high places? (instead of chairs, buckets, boxes, etc.) Yes___ No___ N/A___

22. Do employees seek help or mechanical assistance if they have any doubt about the weight or awkwardness of carrying something? Yes___ No___ N/A___

23. Do employees used personal protective equipment when needed? Yes___ No___ N/A___

General Safety

24. Is the supervisor aware of an active written safety program, and has he taken steps to implement it? Yes___ No___ N/A___

25. Does the supervisor inspect his area and equipment on a regular basis? Yes___ No___ N/A___

26. Is equipment used in a proper manner as not to make it unsafe to use? Yes___ No___ N/A___

27. Does the supervisor coordinate with other departments to report damaged, faulty, or unsafe equipment and or unsafe practices? Yes___ No___ N/A___

28. Is “horsing around” prohibited around equipment and other work areas? Yes___ No___ N/A___

29 Are procedures for receiving first aid and emergency notification posted? (names and phone numbers of who is to be contacted) Yes___ No___ N/A___

If an explanation is needed for any of the above responses (either Yes or No), place comments on the space provided below. Also please record any suggestions and recommendations to remedy the problem. Please use the following space to write your comments:

Submitted by: _____ Date: _____

Reviewed by: _____ Date: _____

Department Head/Supervisor: _____

Reviewed by: _____ Date: _____

Dean: _____

Copy to Safety Office

Appendix D

Grambling State University

Office/Classroom Inspection Report

Campus Location/Building: _____ Room: _____

Date: _____ Time: _____

Department: _____

****

****

1. Is there litter or spilled liquid on the floor? Does a person guard them or barrier (furniture) until cleanup is accomplished? Yes___ No___ N/A___

2. Are aisles free of boxes, wastebaskets, chairs and other obstacles that impede traffic? Is there unobstructed access to all areas of the room? Yes___ No___ N/A___

3. Are lockers, cabinets, bookcases, blackboards, bulletin boards, light fixtures, ceiling tiles and other objects securely fastened? Yes___ No___ N/A___

4. Are floor surfaces chipped, does carpeting show worn spots or holes that could cause tripping? Yes___ No___ N/A___

5. Do self closing doors have too much spring tension?Yes___ No___ N/A___

6. Do electrical cords look frayed, have loose plugs, worn insulation? Are they draped over hot pipes, bent around hooks or stepped on? Yes___ No___ N/A___

7. Are flimsy extension cords in use? If adapter is used to plug a grounded plug into an ungrounded receptacle, is the pigtail attached to a grounded object. Yes___ No___ N/A___

8. Are all appliances/equipment connected with three prong plugs? Yes___ No___ N/A___

9. Are wall outlets overloaded by connecting additional appliances or equipment with adapters or extension cords? Yes___ No___ N/A___

10. Are electrical or telephone wires protected by furniture arrangements or other means to minimize tripping hazards. Yes___ No___ N/A___

11. Do people stand on furniture or other objects and use them as improvised ladders? Yes___ No___ N/A___

12. Are desks, chairs, file cabinets, etc in good working order and are they positioned so that drawers do not open into hallways or pathways? Yes___ No___ N/A___

13. Do people get help from maintenance to move heavy objects such as file cabinets, desks, supplies, etc? Yes___ No___ N/A___

14. Are desk or file drawers left open? Yes___ No___ N/A___

15. Is more than one file drawer open at once? Are file cabinets secured to the wall, floor, or are several bolted together? Yes___ No___ N/A___

16. Are files top heavy with empty drawers at bottom and full drawers on the top? Yes___ No___ N/A___

17. Are transparent doors marked so they can be seen? Yes___ No___ N/A___

18. Must employees step up or down while going through a doorway? If so, is a warning sign posted, is it highlighted with yellow paint? Yes___ No___ N/A___

19. Do solid doors have a glass panel at eye level to prevent them from being open into someone in the opposite side? Are signs which warn "OPEN SLOWLY" posted if clear panels are not installed? Yes___ No___ N/A___

20. Is the paper cutter placed in a safe place? Yes___ No___ N/A___

21. Are razor blades or pins mixed in with paper clips? Yes___ No___ N/A___

22. Are fire exits clearly marked and does everyone know their location? Yes___ No___ N/A___

23. Is there a floor diagram with marked emergency egress path marked in the room? Yes___ No___ N/A___

24. Are flammable fluids properly stored in safety cans and away form machinery and other heat sources? Yes___ No___ N/A___

25. Does everyone know the location of fire alarms and extinguishers? Does everyone know how to operate these two safety devices? Yes___ No___ N/A___

26. Are emergency numbers posted for Campus Police and Health Services? Yes___ No___ N/A___

27. Are doors to enclosed stairwells kept closed at all times? Yes___ No___ N/A___

28. Is everyone aware of the emergency evacuation procedures? Yes___ No___ N/A___

29 Are all accidents properly recorded and reported? Yes___ No___ N/A___

30. Are quarterly Safety Inspections conducted? Yes___ No___ N/A___

31. Are quarterly Safety Meetings conducted? Yes___ No___ N/A___

If an explanation is needed for any of the above responses (either Yes or No), place comments on the space provided below. Also please record any suggestions and recommendations to remedy the problem. Please use the following space to write your comments:

Submitted by: _____ Date: _____

Department Head/Supervisor: _____

Reviewed by: _____ Date: _____

Dean:_____

Copy to Safety Office