THE UNIVERSITY OF TEXAS AT BROWNSVILLE
and
TEXAS SOUTHMOST COLLEGE

ENVIRONMENTAL HEALTH & SAFETY MANUAL

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Note: This document is ever-evolving; it is revised and posted to the EH&S website as regulations are updated.
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# Glossary of Abbreviations

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<th>Description</th>
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<tbody>
<tr>
<td>ADA</td>
<td>Americans with Disabilities Act</td>
</tr>
<tr>
<td>AED</td>
<td>automatic electrical defibrillator</td>
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<td>AVPBA</td>
<td>assistant vice president for business affairs</td>
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<td>BCRSC</td>
<td>Biological, Chemical, and Radiation Safety Committee</td>
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<tr>
<td>CAA</td>
<td>Clean Air Act</td>
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<tr>
<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
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<td>CEPP</td>
<td>Chemical Emergency Preparedness and Prevention</td>
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<tr>
<td>CESQG</td>
<td>conditionally exempt, small-quantity generator (of hazardous waste)</td>
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<td>CFR</td>
<td>Code of Federal Regulations</td>
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<tr>
<td>CPR</td>
<td>cardio-pulmonary resuscitation</td>
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<tr>
<td>DOT</td>
<td>Department of Transport</td>
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<td>EH&amp;S</td>
<td>Environmental Health and Safety</td>
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<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
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<tr>
<td>EPCRA</td>
<td>Emergency Planning and Community Right to Know Act</td>
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<tr>
<td>ESA</td>
<td>environmental site assessment</td>
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<tr>
<td>HazCom</td>
<td>hazard communications</td>
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<tr>
<td>HazWoper</td>
<td>Hazardous Waste and Emergency Response (training)</td>
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<tr>
<td>HCA</td>
<td>Hazard Communication Act</td>
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<tr>
<td>HOOP</td>
<td>Handbook of Operating Procedures (UTB/TSC specific)</td>
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<tr>
<td>HR</td>
<td>Human Resources Office</td>
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<td>IACUC</td>
<td>Institutional Animal Care and Use Committee</td>
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<td>IAQ</td>
<td>Indoor Air Quality</td>
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<td>LEPC</td>
<td>Local Emergency Planning Committee</td>
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<td>MSDS</td>
<td>materials safety data sheet</td>
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<tr>
<td>MTA</td>
<td>Materials Transfer Agreement</td>
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<td>NFPA</td>
<td>National Fire Protection Agency (or Act)</td>
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<td>NIH</td>
<td>National Institutes of Health</td>
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<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
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<td>PHS</td>
<td>Public Health Service</td>
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<td>PPE</td>
<td>personal protective equipment</td>
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<td>RAM</td>
<td>radioactive material</td>
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<td>RCRA</td>
<td>Resource Conservation and Recovery Act</td>
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<td>RDNA</td>
<td>recombinant DNA</td>
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<td>SERC</td>
<td>State Emergency Response Commission</td>
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<tr>
<td>SPPC</td>
<td>Spill Prevention Control and Countermeasure</td>
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<tr>
<td>SWPPP</td>
<td>Stormwater Pollution Prevention Plan</td>
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<tr>
<td>TSDF</td>
<td>treatment, storage, and disposal facility</td>
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<tr>
<td>UST</td>
<td>underground storage tank</td>
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<tr>
<td>UTB/TSC</td>
<td>The University of Texas at Brownsville and Texas Southmost College</td>
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<tr>
<td>VPAA</td>
<td>Vice president for academic affairs</td>
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<td>VPBA</td>
<td>Vice president for business affairs</td>
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<tr>
<td>WIC</td>
<td>Worker’s Insurance Compensation</td>
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1 Administration

1.1 Introduction

The administration of the Environmental Health and Safety program at UTB/TSC is coordinated by the director of environmental health and safety (EH&S), who has the authority to plan, establish, and manage priorities for the implementation of the EH&S program objectives.

EH&S will provide the broad technical and administrative procedures needed to coordinate the objectives of the master plan of the EH&S program. The role of the EH&S Office is fourfold: surveillance, consulting, education, and documentation.

1.2 HOOP 10.9.3 to empower the Campus Safety program

The University of Texas at Brownsville and Texas Southmost College (UTB/TSC) Environmental Health and Safety program is designed to define and implement the Campus Safety program as authorized by HOOP 10.9.3. This manual implements 29 CFR 1910, Light Industries; 40 CFR 273, Hazardous Chemicals; 42 CFR 72.6 (from the USA Patriot Act); National Fire Protection Agency (NFPA) 101; and other UT System, state, and federal requirements for personnel and environmental protection.

1.3 UTB/TSC policy expectations

All employees of UTB/TSC will perform their duties in compliance with all applicable federal, state, and local environmental laws, regulations, and ordinances. Additionally, UTB/TSC is committed to appropriate training of employees and students to enable them to perform their duties and conduct their activities in an environmentally responsible manner. The students of today will be the regulatory compliance managers of industry tomorrow.

It is the expectation of UTB/TSC executive management that all wastes generated as a result of University activities are considered in a manner that will be consistent with the protection of human health and the environment. It is also expected that all lands held by TSC or managed by UTB will be managed in a manner that will result in proper use of natural resources and the preservation of the natural environment for the benefit of the citizens of Texas.

Further, UTB/TSC will make reasonable efforts to minimize waste generated as a result of university activities and to achieve the goals set out in the Governor’s Executive Order AWR 92-2. The UTB/TSC safety program has been founded on the following objectives:

1. To ensure a safe working environment for the campus community.
2. To ensure compliance with all provisions and standards of environmental and occupational health and safety laws.
3. To ensure compliance with the safety requirements of state and local departments of public health, fire marshals, and law enforcement agencies having safety and health requirements which affect the campus environment.
4. To ensure compliance with standards to meet the special needs of people with disabilities, as set forth in various government codes and regulations.
5. To ensure compliance with any other legal requirements set forth by any local, state, or federal regulatory body concerned with the prevention of injury to any people on campus.
6. To ensure that the contributing human factors are considered in planning for accident prevention.

In the absence of appropriate local, state, or federal regulations in any given subject area, published standards of nationally recognized safety organizations have been used as guidelines in determining the applicable standards for the UTB/TSC program.

### 1.4 The Environmental Health and Safety Committee

The primary safety advisory committee at UTB/TSC is the Environmental Health and Safety Committee, recommended by the Executive Committee and appointed by the president as a standing committee, as laid out in HOOP 10.9.3. Its purpose is to serve as advisory oversight to the environmental health and safety director in all areas of safety.

### 1.5 Environmental Health and Safety Office

As set out in HOOP 10.9.2, it is the policy of UTB/TSC to maintain, within the reasonable control of the institution, a campus environment for students, faculty, staff, and visitors that is free of unsafe or hazardous conditions. No person shall be required to perform any task under unsafe or hazardous conditions.

The responsibility for the administration, monitoring, inspecting, and reporting of the campus safety program is assigned to the director of environmental health and safety (EH&S), who reports to the associate vice president for business affairs/compliance (AVPBA). The implementation of the safety policy is the responsibility of the vice presidents, chairs, deans, faculty, staff, and the researchers and laboratory and shop instructors within the institution.

The director of EH&S is responsible for ensuring University compliance with the safety programs established by the HOOP and this manual. EH&S formulates and recommends to the Environmental Health and Safety Committee appropriate new codes, rules, standards, policies, and procedures based on analysis and interpretation of pertinent local, state, and federal health and safety laws. The director also serves as an ex-officio member of the Biological, Chemical, and Radiation Safety Committee (BCRSC) and the Institutional Animal Care and Use Committee (IACUC) (see chapter 6).

A primary administrative function of the EH&S Office is to assist UTB/TSC administrators, deans, and department chairs in meeting their assigned environmental health and safety responsibilities, outlined in this manual. To accomplish this, EH&S will meet and work with all campus administrators, academic departments, and specialized committees to provide methods for the continued development and implementation of environmental health and safety programs designed to prevent or reduce accidents and to identify and eliminate hazardous environmental and safety conditions.
The Environmental Health and Safety Office has the authority to require that administrators, deans, department chairs, supervisors and other individuals abate unsafe conditions or operations when, in the professional opinion of the safety officer, the operation/condition constitutes an imminent hazard to life and/or property. Other conditions or operations not considered to be an imminent danger, but in violation of standards published in this manual or local, state, and federal health and safety laws, will be documented for correction through appropriate channels.

Administrative and corporate-compliance duties of the Environmental Health and Safety Office shall include, but not be limited to, the following areas:

- **Environmental monitoring and inspections**: The EH&S Office will promote safe and sanitary conditions of campus buildings and grounds by conducting periodic health and safety inspections of all campus facilities. Also, EH&S will investigate complaints to evaluate unsafe conditions, practices, and procedures, violations of campus regulations and/or applicable local, state, and federal laws, and report the results to the responsible administrator, dean, or department chair for correction.

- **Liaison with governmental agencies**: The EH&S Office will develop and maintain good working relationships with governmental agencies having jurisdiction or quasi-jurisdiction over matters affecting the health and safety of employees, students, and visitors on the UTB/TSC campus.

- **Procurement of machinery and equipment**: The EH&S Office will assist departments in the design, purchase, and use of hazardous or potentially hazardous equipment. It will also assure that all such items are in conformance with safe operating standards.

- **Review of research projects**: The EH&S Office will assist in the review of academic research proposals and contracts to assure that pertinent health and safety factors are incorporated into grants and projects submitted by and/or awarded to personnel or departments.

- **Emergency preparedness**: The EH&S Office will assist in the continued development and implementation of emergency procedures and the procurement of needed equipment, and provide technical consultation to campus emergency personnel.

- **Campus public events**: EH&S will monitor all campus public events, in conjunction with the Student Activities Office, to assure that proper consideration is given to environmental health and safety factors such as electrical equipment, food sanitation, temporary structures, waste disposal, fire safety, etc.

- **Machinery guarding**: EH&S will assist Physical Plant in ensuring that campus machinery, equipment, and power tools are properly guarded in conformance with the standards contained in this manual.

- **Electrical safety**: EH&S will ensure that electrical hazards, including cord-connected equipment in laboratories, shops, and offices, are identified and eliminated.

- **Fire protection**: EH&S will ensure that buildings, facilities, and fire-detection and fire-suppression equipment are properly inspected at regular intervals and
maintained to reduce the potential of fire losses. Also, flammable liquids and materials will be monitored.

- **Radiation safety**: EH&S will, in cooperation with the Radiation Officer and the Environmental Health & Safety Committee, ensure that proper surveillance and control of ionizing and non-ionizing sources of radiation are in accordance with the radiation safety standards.

- **Ventilation control**: EH&S will ensure that all laboratory fume hoods and general room ventilation meet accepted flow-rate standards.

- **Chemical waste disposal**: EH&S will provide for the safe handling, storage, and disposal of hazardous and toxic liquid and solid waste. It will also maintain surveillance of waste disposal and investigate and evaluate complaints regarding general refuse collection and sewage for all campus buildings and areas.

- **Environmental sanitation**: EH&S will ensure that maintenance of the campus environment is consistent with accepted standards of sanitation for buildings and grounds.

- **Information**: EH&S will disseminate information to the campus community on safety-related items to assure that all faculty and staff are kept informed of current safety procedures, hazards, and unsafe conditions.

- **Personal protective equipment**: EH&S will ensure the purchase and correct use of personal protective equipment that is adequate for the health and safety hazards encountered on campus. These hazards include confined spaces.

- **Emergency response**: EH&S will provide professional assistance to the campus community by responding to emergency calls.

- **Safety training**: EH&S will provide and promote education and training of campus personnel in health and safety practices in cooperation with the Department of Human Resources, Physical Plant, and Campus Police.

- **Building construction and space modification**: EH&S will advise on applicable safety codes and practices in construction and in modification of new or existing campus buildings; also, equipment and facilities, grounds, roadways, and the construction or placement of temporary or permanent objects. EH&S will review construction plans as required.

- **Handicapped services**: EH&S will provide advice and assistance on health and safety matters relevant to the needs of people with disabilities on campus.

- **Incident investigation**: EH&S will conduct appropriate investigations of campus accidents reported that may involve UTB/TSC liability under the Texas Tort Claims Act. EH&S will also obtain the necessary photographs, evidence, and witnesses, and ensure that the cause of the accident is removed or corrected where possible.

- **Consultation and advice**: EH&S will provide consultation and advice to the office working with the UTB/TSC accident and injury statistics and cost data (when available), and prepare and distribute periodic reports to selected campus departments.

- **Right to know**: EH&S will ensure that UTB/TSC is in compliance with all provisions of the Texas Hazard Communication Act by ensuring that material safety data sheets (MSDSs) are available to all UTB/TSC personnel who are, or may be, exposed to hazardous materials.
1.6  Record-keeping, training, and checklist requirements
Record-keeping of the various programs is one of the more often violated EH&S program elements. Each of the programs will be reviewed for training and certification requirements. The certification roster provided by the Training Post for full-time employees is sufficient to meet this requirement. A similar listing of the part-time or applicable student employees will be maintained by EH&S.

1.7  Scheduling of EH&S program inspection activities
In order to meet the corporate compliance, EPA, OSHA, and high-risk documentation requirements, an annual inspection schedule of EH&S activities will be completed. As the inspection activities are completed, they will be documented within their respective program files.

In order to implement all of the EH&S program sub-elements in the Risk Management program, an inspection schedule is used to track all required activities over the applicable time periods. Completed work orders serve to document, according to program, the completion of the activities to meet the EPA/OSHA/NFPA program reporting requirements.

1.8  Program responsibilities
The ultimate responsibility for establishing and maintaining the Environmental Health and Safety (EH&S) program on the UTB/TSC campus rests with the UTB/TSC president.

Basic policies which govern the activities and limitations of the EH&S program are thereby established under the final authority of the president, through the Environmental Health and Safety Committee using safety programs as authorized in HOOP 10.9.2 and implemented by this EH&S manual. However, the primary responsibility for providing and maintaining a healthy and safe campus environment on a day-to-day basis lies at the operational department levels. At the department level UTB/TSC effectively fulfills the basic requirement of all applicable laws and regulations associated with environmental health and safety issues.

Because of the wide diversity of operations at UTB/TSC and the necessary differences in organizational structure with various departments, it is recognized that certain responsibilities and expressed procedures in this program cannot be equally applied. Therefore, each department has some latitude in formulating and implementing alternative methods when necessary, as long as the total Environmental Health and Safety program objectives are not compromised. Necessary modifications are to be documented by the department head and copies forwarded to EH&S in a timely manner.

Each individual who participates in the operations of UTB/TSC has the responsibility to help create and maintain a safe campus environment. Specific responsibilities of all faculty and staff are directly proportional to their operational authority.
1.8.1 Administrators, deans, and department chairs

UTB/TSC administrators and department chairs have the explicit responsibility to maintain healthful and safe working conditions within their jurisdictions; to monitor and exercise control over their assigned areas, and to implement the following designated safety-related procedures:

- Appoint an area fire warden and a backup to be the department’s point of contact for day-to-day implementing and administration of the department’s safety program.
- Make every effort to maintain compliance with and observance of all campus health and safety regulations established by this manual that are applicable to their particular environmental jurisdiction. Also, ensure compliance with additional local, state, and federal health and safety laws by consultation with the EH&S Office.
- Identify facilities and equipment that present a health or safety hazard. If it becomes necessary to replace, upgrade, or add additional items of equipment to ensure a proper and safe working environment, available departmental or UTB/TSC funds should be scheduled by the account manager for replacement or acquisition.
- Monitor the documented EH&S periodic safety inspections of the division or department and correct any deficiencies that might exist. Departments having hazardous operations will be inspected more frequently. The EH&S director will advise on any questions regarding corrective measures to be taken. A written report summarizing safety inspection findings and recommended corrective actions will be submitted to the affected deans and chairs. Deficiencies beyond the departmental capabilities will be handled directly by the EH&S staff, using an appropriate work order.
- Ensure that all personnel are briefed and fully understand departmental work procedures and existing policies before starting work.
- Provide necessary safety equipment and personal protective equipment (PPE) for each person (other than personal equipment that can be worn off-campus, such as safety glasses and shoes).
- Seek prompt medical treatment for any faculty, staff, students, or visitors who are injured. Maintain a fully supplied first-aid kit in the laboratories and shops and be sure that all employees are aware of its location and proper use.
- Investigate, document, and review all injuries, illnesses, incidents, or accidents occurring within the department that represent any degree of loss or potential loss.
- Require all faculty and/or staff to complete applicable UTB/TSC safety-related training courses. These are available through the Training Post.
- Ensure that copies of all documentation of fire and safety inspections, reviews, corrective action, and follow-ups are forwarded to EH&S where they will be maintained and consolidated to ensure corrective actions for follow-up outside inspections.

Whatever consultation or assistance is needed to assure compliance with all of the above responsibilities will be available from or through the director of EH&S.
1.8.2 Supervisors

Supervisors are responsible for instructing personnel under their direction in exercising proper operational procedures, and ensuring that all facilities and equipment under their jurisdiction are monitored and maintained in a safe condition at all times. Physical deficiencies shall be documented to the Physical Plant or EH&S using an appropriate work order form or by email to EH&S.

The supervisor will ensure scheduled training is completed as necessary. Special emphasis should be given to providing detailed training prior to assignment of duties and equipment. Further, responsibilities of supervisors will include the following:

- Explain clearly to employees the safety regulations that are relevant to specific work duties, and enforce compliance. If necessary, make arrangements through EH&S for explanations in Spanish.
- Conduct training meetings for all employees to assure uniform safe operation and performance of equipment and skills.
- Encourage employees to voluntarily observe safety rules and regulations at all times.
- Provide personnel with needed personal protective equipment (PPE) as appropriate.
- Control unsafe practices and actions of employees such as standing on chairs, stacking boxes above desks, smoking in prohibited areas, operating machinery without safeguards, etc.
- Inspect work areas for hazardous conditions or unsafe practices, such as electrical cords across walkways. Initiate prompt corrective actions. Notify the EH&S Office of any assistance needed.
- Maintain good housekeeping practices in work, lab, and/or teaching areas.
- Report unsafe conditions, equipment, and practices, personally observed or reported to you by your employees, to EH&S.
- Report all accidents promptly and complete an Incident Report Form, available from the EH&S website.
- Seek prompt medical treatment for employees who are injured, including transportation, if necessary.
- Notify the department of any employee who may be physically or emotionally incapable of performing their assigned duties.
- Maintain records of occupational injuries and illnesses associated with work. Copies of incident reports are to be provided to EH&S and Human Resources. Originals should be provided to Student Health Services.
- Encourage recommendations from employees of the department for improving actions to eliminate potential safety hazards.
- Commend and recognize employees who maintain a uniformly safe environment and accident-free work record, or who develop unique safety devices or practices for their work area.
- Ensure a first-aid kit is available for employees and students.
1.8.3 Faculty and teaching assistants

Faculty members and teaching assistants are responsible for the dissemination of information regarding safety regulations to students and employees under their active academic supervision. These responsibilities include but are not limited to the following:

- Explain to students the campus safety regulations and procedures established by this manual and departmental procedures that are pertinent to their specific academic tasks and/or activities. The majority of these requirements are contained within the accreditation process, handbooks, and course syllabuses utilized.
- Ensure that all laboratory and shop teachers and instructors have a safety certification, or its equivalent, on file with the chair or vice president prior to providing instruction in the lab or shop.
- Ensure that all laboratory and shop teachers and instructors have a certification of bloodborne pathogen (BBP) and CPR training prior to teaching any laboratory or shop.
- Assure the proper use of manual or powered equipment by first demonstrating the correct operation, then providing initial personalized training and instruction, and thereafter maintaining periodic surveillance of individual users.
- Provide students with specialized personal protective devices and clothing, as needed, for the proposed instruction or activity, after first checking to see that such equipment is in good repair and complete in all component parts, sizes, and types. Students are to provide their own personal safety glasses and steel-toed shoes as applicable, as they can be worn off campus.
- Inspect instructional areas frequently for identification and prompt elimination of unsafe practices and conditions. Ask the department head to take specific corrective actions to eliminate hazards. Advice and assistance is available from the EH&S Office.
- Make every effort to seek prompt medical treatment from the department, Student Health Center, or a doctor of choice, for students who are injured.
- Know how to use the Internet to obtain material safety data sheets (MSDSs) for all employees and/or students who are or may be exposed to hazardous materials. Links can be found on the EH&S website.

1.8.4 Employees and students

All UTB/TSC employees and students are subject to the campus health and safety regulations established in this manual and in departmental procedures, which shall take precedence over any conflicting instructions, except where lawful and applicable government regulations may be contrary to these rules. Compliance with standards contained herein is vital to the creation and maintenance of a healthy and safe campus environment to facilitate the pursuit of desired goals and activities for UTB/TSC.

Responsibilities and rights of employees and students in achieving a healthy and safe campus are as follows:

- Not to perform any function or operation which is hazardous, or has an unknown hazard, before requesting advice or consulting with their supervisor or instructor as to the safe manner of procedures. Health and safety problems not settled at
either the supervisor, instructor, or departmental level may be appealed to the
deans or chairs, then to the director of EH&S.

- To understand and comply with UTB/TSC and departmental safety instructions,
  whether written or oral, when performing assigned duties.
- To use only tools and equipment approved or provided by the supervisor or
  instructor.
- To use appropriate safety equipment and guards, and work within established
  safety procedures, giving precedence to correct methods over expediency or
  shortcuts.
- To have available material safety data sheets (MSDSs) for all employees and/or
  students who are or may be exposed to hazardous materials.
- To report unsafe conditions, practices, or equipment to the supervisor or instructor
  when such deficiencies are observed and as often as necessary to assure their
  correction.

1.8.5 Off-campus organizations
University organizations and operations located off the main campus such as the South
Padre Island Center and other smaller operations are an integral part of the total campus
community. Therefore, they are required to accept the same health and safety
responsibilities as on-campus departments and to follow all safety regulations and
procedures established in this manual. In addition, satellite groups will develop, publish
and implement specialized safety instructions, as necessary, for their particular activities
and needs after consultation with the UTB/TSC EH&S Office.

1.9 Environmental and safety queries
The director of environmental health and safety is responsible for the monitoring,
reporting, and documenting of the environmental status of the campus, including the
scheduling and monitoring of the remediation of any deficiencies cited. The EH&S
Office may request advice and/or assistance by initiating a work order directly to the
Physical Plant, if a structural or physical modification is required. If queries arise about
regulatory requirements, all are welcome to contact the EH&S Office by phone or email.
Such queries could be:

- A research question such as whether a particular commercial remediation solution
to a problem will meet the EPA regulation, such as a bulb crusher crushing
  mercury bulbs.
- What are the city/county ordinances on how rodent carcasses are disposed of from
  a lab or shop?
- What regulations provide for the secondary containment of individual containers
  in a storeroom of 2500 chemicals in individual containers?

1.10 Reporting health and safety suggestions
Employees and students having suggestions regarding health and safety matters should
report their recommendations in writing to their supervisor, instructor, or department
head. Supervisors, instructors, or department heads should seriously encourage and
consider all safety suggestions and respond to them as soon as possible. Guidance or assistance in handling safety suggestions is available through the EH&S personnel.

1.11 Emergency referrals and assistance

1.11.1 Medical emergencies

- Campus police for transportation or to contact EH&S 882-8232
- Student Health Services 882-8951
- Environmental Health and Safety 882-5929

1.11.2 Psychological crises or suicidal concerns

Severe anxiety, depression, or other emotional disturbance
- Counseling and Career Services 882-8292

Highly irrational, bizarre, and/or disruptive behavior
- Campus Police 882-8232
- Student Health Services 882-8951

Demonstration, confrontation, or disruptive and threatening behavior
- Campus Police 882-8232
- Student Activities Office 882-5137
- Dean of Students 882-5140

1.11.3 Hazardous activities or conditions

- Campus Police 882-8232
- Environmental Health and Safety 882-5929
2 UT System Requirements

2.1 Risk management

The UT System’s Risk Management program is designed to enable a committee made up of individuals from each component to look at the high-probability risk to which the component universities are exposed and work out solutions to either eliminate or reduce the probability of the risk occurring, or reduce the potential loss of the occurrence. The UT Risk Analysis Advisory Committee reviews the System risk as a whole, then looks to see how the other components are handling the risk, and whether this solution can apply to the system.

This is a UT System program that formalizes a risk evaluation system where each type of System risk is analyzed and solutions developed to remediate the risk or develop a plan or plans to reduce the risk, improve the outcome, or both.

2.2 Corporate compliance

The UT System’s Corporate Compliance program is an oversight function of the University’s high-risk programs, designed to institutionalize the risk reduction programs. The program is designed to install a self-enforcing method so that a cost-effective corrective system is institutionalized.

The UTB/TSC Corporate Compliance Office maintains the Risk-Based Compliance Plan, which details each office’s contribution to compliance.

EH&S personnel are not to fulfill the compliance requirements, but are to consult and ensure that the individual University functions fulfill them as part of their daily work. Specifically, EH&S is to perform consultations and compliance monitoring verifications to ensure that the National Fire Prevention Act and the Hazard Communication program, as outlined in 29 CFR 1910, are in place and functioning.

2.2.1 Corrective actions

All discrepancies discovered during reviews of various programs for corporate compliance shall be documented and, with the relevant pictures, provided to the immediate supervisors of the inspected activities, their supervisors, and department heads or vice presidents as appropriate. Where no findings are made, this will also be documented.

Where corrective actions are required, a suspense date will be established in the correspondence and a work order filed in the EH&S suspense system. This will enable EH&S to ensure a follow-up review is made to verify the correction. This action will be noted in the quarterly corporate-compliance certification documents.

In the event that the corrective action has not been taken, a follow-up documentation will be made and escalated to the chair of the Corporate Compliance Committee, the VPBA, and the chair or senior vice president of the function being reviewed. Pictures will again
be provided of the problem and a second suspense date established. If the deficiencies are not corrected by the second suspense date, then a third letter to the VPAA, the provost, the VPBA, and the UTB/TSC president will be initiated, with the appropriate pictures and history of actions taken to date.

Documentation of corrective actions from the appropriate levels will be added to the file to ensure closure of the subject, and to be available for review by Corporate Compliance or other authorities as appropriate.

2.3 Environmental review of real estate acquisitions
An environmental site assessment (ESA) must be performed on any real estate before it can be accepted by any component of the UT System. The review process is to ensure that the University System is fully aware of any environmental liability from acquiring any real estate, no matter what the source of the acquisition. (See UT System Administrative Rule series 80306.)

It is the policy of UTB/TSC to minimize its potential for exposure to claims for damages under the applicable laws governing the environment and hazardous substances by making all appropriate inquiries with regard to environmental condition of real estate assets prior to acquisition.

To reduce the risk of liability, UTB/TSC will complete an environmental site assessment prior to acquisition of any parcel of real estate by any means, including donations, leases or rental, or purchases. This includes any real estate moving between the partnership of the Southmost Union Junior College District and The University of Texas at Brownsville.

2.4 Environmental policy
The UT System Environmental Policy Statement (updated November 1999) details the UT System’s expectations and commitments with regards to protection of the environment. This covers the generation and discharge of waste, use of natural resources and land, and provision of appropriate training for employees and students.

2.5 Disaster response mutual aid
UT System has established a Mutual Aid program whereby System components in each region will plan to come to each other’s aid in the event of a disaster. The southeastern region comprises UTB/TSC and UT Pan American. The Business Recovery Mutual Aid Guidebook, available on the EH&S website, outlines the procedures and provides relevant forms and contact numbers for all participating components of the UT System.
3 Federal Regulatory Reporting Requirements

3.1 Local Emergency Planning Committee (LEPC)

The LEPC is a requirement in support of the Emergency Planning and Community Right to Know Act (EPCRA) of 1986 and is generally located in and managed by the local fire department. It forms part of the EPA’s Chemical Emergency Preparedness and Prevention (CEPP) program. The basic requirement is that every entity must provide public access to information on the presence of hazardous chemicals in the community. Specifically, the information must be available to the LEPC, the local fire department, and the State Emergency Response Commission (SERC).

The LEPC maintains the community data center to provide chemical storage information related to the location, quantity, and hazardous ratings of hazardous materials in the area. The committee provides this information to:

- the Emergency Response Services (ERS) so they are aware of the hazards that are in certain areas before entering them
- the public through the LEPC as part of the public’s right to know what hazardous materials by quantity and location are in the community
- the general public upon request so they know what is in the community

The University, because of its location, size, and hazardous materials possession, is a standing member of the Brownsville LEPC and is represented by the chief of Campus Police or the director of EH&S.

The LEPC conducts or participates in community chemical spill exercises on the streets and international bridges adjoining the University. Both the Campus Police and the director of EH&S participate in these exercises.

3.1.1 Reporting

Facilities covered by the EPCRA Section 311 must submit an emergency and hazardous chemical inventory report to the LEPC, the SERC, and the local fire department annually. At present, UTB/TSC does not have the amount or type of chemicals that would require either a tier I or tier II report.

3.1.1.1 Tier I

Requirements:

- An estimate of the maximum amount of chemicals for each category present at the facility at any time during the preceding calendar year.
- An estimate of the average daily amount of chemicals in each category.
- The general location of hazardous chemicals in each category.

3.1.1.2 Tier II

Requirements:

- Chemical name or the common name of the chemicals as indicated on the MSDS.
• An estimate of the maximum and average daily amounts of the chemical present at any time during the preceding calendar year.
• A brief description of the manner of storage of the chemical.
• The location of the chemical at the facility.
• An indication of whether the facility management elects to withhold location information from disclosure to the public, which UTB/TSC will not.

3.2 Stormwater Pollution Prevention Plan (SWPPP)

Under the Environmental Protection Agency (EPA) regulations of the Clean Water Act, UTB/TSC is exempt from having a written SWPPP, as the University does not have any effluent discharged into our resacas. During construction of new facilities, there could be discharges, however, UTB/TSC individual constructions are handled by the UT System Office of Facilities Planning and Construction (OFPC), which files for any construction permits required and is responsible.

The University does not have a water treatment plant or any industrial process which is accessible to rain or storm water.

3.3 Spill Prevention, Control, and Countermeasure plan (SPCC)

UTB/TSC is exempt from having a documented SPCC plan because we do not have any underground storage of water. A plan is required if total underground storage capacity is more than 42,000 gallons or if above-ground storage capacity exceeds 1,320 gallons. The University has only 1,000 gallons of capacity in two 500 gallon tanks. There are no industrial processes on the campus, hence none that are exposed to storm water flooding.

The SPCC plan is required by Section 311 of the Clean Water Act and came about because of the Exxon Valdez oil spill. In addition to hydrocarbons being released into surface waters, such as our resacas, there are almost 300 other substances listed as hazardous that must be prevented from reaching the water. Any sheens or floating pollution spotted on the resacas should immediately be reported to EH&S for investigation.

3.4 Clean Air Act

3.4.1 Indoor air quality

The Indoor Air Quality program is a coming requirement of OSHA, under the EPA’s Clean Air Act (CAA), to ensure the indoor atmosphere is environmentally safe for our staff, students, and faculty. It is postulated that 90% of all colds and asthmatic conditions are caught indoors. To date, the Indoor Air Quality program is mandated, but regulation standards have not been established. The IAQ program will become a synergistically coordinated effort between the Physical Plant, EH&S, and Engineering Technology’s Air Handling curriculum. A documented program with mandated suspense dates has not been legislated at this time.
The University will develop an IAQ program to systematically test and document the air quality of each building and to develop a program, as necessary, to remediate any identified deficiencies.

The Indoor Air Quality program will involve several steps which will be developed and documented. These may include the following:

- Drafting an overall integrated program between Academic Affairs and the Physical Plant, as this is a valley-wide commercial technology need.
- Training and certifying indoor air specialists in and for the Physical Plant.
- Purchasing IAQ monitoring equipment and training personnel in its use.
- Establishing an IAQ monitoring program within the University to develop building profiles.
- Identifying specific UTB/TSC buildings for close monitoring.

The EH&S future task will be to monitor the IAQ program, handle complaints, conduct air tests, and process work orders related to the testing of the air flows that affect the health of University personnel.

### 3.4.2 Title V – Permits

**Title V** of the Clean Air Act requires the following:

- Compilation of emission source inventory
- Identification of groups and processes
- The applicable state and federal regulations for the facility
- A review of future regulations that may apply

Since the University is classified as a conditionally exempt small quantity generator, we are not required to submit these reports – but the reporting requirements must be monitored periodically by EH&S, as they often change. The requirements are generally related to oil- or diesel-fired generator plants, which UTB/TSC does not have.

An air permit applicability audit was conducted by Benton and Associates, Environmental Consultants on March 12, 1998. The following was determined: “The referenced campus sites all appear to be applicable for past or present exemptions that do not specifically require registration.” The analysis included the 24 vent hoods in SETB. No major changes have occurred and the campus is still considered exempt from annual reporting.

### 3.5 USA Patriot Act – select agents and high-risk materials

In order to comply with the **USA Patriot Act**, 42 CFR 72.6 mandates that procedures are established for the control of biological and chemical materials. UTB/TSC has implemented the following operating procedures for the acquisition, storage, use, and disposal of “select agents” and extremely hazardous biological and chemical materials. At this time UTB/TSC does not have or utilize any select agents. However, the following procedures have been implemented in anticipation of someday having a select agent.
3.5.1 Purchase of materials
All purchases of select agents and high-risk materials will be made by requisition and purchase order only. The use of a procurement card will not be allowed. The purchase order process requires the signature of the applicable department chair before processing the requisition.

3.5.2 Storage of materials
All high-risk materials will be correctly sorted and stored in separate locked cabinets. Any select agents will be stored in a lock box within a locked area and only the primary investigator and chair will have the keys and access to them. This isolation provides an additional layer of security. For example, a student could have access to a lab preparation room, but would not have access to the high-risk materials. A graduate student can have access to hazardous chemicals but not to the select agent(s). Responsible parties to implement this system and its oversight are the chairs of the Biological Sciences and Chemistry and Environmental Sciences departments.

3.5.3 Use of high-risk materials
A modified perpetual inventory system will be used for select agents and high-risk materials. This perpetual inventory sheet will track by date and user the quantity received, used, and balances of controlled materials. A clipboard in each storage area will have a running summary of the controlled substances.

3.5.4 Compliance oversight
The director of EH&S will periodically perform and document random inspections of the high-risk storage areas to confirm that the control procedures are in compliance. On a quarterly basis, the department chairs will have a physical inventory of the high-risk materials performed and documented. This physical inventory will be reconciled against purchase records to establish quantity acquisition and ensure that usage is normal for the activities during the period.

3.6 Americans with Disabilities Act (ADA)
Under the Americans with Disabilities Act, the vice president for student affairs designates a coordinator for students with disabilities, who should be contacted with regard to any physical access problems. The directors of EH&S and Physical Plant are responsible for assisting this coordinator in the resolution of any physical/structural barrier to a student’s access to the campus.

Requirements of the ADA are also addressed in the OSHA Physical Plant Procedures, which covers wheelchair evacuation of buildings.

The Americans with Disabilities Act is implemented through 28 CFR 36 and several others, but its implementation is primarily through two case manuals of court decisions which define how perceived discrepancies must be corrected.
3.7 Mold program

The Texas Mold Assessment and Remediation Rules implemented in 2004 by the Texas Legislature went into effect on January 1, 2005. Any uncontrolled area of 225 square feet or more of contiguous mold shall be reviewed by a state-registered company, which will prepare a remediation plan. UTB/TSC will then implement the plan with trained and certified personnel or by contract. A second registered mold company will then be contracted to certify the remediation program was accomplished.

An area of mold less than 225 square feet may be diagnosed, treated, and certified in-house by trained and certified personnel.
4 Hazard Communication

The Hazard Communication Act (HCA) regulations are outlined in 29 CFR 1910.1200 sections (e), (f), (g), and (h). The concern of the HCA is the method of communications regarding the degree of hazards to workers and to the public in other laws. These HCA regulations cover:

- The workers’ right to know
- The public’s right to know
- Hazardous materials inventories and usage
- Labeling
- Safety placards and signs
- Materials safety data sheets (MSDSs), etc.

The requirements of the Hazard Communication Act are documented in this manual and in the Lab/Shop Safety Procedures/Plan. The requirements are identified under other activities, but can be evaluated in either program. For example, the Laboratory/Shop Safety Procedures/Plan checklist has the HCA items included as part of the larger activity. The checklist has 48 evaluation items, 29 of which are HCA requirements.

The way to measure the effectiveness of implementing a Hazard Communication (HazCom) program is to examine the related programs to ensure that the HazCom items are embedded within them. Two programs, the Material Safety Data Sheet (MSDS) system and the Local Emergency Planning Committee, are exceptions, as both are specific standalone requirements of the HCA.

The Hazard Communication program is implemented by EH&S for UTB/TSC by:

- Posting the instructions on the bulletin boards on how to obtain electronic copies of MSDSs, as allowed by 29 CFR 1910.1200.E.3.b.
- Utilizing the Lab/Shop Safety Procedures flip chart to train the instructors. Requirements are defined in 29 CFR 1919.1450. The flip chart is a precise safety manual provided on the bulletin boards of each laboratory and shop.
- Providing bilingual safety placards of things to avoid in the laboratories.
- Providing instructor annual recertification through the Training Post.

4.1 Hazardous Materials program

There are five areas or levels of controls for hazardous materials (including chemicals and biological materials). These are:

1. Ordering
2. Storage and distribution
3. Inventorying and accounting
4. Disposal
5. Transportation

The degree of control within each of the five levels depends on whether the material is a select agent or ordinary hazardous material used for educational purposes.
4.1.1 Ordering

Ordering of “dangerous” chemicals or select agents shall be made by requisition and purchase order only. This requires two supervisory signatures.

For other chemicals and biological materials, the normal ordering system, either by procurement card or purchase order, requires a two-signature approval.

Requirements for smaller quantities of “non-dangerous” materials may be brought to a central person such as the Biology lab coordinator or a program coordinator, who will compile a list of materials be ordered and then obtain a signature from the chair. The order can then be made by telephone using the procurement card. The order may be delivered to the lab coordinator’s office for distribution with a receiving list denoting the distribution locations forwarded to EH&S.

Other orders using a purchase requisition for hazardous chemicals or materials must provide a copy of the requisition, then the receipt document denoting the storage location to EH&S. Each order must have two signatures, for example, the researcher and the supervisor. No one individual shall decide on, order, or charge the cost of the materials without a supervisor’s signature.

4.1.1.1 Donated materials

As a general policy, no donated hazardous chemical or biological materials will be accepted by the University. Any materials accepted will be required to have complete shipping and transportation documentation noting the material’s full identification information plus its original opening date and its remaining shelf life. It will be entered into the inventory with a shortened shelf life, as applicable. When shipping or receiving materials, the Materials Transfer Agreements (available from the Office of Sponsored Programs website) should be used.

4.1.1.2 Delivery and liability

Upon acquisition of any hazardous material from any source, at any time, the following must occur before the University can accept delivery and liability:

- The containers must be individually labeled and sealed.
- At the time of receipt, a date in the format “Rmmddyyyy” must be entered on the container (the initial R stands for Receipt).
- When the container is opened a second date (in the format “mmddyyyy”) will be entered and designated as the opening date.
- An inventory listing of all received hazardous materials shall be provided to the EH&S director for entry into the MSDSPro data system.
- If an MSDS accompanies the shipment, then a copy or the original will be supplied to EH&S.
- The chemicals, once accepted, will be stored by categories, alphabetically in the appropriate storage rooms or cabinets.
- Waste chemicals are consolidated into common containers that are properly labeled as to name, first date of compilation, last date of compilation, and date of pick-up.
- Chemicals without the required information cannot be moved on a public road to the waste collection point, nor stored, nor picked up by the contractor, nor remediated at the final disposal site.
- All hazardous materials, in all locations, at all times must be labeled, capped, and dated.
- All hazardous waste must have a secondary containment such that if the primary container is broken, the hazardous material is not exposed to the student population.

### 4.1.2 Storage and distribution
Any select agents or hazardous materials will be specially stored and inventoried in a special locked containment area within a locked access room. They will be monitored by a real-time clipboard inventory. Each item will be listed with its quantity. When an item is removed that will be noted.

All other materials shall be stored alphabetically within categories according to regulation requirements. A future goal is to add a shelf life date to the inventory list so that the stored chemicals can be purged at the end of the shelf life.

Labels and other forms of warnings should give the following information:
- The identity of the hazardous chemical(s)
- Appropriate hazard warning
- Name and address of the chemical manufacturer
- Appropriate warnings for the chemicals

Portable containers need only the name if used immediately. Labels shall not be defaced or covered.

#### 4.1.2.1 Storage of hazardous waste
Generated waste chemicals shall be stored in marked “Hazardous Waste” containers having the appropriate name and chemical composition on the label as well as the date generated. Lids are to be closed at all times in storage.

Waste chemicals are not to be stored in the vent hoods, which should be closed at all times when not in use. They shall be placed in consolidating satellite containers, available in every lab area. Waste containers can be opened to add similar waste, after updating generation dates on the labels.

At the end of each semester and summer session, an EH&S work order must be submitted by the lab instructors for the waste chemicals to be transferred to the hazardous-waste storage. The work order shall provide an inventory listing of the sealed and labeled chemicals to be picked up and disposed of.
EH&S staff will transport waste chemicals to the hazardous-storage facilities, pending final disposal. The storage area will be locked and secured, with only the EH&S personnel having keyed access.

4.1.3 Inventory and accounting
Each laboratory and shop is required to submit an annual inventory by chemical name and estimated quantity. Once the initial inventory is submitted, it will be entered into the MSDS system and an inventory listing will be provided back to the laboratories and shops for verification and subsequent inventories. In that manner, only the quantities will need to be modified to their present status at the time of the inventory. The shelf-life dates will be added at a subsequent inventory.

The accounting of materials starts with a copy of the purchase order and signed receipt being provided to EH&S, continues with the dating of the opening of the container, and ends with a container log of the disposal accumulation and the final EH&S waste disposal manifest.

4.1.4 Disposal of hazardous waste
As outlined in 40 CFR 273, there are three levels of waste generators with varying control requirements for each. These three levels are:

- Conditionally exempt, small-quantity generators (CESQG), producing under 220 lbs per month. UTB/TSC falls into this category according to 40 CFR 273
- Small-quantity generators, producing 220 to 2200 lbs per month
- Large-quantity generators producing over 2200 lbs per month

The basic difference between conditionally exempt, small, and large generators is that CESQGs may store their waste onsite for 180 days, and up to 270 days when their treatment, storage, and disposal facility (TSDF) is over 200 miles away. UTB/TSC disposal is through a UT System disposal contract, which requires two-weeks’ notice, and would be considered further than 200 miles away. In summary:

- UTB/TSC, as a CESQG, may not and does not store over 220 lbs of hazardous waste at any time.
- UTB/TSC does not store any petroleum products or chemicals in an underground storage tank.
- All levels of generators must comply with the following:
  - labeling and marking requirements
  - storage standards for tanks and drums
  - safety and spill-response measures
  - the paperwork tracking system, including manifests, land-ban notifications, records of inspections and spills
  - periodic reports to EPA on waste generation and shipments

4.1.5 Transportation of hazardous chemicals
The Hazardous Material Transportation Security Plan establishes a security plan for shipments of hazardous material regulated under 49 CFR 172.802, section 3, including
hazardous waste, radioactive waste, radioactive materials (yellow III packages), and placarded materials not otherwise specified. UTB/TSC has no high-risk agents and is not subject to 42 CFR Part 73.

The UTB/TSC Hazardous Materials Transportation Security Plan is available on request from the Office of Environmental Health and Safety.

- The Department of Transportation specifically requires a complete detailed labeling and manifest, by individual item, for any hazardous material shipped over a public road, regardless of how it is moved or who moves it.
- UTB/TSC requires the same information to receive or have the hazardous material in any of our facilities.
- Hazardous material cannot be processed for disposal without the information.

Only personnel who have completed the 29 CFR 1910.120(q) 8-hour hazardous material training can transport the waste materials. Hazardous waste containers being moved shall have vermiculite absorbent in the secondary containers.

Note: The Department of Transportation (DOT) will not allow unlabeled containers to be transported and the Environmental Protection Agency (EPA) will not allow them to be destroyed.

### 4.2 Select agents and highly hazardous materials

Select agents are defined by the USA Patriot Act, 42 CFR 72.6 and listed in Appendix A of section 72. The list is also available from a link on the EH&S web page. It is updated as the government redefines the list and its elements. Highly hazardous chemicals, toxics and reagents are listed in 29 CFR 1910.119 Appendix A.

There are no select agents at UTB/TSC at the time of publication. If in the future any select agents or highly hazardous chemicals are on campus, this manual will be updated. Preliminary preparations have been made because the biological research area will probably need to use select agents at some time in the future.

### 4.3 Hazardous Waste Minimization program

Conservation of UTB/TSC financial resources and the Resource Conservation and Recovery Act (RCRA) require a commitment to decreasing the disposal of hazardous chemicals and pollution prevention through waste minimization.

### 4.4 Laboratory and Shop Safety program

EH&S personnel, in coordination with the lab and shop instructors, will inspect all active laboratories and shops by utilizing the published checklist to monitor their safety status, currently filed listings of hazardous materials on hand, and the proper labeling of such materials. In addition, a current MSDS must be readily available electronically for each hazardous material that is listed as being stored in each laboratory, shop, or classroom.
At the beginning of each semester an inventory of materials and their quantities must be submitted from each active laboratory and shop to EH&S for entry into the computer for regulatory reporting.

At the beginning of each full semester, EH&S will issue a work order to each lab with an attached checklist for the primary lab instructor to conduct a lab safety inventory. They will return this to the department chair who will review it and forward it to EH&S with any applicable comments, requests for help, etc. EH&S will follow up to assist in safety compliance discrepancies.

4.5 Required lab/shop safety equipment
Lab/shop safety depends on the communication of information, and safe working and housekeeping practices. Each lab/shop must have the following safety items:

1. A chemical spill kit, either commercial or issued by EH&S, containing
   - absorbent for chemicals and oils – vermiculite
   - a dustpan and brush to sweep up the absorbed chemicals
   - a DOT 2000 Emergency Response Guidebook (available from the EH&S Office)
   - goggles for eye protection
   - gloves for hand protection
   - an Incident Report Form to report any accident or incident

2. A first-aid kit for superficial injuries.

In addition, the following requirements must be fulfilled:

- Instructions on how to obtain an MSDS for every hazardous chemical or material in the lab/shop shall be posted on the bulletin board.
- The name and phone number of the person responsible for the lab shall be posted where it is readable from outside the door.
- The red, blue, yellow, and white safety sticker shall be posted so that it can be read from outside the room, with the hazardous levels posted.
- The lab or class instructor, at any time during the semester, shall be certified on the division roster as having received safety training.
- A fire blanket shall be available in an accessible location on the wall.
- A fire extinguisher that is current and suitable for the appropriate category of fire shall be mounted on the wall.

4.6 Material Safety Data Sheets program
The MSDS program is part of the Hazard Communication Act, and requires that an MSDS be readily available for any hazardous materials on hand. The UTB/TSC program is built on the availability of the MSDS from any server on campus. Information on the location of all chemicals is gathered from each lab/shop during their annual inventory and subsequent receipt of new chemicals during the year. This is maintained by the EH&S Office for use in the case of an emergency.
To ensure that all labs/shops have access to the MSDSs, a data retrieval card is prepared and posted on the lab/shop bulletin boards of all UTB/TSC laboratories and shops. There are two methods of obtaining a current MSDS. These methods are published and posted on the bulletin boards and covered in the class safety syllabuses taught on the first day of lab/shop training.

- Maintain paper copies. Some faculty members insist that they have hard copies and they will be supported by EH&S who will supply the current MSDSs for those chemicals requested.
- The web addresses of the major chemical companies are provided in each lab/shop and on the EH&S website. It is possible to download the information on each chemical available from a company from its website. MSDS information is standard in sequence and format. A datasheet will always contain the same information in the same order. It provides the following information, in English, about the hazardous chemical:
  - chemical and common name
  - physical and chemical characteristics
  - signs and symptoms of exposure
  - primary route of body entry
  - OSHA permissible exposure limit
  - whether it is listed in the National Toxicology program
  - generally applicable precautions for safe handling
  - generally applicable control measures
  - emergency and first-aid procedures
  - dates of the MSDS preparation and last changes to it
  - name, address, and phone number of the manufacturer

MSDSs may be kept in any form, but must be available within a reasonable time of one work shift.

4.7 Hazard communication (HazCom) signs
The following signs and placards are required for laboratories:
- “No Eating or Drinking,” to prevent ingestion of hazardous materials
- “No Smoking,” to prevent inhalation
- Clothing restrictions to prevent spillage from direct contact
- Signs on the basins forbidding pouring of waste products down the drain
- Signs to forbid children in the lab
- Signs on the equipment/vent hoods for proper operation

4.8 Student supervision
No undergraduate student shall be left unsupervised in a laboratory which has access to any “high-risk” hazardous materials in their specially secured storage cabinets.

4.9 Safety certification training for new lab/shop personnel
An internal EH&S suspense will be established to carry out the following duties:
• Forward to each program and department, at the beginning of each semester, a list of certified instructors and their associated labs.
• Ask each dean/chair to review and certify that all laboratory and shop instructors have received their safety certifications.
• Determine that when additions or changes are identified, certification and training dates will be established through the Training Post and certification provided to the new employees.
• Inspect the new labs/shops for the Hazard Communication signage and safety equipment using the lab/shop checklist.
• Draw up a list of certified personnel to coordinate with the deans/chairs to certify that applicable personnel have received the required training.

4.10 Safety syllabus documentation

The first step in responding to an emergency is to prepare for it in advance. Therefore the syllabus for lab/shop safety will be covered in the first day’s class in all UTB/TSC laboratories and shops and shall deal with the safety features available in the labs/shops.

All class members and attendees, lab instructors, and class trainers shall print and sign their names on an attendance roster. The original copy of the roster shall be forwarded to the applicable chair or dean, who will establish and maintain a file of the training certifications for a period of three years.
5 Campus Safety Programs

Campus safety programs are a shared effort between the development manager in Human Resources and the directors of the Physical Plant and EH&S. The primary purpose of the campus safety programs is to provide skills training for a safe physical working, teaching, and learning environment and a safety-training program for the staff, faculty, and students.

The director of EH&S is primarily responsible for monitoring the physical environment to ensure that it is safe, in compliance with regulations, and to provide Occupational Safety and Health Administration (OSHA) training related to EH&S craft skills. All training is coordinated with and through the UTB/TSC development manager in Human Resources, who compiles the summary for UT Systems training evaluations.

The OSHA safety program trains University employees in the proper manner in which to respond to environmental and occupational happenings which may be life threatening unless immediate remedial actions are taken. The program is coordinated and jointly taught through the development manager in Human Resources and the EH&S staff. The techniques for saving lives are taught by HR on a continual basis and may be scheduled by calling Human Resources. The occupational training is taught through the Training Post or through EH&S staff. All training will be documented.

5.1 Accident/injury investigation procedures

29 CFR 1904 requires that any accident or incident is documented by the involved individual’s supervisor or Student Health Services. Incidents should be reported to HR and EH&S using an Incident Report Form, available from the EH&S website. Upon receipt, each report is reviewed to determine what training or facilities improvements are needed to avoid future incidents. The EH&S safety coordinator signs and dates EH&S incident reports as they are reviewed, not less than on a monthly basis. The Safety Incidents Committee (see also section 5.6) reviews the relevant reports on a quarterly basis.

Investigation of accidents and near misses is one of the major components of an EH&S program. Every accident or incident must be considered a loss unless its true cause is objectively determined and contributing deficiencies are corrected.

Complete records of all reported accidents and injuries occurring either on UTB/TSC property or at off-campus UTB/TSC-sponsored events are maintained at the EH&S Office.

5.2 Techniques of life safety – HR training

The techniques of life safety are the skills taught to the staff, faculty, and students on how to respond to physical emergencies that may occur in the classroom and/or on campus. These classes are taught or coordinated by a training specialist assigned to Human Resources.
5.2.1 Automatic electrical defibrillator (AED)
The defibrillator units are purchased and provided as part of the University’s Life Safety program. Training on their use is provided by Human Resources for those in close proximity to the procured and assigned units.

5.2.2 CPR – Cardio pulmonary resuscitation
These are the life safety techniques used to restart the heart and/or breathing of a person who has ceased to breathe or whose heart has stopped. This is a mandatory training for our faculty or staff to support the safety of our students and is scheduled through Human Resources.

5.2.3 First aid
First aid is rendered as a preliminary assistance to our staff, faculty, and students until either Student Health Services or the emergency response specialist arrives on the scene. Detailed techniques and information will be provided through training scheduled by Human Resources.

5.3 Defensive driving
In order for any staff (including part-timers) or faculty member to drive as part of their assigned duties, they must first receive a traffic check by the Campus Police Office. If an individual receives two driving violations or desires to drive a 16-passenger bus or passenger van then they must take the defensive driving course offered through Human Resources.

Any student, staff, or faculty member who transports another student, staff, or faculty member for a UTB/TSC function is required to have successfully completed a defensive driving course. The course is available from Human Resources or a commercial certification may be presented. The certification must be attached to the travel request for the supervisor’s review and approval.

5.4 Office safety
The Environmental Health and Safety Office and the Department of Human Resources are responsible for providing generalized safety training programs and coordinating and assisting departments in their specialized safety training programs.

The Workplace Health and Safety Training is to introduce all UTB/TSC employees to the safety procedures and resources. This involves electrical cords, filing cabinets, use of Physical Plant personnel for moving heavy objects, proper lifting techniques, walking the stairs and parking lots, sharp objects, etc.

Workplace Health and Safety Training has been combined with HR’s Newcomers’ Employee Orientation to meet the objectives of both programs and the Worker’s Insurance Compensation (WIC) requirements to ensure a safe office environment. Refresher training for office safety will be conducted through the Training Post. The training is being condensed into a one-hour film.
Many summer hires are involved in minor injuries due to unsafe behavior. All summer-hire programs that use student labor must give a safety presentation before the students are distributed to their work places. Safety glasses, earplugs, and gloves, as applicable, must be provided as part of the program’s cost for the students’ safety.

5.4.1 Workstation ergonomics

Ergonomics means fitting the workplace to the workers by modifying or redesigning the job, workstation, tool or environment. Workstation design can have a major impact on office workers’ health and well-being. Employees are responsible for informing themselves of the basics of workstation ergonomics and ensuring that their workstation is suitably set up for the job at hand. The information below should provide a good starting point.

A multitude of discomforts can result from ergonomically incorrect computer workstation setups: the most common complaints relate to the neck, shoulders, and back, while others concern the arms and hands and occasionally the eyes. For example, poor chairs and/or bad postures can cause lower back strain, or a chair that is too high can cause circulation loss in legs and feet. Certain common characteristics that have been possibly identified and associated with increased risk of musculoskeletal problems. These include:

- design of the workstation
- nature of the task
- repetitiveness of the job
- degree of postural constraint
- work pace
- work/rest schedules
- personal attributes of individual workers

Most of the problems that result in repetitive injuries can be solved with simple, yet effective, solutions. The key to comfort is in maintaining the body in a relaxed, neutral position. The ideal work position is to have the arms hanging relaxed from the shoulders. If a keyboard is used, arms should be bent at right angles at the elbow, with the hands held in a straight line with forearms and elbows close to the body. The head should be in line with the body and slightly forward.

Arrange your workstation according to the following basic principles:

- Adjust the height of the chair’s seat so that your thighs are horizontal while your feet are flat on the floor.
- Adjust the seat pan depth so that your back is supported by the chair back rest while the back of your knee is comfortable relative to the front of the seat.
- Adjust the back rest vertically so that is supports/.fits the curvature of your lower back.
- With arms at your sides and your elbow bent to approximately 90 degrees, adjust the height/position of the chair armrests to support your forearms.
• Adjust the height of the keyboard so that the fingers rest on the keyboard home row when the arm is to the side, elbow at 90 degrees, and the wrist straight.
• Place the mouse, trackball, or special keypads next to the keyboard tray. Keep the wrist in a neutral position with the arm and hand close to the body.
• Adjust the height of the monitor so that the top of the screen is at eye level. If you use bifocals or trifocals, place the monitor at a height that allows easy viewing without tipping your head back.
• Place reference documents on a document holder close to the screen and at the same distance from your eyes.
• If you cannot rest your feet comfortably on the floor, use a footrest.

The way a task is performed and the workstation environment it is performed in can influence the risk of injury and general work productivity. Good technique can make a job easy and safe. Keep in mind the following tips to help you work more comfortably and productively.

• Position the computer monitor directly in front of you.
• Move the monitor away from sources of glare or direct light.
• Tip the monitor slightly downward.
• Place an anti-glare filter on the screen.
• Clean the monitor screen on a regular basis
• Adjust the drapes or blinds to decrease/increase light.
• Use diffusers on overhead lighting. Apply task lighting as to your needs.
• Avoid cradling the telephone between the head and shoulder. Hold the phone with your hand, or use the speaker phone or a headset.
• Keep frequently used items like the telephone, reference materials, and pens/pencils within easy reach.
• Move between different postures regularly
• Use the minimum force necessary to strike the keyboard/ten-key keys or to activate the hole punch and stapler.
• Vary your tasks to avoid a long period of one activity.
• Take mini-breaks to rest the eyes and muscles. A break does not have to be a stop of work duties. However, it should be a different style of physical activity such as changing from keyboarding to using the telephone or filing.
• Neutralize distracting noise by using ear plugs, playing soft music, or turning on a fan.
• Maintain a comfortable workplace temperature by using layers of clothing or a fan.

For more information on office ergonomics, take a look at these websites:

- F-One Ergonomics
- NIH's Ergonomics
- OSHA

5.5 OSHA – occupational safety training

The Occupational Safety program is required by the OSHA safety program outlined in 29 CFR 1926 and requires training for physical dangers from the occupational hazards and any related hazards associated with the environmental and safety laws. There are some 95 individual (bilingual) training sessions related to the Physical Plant, Campus Police, Central Receiving, Media Services, Academic Computing, Information Systems, etc.

5.5.1 Handicapped refuge area

NFPA 101, section 7.2.12 was written to implement the ADA regulations for all buildings and facilities. An area of refuge shall be provided for each floor above the first that cannot be evacuated when the fire alarms shut off the elevators. The refuge shall be in a smoke-proof enclosure, identified by signage and a two-way communication system to the Campus Police desk for 24/7 coverage. An area of refuge within a designated staircase serves as a staging area to remove persons needing assistance and makes the waiting personnel highly visible to other evacuees who can call Campus Police.

5.5.2 Confined spaces

UTB/TSC has 48 confined spaces.

• All confined-area work requires a permit from EH&S.
• No entry shall be made into these areas until they have been checked for
  - oxygen content, 19–21.5% on the oxygen meter
  - explosive gas mixtures using the meters
• There shall always be a minimum of two persons in these work areas plus one monitor at the entrance to monitor the workers in the confined space area.
• Verbal communications must be maintained between monitor and workers, which includes radios, at all times. If there is any break in communications, all work must cease until the communications are restored. In the case of an incident, the monitor will not proceed with a rescue until authorized by the dispatch center, after the center has notified Campus Police, who will immediately notify the Brownsville Fire Department’s rescue squad.
• For every direct fatality in confined spaces there are an additional 1.2 fatalities of those who rushed in without proper notifications, equipment, or backups on the way.
• Lock out/tag out shall be used to ensure that there is no chance that a workman can be locked into the confined space.

Further information on confined spaces can be found in the OSHA Physical Plant Procedures.

5.5.3 Lock out/tag out
This program has been developed in coordination between Physical Plant and EH&S and can be found in the OSHA Physical Plant Procedures.

5.5.4 Forklift certification
All forklift operators must be recertified every two years in Texas. The training is provided by a combination of theory from the Training Post and documented driving through the EH&S safety personnel.

5.5.5 Services
Departments or any operating unit may obtain assistance from the Environmental Health and Safety Office and/or the Department of Human Resources in developing a program for training, orientation, and information for their employees.

General safety training classes are available on a variety of safety-related subjects. The length of these training classes ranges from 30 minutes to two hours. Films, lectures, demonstrations, and group discussions are utilized as training aids in these classes.

Specialized assistance is provided for the avoidance of specific health and safety hazards unique to particular jobs or departments. Departmental training programs may be extensive or condensed depending on specific requirements. Consultation meetings between the involved department and the Environmental Health and Safety Office or Human Resource personnel may be required to effectively develop specified training.

Classes are designed to teach supervisory personnel how to achieve and operate a safe work unit. All classes are tailored to meet the specific needs of the individual department requesting the training assistance.
5.5.6 Materials
The resource materials listed below are generally available free of charge from the Environmental Health and Safety Office upon request:

- A catalog of safety training media has been developed and published for use by the UTB/TSC community. Films, slides, and videotapes are available at no cost to departments. Such training materials are intended to complement a departmental training session, and should not be substituted as the entire core of a safety training session. The Environmental Health and Safety Office will gladly offer assistance to any department that needs help in selecting or using training aids.

- Printed materials, general safety pamphlets, posters, signs, and stickers are normally available to departments free of charge. However, more expensive training media may require a minimal payment. Most of these items may be obtained immediately, but large quantities and special items will require special order from outside agencies such as the National Safety Council, Texas Safety Association, or the National Fire Protection Association.

5.6 Safety Incidents Committee
To comply with 29 CFR 1904 and in order to improve the workers’ compensation insurance rates and improve the campus safety rate, this committee will review the relevant incident reports on a quarterly basis and seek to develop safety training and structural improvements to reduce incidents. The committee consists of the following members:

- EH&S Safety Coordinator (chair)
- Director of Student Health Services
- Campus Risk Manager
- Superintendent of Physical Plant
- Human Resources Development Manager
- Other experts to be invited as appropriate

The chairperson shall date and sign the minutes, and the director of EH&S shall also sign and date the minutes to serve as committee oversight.

5.7 Campus safety training
An effective accident prevention program is based on achieving and maintaining correct job performance. When people are trained to do their jobs properly, they will do them safely. Safety training develops an employee's attitude, desire, and the knowledge necessary for them to perform actions in a manner necessary to prevent accidents. Experience has proven that people who have learned to recognize and correct unsafe conditions and practices, measurably improve their chance of averting pain, inconvenience, and economic loss due to accidental injury. It is important, therefore, that all UTB/TSC departments, supervisors and instructors 1) know how to train employees and students in the safe and proper ways of doing their assigned jobs, and 2) know how to supervise employees and students.
Although safety training and safety education cannot be separated completely, safety education is broader in scope and covers subjects not normally included in a regular educational program. This chapter deals only with safety training. It is concerned with the goal of educating employees so that they are made aware of, and instructed to follow, the standards and procedures established by this manual. Students in academic pursuits should also receive necessary safety training, often required for academic certification.

Human behavior is primarily influenced through safety training. Safe performance of job functions is encouraged at UTB/TSC by departments through the maintenance of a safety program aimed at teaching employees the facts about accident causes and preventive measures. Safe job performance is developed by establishing safe work procedures and ensuring that such procedures are appropriately communicated to employees. Furthermore, it is necessary that safe work procedures be followed at all times in order to assure an effective, accident-free workplace. A well-planned training program not only trains employees about potential safety problems, but also encourages employees to correct potentially adverse safety factors necessary for accident prevention.

No department supervisor or instructor should assume that a newly hired, newly assigned, or reassigned employee or student thoroughly knows all the safe procedures relative to his/her new job. The employee must always be trained in appropriate safety procedures.

**5.8 Training for EH&S employees**

Certain training in working with hazardous materials is recommended by 29 CFR 1910.120 appendix E for Environmental Health and Safety employees:

- The director shall have a minimum of 48 hours of OSHA Hazardous Waste and Emergency Response (HazWoper) training.
- The safety coordinator shall have 24 hours of HazWoper training.
- The safety specialist shall have 8 hours of HazWoper training.

**5.9 Departmental training responsibilities**

Each UTB/TSC department or operating unit is responsible for detailing the specific safety training required for its employees and/or students. All employees and students must be given sufficient instruction with respect to their job assignments to enable them to understand the tasks to be performed and associated avoidable hazards. UTB/TSC departments will provide or obtain task-specific safety training necessary to perform a special job function. Departments are responsible for full safety program implementation, but the EH&S Office is always available for consultation and development of specialized training programs.

Since training can be provided most effectively by the immediate supervisor or instructor, it is recommended that departments require supervisors/instructors to ensure that employees and/or students under their direction are fully trained in the correct and safe operation of the job. Supervisors and instructors are specifically assigned the responsibility to provide detailed safety training for all employees and students who are required to use hazardous machinery such as that which may be found in wood-working.
shops, metal-working shops, chemical laboratories, etc. In addition, each supervisor and/or instructor should prepare written safety instructions for operating hazardous equipment and make available a copy of the instructions to each involved employee or student. Further, it is recommended that a listing of the hazardous equipment each employee/student has been trained to operate be signed by that employee/student and kept on file in the departmental office.

New employees/students must be made aware of immediate safety work considerations during their first day of employment/class. Also, specific safety and health policies and standards of this manual pertaining to their work assignments are to be personally reviewed by employees and/or students prior to beginning a new job assignment. In order to determine ongoing training needs, supervisors should frequently observe employees to see if short-cuts or other departures from safe operating methods are occurring.

General safety meetings or training sessions should be conducted no fewer than two times per year and at least once each semester. Safety meetings should be conducted on a more frequent basis for employees involved in working with hazardous materials, as deemed appropriate by the departmental supervisor and/or instructor. Such safety meetings are an appropriate means of promoting safe work practices and ensuring proper procedures are followed.

5.10 National Fire Prevention Act (NFPA)

The NFPA was implemented by 29 CFR 1910.35, Life Safety Code. The act is a fire safety code which requires building inspections, practiced fire evacuations, and personnel to be designated and trained as fire wardens. The program has been fully implemented by the UT System in coordination with the State Fire Marshal’s Office. An EH&S work order is issued and completed annually as proof that the fire inspections, practice evacuations, and building inspections are completed. NFPA files are maintained by EH&S personnel in building sequence to meet audit documentation requirements.

5.10.1 Emergency evacuations

To implement the Fire Life Safety Code defined in NFPA 101.1–7.1, the University is required to create an emergency action plan. This is outlined in 29 CFR 1910.38. The relevant Building Evacuation procedures are available on the EH&S website.

1. Each department, chair, functional area etc. will appoint an area warden and assistant warden to monitor fire safety compliance within their assigned area, to maintain the red evacuation vest and megaphone, and to coordinate any day-to-day safety communications within the function. The fire warden’s function is to control and coordinate safety activities within their areas of assignment. The warden’s activities include:
   - ensuring that the areas are evacuated in the case of a fire drill
   - ensuring that hurricane preparation supplies are on hand
   - ensuring the area offices and classrooms are empty in the case of a building evacuation
   - ensuring that the doors are locked in the case of a civil disturbance
- ensuring that medical personnel are summoned in the case of a sudden illness, etc.

2. The fire warden assignments are designed to give each department an immediate safety response. EH&S shall provide the training and compliance monitoring of each department’s safety issues.

3. The area warden will participate in the training for the University’s crisis management and recovery plans included in the Building Evacuation procedures, and participate in the fire and safety checklist inspections for the corporate compliance certifications.

4. The area warden will implement and maintain the emergency telephone tree for recall or advisements within the department’s applicable programs. Each June, the updated tree must be furnished to the campus police to update the University’s Disaster Control Recall List.

5. The area warden will complete routine semi-annual checklist evaluations of the program areas in conjunction with the EH&S personnel.

6. The area warden will coordinate any emergency evacuations.

5.11 Disaster control and recovery

The Information Systems Office maintains the Business Recovery Plan for the campus, and each department or office has its own set of procedures to follow in an emergency.

Emergency evacuations will be directed by Campus Police, who will move from building to building emptying them (starting from the bottom floors). The area fire wardens will manage all classroom areas where classes are not currently in session. The following applies to specific disasters:

- **Hurricane** – The campus will be dismissed through the President’s Office and the normal chain of command as there are several hours and days of warnings before the event. The Hurricane Plan can be found on the EH&S website and on the multicolored flip charts available from the Business Affairs Division.

- **Fire** – Dismissal is through the fire alarm systems. Fire drills will be conducted only after providing a week’s notice to the Dean’s Office, who must notify all faculty in their area of the upcoming drill. Drills are scheduled for the last ten minutes of the hour. Building Evacuation procedures can be found on the EH&S website.

- **Tornado** – Dismissal will be through Campus Police. People are to remain in the hallways on the lower floor of the buildings, avoiding any glass areas.

- **Highway chemical spill** – the warnings and evacuations will be directed by Campus Police to proceed in a cross-wind direction from any spill on International Boulevard or University Drive.

5.12 Access to labs

Access to University premises identified as laboratories, studios, workshops, mechanical rooms, warehouses, and other work areas housing potentially dangerous materials, conditions, machinery, or processes shall be limited to authorized University staff and students or other persons on official, related business. Measures should be taken to ensure
that persons entering these areas are appropriately trained, adequately protected from hazards, and informed about the safety and emergency procedures relevant to their activities.

Children under the age of 12 are prohibited from entering laboratory areas or other areas where hazardous materials or conditions may be present without written permission, and then only in cases where:

- entry is in the context of a scheduled open house or tour, or
- entry is with a parent who is authorized to enter these areas

The department head or director, with guidance from Environmental Health and Safety, must ensure that procedures and safety equipment are appropriate and then grant written approval for children entering labs or potentially hazardous areas. Any children allowed to enter a lab under these conditions must be strictly and closely supervised at all times.

5.13 Scaffolds

A scaffold is a temporary, elevated structure used to support workers, materials, or both. Scaffolding is used in construction, alteration, routine maintenance, and renovation, providing a safe and comfortable work arrangement compared to leaning over edges, stretching overhead, and working from ladders. According to OSHA, an estimated 2.3 million construction workers (or 65% of the construction workforce) regularly work on scaffolds. Some common hazards associated with scaffolds include falls from an elevation due to lack of fall protection; electrocution caused by contact with overhead powerlines; being struck by falling objects such as tools, materials, and debris; and collapse of the scaffold due to overloading or instability. Other scaffolding accidents can be attributed to failures at attachment points, parts failure, improper construction or work rules, and changing environmental conditions (high winds, temperature extremes, or the presence of toxic gases). Most accidents can be prevented with proper training and familiarity with safety requirements.

For detailed information regarding safety procedures for scaffolding, please refer to Physical Plant Safety Related Work Standards – Section 11.
6 Biological Research Programs

6.1 Biological, Chemical, and Radiation Safety Committee
The Biological, Chemical, and Radiation Safety Committee (BCRSC) was established for the purpose of formulating and recommending to the governing body, through the dean of Health Sciences, a general policy for the safe use of biological agents at UTB/TSC. The committee recognizes and supports the University’s fundamental objectives of teaching, research, and development. It also recognizes the University’s obligation to pursue these objectives without compromising the health and safety of its students, staff, and faculty and members of the surrounding community. The committee’s goal, therefore, is not to be restrictive but to develop policies and procedures that will promote the safe use and handling of biological agents while allowing necessary research to proceed.

6.1.1 Biological research safety
The Biological Research Safety Manual, as approved by the BCRSC, addresses the correct procedures for dealing with biological materials in the University. The most recent version of the manual will be found on the EH&S web site.

6.1.2 Chemical hygiene
Documentation is required by 29 CFR 1910.1450 with the outlined requirements in 1450 Appendix A, to cover those items listed in 1450(e).

The Chemical Hygiene Safety Manual, 29 CFR 1910.1450, as approved by the BCRSC, addresses the correct procedures for dealing with chemicals in the University. The most recent version of the manual will be found on the EH&S web site. The abbreviated Lab/Shop Safety Procedures are provided in flip chart form in each laboratory. Both documents have been approved by the University’s Environmental Health and Safety Committee, which is the equivalent of the Chemical Hygiene Committee as recommended in 1450 (g) (vii).

6.1.3 Bloodborne pathogens
The Bloodborne Pathogens Exposure Control Manual is provided to comply with 29 CFR 1910.1030, Occupational Safety and Health Administration (OSHA), Bloodborne Pathogens standard as specified in Health and Safety Code, 81.304. The Biology Committee will provide oversight. The most recent version of the manual can be found on the EH&S website.

The National Institutes of Health (NIH) and Centers of Disease Control and Prevention (CDC) define biohazards (biological hazards) as “infectious agents presenting a risk or potential risk to the well-being of man, or other animals, either directly through infection or indirectly through disruption of the environment.” Proper handling and disposal of biohazardous materials greatly reduces the potential for exposure to infectious or harmful agents.
Details for the safe use of specific biological agents and recombinant DNA (RDNA) may be obtained from the Health and Safety Services, Biological and Chemical Safety. Instructions for dealing with contaminated or potentially contaminated needles and sharps can be found in the Lab/Shop Safety Procedures/Plan.

6.1.4 Radiation safety

The Biological, Chemical, and Radiation Safety Committee is responsible for ensuring that radioactive material (RAM), radiation-producing machines, and hazardous chemicals are used in accordance with state regulations.

The Radiation Safety Manual, as approved by the BCRSC, addresses the correct procedures for dealing with radiation and radioactive materials in the University, as well as relevant forms. The most recent version of the manual can be found on the EH&S website.

6.2 Institutional Animal Care and Use Committee

The Institutional Animal Care and Use Committee (IACUC) fulfils an advisory function to the University president and provost on matters of policy on the use of laboratory animals for research and teaching. The IACUC, through the experience and expertise of its members, oversees UTB/TSC’s animal program, facilities and procedures. The IACUC’s primary responsibility involves review of research applications proposing the use of laboratory animals.

The Public Health Service (PHS) policy on Humane Care and Use of Laboratory Animals, otherwise known as the NIH Policy, requires each institution which receives PHS funds for research involving animals to file an approved Animal Assurance Statement with the PHS. This commits the institution to comply with the Animal Welfare Act, the NIH Guide for the Care and Use of Laboratory Animals, the principles for the utilization and care of vertebrate animals used in testing, research, and training, and other applicable laws and regulations. The Animal Care and Use Training Manual as approved by the IACUC, addresses the correct procedures for dealing with animals in the University in compliance with the NIH policy and the Guide. The most recent version of the manual can be found on the EH&S website.