



**MOTLOW
STATE**

**Environment, Health, and
Safety Programs Manual**

REVISION:
August 30, 2023

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* Indicates updated information is required from other MSCC personnel

INTRODUCTION

Motlow State Community College (MSCC) recognizes that our associates are a key asset in the success of our educational values. As the most critical resource, associates will be safeguarded through training, provision of appropriate work surroundings, and procedures that foster protection of health and safety and our natural resources. All work assignments conducted by our associates will take into account the intent of these written programs designed to foster a safe and healthy environment. There will be no requested activity deemed more important than employee health and safety and environmental protection.

MSCC is passionately committed to the safety of our associates and students. We are committed to providing a safe work environment for all associates and will do everything possible to prevent workplace accidents and workplace incidents which could impact our environment. We value our associates not only as associates but also as human beings critical to the success of their families, the local community, and Motlow State Community College.

Associates are encouraged to report any unsafe work practices or safety hazards encountered on the job. All accidents/incidents (no matter how slight) are to be immediately reported.

A key factor in implementing these written programs will be the strict compliance to all applicable federal, state, local and MSCC procedures. Failure to comply with these guidelines may result in disciplinary actions.

Respecting this, MSCC subscribes to these basic principles:

1. All accidents/incidents are preventable through implementation of effective Safety, Health, and Environmental Control programs.
2. Accident/Incident prevention is good business. It minimizes human suffering, promotes better working conditions for everyone, and holds Motlow State Community College in higher regard with our communities and student base. Therefore, MSCC will comply with all safety, health, and environmental regulations which apply to the course and scope of operations.
3. The MSCC Management Team is responsible for providing the safest possible workplace for associates and students. Consequently, Motlow State Community College is committed to allocating and providing all the resources needed to promote and effectively implement these written programs. The MSCC Management Team will set an exemplary example with good attitudes and strong commitment to safety and health in the workplace which includes monitoring safety and health performance, working environment and conditions to ensure that program objectives are achieved.
4. Associates are responsible for following safe work practices and college rules, and for preventing accidents and injuries and environmental incidents. MSCC will establish lines of communication to solicit and receive comments, information, suggestions, and assistance from associates where safety, health, and environmental are concerned.

Everyone at Motlow State Community College must be involved and committed to safety in one team effort. Together, we can prevent accidents, injuries, and incidents. Together, we can keep each other safe and healthy in the workplace and protect our environment.

1:00:00:00 ENVIRONMENTAL HEALTH AND SAFETY PROGRAM

Responsible Executive: Motlow College President, EHS Oversight Team

I. PURPOSE

All faculty, staff, students, and administrators of Motlow State Community College (Motlow State) should work together to create and maintain a safe working and learning environment. In order to ensure this safe working and learning environment is established and maintained, this policy is created to define responsibilities, guidelines, and processes for Environmental Health and Safety (EHS).

II. GUIDELINES

- A. Motlow State Academic Deans have supervisory responsibilities to provide leadership on safety issues. Faculty and staff who supervise student workers or who work with students in labs, shops, studios, and other places where there are potentially hazardous machines, equipment, substances, or materials also have special responsibilities for helping ensure the safety of all those involved. Deans, department leads, faculty, and staff must also be concerned with the safety of students in normal classroom situations and in events they sponsor which are attended by the public. In addition, all personnel are required to follow all safety regulations and procedures, and to report immediately to the appropriate personnel all accidents and injuries, and to report potentially dangerous situations which might result in accidents and injuries.
- B. Deans and department leads should read or review the Associate Safety Handbook annually and provide departmental leadership to ensure a safe learning and working environment.
- C. Department leads should ensure faculty annually read or review the Associate Safety Handbook thoroughly. The faculty should assist the EHS Coordinator as requested by the faculty lead, should bring safety issues to the attention of the faculty lead chair and faculty as needed throughout the year, and should participate in safety training when offered by the EHS Coordinator. The EHS Coordinator, faculty lead and faculty should work together to ensure that all safety standards and regulations are met and observed.
- D. Academic personnel who work in labs, shops, studios, and other workplaces that have potentially hazardous machines, equipment, materials, or substances should read or review the safety manuals annually, conduct regular safety inspections in their work area, take appropriate training when offered by the EHS Coordinator, and take all appropriate and prescribed measures and precautions to ensure a safe working environment. Special attention should be given to precautionary procedures and safeguards and to the use of personal protective equipment, and to make certain all personnel in the area follow the safeguards and use the protective equipment.

- E. Academic Deans should address general safety issues each semester with all full-time faculty, adjunct faculty, staff, and secretaries. Procedures for emergency situations should be discussed. Everyone should be aware of the nearest unobstructed building exit for all classrooms and workplaces and should at the first class or group meeting in the semester or term see that all students are aware of those exits. All course syllabi should contain a request for students with disabilities who would need assistance in an emergency evacuation to self-disclose that need to the instructor no later than in the second day of class or second group meeting. Following the self-disclosure, the instructor should discreetly secure volunteers from the class or work group to assist in evacuating students who require help. The instructor should make sure that the volunteers are given proper instructions on methods of evacuating students with disabilities, and particularly those who use motorized and non-motorized wheelchairs. Instructions must include that elevators are not to be used in a fire emergency.
- F. Academic Deans should see that all accidents and injuries within their units are properly reported as soon as possible after they occur and no later than three (3) business days after the occurrence. Departmental clerical personnel and faculty should also help ensure that all accidents and injuries are reported as soon as possible.
- G. The following are members of Motlow State's Environmental Health and Safety Oversight Team:
- President

 - Executive Vice President for Business and Finance

 - Executive Vice President for Academic Affairs

 - Executive Vice President for Student Success

 - Executive Director of Human Resources

 - Director of Facilities Services

 - Environmental Health and Safety Coordinator
- H. The Oversight Team at Motlow State will serve as the governing body for development and implementation of environmental health and safety procedures. The Oversight Committee will:
1. Regularly review EHS issues and progress in program development during the meetings;
 2. Ensure that responsibilities throughout the organization are defined;

3. Ensure accountability for EHS commitments and take corrective action when appropriate;
4. Support Safety Committee involvement in college wide initiatives to improve safety, health and environmental performance with annual reviews of activities;
5. Ensure that issues identified in hazard identification initiatives are mitigated or controlled in accordance with assigned responsibilities and schedules;
6. Ensure all direct reports receive appropriate education and training;
7. Ensure that direct reports are communicating EHS issues to associates/students; and
8. Ensure that appropriate EHS rules and procedures are developed and consistently enforced.

2:01:00:00 INCIDENT / INJURY REPORTING

Responsible Executive: Executive Vice President for Business and Finance, Director Human Resources

I. PURPOSE

All faculty, staff, students, and administrators of Motlow State Community College (Motlow State) should work together to create and maintain a safe working and learning environment. This guidance addresses the responsibility of all Motlow associates and the necessary steps for prevention of injuries from work-related causes. It will take the combined efforts of all departments to effectively manage this program and keep Motlow injury free.

II. GUIDELINES

Motlow State Academic Deans have supervisory responsibilities to provide leadership on safety issues. Faculty and staff who supervise student workers or who work with students in labs, shops, studios, and other places where there are potentially hazardous machines, equipment, substances, or materials also have special responsibilities for helping ensure the safety of all those involved. In addition, all personnel are required to follow all safety regulations and procedures, and to report immediately to the appropriate personnel all accidents and injuries, and to report potentially dangerous situations which might result in accidents and injuries.

III. PROCEDURE:

- A. You must report all work-related accidents, injuries, or suspected illnesses to your supervisor. If an injury or illness requires medical attention, supervisors must report it to Human Resources at ext. 1544.
- B. The supervisor must complete an Incident Investigation Form (Attachment A), which meets the requirements of the OSHA Form 101, and forward it to Human Resources within two working days. The forms are available from Human Resources.
- C. Any faculty or staff member who witnesses, is involved in, or is informed of an accident with a student or visitor, should report the accident to Human Resources at ext. 1544. Human Resources will determine if an incident investigation should be completed. Our philosophy is to prevent repeat occurrences.
- D. All accidents involving vehicles being used for college business, occurring on or off campus, will be reported to their immediate supervisor, who will notify Human Resources and other offices or officials as appropriate.
- E. Injuries must be treated by an authorized physician from the posted panel of physicians, or a consulting specialist authorized by Motlow State Community College. Payments will not be made to personal doctors for treatments of occupational injuries unless previously authorized by MSCC, except as otherwise provided by applicable workers' compensation laws.

- F. Unless an imminent danger exists to an associate due to a medical emergency, any associate who leaves the campus during working hours because of an occupational injury must receive approval through Human Resources and notify your supervisor.

IV. COMPENSATION GUIDELINES

When an associate is injured and has to leave the campus, he or she will be paid a minimum of four hours if less than four hours of the shift have been worked. In the event the associate has worked more than four hours of the shift before the injury occurred, the balance of the time for the shift shall be allowed.

MSCC shall pay for lost time necessary for appointments with physicians for treatment and/or examination of compensable injuries when an associate is required to leave the job for such appointments, provided it is an appointment made by Human Resources or return appointment made by the physician with whom an appointment was previously made by Human Resources. It is understood that this provision does not apply when the associate concerned is not actively working. It is further understood that this provision does not apply for therapy or other similar treatments not involving a physician. Such appointments will continue to be made during off-duty hours, insofar as possible. Associates are required to report all injuries immediately.

V. RESPONSIBILITIES

A. Safety Coordinator

All reports of incidents/illnesses should be investigated utilizing the Incident Investigation Form attached to this procedure by the Academic Head. The Safety Coordinator will assist as necessary with the investigation and will review potential corrective actions with the department to ensure corrective actions are appropriate and completed in a timely manner.

B. Human Resources

Human Resources is responsible for ensuring Incident Investigation Forms are readily available as needed. They should coordinate investigations involving students and visitors and seek participation from the appropriate department personnel. Human Resources is responsible for contacting the panel of physicians' selection made by the injured associate. Human Resources will review with the EHS Oversight Committee on a periodic basis the incidents occurring on our campuses.

C. Supervisor

Supervision is responsible for completing the Incident Investigation Form while identifying appropriate corrective actions that will prevent a re-occurrence of a similar incident. Once the corrective actions are completed, a final signed copy of the form with completion dates should be sent to Human Resources for filing in the appropriate file and the Safety Coordinator for close-out of action items.

VI. ATTACHMENTS

- A. Incident Investigation Form
- B. Vehicle Accident Information Form

2:02:00:00 BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN

Responsible Executive: Director Facility Services, Academic Dean

I. PURPOSE

It is the responsibility of the Motlow College EHS Oversight Team to implement all required activities of the Bloodborne Pathogens Standard. The Safety Coordinator is to ensure that appropriate personnel are trained in Bloodborne Pathogens and are provided as appropriate with Hepatitis A, B, C vaccinations and a Tetanus shot. It is also the responsibility of the Safety Coordinator to assure Supervisors are aware of the provisions of this procedure, Coordinate training, and retain documentation of training. In addition, it is the Safety Coordinator's responsibility to audit and monitor activities and to make the EHS Oversight team aware of deficiencies in the Bloodborne Pathogen Procedure.

II. DEFINITIONS – The following definitions apply to this procedure:

- A. "Bloodborne Pathogens" means pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include but are not limited to hepatitis B virus (HBV) and human immunodeficiency virus (HIV).
- B. "Contaminated" means the presence or the reasonable anticipated presence of blood or other infectious materials on an item or surface.
- C. "Exposure Incident" means a specific eye, mouth, other mucus membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of an associate's duties.
- D. "Occupational Exposure" means reasonably anticipated skin, eye, mucus membrane, or parenteral contact with blood or other potentially infectious materials that may result from performance of an associate's duties.
- E. "Other Potentially Infectious Materials" means (1) The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, and body fluid that is visibly contaminated with blood, and all body fluids where it is difficult or impossible to differentiate between body fluids; (2) Any unfixed tissue or organ from a human; (3) HIV-containing cell or tissue cultures, organ cultures.
- F. "Universal Precautions" is an approach to infection control. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.
- G. Exposure Determination – An exposure determination must contain the following:
 - 1. All associates in the following job classifications potentially perform tasks which may result in exposure to Bloodborne Pathogens:
 - a. Safety Coordinator

- b. Facilities Personnel
- c. Medical First Responders
- d. Police Personnel
- e. Athletic Staff

2. Some associates in the following job classifications potentially perform tasks which may result in exposure to bloodborne pathogens:

* (TBD)

3. The following tasks are performed by associates which may result in Occupational Exposure to Bloodborne Pathogens:

- a. first aid treatment of injured associates
- b. cleaning and disinfecting restroom facilities
- c. cleaning and disinfecting equipment and facilities following an injury
- d. handling household garbage for processing

H. Methods of Compliance – Universal precautions must be observed to prevent contact with blood or other potentially infectious materials.

1. Personal Protective Equipment (PPE) such as gloves, face shields, and eye protection must be made available and used as appropriate by associates.

2. PPE will be provided at no cost to associates.

- a. PPE must be readily accessible to associates.
- b. Disposable latex gloves are available from Facility Services.
- c. Associates must wear safety glasses or a faceshield when decontaminating equipment or facilities.

3. Associates must wash their hands immediately or as soon as possible after removal of gloves.

4. PPE must be replaced as needed to maintain its effectiveness.

- a. Disposable gloves such as surgical or examination gloves, must be replaced as soon as practical when contaminated, torn or punctured.
- b. All equipment and working surfaces must be cleaned and decontaminated after contact with blood or other potentially infectious materials.
- c. Blood contaminated waste must be placed into containers which will close and prevent any leakage during handling storage or transportation. The container must be labeled “BIOHAZARD”. A red “Biohazard” bag can be obtained by calling Facilities.
- d. Blood contaminated waste must only be disposed of through properly licensed hazardous waste vendors. Contact the safety coordinator to determine what to do with contaminated waste.

5. Hepatitis B Vaccinations

- a. Hepatitis B Vaccination will be offered at no cost to all associates who have occupational exposure to bloodborne pathogens.

- b. The Safety Coordinator or Human Resources representative will coordinate with the clinic for the Hepatitis B vaccinations.
 - c. Hepatitis B vaccination will be made available after associate has received training on bloodborne pathogens.
 - d. Any associate who declines the Hepatitis B Vaccination, must sign the Statement of Declination required by OSHA. (Issued upon declination)
6. Post-Exposure Evaluation and Follow-up:
- a. Post exposure follow-up in accordance with OSHA 1910.1030 (f) will be provided to associates at no cost and be performed by licensed health care professionals.
 - b. Post exposure evaluation and follow-up must be made available immediately following a report of an exposure event. A copy of the OSHA 1910.1030 must be provided to the health care professional along with other the information specified in the OSHA standard. A written opinion from the health care professional must be obtained, and a copy provided to the associate within 15 days of the evaluation.
7. Communication of Hazards to Associates:
- a. Warning labels with the word “BIOHAZARD” must be attached to containers of blood contaminated waste.
 - b. Blood contaminated waste must be placed in red containers.
8. Information and Training:
- a. Associates with occupational exposure must be provided Bloodborne Pathogen training during work hours and at no cost.
 - b. The training must be provided upon initial assignment to a job with potential exposure.
 - c. Refresher training must be provided at least annually.
 - d. The training material must be appropriate in content to the vocabulary level, education, literacy, and language of the associates.
 - e. The training program must contain the following elements:
 - i. An accessible copy of the OSHA 1910.1030 Standard
 - ii. A general explanation of the epidemiology and symptoms of bloodborne diseases
 - An explanation of the modes of transmission of bloodborne pathogens

- An explanation of the Exposure Control Plan and means by which the associate can obtain a copy of the written plan.
 - An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials.
 - An explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate engineering controls, work practices, and personal protective equipment.
 - Information on the types, proper use, location, removal, handling, decontamination, and disposal of personal protective equipment.
 - An explanation of the basis for selection of personal protective equipment.
 - Information on the hepatitis B vaccine, including information on its efficacy, safety method of administration, the benefits of being vaccinated, and the vaccine and vaccination will be offered free of charge.
 - Information on the appropriate actions to take and people to contact in an emergency involving blood or other potentially infectious materials.
 - An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the required follow-up that will be made available.
 - Information on the post-exposure evaluation and follow-up that the employer is required to provide for the associate following an exposure incident.
 - An explanation of the signs and labels and color-coding which will be used.
 - An opportunity for interactive questions and answers with the person conducting the training session.
- a. Training must be conducted by a person knowledgeable in the subject matter as it relates to the workplace.
9. Procedure for Evaluating Exposure Incidents
- a. Associates should report any bloodborne exposure incident to the Safety Coordinator or Department Head.
 - b. The circumstances surrounding the exposure incident will be documented in writing. This will include all pertinent information such as persons involved, location of blood onto associate, PPE, time until washing etc.,
 - c. Identification and documentation of the source individual,
 - d. Referral to a healthcare professional for confidential follow-up and counseling,
 - e. Coordination of testing of source individuals' blood (with consent),

- a. Collection and testing of exposed associate's blood for HBV and HIV serological status,
- b. All elements of the evaluation must be kept medically confidential.

10. Recordkeeping:

- a. A medical record meeting the requirements of OSHA 1910.1030 (h) must be kept for each associate with occupational exposure. The records must be kept as Medical Confidential and retained in accordance with OSHA 1910.1020. These records are maintained by the Human Resources Department.
- b. A record for each associate with occupational exposure containing the following information:
 - The name and social security number of the associate,
 - A copy of the associate's hepatitis B vaccination status including the dates of all the hepatitis B vaccinations and any medical record relative to the associate's ability to receive vaccinations.
 - A copy of all results of examinations, medical testing, and follow-up procedures as required by OSHA 1910.1030.
 - A copy of the healthcare professionals' written opinion for any exposure incident.
 - A copy of the information provided to the healthcare professional.
 - The medical records must be kept confidential and must not be disclosed or reported without the associate's expressed consent to any person within or outside the workplace except as required by OSHA 1910.1030, and
 - Medical records must be retained for 30 years beyond the duration of employment.

2:03:00:00 HAZARD COMMUNICATION STANDARD

Responsible Executive: Director Facility Services, Academic Dean

I. PURPOSE

- A. The purpose of the Occupational Safety and Health Administration's hazard communication standard (OSHA, 29 CFR 1910.1200) is to establish uniform requirements to make sure that the hazards of all chemicals produced, imported, or used with the United States manufacturing sector are evaluated and that this hazard information is transmitted to affected employers and associates.
- B. The chemical manufacturers and imports must convey hazard information to purchasers by means of labels and Safety Data Sheets, referred to as SDS's.
- C. All substances shall be handled in accordance with established SDS's. The SDS's and a Chemical Information List of all chemicals used by the associates shall be maintained in a master file and the work area of the Department where the hazardous substances are used.

II. RESPONSIBILITY

It is the responsibility of the Motlow College EHS Oversight Team to implement all required activities of the Hazard Communication Standard. The Safety Coordinator is to ensure that appropriate personnel are trained in the standards requirements. It is also the responsibility of the Safety Coordinator to assure Supervisors are aware of the provisions of this procedure, coordinate training, and retain documentation of training. In addition, it is the Safety Coordinator's responsibility to audit and monitor activities and to make the EHS Oversight team aware of deficiencies in the Hazard Communication Standard.

III. PROCEDURES

- A. All chemicals/materials will be approved for purchase by the Safety Coordinator working in unison with the Purchasing Department prior to submitting purchase orders or making individual purchases.
- B. Safety Data Sheets (SDS) shall be made available to MSCC personnel upon request.
- C. An SDS can be obtained by any member of the administration by contacting the Safety Coordinator. Master SDS files are available within the MSCC Intranet for your review. You may request a copy of an SDS by contacting Facility Services at ext. 1575.
- D. Any chemical that has been introduced into the department must have a copy of the SDS in the master inventory list and m3v file on the MSCC Intranet list **PRIOR** to an associate being allowed to use the chemical.
- E. All containers housing any chemical on MSCC campuses will be labeled or tagged. The purpose is to provide all associates/students with necessary information regarding the physical and health hazards associated with chemicals within each container. Labeling will follow the following criteria:
 - 1) Identity of the hazardous chemical(s) contained.

- 2) Appropriate hazard warnings, or alternatively, words, pictograms, symbols, or combination thereof.
 - 3) Labels and warnings should be legible, in English, and prominently displayed on the container.
 - 4) Existing labels or labels on incoming containers will not be removed or defaced.
- F. All affected instructors/students shall be trained in the physical and health hazards of chemicals and how to properly handle hazardous materials/chemicals including personal protective equipment.
- G. Contractors and instructors/students of MSCC engaged in non-routine situations will be informed regarding potential hazards and required personal protective equipment to be worn when handling and identifying hazardous materials/chemicals.
- H. SDS's of chemicals proposed for use by contractors will be reviewed and approved by the Safety Coordinator with appropriate SDS's maintained for ready access.

III. RESPONSIBILITIES

A. SAFETY COORDINATOR:

- 1) Develop and maintain a "Master" hazardous materials chemical list. The list will consist of the following:
 - a. Manufacturer name
 - b. Product name
 - c. Composition State (Liquid, Gas, Solid)
- 2) Review all SDS's for acceptability of content, intended use and maintain the master SDS file.
- 3) Initially compile SDS's into an SDS manual cross referenced by manufacturer and product name.
- 4) Audit program compliance at each campus annually.
- 5) Specify the format of in-house labels to be provided to designated personnel for labeling requirements.
- 6) Develop and maintain all training materials.
- 7) Provide initial training for executive committee, instructors and MSCC personnel, provide training materials for departmental use, and provide support to MSCC personnel on technical issues.
- 8) Provide consulting services to Facilities Services Group or others bringing in contractors in identifying hazards and protective measures.
- 9) Establish and maintain a training program for new associates and associates involved in job specific assignments such as spill response, security contractors, etc.

B. ACADEMIC HEAD:

- 1) Ensure any personnel submitting a request for purchase for any material meeting the definition of a chemical completes the Chemical Approval Process form for submittal along with the purchase requisition.

IV. TRAINING CRITERIA

- A. All affected instructors, associates, and on-site contractors will be informed of:
 - 1) Contents of the standard.
 - 2) Location and availability of this written program.
 - 3) The location and availability of Safety Data Sheets.
 - 4) How to understand a Safety Data Sheet.
 - 5) Existence of labels on incoming commodities and the use of the in-house labeling system.
 - 6) The existence of exposure monitoring programs and the availability of results.
 - 7) The existence of training materials.
 - 8) The physical and health hazards of the chemicals in their respective work areas.
 - 9) Proper protective measures including work practices, emergency procedures (where applicable) and personal protective equipment.

- B. All contractors who are selected for a specific project will be informed of:
 - 1) Location and availability of this written program and Safety Data Sheets.
 - 2) Container labeling requirements and prior approval of materials to be brought on site.
 - 3) The physical and health hazards of the chemicals in their respective work areas.
 - 4) Proper protective measures including work practices, emergency procedures (where applicable) and personal protective equipment.

- C. TOSHA requires annual training/overview of requirements for all personnel.

2:04:00:00 CHEMICAL APPROVAL PROCESS

Responsible Executive: Director Facility Services, Academic Dean

A. **PURPOSE**

The purpose of this procedure is to provide a method for EHS review and acceptance of new and/or changed chemicals. This applies to all new/changed chemicals and associated processes that could present a chemical hazard to Motlow personnel.

II. **RESPONSIBILITY**

- A. Academic Head: required to submit Page 1 of the New/Changed Chemical Approval form to the EHS Coordinator prior to obtaining any new or changed chemicals. This includes re-formulations of current chemicals.
- B. EHS Coordinator: required to review all New/Changed Chemical requests and determine applicable safety, environmental or health impacts and either accept or reject the request.
- C. Project Leaders: required to coordinate outside contractor services in association with the use of chemicals must complete the necessary Contract Coordinator Review Form. Contractors are required to submit a copy of all SDS for chemicals they will be using at MSCC. Approved chemicals used on-site by contractors must be removed from MSCC premises by the contractor upon departure. Any and all waste generated by a contractor from work on MSCC property must be identified by the contractor and proper arrangements for disposal coordinated with the Contract Coordinator. Disposal issues should be addressed within the scope of work accepted by both parties.

III. **DEFINITIONS**

- A. *Chemical Samples* – Chemicals which will be tested for potential future use. All samples must be approved through this process. Once conditional EHS approval is granted, samples received should be in small quantities. All un-used chemicals that will not be used at MSCC must be returned to the vendor or arrangements will be made with the EHS Coordinator for disposal as outlined in the Safety Coordinator Comment Section of the form.
- B. *Modified Equipment/Processes* - Any substantive change to machines or processes already existing on our campuses. This may include reorientation of equipment, labs, chemical changes in the curriculum, etc.
- C. *New Process* - Any process not yet approved for and/or installed.
- D. *Permits* - Environmental licenses to operate. Examples include air permits for painting emissions, water permits for sewer or surface water discharges, and special waste permits for non-hazardous industrial wastes. Permits shall be applied for and received as approved from the regulating authority before operating machines/processes in question. Permits may be issued by federal, state, and/or local authorities.

IV. REFERENCES

OSHA Hazard Communication Standard, 29 CFR 1910.1200
Chemical Approval Review Form

CHEMICAL APPROVAL REVIEW FORM

Requester:	Phone:	Dept.:	
SDS Trade Name:			
Manufacture Name:	Phone #:		
Supplier Name:	Phone #:		
Chemical will be used in combination with (Describe):	Replacement for what chemical (Describe):		
New Process:	<input type="checkbox"/> Yes / <input type="checkbox"/> No	Department Affected:	
Process Description			
Will an exhaust stack be used?	<input type="checkbox"/> Yes / <input type="checkbox"/> No	Will an emission control device be used?	<input type="checkbox"/> Yes / <input type="checkbox"/> No
Will process discharge to water?	<input type="checkbox"/> Yes / <input type="checkbox"/> No	Tank size(s) associated with process:	
Will waste be generated?	<input type="checkbox"/> Yes / <input type="checkbox"/> No	Describe waste type:	
Is it flammable? Flash point < 140°F	<input type="checkbox"/> Yes / <input type="checkbox"/> No	Is it combustible? Flash point >140 °F & <300 °F	<input type="checkbox"/> Yes / <input type="checkbox"/> No
Is it corrosive? pH >12.5 or <2	<input type="checkbox"/> Yes / <input type="checkbox"/> No		

Describe Use:

Anticipated Usage	<u>Unit</u>	<u>Rate</u>
	<input type="checkbox"/> Gallons <input type="checkbox"/> Lbs. <input type="checkbox"/> oz	<input type="checkbox"/> Day <input type="checkbox"/> Week <input type="checkbox"/> Month <input type="checkbox"/> Semester <input type="checkbox"/> School Year

Storage Method:

Container Size:

Storage Location:

Disposal Method:

- | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Refrigerator in Lab
<input type="checkbox"/> Bench Top
<input type="checkbox"/> Flammable Cabinet
<input type="checkbox"/> General Material Storage Cabinet
<input type="checkbox"/> Corrosive Chemical Cabinet | <input type="checkbox"/> 55 gal. Drum
<input type="checkbox"/> 5 gal. pail
<input type="checkbox"/> 1 Gallon Can
<input type="checkbox"/> Aerosol Can
<input type="checkbox"/> < 6 oz bottle
<input type="checkbox"/> Other: _____ | <input type="checkbox"/> Facilities Services
<input type="checkbox"/> Lab Storage Room
<input type="checkbox"/> Flammable Cabinet
<input type="checkbox"/> Maintenance
<input type="checkbox"/> Custodial Closet
<input type="checkbox"/> Other _____ | <input type="checkbox"/> Flammable Can
<input type="checkbox"/> Oily Waste Can
<input type="checkbox"/> 55 Gallon Drum
<input type="checkbox"/> Recycling Roll-off
<input type="checkbox"/> Trash
<input type="checkbox"/> Vendor Pickup |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

EHS Coordinator Comments: The chemical submitted for approval is:

Accepted with the following conditions:

Rejected due to:

APPROVAL SIGNATURE

EHS Coordinator: _____ Date: _____

2:05:00:00 LOCKOUT / TAGOUT PROGRAM

Responsible Executive: Director Facility Services, Academic Dean

I. PURPOSE

The purpose of this procedure is to provide a method for minimizing the risk of injury from electrical hazards and any source(s) with stored energy and to comply with state and local regulations. This applies to all equipment and processes that could present an electrical hazard to Motlow personnel.

II. RESPONSIBILITY

- A. It is the responsibility of the Motlow College EHS Oversight Team to implement all required activities of the Lockout/Tagout Program. The Safety Coordinator is to ensure that appropriate personnel are trained in the standards requirements. It is also the responsibility of the Safety Coordinator to assure appropriate departmental personnel are aware of the provisions of this procedure, coordinate training, and retain documentation of training. In addition, it is the Safety Coordinator's responsibility to audit and monitor activities and to make the EHS Oversight Team aware of deficiencies in the Lockout / Tagout Program.
- B. All associates are required to follow each step of this procedure. Any deviation from the required steps must be reviewed with their immediate supervisor and the Safety Coordinator prior to modifying the procedure.
- C. It is the responsibility of the Safety Coordinator for the following:
 - 1) Training will be conducted on an annual basis with the "authorized" associates who will be conducting Lockout of equipment.
 - 2) The Safety Coordinator will coordinate annual verification audits of all authorized personnel and all documentation will be filed in appropriate training records.
 - 3) If an incident investigation is warranted, the Safety Coordinator will facilitate the investigation with appropriate corrective actions communicated to the affected departments and the EHS Oversight Team.

III. DEFINITIONS

- A. Associate - any member of the MSCC community including management, supervisors, and associates.
- B. Lockout – the term that shall mean the locking of the energy source of a piece of equipment in such a way that the equipment cannot operate without the lock being removed.
 - 1) Electrical Lockout – means disconnecting the electrical power from the equipment
 - 2) Equipment powered by other energy means shall be locked out in the following manner as appropriate:
 - a) Close the supply valve
 - b) Bleed the line or lines and disconnect or blank the line
 - c) Insert a blocking device and tag-it. (As described in Tagout Procedures)
- C. Tagout – the placement of a Tagout device on an energy isolating device to indicate that the energy isolating device and the equipment being controlled may not be operated until the Tagout device is removed. All tags must contain the following information:

- 1) Do Not Start; Do Not Energize; Do Not Operate; etc.
 - 2) Tag attached by _____
 - 3) Date & Time
 - 4) What supervisor approved the Tagout tag
 - 5) Reason tag is attached
- D. Authorized – the person who has completed the classroom training for Lockout and who has been certified to perform lockout of equipment in their work area.
 - E. Affected – the person or groups of people who are in the area where lockout is being performed by an authorized operator and could be affected.
 - F. Energy Source – any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy source.

IV. PROCESS OVERVIEW:

- A. This program addresses the necessary steps for prevention of injuries from work-related electrical and mechanical sources where stored energy is available. The unexpected energization or startup of machines and equipment, or release of stored energy during service, repair, maintenance, operation presents hazards to our associates and the specific step of this procedure is designed to minimize those risks. It will take the combined efforts of all departments to effectively manage this program and keep us injury free. This program applies to all associates, students, and outside contractors. These are minimum requirements only and are not to be considered all encompassing.
- B. Lockout/Tagout is required when:
 - 1) The energizing of a piece of equipment poses an associate to a hazard when they are working on or near that piece of equipment (i.e., guards are removed, safety devices are bypassed and / or any part of the body is to be in the point of operation)
 - 2) The operation of a piece of equipment may cause damage to that equipment.
 - 3) It is necessary to prevent the unauthorized use of equipment.
- C. Work on cord and plug connected electric equipment for which exposure to the hazards of unexpected energization or startup of the equipment is controlled by the unplugging of the equipment from the energy source and by the plug being under the exclusive control of the associate.
- D. The preferred method for securing any piece of equipment is Lockout of ALL energy sources. If the “Authorized” associate deems it necessary to use Tagout as the securing method, the process must be reviewed with the area supervisor.

IV. PROCEDURE:

- A. Before starting work on any piece of equipment requiring a Lockout/Tagout, the individual involved must notify their supervisor that they are going to Lockout a piece of equipment. If proper lockout sequence is in question, check with the supervisor responsible for the piece of equipment prior to proceeding.
- B. Equipment must be shut-off at the appropriate energy source(s) and any process line(s) bled if necessary. This will ensure that the proper equipment is de-energized.
- C. The lockout shall be made at the energy source(s) by the individual performing the work who is “authorized” to perform lockout.
- D. Each facilities services associate has an assigned lock with a laminated tag clearly identifying the owner of the lock. After locking out the piece of equipment, the person

- locking out the equipment **should attempt to operate the equipment** before attempting to work on the equipment.
- E. Push the “STOP” button before determining to start work on the equipment.
 - F. If the work requires the “authorized” associate to go inside electrical boxes for repairs, etc., they should use a voltage meter and verify a “zero energy” state has been accomplished.
 - G. Each person working on a piece of equipment is required to remove his/her own lock or tag. ***The removal of another person’s Lockout or Tagout will result in disciplinary action up to and including termination.***
 - H. When an associate has left their lock or tag on for an unknown reason (abandoned locks) and it must be removed, the following procedure shall be adhered to:
 - a) Every effort should be made to verify that the associate is not still on the premises.
 - I. If the associate has left the building, every effort shall be made to contact them to determine the reason for leaving the lock/tag in place.
 - J. When the servicing and/or maintenance of an energized system or equipment will be performed by more than one person, an authorized associate will be assigned the responsibility to coordinate lockout/tagout under the protection of a group lockout (multi-hasp) or master tagout device. A master tag is a personal tagout device if each associate personally signs on and signs off on it and if the tag clearly identifies each authorized associate who is being protected by it. The responsible authorized associate will monitor the status of individual group members concerning the lockout or tagout of the machine or equipment. **Tagout will only be used when there is not a physical means to apply a lockout device and the situation has been reviewed with the Safety Coordinator.**
 - K. When more than one crew, craft, or department is involved, an authorized associate will be assigned the responsibility to coordinate all the affected workforces and ensure continuity of protection up to and including the placement of a maintenance department lock as the master control mechanism.
 - L. Any piece of equipment or process to be shut-down for an extended period of time should have a departmental lock installed versus the individual lock assigned to the authorized associate.
 - M. Authorized associates will verify that isolation and de-energization have been effectively accomplished before starting servicing/maintenance work. Verification is also necessary by each group of workers before starting work at shift changes.
 - N. When the servicing or maintenance is completed and the machine or equipment is ready to return to normal operating condition, each authorized associate will remove his or her own lock from the multi-hasps and verify that all tools are clear from the equipment and that no affected personnel are in the area. After verification of “all clear,” the designated “authorized” associate will re-engage the equipment following normal start-up procedures.
 - O. The Abandoned Lock Removal Procedure is to be followed if the associate cannot be located within the building or by attempts outside the building. The procedure is as follows:
 - 1. The department supervisor along with another associate from the same department as the associate who locked out the equipment, must check out the equipment and make sure it is safe to remove the lock or tag due to unknown safety considerations.

2. The department supervisor must then request the “Master” key from the Director of Facilities Services to remove the lock.
3. The department supervisor must complete an “incident investigation” form and corrective actions should be addressed through the incident investigation procedures.
4. The Safety Coordinator or Director of Facilities Services must review the piece of equipment in a final attempt to verify the safety of the equipment before the lock is removed.

V. EXCEPTIONS:

- A. Lockout is not required if work on cord and plug-connected electrical equipment for which exposure to the hazards of unexpected energization or start-up of the equipment is controlled by the unplugging of the equipment from the energy source and by the plug being under the exclusive control of the associate performing the service or maintenance.
- B. Hot tap operations involving transmission and distribution systems for substances such as gas, steam, water, or petroleum products when they are performed on pressurized pipelines, provided that the employer demonstrates that:
 - 1) Continuity of service is essential.
 - 2) Shutdown of the system is impractical; and
 - 3) Documented procedures are followed, and special equipment is used that will provide proven, effective protection for associates.

VII. MACHINE SPECIFIC WRITTEN PROCEDURES

All equipment will have machine specific Lockout/Tagout procedures when they are equipped with more than one energy source and/or their energy isolating device is not readily identifiable to the piece of equipment. The Safety Coordinator will assist with identifying those required pieces of equipment and completing the written procedures.

VIII. TRAINING REQUIREMENTS

- A. Initial training will be conducted with all associates who may perform electrical work or be in proximity of equipment containing energy sources. The training will be offered in two groups with “affected” and “authorized” receiving different levels of training.
- B. Refresher training will be conducted either annually or as conditions warrant. Conditions that will warrant training will include an incident, new equipment, new responsibilities, etc. All training records will be maintained in the Facilities Services EHS files.

IX. ATTACHMENTS

- A. Lockout Verification Audit Form

Lockout/Tagout Verification Audit Form

Instructions: (This process may be conducted as a group activity)

1. Authorized Associate's Supervisor must complete all sections below.
2. Supervisor must ensure that Lockout/Tagout procedures and requirements are being followed.
3. Return this form completed to the Safety Coordinator for filing.

Authorized Associate Reviewed: _____

Operation Verified: _____

Operator knew Lockout Procedures: Yes No

Operator accessed specific Lockout Procedures for Operation: Yes No

Operator Had Required Equipment:

Individual Red American Lock Yes No

Individual Multi-Lock Hasp Yes No

Individual Laminated ID Tag Yes No

Audit Findings:

Deficiencies Noted Other Than Above:

Authorized Associate Signature:

Supervisor Signature:

Auditor Signature: (if different from Supervisor)

2:06:00:00 CONFINED SPACE PROGRAM

Responsible Executive: Director Facility Services

I. PURPOSE

The purpose of this procedure is to provide a method for minimizing the risk of injury from entering spaces that meet the definition of a confined space or a permit-required confined space. This applies to any process that could present an exposure or safety hazard to Motlow personnel.

II. RESPONSIBILITY

- A. It is the responsibility of the Motlow College EHS Oversight Team to implement all required activities of the Confined Space Program. The Safety Coordinator is to ensure that appropriate personnel are trained in the standards requirements. It is also the responsibility of the Safety Coordinator to assure appropriate departmental personnel are aware of the provisions of this procedure, coordinate training, and retain documentation of training. In addition, it is the Safety Coordinator's responsibility to audit and monitor activities and to make the EHS Oversight team aware of deficiencies in the Confined Space Program.
- B. All affected associates are required to follow each step of this procedure. Any deviation from the required steps must be reviewed with the Safety Coordinator prior to modifying the procedure.
- C. It is the responsibility of the Safety Coordinator for the following:
 - 1) Training will be conducted with the "authorized" associates who will be entering these types of workspaces.
 - 2) If an incident investigation is warranted, the Safety Coordinator will facilitate the investigation with appropriate corrective actions communicated to the affected departments and the EHS Oversight Team.

III. DEFINITIONS

- A. Associate - any member of the MSCC community including management, supervisors, and associates.
- B. Confined Space - OSHA standard defines "confined space" as any area large enough and so configured that an employee can bodily enter and perform assigned work but has limited means for entry and exit and is not designed for continuous occupancy.
 - 1) Entry is defined as "placing any part of your body through the opening of a permit space." The employee(s) or entrant(s) must be knowledgeable of the hazards that may be encountered during and throughout the duration of entry. No employee shall enter a confined space until they have received training for Confined Space Entry.

IV. PROCEDURE - Confined Space

- A. Use only approved equipment and maintain and calibrate all testers according to the manufacturers' specifications. The first atmospheric test should be performed by remote probe before anyone enters the space. All areas and levels of the space should be tested.

- B. Oxygen deficient atmospheres have less than 19.5% available oxygen. Atmospheres that have more than 23.5% oxygen by volume must be ventilated and retested before entry. To guard against the atmosphere becoming unsafe while work is in progress, retest the atmosphere periodically and monitor the atmosphere continuously.
- C. "Non-permit confined space" is defined as any area that does not contain or, with respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm. **All spaces shall be considered permit-required confined spaces until the pre-entry procedures demonstrate otherwise.**
 - 1) A non-permit confined space checklist must be filled out before entry.
 - 2) Non-permit confined spaces shall be checked for safe atmosphere prior to the first entry on any shift due to hazards beyond our control such as possible natural gas line leaks or toxic spills and releases.
 - 3) Any time a hazard or a potential hazard presents in a non-permit-required confined space, the space is to be immediately evacuated and the confined space then becomes a permit-required confined space. The space shall remain a permit required confined space until the determination has been made that the hazard has permanently been abated by the Safety Coordinator.
 - 4) The Safety Coordinator must be notified and/or consulted with to determine if a confined space is able to be considered as a "non-permit" space.
- D. If conditions become unacceptable evacuate the space immediately, cancel the permit and stop the work until the problem is corrected.

V. **PROCEDURE – Permit-Required Confined Space**

- A. A permit-required confined space contains or has a potential to contain a hazardous atmosphere or any other recognized serious safety or health hazard.
- B. If a confined space is vacated for any length of time re-test atmosphere before reentry. In areas where any potentially hazardous environment exists, a confined space entry permit is required.
- C. All lift stations, wells, pit vaults, manholes, and obstructed drainage culverts are considered permit-required confined spaces due to emersion, electrical, engulfment hazards and hazards that are unable to be determined without atmospheric testing and constant monitoring.
- D. Permit-required confined spaces require the use of specific equipment and procedures. An employee that is not trained and certified to enter a confined space SHALL NOT enter a confined space for any length of time.
- E. Prior to entry into a permit-required confined space, it shall be established the roles of each participant of the entry team. At a minimum, there is to be an entrant, and attendant, and a safety person. A permit must be filled out by the attendant/supervisor prior to the entry. An authorized permit form is to be used.
- F. Atmospheric monitoring is to be performed initially and then continue to be monitored by the entrant and/or attendant using a portable 4-gas monitor.
- G. If for any reason conditions change in or around the confined space, the entrants are to exit the space and the permit be terminated. (This includes, but is not limited to, monitor activation, communication malfunction, attendant leaving the area, etc.). Any additional identified hazards must be recognized as the reason for termination, resolved, and a new permit used for re-entry.

H. All permit forms are to be kept together upon completion of the job task and filed with the supervisor of the department.

VI. CONFINED SPACE PERMIT

A. See Attached Confined Space Permit

Confined Space Entry Permit

Date and Time Issued: _____ Date and Time Expires: _____

Job site/Space I.D.: _____ Job Supervisor: _____

Equipment to be worked on: _____ Work to be performed: _____

Stand-by personnel: _____

1. Atmospheric Checks: Time _____ Oxygen _____ %
 Explosive _____ % L.F.L. Toxic _____ PPM

2. Tester's signature: _____

3. Source isolation (No Entry): N/A Yes No
 Pumps or lines blinded, () () ()
 disconnected, or blocked () () ()

4. Ventilation Modification: N/A Yes No
 Mechanical () () ()
 Natural Ventilation only () () ()

5. Atmospheric check after isolation and Ventilation:

Oxygen _____ % > 19.5 %
 Explosive _____ % L.F.L < 10 %
 Toxic _____ PPM < 10 PPM H(2)S

Tester's signature: _____ Time _____

6. Communication procedures:

7. Rescue procedures:

8. Entry, standby, and back up persons: Yes No
 Successfully completed required training? () ()
 Is it current? () ()

9. Equipment: N/A Yes No
 Direct reading gas monitor - tested () () ()
 Safety harnesses and lifelines
 for entry and standby persons () () ()
 Hoisting equipment () () ()
 Powered communications () () ()
 SCBA's for entry/standby persons () () ()
 Protective Clothing () () ()

All electric equipment listed Class I,
Div. I, Group D and Non-sparking tools () () ()

10. Periodic atmospheric tests:

Oxygen	____%	Time	____	Oxygen	____%	Time	____
Oxygen	____%	Time	____	Oxygen	____%	Time	____
Explosive	____%	Time	____	Explosive	____%	Time	____
Explosive	____%	Time	____	Explosive	____%	Time	____
Toxic	____%	Time	____	Toxic	____%	Time	____
Toxic	____%	Time	____	Toxic	____%	Time	____

We have reviewed the work authorized by this permit and the information contained here-in. Written instructions and safety procedures have been received and are understood. Entry cannot be approved if any squares are marked in the "No" column. This permit is not valid unless all appropriate items are completed.

Permit Prepared By: (Supervisor) _____
Approved By: (Unit Supervisor) _____
(printed name) (signature)

This permit is to be kept at job site. Return job site copy to Facility Services Office following job completion.

Copies: White Original (Facility Services Office)
Hard Copy (Job site)

ENTRY PERMIT

PERMIT VALID FOR 8 HOURS ONLY. ALL COPIES OF PERMIT WILL REMAIN AT JOB SITE UNTIL JOB IS COMPLETED

DATE: SITE LOCATION and DESCRIPTION

PURPOSE OF ENTRY

SUPERVISOR(S) in charge	Type of Crew	Phone #
-------------------------	--------------	---------

COMMUNICATION PROCEDURES

RESCUE PROCEDURES (PHONE NUMBERS AT BOTTOM)

*** BOLD DENOTES MINIMUM REQUIREMENTS TO BE COMPLETED AND REVIEWED PRIOR TO ENTRY***

REQUIREMENTS COMPLETED	DATE	TIME
Lock Out/De-energize/Try-out	_____	_____
Line(s) Broken-Capped-Blanked	_____	_____
Purge-Flush and Vent	_____	_____
Ventilation	_____	_____
Secure Area (Post and Flag)	_____	_____
Breathing Apparatus	_____	_____
Resuscitator - Inhalator	_____	_____
Standby Safety Personnel	_____	_____
Full Body Harness w/"D" ring	_____	_____
Emergency Escape Retrieval Equip	_____	_____
Lifelines	_____	_____
Fire Extinguishers	_____	_____
Lighting (Explosive Proof)	_____	_____
Protective Clothing	_____	_____
Respirator(s) (Air Purifying)	_____	_____
Burning and Welding Permit	_____	_____

Note: Items that do not apply enter N/A in the blank.

****RECORD CONTINUOUS MONITORING RESULTS EVERY 2 HOURS CONTINUOUS MONITORING**** Permissible _____

TEST(S) TO BE TAKEN	Entry Level	_____
PERCENT OF OXYGEN	19.5% to 23.5%	_____
LOWER FLAMMABLE LIMIT	Under 10%	_____
CARBON MONOXIDE	+35 PPM	_____
Aromatic Hydrocarbon	+ 1 PPM * 5PPM	_____

Hydrogen Cyanide (Skin) * 4PPM _____
 Hydrogen Sulfide +10 PPM *15PPM _____
 Sulfur Dioxide + 2 PPM * 5PPM _____
 Ammonia *35PPM _____

* Short-term exposure limit: Employee can work in the area up to 15 minutes.
 + 8 hr. Time Weighted Avg.: Employee can work in area 8 hrs. (longer with appropriate respiratory protection).

REMARKS: _____

GAS TESTER NAME & CHECK #	INSTRUMENT(S) USED	MODEL &/OR TYPE	SERIAL &/OR UNIT #
_____	_____	_____	_____
_____	_____	_____	_____

A SAFETY STANDBY PERSON IS REQUIRED FOR ALL CONFINED SPACE WORK
 SAFETY STANDBY PERSON(S) CHECK # CONFINED SPACE ENTRANT (S)

SUPERVISOR AUTHORIZING - ALL CONDITIONS

SATISFIED _____

DEPARTMENT/PHONE _____

2:07:00:00 PERSONAL PROTECTIVE EQUIPMENT

Responsible Executive: Executive Vice President Business and Finance, Director Facility Services

I. PURPOSE

The purpose of this procedure is to provide a method for minimizing the risk of hand, face, arm, foot, head injury from performing tasks required by associates on MSCC campuses. This Program addresses the requirements of the OSHA Personal Protective Equipment Standard (29 CFR 1910 Subpart I). It will take the combined efforts of all to effectively develop and manage the various aspects of the program. This applies to any initiative that could present an exposure or safety hazard to Motlow personnel.

II. RESPONSIBILITY

- A. The Motlow College EHS Oversight Team has responsibility for the development and implementation of all aspects of the Personal Protective Equipment Standard.
- B. All associates will review, understand, and implement the policies under the Personal Protective Equipment Program. Designated MSCC associates shall know the Personal Protective Equipment Program requirements and will assist in the training and orientation of all associates.
- C. The Safety Coordinator shall conduct training as necessary and assist in assigning responsibility relating to the implementation and monitoring of this requirement. The Safety Coordinator is to make the EHS Oversight team aware of deficiencies in the Personal Protective Equipment Program.

III. PROCEDURE

- A. The following procedure covers Personal Protective Equipment's use as determined by the performance of a Job Hazard Analysis as required by 29 CFR 1910.132 (Attachment "A"). The JHA will establish minimum requirements for all operations. If for any reason an associate or supervisor has a concern that the provided PPE is not appropriate protection for the job task they are performing, they must contact the Safety Coordinator for an evaluation of the task prior to continuing with the task.
- B. It is the responsibility of Motlow State Community College to provide appropriate personal protective equipment (Attachment "B") for the tasks that our associates perform. It is the responsibility of the associate to properly use and maintain the equipment provided.
- C. These requirements are to be available to all associates within the work area. Inspect PPE prior to each use. Do not use damaged PPE. You are required to maintain and keep PPE clean.

VI. BASIC REQUIREMENTS

- A. Safety Glasses – must be worn at all times in posted areas.
- B. Hard Hats – must be worn at all times when overhead work is performed.

- C. Gloves – work gloves must be worn at all times when handling sharp or rough stock, welding or performing other jobs which could cause hand injuries. Synthetic gloves must be worn when handling chemicals.
- D. Welding – appropriate filter lens, welding helmet, gloves and sleeves are required for welders at all times.
- E. Hearing Protection – is required in areas where noise exposure is more than 90dBA (85dBA if you already have experienced a hearing loss) or areas posted due to impact noise levels.

Attachment "A"
Personal Protective Equipment (PPE)
Hazard Assessment Survey and Analysis

Department: _____

Location: _____

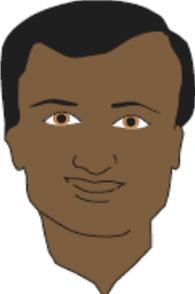
Job Classification: _____

Operation / Process: _____

Person Performing Assessment: _____

Title: _____

This form should be reviewed at a minimum of every 3 years or if there is a change in a process or operation/accident that warrants a review. This form should be filed hardcopy or electronically by EHS and readily available if requested by an auditor. No changes should be made to the form without approval by the Safety Coordinator.

Part of Body	Hazard	Required PPE
<p>Hands</p>  <p>29CFR1910.138</p>	<input type="checkbox"/> Penetration – Sharp Objects <input type="checkbox"/> Material Handling <input type="checkbox"/> Penetration – rough objects <input type="checkbox"/> Chemical(s) _____ <input type="checkbox"/> Extreme Cold <input type="checkbox"/> Extreme Heat <input type="checkbox"/> Moving / Rotating Equipment <input type="checkbox"/> Electrical shock <input type="checkbox"/> Vibration-power tools <input type="checkbox"/> Other _____	<input type="checkbox"/> Cut resistant gloves level 2 <input type="checkbox"/> Cut resistant gloves level 4 <input type="checkbox"/> Puncture Resistant Glove <input type="checkbox"/> General purpose work gloves <input type="checkbox"/> Chemical resistant gloves. <input type="checkbox"/> Type _____ <input type="checkbox"/> Insulated gloves <input type="checkbox"/> Heat/flame resistant gloves <input type="checkbox"/> Latex or nitrile gloves <input type="checkbox"/> Insulated rubber gloves. <input type="checkbox"/> Type _____ <input type="checkbox"/> Cotton, or leather gloves <input type="checkbox"/> Anti-vibration gloves <input type="checkbox"/> Barrier Cream <input type="checkbox"/> Other _____
<p>Eyes & Face</p>  <p>29CFR1910.133</p>	<input type="checkbox"/> Exposure to sparks <input type="checkbox"/> Pressurized air <input type="checkbox"/> Impact-flying objects, chips, or dirt <input type="checkbox"/> Nuisance dust <input type="checkbox"/> UV light-welding, cutting, torch brazing, soldering <input type="checkbox"/> Chemical-splashing liquid <input type="checkbox"/> Chemical-irritating mists <input type="checkbox"/> Hot sparks-grinding <input type="checkbox"/> Splashing molten metal <input type="checkbox"/> Sun Exposure / Glare/High Intensity lights <input type="checkbox"/> Laser operations <input type="checkbox"/> Other _____	<input type="checkbox"/> Leather welding hood <input type="checkbox"/> Safety glasses w/side shields <input type="checkbox"/> Glasses/goggles w/face shield <input type="checkbox"/> Impact goggles <input type="checkbox"/> Welding goggles <input type="checkbox"/> Welding helmet/shield w/ safety glasses & side shields <input type="checkbox"/> Chemical goggles/face shield <input type="checkbox"/> Chemical splash goggles <input type="checkbox"/> Shaded safety glasses <input type="checkbox"/> Glasses / goggles w/ face shield <input type="checkbox"/> Safety goggles w/face shield <input type="checkbox"/> Laser spectacles or goggles <input type="checkbox"/> Other _____
<p>Ears</p>  <p>29CFR1910.95</p>	<input type="checkbox"/> Exposure to noise levels (>85 dBA 8-hour TWA)	<input type="checkbox"/> Earmuffs <input type="checkbox"/> Ear plugs <input type="checkbox"/> Ear plugs and muffs

<p>Respiratory System</p>  <p>29CFR1910.134</p>	<input type="checkbox"/> Nuisance dust/ mist <input type="checkbox"/> Welding fumes <input type="checkbox"/> Isocyanates <input type="checkbox"/> Paint spray <input type="checkbox"/> Organic vapors <input type="checkbox"/> Acid gases <input type="checkbox"/> Chromium /Lead/Cadmium <input type="checkbox"/> Oxygen deficient/toxic or IDLH atmosphere <input type="checkbox"/> Other _____	<input type="checkbox"/> Disposable dust/mist mask <input type="checkbox"/> Welding respirator <input type="checkbox"/> Respirator w/HEPA filter <input type="checkbox"/> Air-supplied respirator <input type="checkbox"/> Respirator w/paint spray cartridges <input type="checkbox"/> Respirator w/ organic cartridges <input type="checkbox"/> Respirator w/ acid gas cartridges <input type="checkbox"/> SCBA or Type C airline respirator <input type="checkbox"/> Other _____
<p>Foot</p>  <p>29CFR1910.136</p>	<input type="checkbox"/> Impact-heavy objects <input type="checkbox"/> Compression-rolling or pinching objects/ vehicles <input type="checkbox"/> Slippery or wet surface <input type="checkbox"/> Penetration-sharp objects <input type="checkbox"/> Penetration-chemical <input type="checkbox"/> Splashing-chemical <input type="checkbox"/> Exposure to extreme cold <input type="checkbox"/> Other _____	<input type="checkbox"/> Steel toe safety shoes <input type="checkbox"/> Leather boots or safety shoes w/metatarsal guards <input type="checkbox"/> Slip resistant soles <input type="checkbox"/> Puncture resistant soles <input type="checkbox"/> Chemical resistant boots/ covers <input type="checkbox"/> Rubber boots/closed top shoes <input type="checkbox"/> Insulated boots or shoes <input type="checkbox"/> Other _____
<p>Head</p>  <p>29CFR1910.135</p>	<input type="checkbox"/> Struck by falling object <input type="checkbox"/> Struck against fixed object <input type="checkbox"/> Electrical contact with exposed wires/conductors <input type="checkbox"/> Suspended Loads <input type="checkbox"/> Other _____	<input type="checkbox"/> Hard hat / cap <input type="checkbox"/> Class A <input type="checkbox"/> Class B <input type="checkbox"/> Class C <input type="checkbox"/> Bump Caps <input type="checkbox"/> Other _____
<p>Body</p> 	<input type="checkbox"/> Impact-flying objects <input type="checkbox"/> Moving vehicles <input type="checkbox"/> Penetration-sharp objects <input type="checkbox"/> Electrical-static discharge <input type="checkbox"/> Hot metal or sparks <input type="checkbox"/> Chemical(s) <input type="checkbox"/> Exposure to extreme cold <input type="checkbox"/> Exposure to extreme heat <input type="checkbox"/> Unprotected elevated walking / working surface <input type="checkbox"/> Other _____	<input type="checkbox"/> Long sleeves / apron / coat <input type="checkbox"/> Traffic vest <input type="checkbox"/> Cut-resistant sleeves, wristlets <input type="checkbox"/> Static control coats /coveralls <input type="checkbox"/> Flame-resistant jacket / pants <input type="checkbox"/> Lab coat or apron / sleeves <input type="checkbox"/> Insulated jacket, hood <input type="checkbox"/> Body cooling devices <input type="checkbox"/> Body harness and lanyard <input type="checkbox"/> Barrier Cream <input type="checkbox"/> Other _____

In accordance with OSHA 29 CFR 1910.132, this certification serves as verification that a hazard assessment of the workplace and a determination of the required personal protective equipment workplace hazard assessments has been performed.

Signature: _____

Date: _____

Attachment “B”

To: All Concerned
From: David Britton
Date: March 30, 2022

Subject: Workplace Assessment

A workplace survey was conducted of the processes associated with the 4 campuses at Motlow State Community College in accordance with 29 CFR 1910.132(d)(1). Our intent is to meet the requirements of identification of hazards associated with each job, job locations, departments and personal protective equipment requirements.

Certification:

Date of Workplace survey: March 30, 2022

Name and Address of surveyor:

David Britton
305A North Spring Street
McMinnville, TN 37110
Phone Number (931) 474-7233

I hereby verify this 30th day of March 2022, that the workplace assessment was conducted to the best of my knowledge and belief.

(Signature, Title)

PPE Equipment Required	General Maintenance	Custodian	Grounds Maintenance	Administration Associates
Safety Glasses	Yes	No	Yes	No
Gloves	Yes	Yes	Yes	No
Face Shield	Yes	No	(Chainsaw)	No
Leather Shoes	Yes	No	Yes	No
Slip Resistant Soles	Yes	Yes	No	No
Protective Clothing	Yes	Yes	No	No
Hard Hat	No	No	(Chainsaw)	No
Welding Gloves & Helmet	Yes	No	No	No
Leg Chaps	No	No	Yes	No
Hearing Protection	Yes	No	Yes	No

2:08:00:00 EMERGENCY PROCEDURES

Responsible Executive: Executive Vice President Business and Finance, Director Facility Services

A. **PURPOSE**

Motlow State Community College is committed to protecting the health and safety of all students, staff, faculty, and visitors at all college facilities. In conjunction with this commitment is the inherent responsibility for minimizing any danger to life and property resulting from the effects of fire, bomb threat, natural disaster, or other events. When an emergency occurs, an immediate organized response by college personnel will be activated. The Emergency Preparedness Plan (EPP) establishes the framework from which the college will provide response.

The Emergency Preparedness Plan on the MSCC intranet is intended as a reference guide for information necessary to mitigate risks during an existing or impending emergency. The information in the reference guide enhances the information provided within the Emergency Procedures Wall Charts posted throughout Motlow campuses.

The purpose of this procedure is to provide a method for minimizing the risk of hand, face, arm, foot, head injury from performing tasks required by associates on MSCC campuses. This Program addresses the requirements of the OSHA Emergency Preparedness requirements of 29 CFR 1910.38. It will take the combined efforts of all to effectively develop and manage the various aspects of the program. This applies to any initiative that could present an exposure or safety consideration to Motlow personnel.

II. **RESPONSIBILITY**

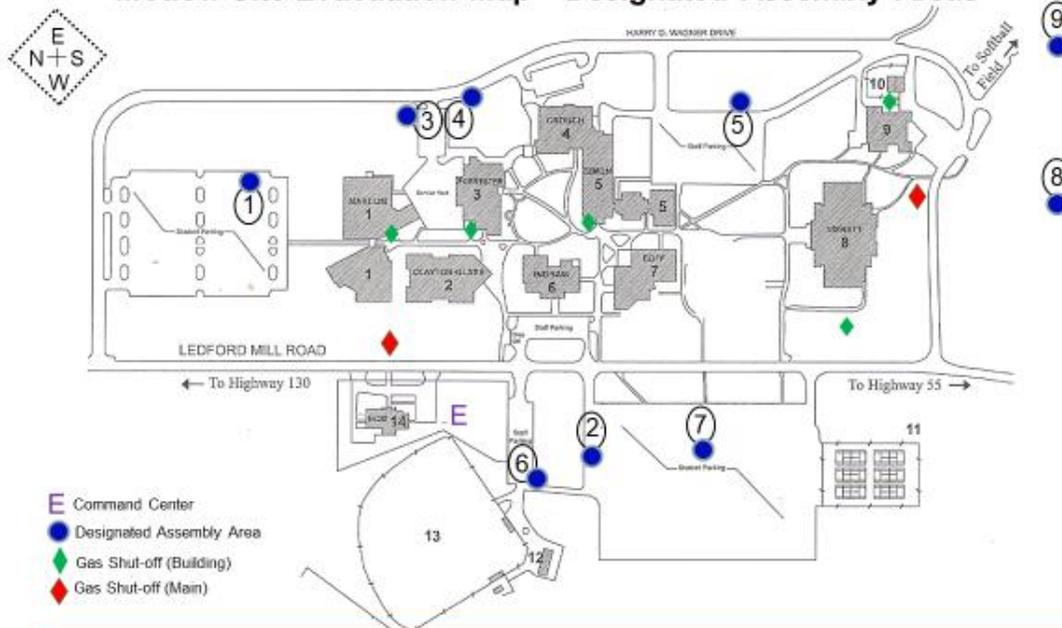
- A. The Motlow College EHS Oversight Team has responsibility for the development and implementation of all aspects of the Emergency Preparedness Plans for Motlow College.
- B. The EHS Oversight Team has designated **The Emergency Management Team** as responsible for the health and safety of the students, faculty and staff of Motlow State Community College during an emergency. They are to maintain constant communications with the Building Responsible Persons and other key designated personnel and address gaps in the plan's effectiveness as quickly as possible. Specific tasks delegated to Emergency Command Center (ECC) personnel or other Motlow personnel should be reviewed with the designated personnel on an annual basis and annual drills should focus on different emergency scenarios ensuring plan effectiveness. The Motlow EHS Oversight Team will be available to support all responsibilities of the Emergency Management Team (EMT) as the situation dictates or in cases of EMT absenteeism from the campus.
- C. Motlow College has designated the Executive Vice President for Business and Finance as the Incident Commander and the Director of Public Safety as backup Incident Commander for Motlow.

The following information is intended to familiarize you with the comprehensive Emergency Preparedness Plan located within the Security section of the MSCC website.

III. EMERGENCY PROCEDURES

- A. The primary early warning system for all campuses in all emergencies is the **MOTLOW ALERT** text messaging service. Warning of actual or impending danger may also come from such sources as siren, telephone, e-mail, radio and/or television and other warning devices utilized by the executive team. When a warning is received, the Emergency Preparedness Plan will be activated as appropriate. The Chief Information Officer and the Executive Vice President for Business and Finance are responsible for issuing **MOTLOW ALERT** text message alerts.
- B. In order for the campus community to be properly prepared for an emergency, the Executive Vice President for Business and Finance will:
- 1) Ensure the Emergency Preparedness Plan (EPP) is current. Ensure all emergency equipment and supplies for operating the Emergency Command Center (ECC) are available and operational.
 - 2) Ensure at least one emergency preparedness drill is conducted each semester.
 - 3) Critique each drill and submit findings and recommendations to the President.
 - 4) Maintain close working liaison with the local emergency services and emergency response officials in order to facilitate all emergency support efforts.
 - 5) Review all fire safety inspections and coordinate any necessary corrective actions.
- C. It must be emphasized that the EPP will only be implemented when there is actual or imminent danger to the campus. Routine management for isolated incidents will not require activation of the EPP unless the incident becomes out of control. The Emergency Command Center will serve as the single point for monitoring and coordinating of all response activities during the emergency. At a minimum, the ECC will be comprised of the following personnel, or their designated representative:
- President
 - Executive Vice President for Business and Finance
 - Director of Public Safety
 - Executive Vice President for Academic Affairs
 - Executive Director of Financial Aid
 - Dean of Students
 - Executive Director for Human Resources
- D. The Emergency Management Team has designated the Building Responsible Persons (BRP) as individuals to assist each building with carrying out the emergency procedures. No individual is to place their own personal safety in jeopardy when attending to the emergency team responsibilities of this emergency prevention plan. Ensure initiation of evacuation plan of the affected building has begun. The BRP's will communicate with EMT personnel in the ECC as required.
- E. Each facility on each campus has an Emergency Map indicating evacuation routes and severe weather shelters. (See examples of campus map and specific building map)

Motlow Site Evacuation Map – Designated Assembly Areas

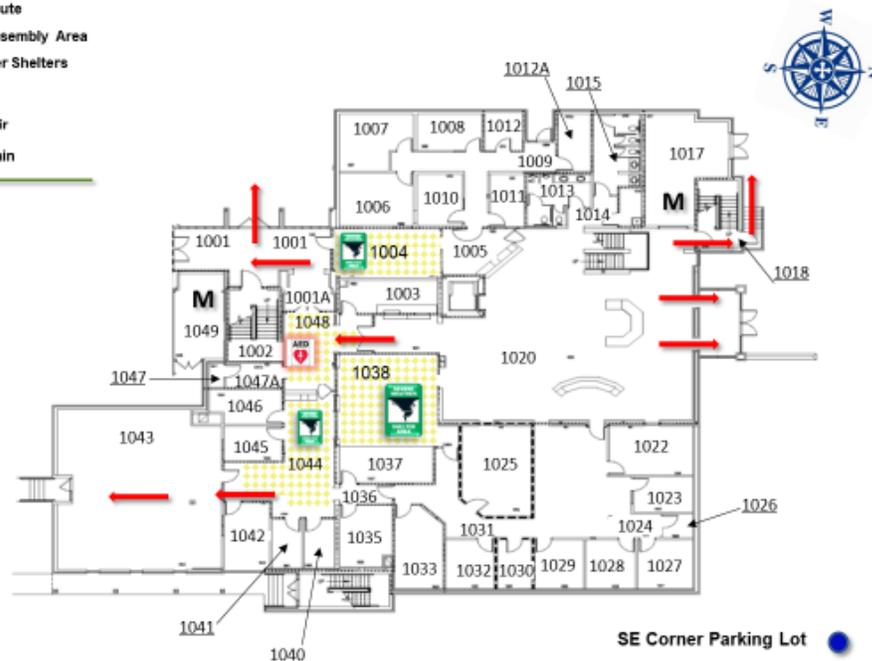


- | | |
|-------------------------------------------------------------------------------|--------------------------------------------------------|
| 1. Marcum Technology Center / Glass Leadership Center (SE Corner Parking Lot) | 8. Nisbett Center (Middle West Side Parking Lot) |
| 2. Clayton Glass Library/Writing Center (NE Corner Parking Lot) | 9. Facilities / Power Building (East Side Parking Lot) |
| 3. Forrester Student Center / Follett Bookstore (NE Corner Parking Lot) | 10. Equipment Storage |
| 4. Crouch Learning Center / Testing Center (SE Corner Parking Lot) | 11. Tennis Courts |
| 5. Simon Hall (SE Corner Parking Lot) | 12. Driver Baseball Complex |
| 6. Ingram Administration (West end of Staff Parking) | 13. Baseball Field |
| 7. Eoff Hall / Powers Auditorium (Middle East side of Regions Parking Lot) | 14. Baptist Collegiate Ministries (BCM) |

MSCC – Crouch 1st (Level 3)

Map Legend:

- Evacuation Route
- Designated Assembly Area
- Severe Weather Shelters
- AED** AED Location
- ♿** Evacuation Chair
- M** Mechanical Main



2:09:00:00 LAB SAFETY

Responsible Executive: Executive Vice President Business and Finance, Vice President of Academic Affairs

I. PURPOSE

This plan applies to all associates and students engaged in the laboratory use of hazardous chemicals. Effective implementation requires a written program for job safety and health that is endorsed and advocated by the senior administrative team. This written plan will be communicated to all required personnel. It is designed to establish clear goals and objectives to provide a safe working environment.

II. RESPONSIBILITY

A. **The EHS Coordinator** is required to monitor the program on an annual basis to ensure key components of the plan are being fulfilled and the written program is updated as regulations or practices dictate. Approves chemical requests for purchase and sends approval to department representatives.

B. **The Lab Instructor** is required to implement all components of this written program with students and other lab participants. Deficiencies should be tracked with corrective actions implemented promptly and communicated to other campuses to eliminate similar situations.

C. The **Purchasing / Departmental Designee** is required to submit Page 1 of the New/Changed Chemical Approval form to the Safety Coordinator prior to obtaining any new or changed chemicals. This includes re-formulations of current chemicals.

III. DEFINITIONS - The following terms are used as part of the Chemical Hygiene Program and within Safety Data Sheets:

A. **ACUTE** - An adverse effect with symptoms of high severity coming quickly to a crisis.

B. **CARCINOGEN** - A substance capable of causing cancer.

C. **CHEMICAL AGENTS** - A wide variety of fluids have a high potential for body entry by various means. Some are more toxic than others and require special measures of control for safety and environmental reasons.

D. **CHRONIC** - An adverse effect with symptoms that develop slowly over a long period of time or that frequently recur.

E. **COMBUSTIBLE** - Able to catch on fire and burn.

F. **DOT** - Department of Transportation

G. **EPA** - Environmental Protection Agency

- H. **FLAMMABLE** - Capable of being easily ignited and of burning with extreme rapidity.
- I. **INFECTIOUS AGENTS** - Sources that cause infections either by inhalation, ingestion, or direct contact with the host material.
- J. **LABORATORY SCALE** - Work with chemicals that can easily and safely be manipulated by one person excluding the commercial production of chemicals for sale.
- K. **LABORATORY USE** - A workplace where relatively small quantities of hazardous chemicals are used on a non-production basis.
- L. **LC 50** - The concentration of a substance in air that causes death in 50% of the animals exposed by inhalation. A measure of acute toxicity.
- M. **LD 50** - The dose that causes death in 50% of the animals exposed by swallowing a substance. A measure of acute toxicity.
- N. **SDS** - Safety Data Sheets
- O. **MUTAGEN** – Chemicals capable of changing cells in such a way that future cell generations are affected. Mutagenic substances are usually considered suspect carcinogens.
- P. **OSHA** - Occupational Safety and Health Administration, the regulatory branch of the Department of Labor concerned with employee safety and health.
- Q. **PEL** – (Permissible Exposure Limit) This is the legally allowed concentration in the workplace that is considered a safe level of exposure for an 8-hour shift, 40 hours per week.
- R. **pH** - A measure of how acidic or caustic a substance is on a scale of 1 to 14. A pH of 1 indicates that a substance is acidic; a pH of 14 indicates that a substance is basic.
- S. **PHYSICAL AGENTS** - Workplace sources recognized for their potential effects on the body. Heat exposure or excessive noise levels are examples of this risk group.
- T. **SENSITIZERS** - Agents to repeated exposure over time creating an allergic reaction at some point in time.
- U. **STERILITY** - Changes made in male or female reproductive systems resulting in inability to reproduce.
- V. **TERATOGENS** - A substance that causes a deformity in newborns if a significant exposure exists during pregnancy.

W. **TLV** – (Threshold Limit Value) The amount of exposure allowable for an employee in an 8-hour day.

IV. WRITTEN PROGRAM ELEMENTS

A. Motlow College will review and evaluate this plan on an annual basis, or when the following conditions are met:

- 1) When regulatory changes occur that prompt revision of this plan.
- 2) When facility operational changes occur that require a revision of this document.
- 3) Anytime there is question concerning the validity of this plan.

B. A chemical inventory will be performed on an annual basis. The inventory will compile a listing of all hazardous chemicals in the laboratory. Chemicals listed are those classified as hazardous by the Department of Transportation (DOT), the Environmental Protection Agency (EPA), or displaying a 2 or greater number in any section of the National Fire Protection Association (NFPA) diamond (DOT and EPA classifications are in Appendices A and B).

C. Inspections will be conducted on a periodic basis as follows:

- 1) Exhaust Hoods - face velocity will be maintained between 75 and 125 feet per minute. Any hood not passing inspection will be "Locked-Out" of service immediately and not used until the hood has passed inspection.
- 2) Eyewash fountains - Eyewash fountains will be inspected every 3 months and records maintained ON THE EYEWASH.
- 3) Safety showers - Safety showers will be inspected, tested, and flushed annually and records maintained by Facilities Services.
- 4) Fire extinguishers - Fire extinguishers will be inspected annually, and records maintained by Facilities Services.

D. Spill containment will be provided with spill containment kits located OUTSIDE THE CHEMICAL STORAGE ROOM AT EACH LAB. Chemical spills will be contained using the Think C.L.E.A.N.E.R. principle:

- Contain the spill.
- Leave the area.
- Emergency Decontamination: Eye wash, shower, medical care.
- Access SDS for follow-on emergency procedures.
- Notify supervisory staff of incident.
- Emergency Response Notification (9-911).
- Report. Gather information for spill report.

V. REFERENCES

OSHA Hazard Communication Standard, 29 CFR 1910.1200
OSHA Chemical Hygiene Plan Standard, 29 CFR 1910.1450

Chemistry Laboratory Safety Rules

Please note: your laboratory instructor will reduce your lab grade and/or ask you to leave the lab if the safety rules are not followed!

1. NO FOOD or DRINK in the lab, to avoid possible contamination.
2. ABSOLUTELY NO CELL PHONE USE in the laboratory.
3. Follow all instructions as given in the lab briefing by your instructor at the beginning of each lab.
4. DO NOT be late to lab! If you miss the lab briefing given by your instructor, you cannot participate in the lab! You will be given a **zero** for the work conducted during that day.
5. DO NOT touch any materials/chemicals/instruments in the lab either before or after the lab unless you have permission from the lab instructor. Wait at your assigned lab station until given instructions during the lab briefing.
6. DO NOT mix any chemicals together or heat any combination of chemicals unless called for directly by the lab procedures in use. Doing so will get you dismissed from the chemistry laboratory for the rest of the semester and the lab portion of your grade will be **zero**!
7. Keep your hands away from your face while working.
8. Wash your hands as often as possible, especially before leaving the lab.
9. Keep your workstation neat and clean.
10. DO NOT leave the lab until your lab station has been checked by your lab instructor!
11. NEVER put trash in the any lab station cubby hole!!!
12. NEVER put solid waste or trash in the laboratory sinks!!!
13. If you are unsure what to do with any materials used during the lab, **ask** your instructor.
14. Be well prepared before you come to the lab. If your laboratory instructor has handouts for you, read them thoroughly before you begin the lab procedures. If you have ANY questions, ASK your laboratory instructor before you do anything!
15. Know what to do in case of emergency.

LABORATORY Dress Code

If you come to the lab dressed inappropriately you will be asked to leave and you will receive a grade of "0" for the day's work.

1. **Wear splash-proof goggles or safety glasses at all times.**

State and Federal law require the use of safety eyewear by anyone working in a chemical laboratory. The Department has approved splash-proof goggles or safety glasses with side shields for this purpose. Safety goggles are available for sale in the MSCC Bookstore if you wish to have your own pair.

2. **Tie back long hair.**

Long hair can accidentally fall into flames or chemicals. Many hair sprays, gels, mousses, etc. are flammable! Think about this! Loose, long hair can also block your vision, which can lead to accidents.

3. **Do not wear clothing which is loose enough to knock over containers on the work bench or drag or dip into flames or chemicals.**
4. **Wear clothing (shirt, blouse, or dress) which covers and protects your chest, belly, sides, back, shoulders and upper arms.**

No cutouts or cutoffs, tank tops, tube tops, muscle shirts, etc. The skin of your torso must not be exposed at any time in the lab.

5. **Wear clothing (pants, long skirt or long dress) which covers and protects your body from the waist all the way down to and including your ankles.**

No shorts are allowed. No short or mid-length skirts are allowed.

6. **Wear shoes which cover and protect your feet completely.**

No sandals, flip-flops, open-toed shoes, or shoes with open sides or heels. And no slippers - the top of your foot must be covered!

Lab Dress Recommendations

1. **Wear comfortable shoes.**

Hours of walking and standing on a hard tile floor can leave your feet very tired and sore if you wear uncomfortable shoes.

2. **Wear socks.**

They offer added padding for your feet, and extra protection to your ankles.

3. **Wear clothing which "breathes."**

The lab can sometimes get very warm. Wear cotton or another natural fiber to keep from overheating yourself in the lab.

4. **Wear clothing which you don't care too much about.**

Tiny splatters or droplets of chemical are very likely to get on your clothing. You might not even know that the droplets are there. But the chemical can stain your clothes or weaken the fibers of

the clothing so that the next time you do the laundry your clothes will come out of the dryer with little, fuzzy holes in them.

5. **Come prepared to change clothes.**

If you do not want to spend the entire day dressed in your lab clothes, then put your lab clothes in your book bag. Before lab class begins, you can go to a nearby rest room and change from your regular clothes to your lab clothes. It is also a good idea to have some spare clothes in case of an emergency.

6. **Do not wear valuable jewelry while working in the lab.**

Chemicals which are harmless to your body may be capable of damaging jewelry. Take your jewelry off and store it in your purse or book bag before beginning any experiment.

Safety Equipment and How to Use It

1. First Aid kit

One first aid kit is located in the laboratory, located to the left of the sink on the far wall. It contains gauze squares, small, adhesive bandages and antibiotic ointment. If any injury occurs which cannot be handled with these supplies, then the student can be escorted to the Student Services office to receive treatment from the health care professionals there, or can wait in the lab for the local Emergency Medical Service (EMS) team if the injury is severe.

2. Broom and Dust Pan

In the Chemistry lab we use a lot of glassware. Glassware usually winds up getting broken some time during the semester. When that happens, it is unsafe to pick up the broken glass with your hands. Instead, you should use a broom and dust pan to collect the broken glass. The broken glass should then be disposed of in the specially marked container provided. There is a little broom for sweeping the bench top, and a big broom for sweeping the floor.

3. Fume Hoods

The chemical fume hood is a large cabinet which has a sliding glass sash in front. Fume hoods are used to protect you from harmful fumes, gases and odors. The fume hood has an air duct in its ceiling which is attached to a powerful fan. When the fan is turned on, the air in the fume hood is pulled up through the duct, carrying away any harmful fumes or smoke. Any time your experiment will produce harmful or bad-smelling gases or smoke, you will perform the experiment in the fume hood. Our fume hood is on at all times, and can only be turned off by authorized personnel.

4. Sinks

While the sink is used for cleaning glassware and many other tasks, it is also a part of our safety equipment. If you happen to get chemicals onto your hands or forearms, you must move quickly to the sink to rinse the chemicals off. The treatment for any chemicals which get on the body is to rinse the affected body area for 15 minutes under cold running water (or as long as you can stand it).

When you are in the lab, if you notice that you have a mysterious itch on your arm which just won't go away, assume that it is a chemical on your skin and wash with soap and plenty of water.

5. Safety shower and eye wash station

The chemistry lab is equipped with a Safety showers and eye wash station. When you are in the lab, make sure you locate the safety shower and eye wash station. You should know where they are and how they operate *before* an accident happens.

The treatment for any chemicals which get on the body is to rinse the affected body area for 15 minutes under cold running water (or as long as you can stand it).

If chemicals are splashed into your face they should not reach your eyes because you will be wearing safety goggles! If this sort of accident happens, *leave your goggles on* while you go to the eye-wash station. There you should wash your face with the goggles still on until you are reasonably sure most of the chemical is gone from your face. Then you should remove your goggles and wash your face again.

If chemicals get into your eyes, you should call out for help. If you cannot see, someone will guide you to the eye wash station, where you should wash out your eyes thoroughly. You should blink continuously and rapidly while washing your eyes to aid the flushing action of the water.

If chemicals get onto your body, you should quickly remove any contaminated clothing and rinse yourself off in the safety shower.

6. **Fire extinguishers**

There are fire extinguishers in each laboratory. While you are in the laboratory, please look carefully at the fire extinguishers. Notice how they are attached to the wall, and what you would have to do to get them off of the wall. Read the instructions on the side of the fire extinguisher so you will be familiar with their use. If you ever need to use a fire extinguisher, remember the following (A) pull the pin, (B) aim to the side at first, (C) depress the handle, (D) sweep the spray from side to side across the BASE of the fire (where the fire meets the fuel), not just at the flames! When the fire is out, report the incident to your instructor and then clean up the area!

Note: Never spray a person with a fire extinguisher. The chemicals in the fire extinguisher can be harmful.

7. **Fire alarm: If a fire alarm sounds you must evacuate the building!**

MSCC will prosecute anyone for setting off false alarms.

8. **Gas shutoff valve**

Make absolutely certain that each gas valve at your laboratory station is shut completely off before you leave your lab station each day. Each lab has a master valve which shuts off the gas supply to the entire lab. DO NOT play with the gas valves at the lab stations. These are not toys!!! Open the

gas valves *ONLY* directly before lighting the burners as called for by the lab experiment and instructors guidance.

10. **EMERGENCY Telephone**

There is a limited access, emergencies-only telephone in the Chemical Preparations Room located on top of the refrigerator. This room is only accessible by Chemistry instructors and staff. If someone asks you to call for help, find a lab instructor (in the neighboring labs), professor or staff member and ask them to call 911. They will then call for an Emergency Medical Service (EMS) team. Be sure to stay with that person until you have given all the necessary information (building, room number, what happened, etc.).

What to Do in Case of an Accident

Always tell your instructor about all accidents immediately!!!

1. **Broken glass.**

Do not pick up broken glass with your fingers! Get a broom and dust pan. Sweep the broken glass into the dust pan and dump it into the specially marked containers provided in the lab.

2. **Small chemical spill.**

Wipe up liquid spills with paper towels and dispose of them as your instructor suggests. Solids should be dissolved in water, if possible, and wiped up. Otherwise, sweep them up with a broom and a dust pan and dispose of them wherever your instructor tells you. In all cases, after the chemical spill has been wiped up, rinse the area with enough water to make sure that all residual chemicals have been removed.

3. **Large chemical spill.**

Move away from the area of the spill. Warn the people around you LOUDLY. Call your instructor! Let the expert handle the clean-up!

4. **Chemical splash in your face, goggles on.**

If the goggles have protected your eyes, DON'T TAKE YOUR GOGGLES OFF! Yell for help. Go to the eye wash station and rinse your face quickly with the goggles still on. Then remove the goggles and rinse your face again.

5. **Chemical splash or broken glass in your face, goggles off.**

If this sort of accident happens, you may not be able to see well enough to go to the eye wash station on your own. YELL LOUDLY FOR HELP and cooperate with anyone who comes to your aid. Since your goggles are to be worn at all times while in the chemistry lab, this should NEVER happen! Remember, most of these accidents happen during laboratory cleanup after you have finished the laboratory procedures!

6. **Large splash of dangerous chemical on your clothing and/or body.**

Quickly follow this procedure while continuously YELLING FOR HELP:

- A. **Move away from the area where the spill occurred (you don't want to get more chemical on you).**
- B. **CALL LOUDLY FOR HELP and to warn others to stay away from the spill!**
- C. **Remove any contaminated clothing.**

D. Use the safety shower. (The treatment for chemical exposure is 15 minutes under cold running water, or as long as you can stand it.)

7. Small, confined fire.

If you have a small fire in a container, (for instance, a small beaker full of alcohol has caught fire) find something you can use as a lid for the container. When the container is covered, the fire will quickly burn itself out. Call the instructor for help.

8. Small, open fire

If you have a small fire which is not in a container, move away from the fire and **SHOUT FOR HELP!** You can use a fire extinguisher to put the fire out. If you ever need to use a fire extinguisher, remember the following (A) pull the pin, (B) aim to the side at first, (C) depress the handle, (D) sweep the spray from side to side across the **BASE** of the fire (where the fire meets the fuel), not just at the flames! When the fire is out, clean up the area!

9. Large fire

SHOUT FOR HELP and leave the area immediately! The fire alarm will probably sound. When it does, evacuate the building and **TELL EVERYONE YOU CAN**, where the fire is.

10. Your clothing on fire

Don't run! It will only fan the flames and make the fire worse! Instead, you should **STOP** moving, **DROP** to the ground (lie down!), and **ROLL** on the ground to squash out the flames! **YELL** continuously! Know the location of the **fire blanket**. This can be used to wrap your body in an emergency.

Note: If you want to help a person who is in this sort of trouble, don't use a fire extinguisher! Use the fire blanket instead. You must never use a fire extinguisher on a human being. The chemicals in the extinguisher can be harmful!

11. Fire Alarm

If a fire alarm sounds you must evacuate the building immediately!

To evacuate properly, you should quickly and calmly do the following:

A. Turn off all flames and unplug any hot plates or other electric equipment you are using.

B. Get your stuff.

Take your book bag, purse, car keys, etc. with you. We never know whether the evacuation will last for 5 minutes or 5 hours. You don't want to become stranded on campus!

C. Walk calmly out the door, down the hall, down the stairs (elevators should not be used during an emergency unless you are handicapped), out the door and away from the building.

Your instructor should escort the class out of the building. Try to stay together as a class, and stay near to your instructor. If your class is allowed back into the building, you should finish your experiment, or at least clean up what you have left on the work bench. If the evacuation lasts beyond the end of the class period, then you are free to go.

What to Do in Case of an Injury or Illness

REPORT ALL injuries and/or illnesses to your instructor!!!

1. **Small cut**

Tell your instructor, and let your instructor look at the injury. Wash the injury thoroughly with water. If the injury is minor, you may use the first aid kit in the laboratory. (The first aid kit contains triple antibiotic ointment and adhesive bandages.) If your injury still hurts so badly that you can't finish the experiment, then you may be sent or taken for appropriate medical attention.

2. **Large cut**

Tell your instructor, and let your instructor look at the injury. To stop or slow down bleeding, apply pressure to the wound. If the wound is very large or there is glass or other foreign matter in the wound, then apply pressure around the arm or leg (between the body's torso and the injury) to slow the bleeding. In all cases, a large cut must be attended to by a medical professional! If you can walk, you may be escorted or taken for appropriate medical attention. You may wait while an Emergency Medical Service (EMS) team is called.

3. **Small burn**

Tell your instructor, and let your instructor look at the injury. Chemical burns and heat burns should both be treated with lots of cold running water. *Never put anything except cold water on a burn!* Doctors often have to remove ointments because they retard healing! After this treatment, if the burn still hurts badly enough that you cannot complete the experiment then you will be escorted or taken for appropriate medical attention.

4. **Large burn**

In all cases, a large burn must be attended to by medical professionals! Tell your instructor, and let your instructor look at the injury. Then you may be escorted or taken for appropriate medical attention or you may wait while an Emergency Medical Service (EMS) team is called.

5. **Fainting**

In all cases, an Emergency Medical Services team will be called! If you feel like you might faint, please ask for medical assistance and a decision will be made regarding the necessity for emergency medical assistance.

6. **Breathing difficulties**

The student will be escorted to a location where they can sit comfortably while emergency medical services are contacted!

TARGET ORGAN LIST. A list of target organ effects shall be posted in a central location for access by all associates as follows:

HEPATOTOXINS Chemicals that produce liver damage Signs and Symptoms
Jaundice; liver enlargement

Chemicals	Carbon tetrachloride; nitrosamines
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

NEPHROTOXINS Chemicals that produce kidney damage Signs and Symptoms
Edema; proteinuria

Chemicals	Halogenated hydrocarbons; uranium
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

NEUROTOXINS Chemicals that produce their primary Signs and Symptoms
toxic effects on the nervous system Narcosis; behavioral
changes; decrease in
motor functions

Chemicals	Mercury; carbon disulfide
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

AGENTS THAT ACT ON THE BLOOD OR HEMATOPOIETIC SYSTEM Decrease hemoglobin function; Signs and Symptoms
deprive body tissues of oxygen Cyanosis; loss of consciousness

Chemicals	Carbon monoxide; cyanides
_____	_____
_____	_____

AGENTS THAT DAMAGE THE LUNG

Chemicals that irritate or damage the pulmonary tissue

Signs and Symptoms
Cough; tightness in chest; shortness of breath

Chemicals

Silica; asbestos

REPRODUCTIVE TOXINS

Chemicals that affect the reproductive capabilities including chromosomal damage (mutations) and effects on fetuses (teratogenesis)

Signs and Symptoms
Birth defects; sterility

Chemicals

Lead

CUTANEOUS HAZARDS

Chemicals that affect the dermal layer of the body

Signs and Symptoms
Defatting of the skin; rashes; irritation

Chemicals

Ketones; chlorinated compounds

EYE HAZARDS

Chemicals that affect the eye or visual capacity

Signs and Symptoms
Conjunctivitis; corneal

damage

Chemicals

Organic solvents; acids

Last updated: July 16th, 2010