

Shop Safety Manual



Environmental Health, Safety, and Risk Management Department

**Box 6113, SFA Station
Nacogdoches, Texas 75962-6113**

**January 2011
Revised: November 2020**

I. PURPOSE

The procedures described in this safety manual are intended to reduce the risk of injury while working in various trades shops on the campus of Stephen F. Austin State University (SFA). Shop accidents can be minimized or prevented by ensuring SFA shop facilities remain free of clutter and equipment is maintained in good working condition. The following shop safety procedures and guidelines should be followed at all times. This manual has been developed in accordance with OSHA general industry and construction industry regulations 29 CFR 1910 & 29 CFR 1926.

II. RESPONSIBILITIES

A. Environmental Health, Safety, & Risk Management (EHSRM)

1. Review and update the Shop Safety Manual on a regular basis or when new information is made available;
2. Investigate the cause of shop accidents and injuries;
3. Look for potential hazards and other unsafe conditions in SFA shops during routine safety inspections;
4. Inspect SFA shops where accidents have occurred or in response to reports of unsafe conditions;
5. Notify shop or department supervisors when shop equipment is found in need of repair or where unsafe conditions exist;
6. Follow up on problem areas to ensure satisfactory corrections have been completed; and
7. Stop work or temporarily close a shop that is found to be in violation of the safety rules described in this manual until appropriate corrections have been made.

B. Shop Supervisors

1. Train shop personnel in the safety procedures described in this manual as well as the OSHA, EPA, and other EHSRM policies and procedures applicable to safety in SFA shops;
2. Regularly inspect shop facilities and equipment and make repairs when deficiencies are identified;
3. Promptly respond to reports of hazards that could pose a danger to employees;
4. Restrict access to shop work areas where hazards are present until the appropriate corrections have been completed or the hazard has been eliminated; and
5. Promptly report to a department supervisor or EHSRM when additional resources are needed to correct problems and eliminate hazards in SFA workshops.

III. SHOP SAFETY

A. Personal Protection

1. Appropriate Personal Protective Equipment (PPE) will be provided by each campus department.
2. PPE should be kept clean, maintained in good condition, and worn when working in a shop on the SFA campus.
3. Safety glasses or goggles must be worn at all times by all personnel, including visitors or spectators, who are engaged in, or are in the area of known dangers created by:

- a. the use of hot liquids, solids or gases;
 - b. caustic or flammable materials,
 - c. milling, sawing, turning, shaping, cutting, grinding, or the stamping of solid materials;
 - d. tempering, heat treatment of kiln firing of metals and other materials; or
 - e. gas or electric welding.
4. Appropriate hand, foot, or leg protection must be worn at all times by personnel who are engaged in activities involving:
 - a. Handling materials with sharp edges such as sheet metal, castings, etc.;
 - b. Working with acids, caustics, solvents, or other hazardous chemicals. Refer to the chemical's Safety Data Sheet (SDS) for the specific PPE required.
 - c. Operations where the main hazard is friction, that may cause blisters or burns; or
 - d. Any type of work involving hazards to the hands, feet, and legs.
 5. Work clothing worn by personnel will be appropriate to the specific activity of the shop area.
 - a. Dress for the job. Loose-fitting clothing is dangerous around moving parts of machinery and can result in serious injury.
 - b. Wear sturdy shoes that are in good condition and suited for your work.
 - c. Avoid wearing oil soaked clothing that may catch fire or cause skin irritation.
 - d. Avoid wearing metal jewelry near electric equipment or machinery (bracelets, rings, etc.)
 6. Approved and appropriate respirators will be worn where harmful dust, fumes, gases, mists, or vapors are present. See the SFA Respiratory Protection Plan for more details at: <http://www.sfasu.edu/safety/147.asp>.
 7. Hard hats must be worn by all personnel engaged in shop activities that warrant protection of the head.
 8. Hearing-protection must be worn by all personnel engaged in shop activities involving intense and/or harmful sound levels defined by OSHA as sound levels above 90 dB for 8 hours or 140 dB for impulsive or impact noise. See the SFA Hearing Conservation Plan for more details at: <http://www.sfasu.edu/safety/147.asp>.

B. General Safety

1. Visitors must obtain shop supervisor approval before entering a shop area.
2. Safety inspections will be conducted on a regular basis by EHSRM Safety Officers and department supervisors of the shop area.
3. Non-slip floor covering materials will be provided for areas where slip hazards may be present.
4. Alternate yellow and black stripes will be applied to protruding parts, low beams, tripping hazards, and loading docks.
5. Warning signs convey important safety information and must be obeyed.
6. Gas cylinders must be secured in an upright position at all times unless otherwise specified by the equipment manufacturer.
7. All accidents resulting in personal injury must be reported immediately, by the supervisor, to the Safety Department using the "24-hr Quick Link" at: <http://www.sfasu.edu/safety/147.asp> or by calling extension 4514.
8. Personnel will not be permitted to work alone in shops where hazards exist.

9. All exits, fire extinguishers, and breaker panels shall be clearly identified and kept unobstructed at all times.

C. Equipment Safety

1. Tools, machines, and other equipment must be properly maintained in good working condition. Never use a tool or machine that is damaged or missing safety guards or devices.
2. Safety guards must be used for all operations involving machine cutting, drilling, shaping, or forming. The removal of machine guards and safety devices, even for a brief interval, without proper authorization, is strictly prohibited. After making repairs or adjustments to a machine, immediately REPLACE GUARDS if removed.
3. Never remove warning signs or labels from equipment or shop areas.
4. Specific safety rules must be posted at or near each hazardous machine or danger area.
5. All employees must be properly trained before operating any machine or hazardous equipment.
6. Appropriate warning signs will be placed on equipment that is under repair or otherwise out of service.
7. All power machines will be fastened securely to the shop floor, or if bench mounted they will be securely attached to the bench.
8. Operation, adjustment, and repair of any machine tool must be restricted to experienced and trained personnel.
9. Chips and dust will be cleaned from a machine with a brush or chip hooks (NOT with a rag, the hand, or compressed air).
10. Never talk to or distract an individual operating power equipment.
11. When oiling, cleaning, adjusting or performing any maintenance on an electrical driven machine be sure the electrical service (or disconnect) is "locked-out" and taped as "maintenance being performed - do not operate."
12. All gears, belts, and other power transmission devices must be enclosed with permanent guards or barricades.
13. Always use the proper tool for the job.

D. Housekeeping

1. Always keep floors free of oil, water, clutter, and other slip, trip, or fall hazards.
2. Overhead storage areas for supplies or equipment must meet safety standards and be properly marked.
3. Clean shops daily removing all sawdust, shavings, metal cuttings, and other waste materials.
4. Marked boxes or bins should be provided for the various kinds of scrap stock.
5. Oily rags must be disposed of in closed metal container specifically provided for the waste.
6. All walkways (aisles) will be kept clear of materials, tools, and equipment.
7. Materials in supply bins should be maintained in an orderly manner with no materials projecting over the edges of the bins.
8. Tools and portable equipment will be stored in approved racks, bins, or shelves when not in use.
9. Tools and equipment will be kept reasonably free of oil, grease, dirt, and other accumulations that may render them hazardous to use.

10. Work bench tops will not be used for storage purposes and will be swept clean after work is completed.
11. Items such as lumber, pipe, etc., will be stored properly on a rack or shelf and not leaned up against a wall.
12. Storage of materials or equipment of any kind under stairs or in stairwells is strictly prohibited.