



UNIVERSITY SAFETY OFFICE

SUBJECT: HOT WORK PERMIT SYSTEM

I. PURPOSE

The purpose of this policy is to provide procedures for any temporary [as opposed to welding or other shop work] operation involving open flames or producing heat and/or sparks.

II. SCOPE

This procedure applies to all Sam Houston State University (SHSU) employees, contractors and visitors.

III. EXCEPTIONS

A Hot Work Permit is not required for hot work performed in the following areas, provided the work follows the provisions defined under the Hot Work 35ft Rule:

- Physical Plant Shops
- Residence Life Shop
- Grounds Shop
- Agricultural Sciences Shops
- Art Department Shops, i.e. Ceramics, Jewelry, and Sculpture
- Parking Lots

Contractors at new construction and renovation sites may also be excluded from this policy provided they have and use a Hot Work procedure that meets or exceeds this procedure.

This procedure does not apply to the open flames used for instruction and research in laboratories.

IV. DEFINITIONS

Hot Work: brazing, cutting, grinding, soldering, thawing pipe, torch applied roofing, welding or other work that can produce sparks or flame.

V. RESPONSIBILITIES

A. THE UNIVERSITY SAFETY OFFICE

The University Safety Coordinator is responsible for the development, implementation, and review of the Hot Work Permit System. The Safety Coordinator shall also provide training to ensure successful implementation of the Hot Work Permit System. The Safety Coordinator may also sign the Hot Work Permit.

B. DEANS, DIRECTORS, DEPARTMENT HEADS

The Deans, Directors and Department Heads shall ensure this procedure is used when applicable.

C. SUPERVISORS

Supervisors, Project Managers, Shop Foremen and the Safety Coordinator are responsible for ensuring the Hot Work Permit System is followed on all hot work performed on the campus. The Shop Foreman has the primary responsibility for initiating and signing the Hot Work Permit for Physical Plant and Resident Life Maintenance employees as well as contractors under their guidance. Project Coordinators are responsible for initiating and signing the Hot Work Permit for contractors under the Project Manager's guidance.

D. EMPLOYEES

Employees are responsible for obtaining and completing a Hot Work Permit when required. The employee is also responsible for ensuring the area where the hot work is to be done is prepared according the requirements defined below.

VI. REQUIREMENTS

The Factory Mutual Global Hot Work Permit will be the permit used to document Hot Work.

Before starting hot work, seek another method. Search for an equally effective way to join, trim, or sever without compromising mechanical integrity.

1. Initiate a Hot Work Permit. Blank permits will be made available to shops. Fill out all portions of the completely and legibly. Obtain Shop Foreman's signature. Remove top sheet of permit and take bottom part to job site. The top sheet stays in the shop.
2. The Hot Work Permit must be issued for each task requiring hot work.
3. A Hot Work Permit shall be issued for 1 to 12 hours.
4. The Hot Work Permit shall be issued on the day the hot work is to be done.
5. Use the following rules to prepare a 35 foot radius around the hot work:
 - a. Remove all combustible and flammable materials.
 - b. Ensure there no explosive atmosphere.
 - c. Shield combustible flooring with wet sand, fire retardant tarps, or sheet metal.
 - d. Cover or protect any combustible items that can not be moved form sparks, slag, and flames.

- e. Cover or block off any openings or ducts in walls, ceiling or floors where sparks or hot materials can enter.
 - f. Provide a fire retardant covering below elevated work.
6. An operational, 10 lb, ABC dry chemical fire extinguisher must be available at the job site.
 7. Hot work equipment must be in good repair.
 8. Use a properly trained fire watch when ever possible. A fire watch shall be used whenever performing hot work in a confined space or there are flammable gases or liquids within a 35 ft radius of the hot work.
 9. Upon completion of hot work ensure there are no hot or smoldering materials before leaving jobsite.
 10. Return bottom portion of the Hot Work Permit to the shop. The shop shall keep the Hot Work Permit a minimum of 30 days. After 30 days the permit may be disposed.
 11. Persons on Call-out duty shall be allowed to issue their own Hot Work Permit provided they have been trained and follow this procedure.

VII. TRAINING

The Safety Coordinator in conjunction with supervisors and managers will ensure that regular employee training is conducted and that all employees understand their responsibilities when any hot work is being performed.

The Fire Watch shall:

1. Have an operational fire extinguisher.
2. Know how to use a fire extinguisher
3. Watch the hot work area to ensure no fires are started by the hot work.
4. Stop the hot work if improper conditions develop.
5. Stay with the hot work for 30 minutes after completion of the work or work is cool to touch, to ensure no fires are smoldering.
6. In the event of a fire, activate the fire alarm system to evacuate the building.
7. Call 9-911 to report any fire.
8. Attempt to extinguish an incipient stage fire, if trained and comfortable to do so.
9. May serve as a Hole Watch for hot work in a Confined Space.

10. Shall monitor Lower Explosive Limits (LEL), oxygen, and carbon monoxide limits when work is conducted in a Confined Space or other areas where flammables gases maybe present or carbon monoxide gas may accumulate.
11. Stop the hot work if the monitor indicates an LEL of 10% or more, an oxygen level less than 19.5% or greater than 23.5 %, or a carbon monoxide level greater than 34 ppm (the alarm set points).
12. Hot Work may resume once the improper conditions have been resolved.