

## 1. Purpose:

Texas Woman's University (TWU) is committed to the protection of the health and safety of employees, students, visitors, and the secondarily to the protection of property. This program establishes the minimum safe procedures for the operation of cutting, brazing, welding, soldering, and grinding or any other similar operation at any TWU facility.

## 2. Scope:

All TWU employees, students and outside contractors/service companies involved in the use of spark or flame-producing equipment at all TWU facilities are required to conform to these guidelines.

## 3. Policies and Procedures:

A Hot Work Permit must be issued before conducting any operation involving the operation of cutting, brazing, welding, soldering, and grinding or any other similar operation in areas that are not permanently designated for Hot Work. The Hot Work permit shall be valid for the day and the operation for which it was issued. In the case of the Hot Work requiring additional days, additional permits will be issued for the subsequent days.

### **3.1. Completing the Hot Work Permit**

A Hot Work Permit may be completed by any TWU employee. Contractors must obtain Hot Work Permits from a TWU employee. Below is a list of the mandatory Hot Work Permit requirements; each item must be checked off on the permit before work may proceed.

#### **3.1.1. Mandatory Precautions**

##### ***Mandatory Precautions for All Hot Work***

- Hot work equipment is in good working order (the equipment actually used to conduct the hot work: welders, torches, grinders, etc.). Oxy-acetylene torches must be equipped with backflow preventers on both gas lines.
- Sprinklers (if present) and fire extinguishers in area are in service and operable.
- At least one fire watch personnel, other than the person(s) conducting the hot work, is present
- Fire watch personnel has access to a minimum of a 10 lb ABC fire extinguisher within 30 feet of the hot work location
- Fire watch provided during work and for a minimum of 30 min after hot work, including any breaks

Document Name: Hot Work Procedure  
Document Number: 5460.7 v.1  
FMC Division: Risk Management

Approval Date: 12/30/12  
Review Date: 4/22/13  
Approved By: AVP, FMC

- Fire watch personnel are trained on fire extinguisher use and how to sound the alarm (building fire alarm or by notifying DPS)
- Pressurized vessels, piping and equipment removed from service, locked out and vented (Refer to the TWU [Hazardous Energy Control Program](#) for information on proper lockout/tagout).

#### *Mandatory Precautions Within 35 feet of Hot Work*

- Flammable liquid, dust, lint, and oily deposits removed.
- Floors swept clean and trash removed.
- Combustible floors covered with fire-resistive/noncombustible materials.
- Ducts that might carry sparks away are covered, protected, or shut down.
- All wall and floor openings covered.
- Other combustible storage material removed or covered with welding pads, blankets or curtains, or metal shields or noncombustible materials.
- Explosive, flammable or other hazardous vapors, gases or dusts are eliminated from the work area

#### *Mandatory Precautions for Work on Walls, Ceilings, or Roofs*

- Flammable liquid, dust, lint, and oily deposits removed.
- Construction must be noncombustible and without combustible coverings or insulation.
- Combustible material on other side of walls, ceilings, or roofs is moved away.

#### *Mandatory Precautions for Hot Work on Enclosed Equipment*

- Enclosed equipment is cleaned of all combustibles.
- Containers are purged of flammable liquid/vapor.
- Pressurized vessels, piping and equipment removed from service, locked out and vented.

#### *Mandatory Precautions for Hot Work Fire Watch and Fire Monitoring*

- Enclosed equipment is cleaned of all combustibles.
- *Containers are purged of flammable liquid/vapor.*

#### *3.1.2. Optional Additional Precautions*

The following are additional precautions that may be required by the TWU employee authorizing the hot work. The authorizing employee should carefully consider if these additional precautions are recommended to protect the health and safety of employees, students and visitors, or for the

Document Name: Hot Work Procedure  
Document Number: 5460.7 v.1  
FMC Division: Risk Management

Approval Date: 12/30/12  
Review Date: 4/22/13  
Approved By: AVP, FMC

protection of property. When in doubt, the additional precautions should be implemented. The authorizing employee checks the boxes in the "Required?" column for the selected additional precautions, and then checks the box in the "Complete?" column when they have been implemented.

#### *Additional Precautions*

- Additional fire watch personnel in adjoining areas? Areas above/below?
- Extended fire watch period beyond 30 min?
- Additional ventilation required in area?
- Barricades/signage to keep unauthorized personnel out of area?
- Check the area for explosive atmosphere?
- Use welding screens to protect individuals in the area?

If there is any question as to whether a permit should be issued, work will be postponed until Risk Management can perform an inspection of the work area and has approved it as safe to proceed.

#### *3.1.3. Optional Additional Precautions*

The TWU employee authorizing the work prints and signs their name at the bottom of the permit indicating that they have examined the work area and authorize the work to proceed providing that the required precautions are maintained.

The names of the persons conducting the work and the company name (if non-TWU personnel are conducting the hot work) are printed. The personnel conducting the work also sign the permit.

#### *3.1.4. Closing the Hot Work Permit*

Once the hot work AND the required fire watch are completed, the fire watch person must print and sign their name on the permit and return the permit to Risk Management.

### ***3.2. Designated Hot Work Area***

TWU Risk Management shall designate areas where hot work will be allowed to be conducted without the issuance of a Hot Work Permit. Risk Management will evaluate potential hot work areas and determine if they can meet the conditions listed above consistently, and what additional procedures or precautions must be implemented to ensure hazards do not develop over time when a permit is not required.

---

Document Name: Hot Work Procedure  
Document Number: 5460.7 v. 1  
FMC Division: Risk Management

Approval Date: 12/30/12  
Review Date: 4/22/13  
Approved By: AVP, FMC

---

Current Designated Hot Work Areas are listed below:

- FMC Central Plant Welding Shop
- FMC Automotive Shop
- Sculpture Welding Shop in Fine Arts Building
- Laboratories (approved only for use of lab type equipment such as Bunsen burners)

### **3.3. Hot Work in Confined Spaces**

If hot work will be conducted in a confined space, the work must be conducted in accordance with this procedure and well as the TWU [Confined Space Entry Program](#). This will generally require that both a confined space entry permit and a hot work permit both be completed.