TAMUCC Hot Work Permit Policy

1.0 Revision Date: 09/09/2014

2.0 Purpose

To establish procedures defining a system of control that will allow work involving possible sources of ignition to be carried out safely, eliminating the danger of fire to surrounding areas.

3.0 Scope

This program applies to all employees and contractors conducting hot work on TAMUCC premises.

NOTE: Areas permanently established and arranged to conduct hot work are exempt. Those areas will be inspected once a year.

3.0 References

TAMU Hot Work Permit Policy

NFPA 51B, Standard for Fire Prevention during welding, cutting, and other hot works

29 CFR 1910.251-255

4.0 Definitions

4.1 Hot Work - Any work which produces open flames, heat, and/or sparks that could ignite materials in the work area.

4.2 Hot Work Permit: A mean to communicate fire hazards and recordkeeping of activities that involve hot work. TAMUCC uses the Factory Mutual forms.

4.3 Combustible - A material capable of sustaining burning when ignited and in the presence of air.

4.4 Flammable - A liquid having a flashpoint below 100 degrees Fahrenheit.

4.5 Hot Work Operator – A person who has been trained and qualified by their supervisor to operate welding, brazing, grinding, and/or cutting at TAMUCC.

4.6 Fire Watch - A person who has been trained to use fire extinguishers and familiar with inherent hazards of the work site and of the hot work operation, the closest exit routes from the building, and the pull stations.

4.7 Permit Authorizing Individual (PAI) – The supervisor, his designee, or EH&S personnel knowledgeable in hot work operation and is capable to identify site-specific flammable and combustible materials, fire hazards, or hazardous processes present or likely to be present in a hot work area.
5.0 Policy

5.1 A Hot Work Permit is required for any temporary operation involving open flames or producing heat and/or sparks. This includes, but is not limited to: brazing, cutting, grinding, soldering, torch applied roofing, and welding when the hot work is done outside of a designated hot work area.

5.2 An area classified and marked as a “Designated Hot Work Area” must meet the following criteria:

- The area is a non-combustible fire resistive construction, essentially free of combustible and/or flammable materials.
- The area is segregated from adjacent areas.
- The area is equipped with at least one fire extinguisher.
- The area is evaluated, approved, and inspected periodically by EH&S.

5.3 The following areas are the “Designated Hot Work” areas on campus:

- Motor Pool building, bays 2, 3, and 4. All combustible materials must be stored in the storage room or at 35 feet radius from the hot work area
- Science and Tech building, room number 114 (south east corner)
- Center for the Arts building, room number 116
- Central Plant, Main room
- Plumber shop in Physical Plant

5.4 The Permit Authorizing Individual (PAI) is responsible to:

- Ensure all flammable and/or combustible materials are at least 35 feet radius clearance from the hot work area or that they will be fully covered with fire resistive blankets
- Determine if a fire watch is required
- The PAI cannot be the person doing the hot work

5.5 A Fire Watch must be posted by a PAI if any of the following conditions exist:

- Combustible materials cannot be removed or fully covered with fire resistive blankets or screen from within 35-foot radius of the hot work
- Wall or floor opening within a 35-foot radius of hot work expose combustible materials in adjacent areas, including concealed spaces in walls or floors
- Combustible materials are adjacent to the opposite site of partitions, walls, ceiling or roofs and are likely to be ignited
- Any other condition that is deemed necessary by the PAI
- Building that does not have a fire sprinkler system

5.6 The Fire Watch is responsible to:

- Remain present and undistracted during hot work operations
- Be alert for any condition that could lead to a fire, including possible problems in adjacent areas
- Guard passersby from welding hazards
• Interrupt the work if a hazardous condition develops, and deal with the situation appropriately
• Remain on the scene for at least thirty minutes after completion of hot work in order to detect, extinguish or report a fire resulting from stored heat or sparks
• If required by PAI, return to the scene one hour after the hot work is completed to give a final check to ensure no more fire hazards in the area, sign off the permit, and return the permit to E,H&S office

5.7 All Hot work operators, fire watch person, permit authorizing individual, and their supervisors are required to:

• Complete the “Fire Safety” training once every two years.

5.8 Hot Work Permits are not required when hot work is done in an exterior area that is at least 35’ away from buildings and at least 35’ away from any flammable and/or combustible materials including trees, bushes, or dried grass.

5.9 The following operations do not require a Hot Work Permit:

• Bunsen burners in laboratories
• Fixed grinding wheels
• Electric soldering irons

6.0 Procedure

6.1 The hot work operator is responsible to request a Hot Work Permit, by calling E,H&S at ext. 5555, when he/she performs hot work outside of a designated hot work area at any times.

6.2 A permit is issued by a Permit Authorizing Individual (PAI).

6.3. The hot work operator is responsible to prepare the work area according to the permit requirements.

6.4 If an alarm system bypass is required, only an official designee of the TAMUCC Physical Plant may temporarily bypass the fire alarm system. Specific devices or sections of the system required to be bypassed will be determined by the Physical Plant technician performing the bypass. All bypassed alarm systems must be restored by 5:00pm Monday through Thursday, and by 3:00pm on Friday.

6.4 The hot work permit issuer is responsible to complete the FM Global Hot Work Permit and make sure all applicable conditions satisfy the requirements from the permit. If any of the applicable conditions does not meet the requirements, the hot work is not allowed.

6.5 Floor openings or drains must be adequately covered to prevent slag or sparks from falling to the area below or entering drains. In the case of the work being performed in an elevated area, the area below shall be barricaded.

6.6 In areas where heavy dust may be present, the dust accumulation must be cleaned prior to the start of work.
6.7 The hot work permit is only valid for one day and within the period permitted.

6.8 The signed permit shall be maintained on the job site at all times during the work.

6.9 When the work is completed, the area shall be returned to normal condition.

6.10 Any unusual incidents that occur shall be noted on the permit and reported to the E,H&S office at extension 5555 for follow-up investigation.

6.11 Hot Work is not allowed in:

- Areas where flammable vapors may be present within a minimum 50' radius.
- The immediate vicinity of any pipe line, valve, fitting, vessel, or equipment that contains or has contained a flammable or combustible liquid or gas.
- Areas where the Lower Explosive Limit (LEL) reading is above 10% LEL.