

Hot Work Permit Program



Contents:

- Purpose
- Application
- Reference
- Definitions
- Procedures
- Responsibilities
- Appendix A. Hot Work Permit

Purpose:

To provide written procedures to prevent the outbreak of fire, fire alarm activations, smoke and odor migration in buildings resulting from any temporary operation involving the use of open flames or which produces heat and / or sparks. This includes, but is not limited to: brazing, grinding, cutting, torch soldering, thawing pipes, torch applied roofing and welding.

Application:

This procedure applies to work performed by any Texas A&M University employee, student and contractor performing work in existing buildings, new construction in existing buildings or new construction attached to existing buildings. When hot work is performed outdoors, necessary precautions should be taken to ensure combustible materials have been cleared and the risk of fire has been eliminated. This procedure does not apply to new construction where there is no attachment to existing buildings or to areas that are specifically designed and equipped for such operations, i.e. maintenance shop areas and designed welding areas.

References:

National Fire Protection Association Standard 51B “Hot Work Guidelines” International Fire Code, 2003 Edition, Chapter 26 “Welding and other Hot Work”

Definitions:

Hot Work - Any operation producing flames, sparks or heat including cutting, welding, brazing, grinding, sawing, torch soldering, thawing frozen pipes, applying roof covering etc.

Hot Work Permit - A special permit, which authorizes “Hot Work” activities at a specific location and time. The permit will be properly filled out, displayed on site and returned to the employee supervisor when the hot work is complete. Permits contain a checklist to be completed prior to commencing hot work activities and also the conclusion of the hot work.

Fire Watch - A trained individual stationed in the hot work area who monitors the work area for the beginning of potential, unwanted fires both during and after hot work. Individuals must be trained and familiar with the operation of portable fire extinguishers and methods to activate building fire alarm systems.

Procedures:

- Hot work should not be performed if the work can be avoided or performed in a safer manner. When practical, objects to be welded, cut or heated should be moved to a designated safe location, i.e. maintenance shops.
- If hot work must be performed, a Hot Work Permit must be completed.
- All precautions on the Hot Work Permit must be met prior to any work commencing. The supervisor or the employee performing the hot work will complete the permit.
- The Hot Work Permit is only good for the date specified on the permit.
- A Hot Work Permit must be displayed at the work site during all hot work.
- All building occupants must be suitably protected against hazards generated by the work. i.e. heat, sparks, fumes, welding rays, etc.
- Before hot work begins:
 - o An appropriate fire extinguisher must be available and operable.
 - o Flammable and ignitable materials and debris must be moved at least 35 feet from the hot work area or covered and protected from the hot work by fire resistant material.
 - o Explosives, oxygen acetylene tanks, flammable liquids, compress gas cylinders or stored fuel must be moved at least 50 feet from the hot work area or covered and protected from the hot work by fire resistant material.
 - o Smoke and fire detectors in the immediate area of the hot work must be temporarily disabled until the hot work is completed. This can only be accomplished by contacting the Fire Alarm & Suppression Shop at 862-1282.
 - o Adequate ventilation is being used (especially when cutting or welding material with painted or metal coated surfaces). For questions or assistance, on ventilation issues, contact EHSD at (845-2132)
 - o Building occupants have been protected or isolated from the hot work area. If work impacts building occupants, the work must be coordinated with the building proctor.

- o Cracks or holes in floors, walls, and ceiling (including ductwork) are properly covered or plugged.
- o Hot work equipment is operable and in good repair.
- o Drums, barrels and tanks have been cleaned and purged of flammables and toxics, all tank feeds are closed and the tank vented.
- o A fire watch is implemented if conditions warrant. If no fire hazards or combustible exposures are present a fire watch is not required.
- o Workers and Fire Watch personnel are trained in the use of fire extinguishing equipment and how to activate the fire alarm system.
- When hot work is complete:
 - o The work area and any potentially affected surrounding areas are inspected for fire, fire damage or the potential for fire for a minimum of 30 minutes following completion of the hot work.
 - o Smoke / fire alarms that were disabled because of hot work are reactivated by contacting the Fire Alarm and Suppression Shop at 862-1282.
 - o Hot work permit is closed out
 - o Completed permit is returned to workers supervisor who then submits the completed permit to be placed in hot work permit file at each location.

RESPONSIBILITIES:

Management

It is the responsibility of management to insure that this policy is implemented in those areas under their jurisdiction where applicable.

Environmental Health and Safety

- Develop written Hot Work program and revise the program as necessary
- Assist with Hot Work procedure training for supervisors
- Periodically audit operations, documentation and training

Safety officers

- Be thoroughly familiar with the hot work procedures
- Implement the hot work program in your areas

Supervisors including Faculty and Instructors

- Be thoroughly familiar with the Hot Work procedures
- Identify employees who may perform hot work as defined in this procedure

- Provide Hot Work training to employees who perform hot work operations
- Maintain records of employee training
- Provide Hot Work Permits
- Collect and complete hot work permits to be filed
- Ensure compliance with procedures by employees

Employees

- Be thoroughly familiar with Hot Work procedures
- Follow all Hot Work procedures
- Complete Hot Work Permits
- Complete required training program

Students

- Be thoroughly familiar with Hot Work procedures
- Follow all Hot Work procedures
- Complete Hot Work Permits
- Complete required training program

Texas A&M University Hot Work Permit

Hot work is any operation that generates heat, spark or open flame. This includes, but is not necessarily limited to welding, cutting, grinding, soldering, torch applied roofing, heat gun use and similar activities.

Before initiating Hot Work, determine if there is a safer way to complete the work.

Date: _____ Location: _____ Job#: _____

Type of Hot Work: Soldering Welding Cutting Roofing Other_____

Hot Work Precautions Check List: Complete prior to any hot work beginning in an area not designated for hot work. Check each box where the statement is true. If any statements are not true, then hot work should not begin until that issue has been safely resolved.

Required Safety Precautions

- Fire suppression sprinklers, fire hoses or fire extinguishers are available and operable.
- Hot work equipment is operable and in good repair.
- Smoke/fire detectors in the immediate area of the hot work have been temporarily disabled until the hot work is complete.
- Building occupants have been protected or isolated from the hot work area.
- Drums, barrels and tanks have been cleaned and purged of flammables and toxics, all tank feeds are closed, and the tank is vented.

Requirements within 35 feet:

- Area within 35 feet of the work area has been properly swept to remove any combustible debris.
- Flammable and ignitable materials and debris have been moved at least 35 feet from the hot work area or covered and protected with fire resistant materials.
- Cracks or holes in floors, walls and ceilings (including ductwork) are covered or plugged.
- Combustible floors covered with fire-resistive material.

Requirements within 50 feet:

- Explosives, compressed gas cylinders or stored fuels have been moved at least 50 feet from the hot work area or have been protected from the hot work.

Work on walls or ceilings:

- Construction is noncombustible and has no combustible covering or insulation.
- Areas adjacent to walls being worked on are checked for combustibles and any combustibles are either removed or protected.

Fire Watch Required during Hot Work and a minimum of 30 minutes following completion of work.

Yes _____ No _____ Name: _____

A fire watch is needed for all hot work activities unless the hot work area has no fire hazards or combustible exposures. The fire watch must have fire-extinguishing equipment readily available and be trained in its use. They must also be familiar with the procedures for sounding an alarm in the event of a fire. The fire watch will watch for fires in the exposed areas and are responsible for extinguishing spot fires and communicating alarms immediately. The fire watch may be assigned other work duties while in the hot work area; however they need to be vigilant in watching for fires.

When work is completed:

- Inspected work area, and any potentially affected surrounding areas, for fire, fire damage, or potential for fire.
- Reactivated smoke/fire detectors that were disabled because of the hot work.

I verify that the above location has been examined and the necessary precautions have been taken to prevent the outbreak of fire due to Hot Work.

Employee Signature (Issued): _____ Date: _____ Time: _____

Employee Signature (Closed): _____ Date: _____ Time: _____

Supervisor Signature: _____ Date: _____ Time: _____

This Permit is valid only for the day issued

WARNING!

HOT WORK IN PROGRESS

WATCH FOR FIRE!

In case of FIRE call 9-911

Emergency Numbers:

UPD.....845-2345

EHS.....845-2132

Communication Center...845-4311