

# GUIDELINES FOR CONTROLLING "HOT WORK" ON PROJECT CONSTRUCTION SITES AT UTS

## 1. INTRODUCTION

The objective of these guidelines is to provide users with an overview of appropriate procedures for preventing losses by fire from hot work ignition sources. "Hot Work" is an operation involving open flame operations, abrasive grinding and cutting, welding, thermal or oxygen cutting or heating and other related heat-producing or spark-producing operations. These Guidelines are based on AS 1674.1 - 1997 "Safety in Welding and Allied Processes Part 1: Fire Precautions"

## 2. APPLICATION

These Guidelines are to be used on all projects that are undertaken or managed by Contractors on University of Technology, Sydney (UTS) Sites. They are intended to supplement any standard processes Contractors would use when undertaking hot work at UTS. Compliance with these Guidelines does not discharge a Contractor from their ongoing obligations to undertake all work with due care and in a safe and workmanlike manner.

## 3. RESPONSIBILITIES

The Contractor's Site Manager or Supervisor has overall responsibility for the safe execution of all operations relating to the hot work. The Contractor shall nominate a "Responsible Officer" who will directly supervise the work. This person shall have satisfactory knowledge of the fire, explosion and toxicity hazards associated with hot work and be adequately trained and experienced in the testing procedures and precautions necessary for the elimination of any risk involved.

*All Contractors are responsible for notifying the UTS Project Manager and obtaining a Hot Work Permit before commencing any hot work on UTS sites.*

The Contractor shall complete the relevant boxes on the attached Hot Work Permit form and fax the form to the UTS Project Manager for approval. The Project Manager will grant approval and fax a copy to UTS Security and to the Contractor. UTS Security will arrange for fire detector isolation if required.

*The Contractor shall collect the Hot Work Permit from UTS Security and will be responsible for the final inspection of the hot work location to ensure the site is safe, before commencement, during **and after completion of the hot work.***

The Contractor shall return the Hot Work Permit to UTS Security at completion of the work with the *completed signed declaration that the location is safe for normal operations to resume.*

UTS Security will arrange for the de-isolation of all previously isolated fire detectors and fax the completed form to the UTS Project Manager.

## 4. GENERAL PRECAUTIONS

### 4.1 Off-cuts and Electrode Stubs

Before any hot work commences, arrangements shall be made to prevent any work off-cuts, hot metal, slag or electrode stubs from lodging in places where there is a possibility of starting a fire.

### 4.2 Timber

Where any hot work is to be carried out adjacent to or above timber, the timber shall be protected by fire safe non-combustible blankets or other suitable means from the direct heat of any flame or arc and from sparks, slag and hot metal particles.

### 4.3 Rope

During hot work, ropes shall be protected from heat of any flame or arc and from sparks, slag and hot metal particles. Particular care shall be exercised with respect to ropes supporting loads, guy ropes and scaffolding ropes. Note: Natural or synthetic fibre ropes should not be used for supporting scaffolding where hot work is being carried out.

### 4.4 Dusty Work Areas

In buildings there are often large quantities of dust present. This dust may be combustible, especially in below floor and ceiling areas. Loose dust shall be cleared from the hot work area for a distance of at least **2 metres**. The preferred cleaning process is by vacuum cleaning.

### 4.5 Grass Fires and Bushfires

Before hot work commences near grass or bush (mainly at Kuring-Gai Campus), the immediate area shall be cleared or wetted sufficiently to prevent the hot work from starting a grass or bush fire.

## 5. PROCESS

### 5.1 Inspection of Site

- Before hot work commences, the site shall be thoroughly inspected by the Contractor and made safe, or alternative methods of carrying out the work shall be adopted.
- On completion of hot work, a thorough inspection of the site shall be carried out by the Contractor to ensure that the site is safe.

### 5.2 Before Performing Hot Work

Prior to commencing hot work, the following precautions shall be taken, to prevent fire, explosion, injury or other danger developing during the performance of the hot work:

- (a) Identify and control any fire hazard (including the presence of flammable or combustible liquids, gases, vapours, dusts, fibres or substances) within **15 metres** from the hot work.
- (b) Consider relevant hazards that may exist outside the 15 metre area.
- (c) Properly ventilate the hot work area.
- (d) Suitably locate equipment, including emergency firefighting equipment.
- (e) Arrange for temporary isolation of Smoke Detection Zone, if necessary with the UTS Project Manager.
- (f) Appropriately isolate the area with safety barricades where the hot work is to be performed.
- (g) Ensure passers by are adequately protected from welding flashes.
- (h) Do not commence the hot work, until complying with all of the above requirements.

### 5.3 Conduct of Work

While carrying out hot work the following requirements shall apply:

- (a) A current hot work permit shall cover the work and shall be prominently displayed.  
*Note: A Hot Work Permit is only valid for the date or job it has been issued for.*
- (b) Each person associated with the hot work shall be conversant with the precautions to be taken as specified on the hot work permit and with the safety requirements of the site.
- (c) Welders shall not work alone.

**HOT WORK PERMIT - Contractor**

Permit No.:

**Application (to be completed by Contractor)**

Site (Bldg / Flr / Campus):		Date for Hot Work:
Specific Location:		
Details of Hot Work:		
Equipment to be Used:		
Fire fighting Equip to be located at Hot Work Site:		
Name of Sub Contractor performing the work: (if applicable)	(Print name & contact Mobile Phone No.)	Signature
Contractor's Responsible Person:	(Print name & contact Mobile Phone No.)	Signature

**Is fire detector isolation required? (To be completed by Contractor)**

Contractor to list fire systems in immediate vicinity of the Hot Work:	
<input type="checkbox"/> Smoke Detection	<input type="checkbox"/> Sprinklers <input type="checkbox"/> Hydrant <input type="checkbox"/> Hose Reel <input type="checkbox"/> Fire Extinguishers
Will the Smoke Detectors in the area be affected during the Hot Works? <input type="checkbox"/> YES <input type="checkbox"/> NO	
<b>Form to be faxed to UTS Project Manager for Approval</b>	

**Approval**

Approval Granted: _____	(UTS Project Manager)	_____	Date of Approval
<b>Project Manager to fax approval to Security (Fax: 9514 1191) and copy to Contractor.</b>			
<b>UTS Security to arrange any required Fire Detector isolation and issue this Hot Work Permit to the Contractor.</b>			

**Completion (To be completed Contractor)**

I have inspected the Work Site at completion of the works and declare it to be safe for normal operations to resume.	
Contractor's Responsible Person:	(Print name & contact Mobile Phone No.) _____ Signature
<b>Fax to UTS Security on x1191 or lodge at the Security Office: Building 1, Building 5, Building 6, Building 10 or Kuring-gai.</b>	

**UTS Security**

UTS Security to arrange de-isolation of all isolated fire detectors.	
Completed:	(Name of Security Officer and Date) _____ Signature
<b>Fax completed form to FMU Project Manager.</b>	