



Buildings & Grounds Maintenance

Safe Operating Procedure

SOP Reference #:	HOT WORK
08	(WELDING, GRINDING, CUTTING, BURNING)

Date Created	Next Review Required	Approved By
05/10/2004	September 05	J. Ash & G. Francis EQAS

Supervisor Conducting SOP	Employees Involved in SOP Creation
J. Ash	B. Hehir, D. Ugrin, K. Claridge C. Rowe

Personal Protective Equipment Required

As required to complete all work. (eg. Welding, grinding etc.)

Before Work Commences

A hot work permit must be completed before any work involving welding, grinding, gas-cutting, flame heating or any other flame / spark producing equipment is commenced. Hot work permits are not required for tasks undertaken in recognised workshops where welding, grinding, burning is a routine operation. Hot work permits are not required for portable gas-fired space-heating equipment hired for specific short-term use. A hazard assessment must be completed before a hot work permit is issued.

Basic Task Step(s)	Hazards	Safe Procedures
Conduct a Hazard Assessment	Fire Explosion Electrocution Burns Arc-flash Oxygen-depletion Toxic fumes	<ul style="list-style-type: none"> Inspect the area in which the work is to be performed. Consider all possible hazards and any necessary precautions. Consider adjacent areas as well especially in the vicinity of chemistry laboratories and air-conditioning / ventilation intakes. List all precautions required on the Hot Work permit including the provision of fire blankets and flash screens where required.
Sign the Hazard Assessment		<ul style="list-style-type: none"> The Hazard Assessment must be signed by the person undertaking the assessment
Isolation of fire detection systems	Fire detection system could be left on inadvertently	<ul style="list-style-type: none"> Fire detectors (smoke or thermal) are not to be isolated without first notifying the University Security Office and the Building Fire Warden.

Basic Task Step(s)	Hazards	Safe Procedures
Issue of the Hot Work Permit		<ul style="list-style-type: none"> • Details of the task and location are to be listed on Hot Work Permit.. • The people issuing the Hot Work Permit must satisfy themselves that all appropriate measures have been taken prior to hot work commencing. They should give additional instructions where their local knowledge suggests further precautions.
Undertaking Hot Work	As per the hazards listed in the permit. Out of date permit.	<ul style="list-style-type: none"> • The permit is only valid for the time(s) noted on the permit. • A new permit is required for any extension of time. • Permits and warning signs are to be displayed at entry points to hot work areas. Copies must be made where more than one entry point exists.
Fire watch checks	Delayed fire outbreak	<ul style="list-style-type: none"> • With the exception of emergency repairs or planned out-of-hours work, all hot work is to be completed by 3.00 pm daily. This is to allow time for final fire watch checks and reinstatement of fire detection circuits. • Where the authorising officer considers that the risk of delayed fire outbreak is heightened, or if fire detectors do not protect the area, they may instruct that further fire checks are conducted up to 3 hours after the task finishes. • If this is extended beyond normal business hours they are to request Security to check the area during their shift rounds and enter confirmation of the check in the security log.
Completion of Hot Work	Fire detection equipment not reinstated. Delayed outbreak of fire.	<ul style="list-style-type: none"> • The permits must be returned to the authorising officer on completion of the task including the period of fire watch. • The authorising officer must check and confirm that all fire checks have been made and that fire detection circuits are operational and that the area is safe before signing off the permit.