

# HOT WORKS PROCEDURE



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## 1 PURPOSE

- 1.1 CQUniversity has an obligation to provide a work environment without risks to health and safety, so far as is reasonably practicable. This obligation includes eliminating or minimising, so far as is reasonably practicable, the risks associated with hot works (e.g. welding and allied processes) where the use of such energy sources creates a hazard.
- 1.2 This procedure outlines the responsibilities and process for undertaking hot works, repairs and/or maintenance at CQUniversity worksites.
- 1.3 This document is to be read in conjunction with the [Welding Processes Code of Practice](#).

## 2 SCOPE

- 2.1 This procedure applies to employees, students, contractors and visitors in CQUniversity operations and activities.
- 2.2 This procedure applies to hot work (e.g. welding and allied processes) undertaken at CQUniversity.
- 2.3 This procedure does not apply to Designated Approved 'Hot Works Areas' (e.g. identified welding bays), however all other requirements will be followed when conducting works in these areas, including:
  - relevant risk management procedures
  - [AS 1674.1-1997 – Safety in welding and allied processes - fire precautions](#), and
  - [AS 2812-2005 - Welding, brazing and cutting of metals – glossary of terms](#).

### 3 PROCEDURE

- 3.1 All hot works, repairs and/or maintenance (e.g. welding and/or allied processes), will be undertaken by a worker who has been trained and assessed as competent to work in such areas, engaged by CQUniversity's Facilities Management Directorate, in accordance with current relevant legislation.
- 3.2 The engagement of contractors or other service providers to undertake work at CQUniversity worksites does not absolve CQUniversity of its responsibilities and obligations as an employer. There remains a statutory duty for CQUniversity to ensure its workplace is safe, so far as is reasonably practicable, regardless of any contractual terms and conditions.

#### Prior to commencement

- 3.3 The Works Supervisor will:
- ascertain whether the work needs to be conducted in-situ or if it can be moved to a more suitable location (e.g. welding bay, workshop, etc.) where the hazards can be better controlled
  - familiarise themselves with the [Welding Processes Code of Practice](#) and the abovementioned Australian Standards, and complete the risk management process:
    - any available generic risk assessment must be reviewed to ensure that it is a true indication of the task to be undertaken and that new hazards have not been created.
    - If new hazards have been created, the Job Card -Take 5 specific risk assessment can be conducted.
    - If not, a formal [Risk Assessment – Task or Activity](#) for the task can be completed. Check that hazards have been identified and ensure that these are adequately addressed.
  - discuss the proposed task with the Work Area Supervisor prior to commencement
  - ensure that people conducting the work are trained and assessed as competent and has been made aware of this procedure
  - complete the [Hot Works Permit](#) prior to commencement, and
  - ensure that general safety precautions are observed, such as but not limited to:
    - provision of suitable screening to protect others in the vicinity
    - correct use of appropriate personal protective equipment (PPE) for the task
    - correct fire equipment is present at the job site
    - people take adequate rest breaks as necessary and drink adequate quantities of water to replenish fluids
    - ample supply of fresh air is provided at the site
    - maintaining a clean and tidy worksite free from flammable materials, and
    - if the work requires fire detection systems to be disconnected, ensure approval from the CQUniversity Security Coordinator is sought.
- 3.4 The Work Area Supervisor will:
- ensure that the Works Supervisor has reviewed the information above and discuss the risk management process and the Hot Works Permit further to ensure that hazards have been identified and controlled
  - ensure that fire training has been conducted for employees, or that alternative arrangements are in place to control the situation in the case of a fire (e.g. suitable firefighting equipment is available for immediate use)
  - ensure that doorways and other openings, drains, pits, tanks, valves, vents and pipelines are closed, 'blanked off', and/or isolated
  - test for the presence of flammable gases and vapours in the atmosphere in any pipe, drum, tank, vessel and other items adjacent to or involved in the task

- where practicable, ensure that a physical barrier is erected or at least isolate/rope off the area and ensure that the worksite is clear with a distance of at least 15 metres separating the worksite from any combustible materials
- monitor the progress of the work and assess changing conditions, including rendering the worksite unsafe for the work to continue if necessary, and
- where the work is being conducted in a confined space or restricted area, ensure that there is a written authority in place and that all is in order, particularly the testing and monitoring of the atmosphere. Refer to the [Confined Space Entry Procedure](#).

## Conclusion of work

- 3.5 At the conclusion of the work, the Works Supervisor and the Work Area Supervisor will:
- ensure there is no threat of a fire igniting – even well after the immediate threat is no longer presented
  - any firefighting equipment made available for immediate use is restored
  - any fire detection systems that were disconnected are reconnected and that the CQUniversity Security Coordinator places the system back into active mode, and
  - endorse the Hot Works Permit and return it to the originator (for example, Facilities Management).

## Employee training and competence

- 3.6 The Occupational Health and Safety (OHS) Unit will provide competency-based training for University employees to ensure they possess the necessary skills to allow them to work safely when conducting hot works duties.
- 3.7 The Works Supervisor or Work Area Supervisor will ensure all persons required to undertake hot works are trained and assessed as competent to perform those activities. The competency based training must be provided by an approved training provider and include the following core training elements:
- demonstrate an understanding of legislation, standards and codes of practice relevant to hot works
  - assess risks associated with hot works
  - identify and implement risk control measures
  - completion of hot work permits, and
  - apply emergency response procedures.
- 3.8 Training providers will make themselves aware of relevant University procedures (including [Confined Space Entry Procedure](#), [Asbestos Safety Policy and Procedure](#) and [Personal Protective Equipment Procedure](#)) relating to hot works and ensure that any training they provide is in accordance with these procedures.
- 3.9 Ongoing refresher training will be provided to relevant University employees to ensure they are kept abreast of any changes and are competent in undertaking hot works.

## Hot works permit

- 3.10 Open flames or flying sparks can ignite flammable/combustible gases and vapours and heat producing operations including furnaces, boilers and other process engineering that involves hot and/or molten materials could present significant hazards. Prior to the commencement of any hot works, the precautions as outlined in the section above shall be taken to prevent any fire, explosion, injury or other danger developing during the performance of hot works.
- 3.11 The [Hot Works Permit](#) is valid for one work shift only. If the work is expected to continue for longer than one work shift, a new permit will be obtained after the Work Area Supervisor has inspected the work area.

## Fire watch

- 3.12 If deemed necessary, a person may be nominated to undertake 'fire watch'. This person should have firefighting equipment readily available, be trained in its use and be prepared to act for any appearance of smoke and/or fire. The 'fire watch' should continue for at least 60 minutes after the completion of hot works.

## 4 RESPONSIBILITIES

### Compliance, monitoring and review

- 4.1 Management, employees, students, contractors and visitors at CQUniversity worksites (including any work activities that are conducted off-site) have a duty to take reasonable care for their own health and safety and must not adversely affect the health and safety of other person. They must comply with relevant instruction and cooperate with any reasonable legislation or policy document relating to health and safety at the workplace. For further information on an individual's roles and responsibilities for safety and health, refer to the [Work Health and Safety Roles and Responsibilities Procedure](#).

### Reporting

- 4.1 Non-compliances with this procedure are to be reported as an OHS Incident using CQUniversity's incident reporting process (via ESSO) and will be investigated in line with the requirements of the Incident and Hazard Reporting and Investigation procedure.

### Records management

- 4.2 Employees must manage records in accordance with the [Records Management Policy and Procedure](#). This includes retaining these records in a recognised University recordkeeping information system.
- 4.3 University records must be retained for the minimum periods specified in the University Sector Retention and Disposal Schedule on the [Queensland State Archives website](#).

## 5 DEFINITIONS

- 5.1 Terms not defined in this document may be in the University [glossary](#).

### Terms and definitions

**Competent person:** a person who has acquired through training, qualification or experience, the knowledge and skills to carry out specific tasks.

## 6 RELATED LEGISLATION AND DOCUMENTS

Australian standards:

- [AS 1674.1-1997 - Safety in welding and allied processes – fire precautions](#)
- [AS 2812-2005 - Welding, brazing and cutting of metals – glossary of terms](#)

[Incident and Hazard Reporting and Investigation Procedure](#)

[Incidents Online Work Instruction](#)

[Work Health and Safety Roles and Responsibilities Procedure](#)

[Hot Works Permit](#)

[Job Card -Take 5](#)

[Risk Assessment – Task or Activity](#)

[Confined Spaces and Restricted Areas Procedure](#)

[Personal Protective Equipment Procedure](#)

[Asbestos Safety Policy and Procedure](#)

[Welding Processes Code of Practice 2013](#)

[Work Health and Safety Act 2011](#) (Qld)

[Work Health and Safety Regulation 2011](#) (Qld)

## 7 FEEDBACK

7.1 Feedback about this document can be emailed to [policy@cqu.edu.au](mailto:policy@cqu.edu.au).

## 8 APPROVAL AND REVIEW DETAILS

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