Confined Space Entry Procedure

**Related Policy**
Work Health and Safety Policy

**Responsible Officer**
Executive Director, Infrastructure Services and Development

**Approved by**
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**Responsible Organisational Unit**
Infrastructure Services and Development.
(Infrastructure Planning and Compliance Unit)

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1 **Objective**
The objective of the *Confined Space Entry Procedure* is to provide minimum requirements for all confined space entry activities undertaken at the University of Tasmania.

Further specific guidance and requirements for confined space entry are detailed in the *Work Health and Safety Regulations* and Code of Practice: *Confined Spaces*.

2 **Scope**
This procedure applies to all confined space entry activities performed by workers and other persons at the University of Tasmania.

3 **Procedure**

3.1 **Permits**
For works being undertaken in occupied buildings, known permit requirements and risk issues shall be provided by the University to the contractor via the University’s Asset Management Information System (AMIS) Work Request communication system.

A Confined Space Entry Permit must be completed and approved by a Permit to Work (PTW) issue officer prior to a worker entering a confined space. In addition to a Confined Space Entry Permit, other permits may be required including:
- a Hot Work Permit if hot work is being carried out in the confined space (refer University *Hot Work Procedure*) and/or
- a Working at Heights Permit if work is being carried out in the confined space at heights/above two metres.

Originals of the issued permit(s) shall be kept at, or in close proximity to the work area, with the Confined Space Entry Permit to be kept at the entrance of the confined space. All workers and other persons planning to enter a confined space to carry out work must comply with the conditions of the entry permit.

A copy of completed confined space entry permits shall be kept by the Organisational Unit (OU) in accordance with the provisions of the University *Work Health Safety Record Management Guidelines* and *Records Management Policy*.

3.2 **Identification of Confined Spaces**
Infrastructure Services and Development (ISD) shall identify the location of all confined spaces in buildings and infrastructure at the University.

OUs shall identify the location of all confined spaces in areas under their control.

All identified confined spaces must be clearly marked: “Confined Space – No Unauthorised Entry”.

All confined spaces shall be recorded by ISD and each relevant OU in a register, that is:
- accessible by all workers and other persons and
- regularly reviewed and updated to include any newly-identified confined spaces and/or elimination of existing confined spaces.
3.3 Confined Space Entry

3.3.1 Risk Assessment

A Take-5 risk assessment shall be completed and documented prior to confined space entry activities being undertaken, in accordance with the University Minimum Standard – Work Health and Safety (WHS) Project and Task Risk Management. The risk assessment shall identify all hazards associated with work in a confined space and assess all risks to health and safety associated with each identified hazard.

PTW Co-ordinators shall ensure that risk assessments for confined spaces are retained in accordance with the provisions of the University Work Health Safety Record Management Guidelines and Records Management Policy. A Confined Space Entry Permit may be used as a record of the risk assessment.

Guidance on completing risk assessments, including hazard identification, is provided in the Code of Practice: Confined Spaces.

3.3.2 Risk Control

The University shall, as far as is reasonably practicable, eliminate or control hazards in accordance with the hierarchy of control. If it is not reasonably practicable to eliminate entering a confined space, then any risk associated with entry to and exit from the space must be minimised, with consideration of:

- the nature of the confined space
- any hazard associated with the level of oxygen or airborne contaminants within the space and the potential for that level to change
- the work to be carried out in the confined space, including the range of methods by which the work can be carried out and the proposed methods of work
- the means of entry to and exit from the confined space and
- the type of emergency procedures required.

3.3.3 Atmospheric Testing and Monitoring

In order to determine risk controls, atmospheric testing of the confined space shall be carried out by a competent person using a suitable, correctly calibrated gas detector prior to the confined space being entered. It may be necessary to test the atmosphere for:

- oxygen content
- airborne concentration of flammable contaminants and
- airborne concentration of potentially harmful contaminants.

Results of any monitoring shall be recorded on the Confined Space Entry Permit.

While work is being undertaken in a confined space, a safe atmosphere must be ensured using methods such as cleaning, purging and ventilation of any contaminant. If this is not reasonably practicable, then appropriate respiratory protective equipment must be provided.

3.3.4 Isolation

Prior to entry into any confined space a risk assessment must be undertaken of potential hazardous services within the confined space. Whilst the confined space activity is being undertaken, any identified hazardous services must be isolated, de-energised and tagged in accordance with the University Isolation and Tagging Procedure. Upon completion of the confined space activity the services must be re-energised.
3.3.5 **Fire and Explosion**
If there is a possibility of fire or explosion in a confined space, PTW Co-ordinators shall ensure that no ignition source is introduced into the confined space or utilised within the space.

3.3.6 **Signs and Barricades**
To prevent unauthorised entry to a confined space, signage should be erected and security devices such as locks and fixed barriers installed.

Before commencement of any work in a confined space, signs must be erected to prevent entry of persons not involved in the work. Signs must be in place while the confined space is accessible, including when preparing to work in the space, during work in the space and when packing up on completion of the work. Signs must:
- identify the confined space
- inform workers that they must not enter the confined space unless they have a Confined Space Entry Permit and
- be clearly legible and prominently located next to each entry to the confined space.

3.3.7 **Communication and Safety Monitoring**
When a confined space has been entered by a worker, a system of work shall be provided for:
- continuous communication with the worker from outside the confined space and
- monitoring of conditions within the confined space.

Where practicable, these activities should be carried out by a standby person who is in the vicinity of the confined space and observing the work being carried out.

3.3.8 **Training**
Appropriate information, instruction and training shall be provided to all workers likely to encounter confined spaces including those who:
- enter or work in confined spaces
- work in the vicinity of an entry to a confined space
- undertake hazard identification, risk assessment and/or implementation of risk control measures in relation to a confined space
- issue entry permits and/or manage or supervise people working in or near confined spaces, including any contractors
- communicate with or act as a standby person for workers in a confined space
- monitor conditions while work is being carried out within a confined space; and/or
- design or lay out a work area that includes a confined space.

The training provided to workers must cover:
- the nature of all hazards associated with a confined space
- the need for, and appropriate use of, risk control measures
- the contents of the Confined Space Entry Permit
- the emergency procedures and
- the selection, use, fit, testing and storage of any personal protective equipment (PPE).
3.3.9 Emergency Procedures
First aid and rescue procedures shall be established and practiced to ensure they are efficient and effective in the event of an emergency in a confined space, taking consideration of:

- the nature of the confined space
- all hazards associated with the concentration (or any change in the concentration) of oxygen and/or airborne contaminants
- work to be done in the confined space and the work method
- work done outside the confined space
- the location of the confined space and the means of entry and exit
- communications
- rescue and resuscitation equipment and capabilities of rescuers and availability of first aid and local emergency services (if they are to be relied on for rescue).

OUs shall ensure in relation to any confined space that:

- the entry and exit openings of the confined space are large enough to allow emergency access
- the entry and exit openings of the confined space are not obstructed and
- plant, equipment and PPE provided for first aid or emergency rescue is maintained so that it is fit for purpose.

3.3.10 Completion of Confined Space Entry Work
When the work for which the confined space entry permit was issued is completed, the PTW Co-ordinator (Project Manager/Supervisor) must ensure:

- all workers leave the confined space and
- the acknowledgement section on the Confined Space Entry Permit indicating that work is complete and all persons have left the space is completed.

3.4 Responsibilities

Officers are responsible for ensuring that:

- this procedure is implemented effectively within their area of responsibility; including the development of specific guidelines consistent with this procedure where necessary
- a register is maintained of all confined spaces in areas under their control at the University and
- appropriate supervision is provided.

PTW Issue Officers (Project Managers/Works Supervisors) are responsible for:

- authorising and co-ordinating permits
- ensuring that risk assessments are carried out and documented prior to entry into a confined space and documented for PTW activities
- ensuring that copies of all authorised permits and risk assessments are retained in accordance with the provisions of the University Work Health Safety Record Management Guidelines and Records Management Policy.

The Manager/Supervisor is responsible for:

- identifying all hazards and assess all risks associated with work in a confined space
- minimising risks to health and safety associated with work in a confined space where it is not reasonably practicable to eliminate risks
- ensuring a worker does not enter a confined space until all duties in relation to the confined space have been complied with including entry permit requirements
establishing first aid and rescue procedures to be followed in the event of an emergency in the confined space; and ensuring emergency procedures are practiced so they are efficient and effective

- ensuring that openings for entry and exit are a sufficient size to allow emergency access; openings are not obstructed and any plant, equipment and personal protective equipment that is provided for first aid or emergency rescue is maintained so that it is fit for purpose

- ensuring that relevant workers are provided with suitable and adequate information, training and instruction to safely perform confined space activities and that training records are retained in accordance with the provisions of the University Work Health Safety Record Management Guidelines and Records Management Policy or for the duration of the worker’s engagement, whichever is longer and

- retaining all other records relating to work in confined spaces in accordance with the provisions of the University Work Health Safety Record Management Guidelines and Records Management Policy.

The **Infrastructure Planning and Compliance Unit** is responsible for:

- providing Confined Space Entry Permits
- ensuring that all confined spaces have been appropriately labelled and access restricted where practicable
- ensuring that risk assessments are carried out and documented for all confined space entry
- ensuring that workers required to enter confined spaces have current competency in relevant training for entry to confined spaces and associated equipment and
- ensuring that appropriate resources are provided to monitor compliance with and effectiveness of this procedure.

All **workers** are responsible for ensuring that:

- any confined space entry is carried out in accordance with this procedure, relevant legislation, and any information, training or instruction they have received and
- they do not enter a confined space without an authorised permit.

### 4 Definitions and Acronyms

**Academic Unit**

Means the secondary organisational unit in the academic structure of the University, reporting directly to the College Executive Deans, as per Ordinance 14 – Academic Structure.

**College**

Means

(a) the primary organisational unit in the academic structure of the University, as per Ordinance 14 – Academic Structure

(b) the University College

**Employee**

For the purposes of this procedure, employee refers to any University staff member.

**Executive Dean**

Means:

(a) the Executive Dean of the relevant College, or

(b) in relation to the University College, the Principal of the University College
Competent Person
A competent person is one who has acquired through training, qualification or experience, the knowledge and skills to carry out a particular task.

Confined space
A confined space means an enclosed or partially enclosed space that:
• is not designed or intended primarily to be occupied by a person and
• is, or is designed or intended to be, at normal atmospheric pressure while any person is in the space and
• is or is likely to be a risk to health and safety from:
  o an atmosphere that does not have a safe oxygen level, or
  o contaminants, including airborne gases, vapours and dusts, that may cause injury from fire or explosion, or
  o harmful concentrations of any airborne contaminants, or
  o engulfment.

Confined spaces include spaces such as, but not limited to, those in a vat, tank, pit, pipe, duct, flue, oven, chimney, silo, container, pressure vessel, underground sewer, wet or dry well, shaft, trench, tunnel or other similar enclosed or partially enclosed structure, which meet the definition of a confined space in the Work Health and Safety Regulations.

Confined space entry
A person enters a confined space if:
• the person's head or upper body is in the confined space or within the boundary of the confined space or
• the person is in close proximity to an opening into the confined space in such circumstances that there is a serious risk that the person's head or upper body will inadvertently enter the confined space.

Confined Space Entry Permit
A University permit that authorises confined space entry activities. It provides a formal check to ensure all elements of a safe system of work are in place before people are allowed to enter a confined space. Permits are available from ISD and on the University website, and must be authorised by the PTW Co-ordinator. Each permit only applies to one confined space and allows one or more workers to enter that space. Permits must be kept for two years.

Contractor
For the purposes of this procedure a contractor is any worker engaged by the University to perform work for gain or reward other than an employee.

Employee
For the purposes of this procedure, employee refers to any University staff member and any student or visitor using plant.

Head of Academic Unit
Means the head of the relevant Academic Unit

Officer
Any person at the University who makes, or participates in making, decisions that affect the whole, or a substantial part, of the University is an Officer. As such, members of University Council, Boards, Committees, Senior Management Team, College Executive Deans, and Heads of Academic and Organisational Units are deemed to be Officers at the University.
Organisational Unit
College, Faculty, School, Centre, University Institute, other University Entity, Division, Section or University Business Enterprise.

Other person
For the purposes of this procedure, ‘other persons’ refers to all other persons that may be at the University who are not workers, including students and visitors.

Permit to Work
(PTW) Issue Officer
The PTW issue officer is usually the Project Manager or Supervisor and is in direct control of the work and responsible for coordinating and authorising permits and associated PTW activities.

Safe Atmosphere
A safe atmosphere in a confined space is one that:

- has a safe oxygen level (oxygen content in air of 19.5% - 23.5% by volume under normal atmospheric pressure)
- is free of airborne contaminants or any airborne contaminants are in concentrations below their allowable exposure standard (if any) and
- any flammable gas or vapour in the atmosphere is at concentrations below 5% of its LEL.

Worker
Any person carrying out work in any capacity at the University, including work as an employee, contractor or sub-contractor, employee of a labour hire company, outworker, apprentice or trainee, work integrated learning or work experience student and volunteer.

5 Supporting Documentation
- Code of Practice Confined Spaces
- Hot Work Procedure
- Project and Task Risk Management Procedure
- Permit to Work Procedure
- Records Management Policy
- Work Health Safety Record Management Guidelines
- Working at Heights Procedure
- Australian Standard 1674.1-1997, Safety in welding and allied processes, fire precautions

6 Versioning

Former Version(s)
Version 1 – Confined Space Entry Procedure; approved September, 2000.
Version 2 – Confined Space Entry Procedure (current document); approved by Responsible Officer; October, 2014, amended in December 2016 to incorporate Colleges.

Current Version(s)
Version 3 – Confined Space Entry Procedure (current document); approved by Responsible Officer; October, 2014, amended in December 2017 to incorporate final academic structure.