

Health and Safety Procedure - Confined Spaces

Section 1 - Background and Purpose

(1) Confined spaces are, for the purposes of this procedure, defined as the following which is the definition under the [Occupational Health and Safety Regulations 2017](#):

- a. A space in any vat, tank, pit, pipe, duct, flue, oven, chimney, silo, reaction vessel, container, receptacle, underground sewer or well, or any shaft, trench or tunnel or other similar enclosed or partially enclosed structure, if the space:
- b. is, or is intended to be, or is likely to be, entered by any person; and
- c. has a limited or restricted means for entry or exit that makes it physically difficult for a person to enter or exit the space; and
- d. is, or is intended to be, at normal atmospheric pressure while any person is in the space; and
- e. contains, is intended to contain, or is likely to contain —
 - i. an atmosphere that has a harmful level of any contaminant; or
 - ii. an atmosphere that does not have a safe oxygen level; or
 - iii. any stored substance, except liquids, that could cause engulfment

(2) but does not include a shaft, trench or tunnel that is a mine or is part of the workings of a mine.

Section 2 - Scope

(3) This Procedure applies to:

- a. All confined space work undertaken by LTU employees and all contractors engaged directly or indirectly by La Trobe.
- b. All visitors and other personnel present on La Trobe campuses or areas that La Trobe has responsibility in the management of confined space work.

Section 3 - Policy Statement

(4) Refer to the [Health and Safety Policy](#).

Section 4 - Procedures

Part A - Accountability and Responsibility

(5) The Executive Director, Asset Transformation and Executive Director, Operations in the Office of the Provost are responsible for ensuring:

- a. a safe system for entry into and the conduct of tasks within Confined Spaces is established;
 - b. the effective management of all activities associated with entry into and exit from Confined Spaces; and
 - c. a program is established for measuring the performance of the Confined Space management system.
- (6) The Infrastructure and Operations Senior Leadership Team and School Managers are responsible for ensuring:
- a. All facilities under their control implement a safe system for entry into and the conduct of tasks within Confined Spaces, in accordance with this procedure;
 - b. delegation of accountability for entry into and activities conducted within Confined Spaces;
 - c. establishment and maintenance of training and competency systems;
 - d. establishment and implementation of monitoring, audit and review processes to verify the Confined Space system is in place, operating effectively and applied consistently; and
 - e. competent personnel have been appointed as responsible Supervisors for confined space work.
- (7) H&S teams are responsible for:
- a. ensuring appropriate competency-based training consistent with the Confined Space system is implemented according to this procedure;
 - b. providing a system to monitor, review and report on any deviations from this procedure; and
 - c. providing advice on this procedure.
- (8) Persons in control of confined space work are responsible for ensuring:
- a. a risk assessment is completed and risks are adequately controlled prior to entry into confined spaces;
 - b. the planning and return of Confined Space Permits and other required permits are properly coordinated;
 - c. persons conducting confined space work are formally trained and assessed as competent;
 - d. all records relating to entry into and activities conducted within Confined Spaces are accurately maintained and readily available;
 - e. processes are in place to monitor the effectiveness of the Confined Space system; and
 - f. team members associated with the confined space work are briefed on the risk and control measures for the job.

Permit Authority

- (9) The role and purpose of the Permit Authority is to:
- a. Be responsible for the administration of the Permit to Work (PTW) process;
 - b. Participate in the risk assessment process;
 - c. Review and confirm the adequacy of the requestor's permit request;
 - d. Communicate with other work related areas for interface hazards;
 - e. Review and verify with the Permit Holder, the implementation of agreed controls;
 - f. Review and verify with the Permit Holder, the permit conditions and other associated controls;
 - g. Manage other PTW essentials, such as, suspension, handover and emergencies;
 - h. Verify that permitted work sites are safe at the time the permit is handed back at the end of the work and that the PTW is closed and cancelled as required.

Part B - Design, Manufacture, Supply and Modification

(10) For new facilities and plant that have confined spaces incorporated in the design and will require entry as part of maintenance and repair work, LTU will ensure that the confined spaces are designed to minimise the need for entry. For confined spaces requiring entry, consideration will be given during the design phase for minimising the risks associated with conducting tasks inside the confined space.

(11) This will be captured as part of the LTU safety in design processes for commissioning new plant and infrastructure and will ensure the design of confined spaces meet the minimum requirements set out in AS2864.

(12) Any modification made to confined spaces by LTU, will not detrimentally effect the safe means of entry and exit or the conduct of other tasks. LTU will initiate a review of this as part of a risk assessment and design review to ensure the safety of confined spaces is not negatively impacted.

Part C - Risk Assessment

(13) A risk assessment will be conducted by the persons undertaking the work before entry into a confined space. The person controlling the confined space work will be responsible for leading the process and approving the risk assessment. All persons conducting the confined space risk assessment will be suitably competent for the work being conducted in the confined space, meeting the competency requirements set out in clause 8 of this document. The assessment will be documented and will at a minimum, cover the following aspects:

- a. The tasks to be conducted including the justification for the need to enter the confined space
- b. The range of methods by which the tasks can be conducted
- c. The hazards and risks associated with the actual method selected for work in the confined space and the equipment proposed to be used.
- d. Emergency response procedures in line with clause 9 of this document
- e. The competence of the persons conducting work associated with the confined space.

(14) The permit issuer will be required to review and approve the risk assessment by way of issuing the permit. Any person entering the confined space must first review the risk assessment for the work. The person in control of the confined space work must ensure that all persons associated with the work are advised of and understand the contents of the risk assessment.

(15) Other factors to be considered when undertaking a risk assessment of a confined space are outlined in appendix 3 and 4.

(16) Whenever there is a change of conditions that may affect the risks associated with the confined space work, the risk assessment must be reviewed to adequately control the risks. Where the risks are unacceptably high as a result of changed conditions, work must be suspended until controls are implemented to reduce the risks to an acceptable level.

(17) For further guidance and requirements of the LTU risk assessment process, refer to the LTU Hazard Identification, Risk Assessment and Control Procedure.

Part D - Contractor Management

(18) This section applies to confined space work undertaken by contractors on behalf of La Trobe University.

(19) For the most part, LTU engages contractors to conduct confined space work including entry and work associated with confined spaces.

(20) Contractors may work under their own Health and Safety Management System processes for confined space work as agreed to under the arrangements with LTU. Where contractor systems are used, the system must at a minimum, meet the requirements and level of safety of this procedure. This will be determined as part of the LTU prequalification process through RAPID Induct.

(21) Depending on any specific arrangements, contractors will typically be responsible for the following:

- a. Conducting the confined space risk assessment in consultation with La Trobe University.
- b. Ensuring that all personnel are suitably trained and competent in accordance with section 8 of this document
- c. Undertake atmospheric testing to establish required controls for entering into a confined space in line with clause 10 of this document
- d. Establish and resource emergency management in line with clause 9
- e. Control entry into confined spaces through a permit to work system in line with clause 12
- f. Confirm isolation of all potential energy sources associated with the confined space in line with clause 12

(22) La Trobe University will be responsible for the following tasks associated with confined space work undertaken by contractors:

- a. Verify a risk assessment has been completed by the contractor with LTU consultation and the controls are implemented before confined space work begins.
- b. Where contractor HSE management systems are used to control work in confined spaces, verify that they meet or exceed the minimum standards set by this procedure.
- c. Ensure all potential energy sources associated with the confined space are isolated prior to entry.
- d. Identifying any simultaneous operations that may affect the confined space work and de-conflicting any overlaps.
- e. Consulting with contractors to establish emergency management planning.
- f. Auditing and reviewing confined space work undertaken by contractors to ensure controls are implemented and in-line with the risk assessment.
- g. Upon completion of the work, confirm all personnel have exited the confined space, confirm that the equipment is in a safe condition to be made available for service and that all permits associated with the confined space work have been closed.

Part E - Training and Competency

(23) All persons with tasks associated with confined spaces will be trained and assessed as competent to conduct those tasks. Persons will be reassessed at appropriate intervals to maintain their competency. This training will be recorded in the appropriate system at LTU:

- a. Contractors – Training will be verified upon issue of a confined space permit by the permit issuer (either LTU or contractor permit issuer).
- b. LTU Employees – These must be recorded in the area database for staff competencies and verified upon issue of the permit.

(24) All personnel associated with confined space work will be required to have successfully completed the relevant national unit of competency via statement of attainment for enter and work in confined spaces in accordance with the requirements of Appendix 5.

(25) Where a person has not worked in confined spaces for more than one year or has minimal experience working in confined spaces as deemed appropriate by the person in control of the work, that person's competency must be verified before entering a confined space or conducting work in association with confined spaces.

(26) The person undertaking the verification of competency (VOC) will be qualified and competent in the work they are conducting the assessment for, and have successfully completed TAE40110 – Certificate IV in Training and Assessment. This assessment must be recorded (see Appendix 1 for an example form for verifying competency).

(27) In addition to the national units of competency required, adequate instruction and training must be provided to persons in relevant safety management systems and procedures for the control of risks associated with the confined space work e.g. the relevant contractor management system processes for confined spaces.

(28) This is particularly important for procedures that are unusual or non-typical, including the use and limitations of any personal protective equipment and mechanical or other equipment to be used.

Part F - Confined Space Emergencies

(29) All confined space work requires an emergency response plan to be identified, established and rehearsed to ensure that in the event of an emergency in a confined space, adequate response is taken to minimise the impact of an incident.

(30) An emergency response team is required to be in place and on hand for the duration of work while people are occupying a confined space. The emergency response team must be involved in the planning of confined space work including the conditions of work and the maximum number of persons in the confined space prior to any entry.

(31) A rescue plan must be developed and rehearsed prior to any confined space entry. See Appendix 2 for a sample form that can be used for this plan.

(32) The emergency response plan will vary depending on the circumstances, however the plan must consist of the following minimum elements:

- a. An effective method of communication to raise the alarm in the event of an emergency e.g. radio or telephone
- b. Identification of first aid personnel and provisions to be on hand for the work
- c. How emergency vehicles and the emergency response team will access the confined space
- d. How any casualties will be extracted from the confined space
- e. How casualties will be brought to emergency vehicles for treatment and/or transport (particularly important for confined spaces not at ground level)
- f. A list of equipment necessary to perform the rescue
- g. Where the confined space is, the date of entry and how many people will be entering
- h. How many emergency response team members are required to execute the response plan.

(33) If an emergency occurs, the situation will be controlled by the emergency response team who may require support from other personnel.

(34) A standby person must be assigned to all confined space work. A standby person is a competent person assigned to remain on the outside of, and in close proximity to, the confined space and capable of being in continuous communication with those inside. Wherever practical, the standby person should be able to observe persons inside the confined space. In addition, where necessary, the standby person may operate and monitor equipment for the safety of personnel in the confined space and initiate an emergency response.

Part G - Atmospheric Testing and Monitoring

(35) The atmosphere within all confined spaces, must be tested and assessed prior to work commencing. When planning for entry into a confined space, persons conducting the risk assessment will determine the risks associated with undertaking atmospheric testing and plan accordingly.

(36) The atmospheric testing required in confined spaces will depend on the nature of the confined space and the work conducted in and around the confined space. Factors to be considered will include:

- a. whether ongoing monitoring is required, and/or
- b. testing of remote areas of the confined space is required

(37) No person will enter a confined space to conduct atmospheric testing or monitoring without a permit to work and the permit will include any risk control measures necessary for undertaking the atmospheric testing including entry into the confined space where required. The results of any atmospheric testing, will be recorded on the confined space permit.

(38) Atmospheric testing will include testing by scientific means for:

- a. oxygen concentration;
- b. concentration of flammable airborne contaminants; and
- c. concentration of airborne contaminants.

(39) No person will enter a confined space if the following is found through testing:

- a. The oxygen concentration of the atmosphere is above 23.5% or below 19.5%
- b. The flammable airborne contaminants are greater than 5% LEL (lower explosive limit)
- c. Where an airborne contaminant that may cause impairment, loss of consciousness or asphyxiation is above the relevant exposure standard

(40) Controls will be in place to ensure exposure standards for hazardous substances are not exceeded, preferably by high order controls such as elimination of hazardous substances rather than by use of personal protective equipment.

(41) Where there is no exposure standard for any hazardous substances that will be encountered in confined space work, guidance will be obtained by a hygienist or other competent person on the required controls.

Part H - Security and Sign Posting

(42) Confined spaces will at all times be secured against unauthorised access. Sign posting should be permanently installed where a confined space is likely to be entered and where a risk assessment deems it necessary.

(43) Where entry and exit to a confined space is required, signs and protective barriers will be erected to prevent entry of persons not involved in the tasks prior to anyone entering. This will be the responsibility of the person in control of the confined space work (LTU or Contractor) and must be planned in advance to ensure the correct equipment is available. Signage will comply with AS1319.

Part I - Permit to Work and Isolations

(44) A permit must be issued before any person enters a confined space. The intent of the permit is to verify that minimum controls have been planned for and periodically checked as deemed necessary to confirm implementation. The permit to work used by La Trobe for confined spaces is included in appendix 4, however where approved, contractors can use their own permit to work systems to manage confined space work at LTU.

(45) The permit will be issued by a person separate to the permit holder as a third party check. The permit holder must be the person responsible for direct control of the tasks in the confined space and by accepting and signing onto the permit, will provide their written authority for persons to enter.

(46) The permit will be displayed in a prominent place adjacent to the confined space entry to facilitate:

- a. signing on for entrants,
- b. clearance that the space is safe to enter and all persons associated with the work have read and understood the risk, and
- c. to validate authorization and the controls for auditing and assurance.
- d. The party issuing the permit (contractor or LTU) must retain a copy of the permit for a minimum of 30 days from the date the permit is closed.

(47) A record sheet controlling the entry and exit of persons must be maintained (a sample of which is provided in Appendix 4).

(48) Before any person enters a confined space, all hazardous services connected to the confined space must be isolated. This includes any services that could introduce:

- a. any materials, contaminants, agents or conditions harmful to persons occupying the confined space; and
- b. the activation or energising in any way of equipment or services that could pose a risk to the health or safety of persons within the confined space.

(49) For confined spaces managed by contractors, an isolation plan must be submitted to LTU for approval prior to any person entering a confined space. This must be a documented approval process and records of this are to be retained by LTU and the contractor.

(50) Isolations will only be removed and the permit cancelled, after the permit holder has advised in writing that all tasks have ceased and all persons have vacated the confined space.

Part J - Compliance and Assurance

(51) Compliance with this procedure will be periodically monitored by the Executive Director, Asset Transformation or delegate and included in the scope of relevant audits and reviews.

(52) Compliance with the requirements established in this procedure must be reviewed as part of the LTU Assurance Plan and internal audit schedule, and included in the HSE management system audit cycle.

(53) Monitoring and verification of the key requirements of this procedure must also be included in the areas key performance indicator reporting requirements.

(54) Annual reviews will be undertaken on this procedure and must include:

- a. changes in legislation, industry best practice and Australian Standards
- b. changes in the organisational structure
- c. approved variations of Confined Space procedures
- d. changes in available or applied technology
- e. changes in processes, equipment and facilities
- f. lessons learned from Confined Space incidents
- g. continuous improvement recommendations
- h. audit results
- i. Key Performance Indicator (KPI) outcomes.

(55) The process of continuous improvement must include:

- a. collecting feedback from persons in the workplace and in relation to specific activities

- b. identifying improvement opportunities in the management of Confined Space activities
- c. conducting system audits and Confined Space activity inspections
- d. conducting quality investigations to determine the correct root causes of any incidents and their relevance to Confined Space activities
- e. developing and implementing corrective actions to control identified root causes of any Confined Space incidents
- f. documenting any changes in procedures that result from the continuous improvement process.

Section 5 - Definitions

(56) Nil.

Status and Details

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Author	Spomenka Krizmanic 61 3 9479 2186
Enquiries Contact	Health and Safety