

Code of Practice

Confined Space Arrangements

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1.0 Purpose and Scope

This Code of Practice (CoP) details the University-wide arrangements and responsibilities for accessing and working in confined spaces. It applies to all confined spaces located at the University of Warwick or in any of the buildings occupied by University of Warwick departments or staff for which access may be required.

The objective of the management arrangements described within this code of practice is to ensure compliance with regulation and to protect employees, students, third party occupiers, contractors and inspectors or any others that might access or work in confined spaces within the University.

This CoP forms part of the University of Warwick's Occupational Health and Safety Management System and supports the University of Warwick Confined Spaces Policy. It should be read in conjunction with the Policy and the associated guidance on confined spaces, which are available on the University's Health and Safety web pages (Ref. 1) and the Estates Permit webpages (Ref. 2).

In the case of lease or licence arrangements, consideration must be given to the extent, access and proposed use of any confined space falling wholly or partially within the demise of the relevant lease or licence. This applies to circumstances wherein the University is either landlord or tenant/occupier.

2.0 Introduction

The Confined Spaces Regulations 1997 are relevant to the following activities carried out on the University campuses:

- Entry into any place, including any chamber, tank, vat, silo, pit, trench, pipe, sewer, flue, well or other similar space, which, by virtue of its enclosed nature, poses a risk from fire or explosion;
- Entry into a space that can foreseeably cause the loss of consciousness arising from an increase in body temperature; the loss of consciousness or asphyxiation arising from gas, fume, vapour or the lack of oxygen; drowning arising from an increase in the level of liquid; or asphyxiation arising from the presence of a free flowing solid.

Entry into confined spaces should, so far as is reasonably practicable, be prevented. However, where entry into a confined space is unavoidable the following must be in place before work commences:

- Adequate hazard assessments and RAMS
- The permit to work system must be followed and a permit obtained
- Appropriate emergency arrangements and safety plans
- Suitable confined spaces warning signs must be used to highlight potential risk areas
- All those involved in confined spaces work must have sufficient knowledge, experience and training to ensure the work is carried out safely
- Guidance and information on safe working in confined spaces must be provided to all those involved in confined spaces work
- Regular audits on confined spaces work (including the operation of the permit to work system) will be carried out to ensure the Code of Practice is adhered to
- Reporting of accidents and incidents resulting from work in confined spaces via the SHE Assure system. Reported incidents should be investigated thoroughly.

The University of Warwick Confined Spaces Policy is available on the University website and on the following link: [Confined Spaces](#)

The University of Warwick Permits to Work Policy is available on the University website and on the following link:

[Advice and Guidance | Permit to Work/Access | University of Warwick](#)

2.1 Definitions

Confined Space

Under these Regulations a 'confined space' must have both of the following defining features: It must be a space which is substantially (though not always entirely) enclosed and one or more of the 'specified risks' must be present or reasonably foreseeable. Specified risks include:

- Flammable substances and oxygen enrichment
- Excessive heat
- Toxic gas, fume or vapour which can lead to asphyxia or unconsciousness
- Oxygen deficiency
- Ingress or presence of liquids
- Free-flowing solids which can submerge a person, preventing breathing
- Risk of structural collapse which could entrap a person.

Restricted Space

A 'restricted space' is a space that either

- is difficult to access or work in due to the size or height of the space but does not contain any equipment that might lead to a sudden reduction in oxygen levels, or;
- has the potential to become a 'confined space' because of the activities being carried out in the space, i.e., welding pens, laboratories working with gases, nitrogen storerooms, walk in fridges/freezers etc.

2.2 Competence and training

The Management of Health and Safety at Work Regulations 1999 (Ref. 3) and The Confined Spaces Regulations 1997 (Ref. 4) require that all personnel involved in confined spaces work should have a level of competence that allows them to make a suitable assessment of the activities to be conducted and what precautions are appropriate for the situation. This will include:

- An awareness of the Confined Spaces Regulations including the need to avoid entry where possible
- How to determine whether areas are "confined spaces"
- An understanding of the confined spaces precautions form and permit to work systems
- How to establish safe systems of work
- How to use personal gas detectors
- The use of Emergency Escape Breathing Apparatus (EEBA)
- Use of communication methods
- What to do in an emergency

- Having completed an Entry into Confined Spaces training course and have an up-to-date certification.

As a minimum, all those involved in confined spaces should be trained in the code of practice which includes details on risk assessments and permits to work systems. Anyone entering a confined space should have received confined space entry training by a reputable training provider.

Records of all individuals' Confined Space training shall be recorded and retained in accordance with the University Records Retention Schedule (Ref. 5).

Training and competence requirements must be role-based. Awareness training is required for staff who may identify, manage or request access to confined or restricted spaces. Entry training is required for anyone entering a confined space. Rescue training is required only for those appointed to undertake rescue duties. Permit Approvers must be suitably experienced, trained and deemed competent to review RAMS, confirm controls, issue permits and close permits. Refresher training requirements and competence records must be defined, recorded and retained in accordance with the University Records Retention Schedule.

Further details concerning training and awareness required for working in confined spaces is available on the University's Health and Safety web pages (Ref. 1).

3.0 Responsibilities

The principal responsibilities for the management of health and safety are stated in the University of Warwick Health and Safety Policy (with line management/delegation of duty described in the document 'Leadership and Management of Health and Safety at the University of Warwick') and complemented by a topic specific Policy for Confined Spaces. These documents are available via the University's Health and Safety web page:

<https://warwick.ac.uk/services/healthsafetywellbeing/guidance/handspolicy>.

3.1 Director of Health and Safety (or equivalent post holder)

The Director of Health and Safety is responsible for:

- Advising on the standards and regulations that must be achieved in order to meet legal requirements
- Keeping the University's Health and Safety website up to date with the related policy documents
- Ensuring that spot checks and audits are carried out to provide assurance that activities are being carried out in compliance with policy and this Code of Practice.

3.2 Estates Director

The Estates Director is responsible for identifying and maintaining records of all spaces within the Estate which are deemed to be confined spaces and for providing a Permit to Work and Access system

to ensure the safety of individuals, and particularly the safety of those Estates staff and contractors required to enter such spaces. Expect for where Heads of Departments are responsible for identifying, through general risk assessment, any potential confined spaces within their respective departments and for ensuring that the Estates department are informed of all such spaces which are part of the Estate

The Estates Director will work in conjunction with, or delegate responsibility to, the Director of Maintenance, Director of Business Services, Head of Assurance, Risk and Property, Assurance and Risk Officer and Permit Officer to:

- Develop the confined spaces register and hazard assessments to maintain accurate information
- Develop appropriate systems for confined space management and monitor their implementation within Estates control.
- Implement procedures for training and communicating relevant information on confined spaces and these management arrangements to all relevant Estates staff.

3.3 Director of Maintenance (Estates)

The Director of Maintenance, supported by their respective managers, is responsible for operational delivery where confined spaces, assets, staff, contractors or works are under Estates/Maintenance control. This includes ensuring that maintenance activity is planned, resourced and undertaken in accordance with this Code of Practice, the University Confined Spaces Policy and the Estates permit to work arrangements. Overall policy governance, assurance and ownership of the confined space register remain with the accountable Estates, Health and Safety and Assurance roles identified within this document.

- planned preventative maintenance (PPM), and remedial maintenance of all systems and equipment within confined spaces which have been notified to Estates, or are owned/managed by Estates.
- ensuring suitable resource and budget are available for PPM, and remedial maintenance of confined spaces and any equipment therein and any associated training for Estates staff;
- escalating any non-compliance discovered or notified to them, to the Responsible Person.
- Ensuring up to date information relating to staff and agency workers within the maintenance teams is provided to the Estates Training and CPD Officer so that the required levels of training can be provided.
- Ensuring that adequate resources are available for identified confined spaces to undergo a hazard assessment which is recorded and shared with those needing access.
- Ensuring that adequate resources are available for Permit Approvers (PA) and a Permit Officer that are suitably experienced, trained and deemed competent.
- Ensuring that Staff and Contractors within their control comply with the arrangements of the COP and follow the permit system as outlined on the Permit pages.

- Ensuring that Maintenance managers, supervisors, directly employed labour and contractors understand the limits of Maintenance responsibility and escalate any register, policy, assurance or governance issues to the appropriate accountable role.

3.4 Chief Finance Officer (Estates)

The Chief Finance Officer (Estates) is responsible for:

- Making funds available for training of staff
- Making funds available for equipment and testing (hire)
- Funds for upkeep of confined spaces (signage, security, University inspections)

3.5 Head of Estates Information and Systems

The Head of Estates Information and Systems is responsible for:

- maintaining the [asset register of confined spaces](#), as notified to Estates;
- making this document and information available to those stakeholders requiring access to such as part of the responsibilities allocated herein.

These documents and information shall be retained in accordance with the relevant legislation and the University Records Retention Schedule (Ref. 5).

3.6 Head of Assurance, Risk and Property

The Head of Assurance, Risk and Property is responsible for ensuring that all resources required to administer and monitor these arrangements for the University are in place for the delivery of confined space compliance as far as it's in their control, that includes a suitably, experienced, trained and competent Permit Approver for confined spaces, reporting back to the Estates Director and Chief, Finance Officer and Business Services Director where any additional resources of any kind are required.

3.7 Heads of Departments

Heads of Departments are responsible for the implementation of the [Confined Spaces Policy](#) and this Code of Practice with regard to identifying, through general risk assessment, any potential confined spaces within their respective departments and for ensuring that the Estates department are informed of all such spaces which are part of the Estate. For restricted spaces which are not part of the Estate (associated with work equipment used for research for example) the Heads of Department are responsible for ensuring that appropriate controls are put in place and monitored, through the use of local standard operating procedures, safe systems of work and permits to work (such as laboratory permits, see section 5.4), to minimise the risk to staff, contractors, students and visitors.

Please refer to definitions of 'confined spaces' and 'restricted spaces' in Section 2.1.

3.8 Estates Site Manager (Warwick Innovation Campus, Stratford-upon-Avon)

The Estates Site Manager (Warwick Innovation Campus, Stratford-upon-Avon), reporting to the Estates Business Services Director with maintenance activities overseen by the Director of Maintenance, is responsible for:

- Ensuring no work is undertaken in the building/s they are responsible for, unless the correct University procedures are followed, including ensuring the correct confined space permits are in place prior to work commencing.
- Ensuring building hazard assessments relating to confined spaces are undertaken and recorded.
- Ensuring that work on the fabric of their respective buildings is being carried out in accordance with agreed risk assessments and method statements and any other required safe systems of work.
- Letting key stakeholders know that work is going on in a local confined space.
- Ensuring up to date information relating to staff and agency workers within the maintenance teams are provided to the Estates Training and CPD Officer so that the required levels of training can be provided.
- Ensuring that Staff and Contractors within their control comply with the arrangements of the COP and follow the permit system as outlined on the Permit pages.

3.9 Principal Designers

- When creating confined spaces within new buildings or refurbishments, the Designer shall be required to provide a hazard assessment of the confined space.

3.10 Building Facilities Managers/Zone Managers

Building Facilities Managers/Zone Managers are responsible for:

- Ensuring no work is undertaken in the building/s they are responsible for, unless the correct University procedures are followed, including ensuring the correct confined space permits are in place prior to work commencing.
- Ensuring they are aware of building hazard assessments relating to confined spaces in the buildings they are responsible for.
- Ensuring that work on the fabric of their respective buildings is being carried out in accordance with agreed risk assessments and method statements and any other required safe systems of work.
- Letting key stakeholders know that work is going on in a local confined space when they are informed that a permit has been approved.

3.11 Permit Officer (Estates)

The Permit Officer (Estates) is responsible for:

- Overall management of the permit to work and contractor site access system.
- Reviewing the Permit Requesters' confined space permit application.
- Keeping an up-to-date Confined Spaces Register and ensuring that confined spaces are clearly signed in accordance with the register.
- Ensuring that a hazard assessment is carried out and recorded for confined spaces and reviewed by anyone requesting a permit to access that space before issuing a permit.
- Ensuring contractor and staff compliance with the permits system, ensuring they present a site specific risk assessment and safe system of work (method statement), evacuation plans, training records which have been approved by the Estates Permit Approver (PA).
- Liaising between end users, building managers and contractors about any access limitations, so that they may evaluate and plan to complete the work in a safe and timely manner.
- Undertaking quality checks and audits of the confined space permits prior to issue, ensuring all sections are completed correctly and prerequisite approvals received. Informing the Assurance, Risk and Property Team of any potential conflicts.
- Liaising with Zone Manager/Building Facilities Manager to inform them of any upcoming work in a confined space in their building.
- Following the steps in 3.13 if a confined space permit is applied for and they are designated Permit Approver.

3.12 Confined Space Permit Approver (in lieu of Permit Officer (Estates))

The Confined Space PA is responsible for:

- Ensuring that a hazard assessment is carried out and recorded for confined spaces and reviewed by anyone requesting a permit to access that space before issuing a permit.
- Providing a hazard assessment of the confined space to the Permit Requester to provide to the DEL or contractor
- Reviewing the risk assessment and method statement
- Setting up a meeting with the Confined Spaces Group (membership made up of x3 from Permit group and x1 Authorised confined spaces approver) for approval for high risk activities.
- Approving or declining the permit request
- Checking all certification on the day of entry
- Issuing the permit on the day of entry, if approved
- Being present at the location of works when the permit is issued, when the entry team is briefed, and when the permit is closed. For higher risk entries, or where identified by the risk assessment, the Permit Approver must remain at the work location for the duration of entry. For lower risk entries, the Permit Approver must remain available on campus and contactable until all entrants are confirmed out of the space and the space is secured.
- Closing the permit and retaining and filing all associated documents
- Liaising with Zone Manager/Building Facilities Manager to inform them of any upcoming work in a confined space in their building.

3.13 Estates Permit Working Group

The Estates Permit Working Group is responsible for:

- Reviewing the risk assessment and method statement for potentially difficult or complex entry and work in the confined space (as an advice panel)
- Agreeing to approve or decline the permit request or seek external AE advice.
- Monitoring the confined spaces register
- Reviewing high risk activities where requested

3.14 Project Managers and Those Who Commission Works

Project Managers and Those Who Commission Works are responsible for:

- Ensuring that the contractor is inducted to site
- Liaising with the Permit Office
- Ensuring that where project works require confined spaces permits that suitable time is allowed to obtain and supply documentation for a permit prior to works commencing
- Stopping any works if the confined space permit is not being complied with.

3.15 Maintenance Operations Staff

All directly employed labour staff (and any agency employees within the directly employed labour teams) within the Maintenance Operations Section will be required to:

- Comply with all relevant statutory requirements and these management arrangements
- Follow safe systems of work as identified by line managers and supervisors
- Report to their line manager or supervisor any concern about any potential health and safety risk
- Read and follow the confined spaces permit to work.

3.16 All Members of Staff

- All members of staff (including agency staff) must cooperate and comply with the Confined Spaces Policy and these associated arrangements, instructions and guidance.
- They should not undertake any works or inspections, estimating, or surveying in confined spaces without a confined space permit.

3.17 University Contractors, Consultants and Suppliers

The University Code of Conduct for Contractors is a document produced for contractors undertaking works in any area of the University. The code refers to guidance and legislation issued by the Health and Safety Executive and has details relating to the University Permits Policy; however, it is the responsibility of contractors, sub-contractors, consultants and suppliers to ensure compliance with current best practice and legislation.

- ensuring that any person required to undertake work in confined spaces has sufficient competence to safely complete the task, and that any relevant arrangements have been made to mitigate risks to safety;
- ensuring contractors are appointed and managed in accordance with the University Contractor Management Policy and associated guidance (Ref. 6);
- addressing, through engagement of competent personnel or contractors and supported by the AP for confined spaces, the generation of documents essential to compliance, such as confined space hazard surveys, where these have not historically been in place;
- reporting back to the Manager/Contracts Manager and Head of Assurance, Risk and Property any non-compliance discovered or notified to them;
- seeking assurance that the arrangements for leasing of spaces includes due consideration of the restriction of access to confined spaces falling wholly or partially within the demise of the

lease. This applies to circumstances wherein the University is either landlord or tenant/occupier;

- Reporting back to the Responsible Person/Manager/Contracts manager, Director of Maintenance/ Head of Assurance, Risk and Property any non-compliance discovered or notified to them.
- Link to Contractor webpages - https://warwick.ac.uk/services/estates/h_and_s/contractors
- The link below is to the University Contractors' induction video:
- <http://www2.warwick.ac.uk/services/healthsafetywellbeing/guidance/contractors/management/contractorinductionvideo/>
-

4.0 Requirements

4.1 Detailed plan of work and risk assessment

The competent person in charge of the planned work in a confined space should be provided with the University's site-specific hazard assessment for the confined space to allow them to produce a suitable, safe plan of work and risk assessment. If no hazard assessment is available, the University's Permit Officer or qualified Confined Space Permit Approver should be consulted to arrange for a competent person to undertake an assessment. The plan of work and risk assessment must be discussed and agreed with the Permit Requester and they shall upload it when they apply for a permit.

The Permit Officer or delegated Confined Space Permit Approver will review the permit and uploaded supporting documents and will either approve it, or if they deem it necessary, will convene a meeting of the Estates Permit Working Group to discuss further and agree if the work is safe to proceed. The Permit Officer/Delegated Confined Space Permit Approver will make the final decision.

4.2 Supervision

The Permit Requester and Person in Charge of entry into the confined space on the day should be present at all times. If the Person in Charge has to leave the area, all entrants within the confined space must be withdrawn from the space. The Permit Approver should be present at the point of permit issue and close-out. Where the risk assessment or permit conditions require it, the Permit Approver must remain at the location of works throughout entry. For lower risk entries, the Permit Approver must remain available on campus and contactable until all entrants are out of the space and the space is securely locked off.

4.3 Communication systems

Adequate means of communication need to be identified before work commences. This will include communication between those involved in the task, between those inside the confined space and those outside, and systems to be used to contact emergency services. Whatever means is used, it must be able to convey messages clearly, unambiguously and quickly between the relevant parties.

Communication may range from using a two-way radio system; mobile phone; or to always having an additional person present (normally the Person in Charge) outside the confined space with immediate access to a means of communication with the Person in Charge, Permit Approver and Community Safety.

The means of communication must be checked for correct operation immediately before entry and acts as the reporting in and out procedure. The function of the Person in Charge would be to render advice and support for the person(s) inside, make decisions of access and egress of the team, and be ready to summon assistance if required.

It should be clearly understood that if the person(s) inside appear(s) to be overcome, it should be assumed that the atmosphere has become unsafe and that no attempt should be made to rescue the individual(s) other than by winching out, if possible, by the Person(s) in Charge.

TRAINED RESCUE TEAM ONLY

The gas monitors should be checked, and if a rescue is required, only the TRAINED rescue team should assist in rescue via means of using the man safe winch, or as a last resort, entry into the space with breathing apparatus and appropriate rescue equipment.

IMPORTANT NOTE: RESCUE TRAINING IS VERY DIFFERENT TO CONFINED SPACE ENTRY TRAINING. ONLY FULLY TRAINED RESCUE TEAM MEMBERS CAN PERFORM AN EXTRACTION RESCUE IF THEY DEEM IT SAFE TO DO SO.

4.4 Testing/monitoring the atmosphere

With any confined space, one of the most important considerations is to establish that the atmosphere is, and will remain, breathable. Considerations include whether the area of open access, egress and ventilation ports are large enough to allow reasonable air flow for the proposed activity to take place within the space.

In boilers and tanks, activities such as painting; cleaning with degreasers or solvents; chipping off rust; steam cleaning; and disturbing sludge are too hazardous to permit without the use of full self-contained breathing apparatus. Such tasks must be referred to a specialist external contractor and entry is not to be undertaken by University personnel.

For other tasks, a gas detector is required to monitor the atmosphere. A variety of detection devices are available on the market ranging from oxygen depletion detection devices to multi-gas detection systems. Manufacturers' instructions must be read and calibration certificates checked before using any gas detection/monitoring devices.

The standard oxygen meter gives warning of a depleted atmosphere and leaves plenty of time for persons to safely leave the space, before any physiological problems arise. The meter will also detect oxygen enrichment, which can occur during the use of oxyacetylene cutting equipment.

If an oxygen leak were to occur, materials not normally considered combustible will burn, and combustible materials will burn fiercely, possibly spontaneously. In this regard oxy-acetylene torches and lines must be withdrawn from the space during breaks and particularly overnight to minimise this possibility.

A gas meter may be appropriate to warn of a build-up of a flammable or noxious vapour. Methane or hydrogen sulphide are the two gases which cause problems, but normally only in sewers and water supply conduits.

An oxygen meter must never be used on its own as a check for a hazardous gas or vapour; by the time such a vapour has displaced the oxygen sufficiently to activate the meter, the level is already much too high.

For planned work, those in control of the work should hire in appropriate gas detection equipment as required. When hiring in equipment, checks should be carried out to ensure that it is provided with all relevant calibration certificates and instructions on use.

4.5 Gas purging

If the confined space is likely to contain, or did contain, flammable or toxic gases then the gas/vapours will need to be purged from the space before entry by the competent person.

Purging is normally carried out using an inert gas. If this is required, it is important that the atmosphere is tested after the purging to ensure that it is safe to breathe. Consideration should be given to where people are to be positioned when carrying out purging.

4.6 Ventilation

Adequate ventilation must be provided at all times when working in a confined space. Some tanks and boilers may have a large enough port or manhole at or near the top in addition to low level access to permit a sufficient flow of air so as to render the introduction of additional air unnecessary. Similarly, if there are hatches or manholes in ductwork, these must be opened up before entry proceeds. For longer jobs, these open apertures will need to be guarded with barriers and signs. This will also act as a secondary means of escape or access by the emergency services should a serious accident occur within the confined space. Prior to entering boilers, tanks and ductwork, careful consideration of the length of time to be spent inside the confined space, and the proposed activity must be undertaken.

Some spaces may be closed off sufficiently to warrant mechanical ventilation. Blower fans and trunking may be needed in these cases. The source of any supplied air must be from an uncontaminated area and introduced at the bottom of any space. Under no circumstances should oxygen be introduced.

An oxygen level meter may be considered necessary for certain activities. If the risk assessment states that an oxygen meter is required, the meter must be lowered into the space, or inserted on a pole, to check that the atmosphere is breathable before entry is attempted. The meter

should remain inside the space during the period of entry and an additional meter should accompany each individual entering the space.

4.7 Removal of residues

If residues have to be removed prior to other work or as part of the main work, then appropriate control measures have to be introduced. As mentioned above, the use of powered ventilation equipment may be required. Atmospheric testing may also need to be carried out in addition to the use of specially protected electrical equipment and the correct respiratory protective equipment.

4.8 Isolation of services

For some activities in confined spaces, it may be necessary to isolate gases or liquids. Where possible the confined space should be isolated from all plant that contains hazardous gases and liquids by using blanks or removing parts of pipework. Locking off valves is an alternative providing there is no chance that they could be unlocked when people are in the confined space. Consideration should also be given to isolating mechanical and electrical services where these are not required for the confined spaces work and this should be in line with Estates safe isolation procedures.

4.9 Selection of suitable equipment

Equipment used in a confined space must be fit for purpose. If there is a risk of flammable gases being present, specially protected electrical equipment must be used. Earthing should also be considered if there is a risk of static charge build up.

4.10 Personal protective equipment

The type of personal protective equipment (PPE) required should be based on the nature of the work. As a minimum, staff should be provided with a hard hat, safety footwear, a torch and knee pads if crawling is required. The type of work may also require some form of respiratory equipment. Consideration must be given to any equipment needed for rescue or other emergency situations, e.g. harnesses, ropes and EBA/BA.

4.11 Portable gas cylinders and internal combustion engines

Petrol engines should be avoided in confined spaces. Where possible, gas cylinders should also be kept away from confined spaces. If gas cylinders or engines have to be used, then sufficient ventilation needs to be provided. Engine exhausts must be vented to outside and clear of any ventilation hatches and access, egress hatches. Use of engines or cylinders requires constant atmospheric monitoring. If the work is likely to take more than one day, then equipment should be removed from the confined space at the end of the day.

4.12 Gas supplied by pipes and hoses

If pipes are used to convey oxygen or flammable gases into or through the confined space, then supply valves should be closed before pipes and hoses are withdrawn from the area. If pipes cannot be removed, then they should still be disconnected from the gas supply and allowed to vent.

4.13 Access and egress

Routes in and out of any confined space must be kept clear and easily accessible, particularly any route designated for emergency escape. They should be of adequate size for people both wearing PPE and moving equipment. Access restrictions may be required when no work is being carried out in the confined space. Signs may also be needed to prevent other personnel inadvertently blocking access/egress points. An adequate means of checking the confined space at the end of the working period should be in place so that all personnel involved in the work can be accounted for.

4.14 Fire prevention

Flammable and combustible materials should not be kept in confined spaces unless as part of the work. When no longer required they should be removed as soon as possible. When required, amounts of flammable material should be kept to a minimum and stored in appropriate containers.

4.15 Lighting

An appropriate level of lighting must be provided when working in confined spaces. As a minimum, staff should be provided with a torch and head lamp. If another type of lighting is required it must be ensured that it does not introduce further hazards, i.e. it must be specially designed for use in potential flammable atmospheres, it may need to be waterproof and protected with RCD's and it may need to be positioned such that it does not create obstructions.

4.16 Static electricity

The potential for static build up should not be ignored. All conducting items should be bonded and effectively earthed. This is of particular importance if high pressure water jets are used. Care must also be taken with the type of clothing worn and cotton and wool should be avoided where possible.

4.17 Smoking/Vaping

Smoking and vaping are strictly prohibited within buildings on University premises. This also applies to any confined spaces.

4.18 Emergencies

The extent of the emergency arrangements will depend on the confined space being worked in and the extent of the work. The procedures adopted should be appropriate in view of the likely emergencies. An emergency plan may consist of one, some or all of the following: **No confined space entry shall proceed unless a suitable, task-specific and tested rescue plan is in place before entry.**

The rescue plan must be proportionate to the space, activity and foreseeable emergency scenarios, and must identify the rescue method, equipment, trained rescue personnel, communication route and escalation process. Reliance on the Fire and Rescue Service alone is not sufficient unless prior arrangements have been confirmed through the central Health and Safety Services Team.

- Self-rescue including emergency breathing apparatus (EBA);
- Rescue by Person in Charge/Top Person using winch line;
- Dedicated fully trained rescue team onsite (CONTRACTED ONTO SITE);
- Miners Rescue team or local Fire & Rescue Service with prior arrangements in place through the central Health & Safety Services Team.

5.0 Operational Use – INVIDA System

5.1 When is a confined space permit required?

A confined space permit to work shall be required where access is needed to any confined space (see 2.1 Definitions) for purposes of inspections, surveys, estimating and any other works required within the space.

Where such areas fall under the control of the Estates Office, access shall be physically restricted, such that unauthorised persons shall not be able to access that area. Access to these areas shall only be granted to approved persons once the Estates Office is satisfied that adequate workplace precautions have been agreed to deal with the health and safety risks associated with each activity undertaken in such spaces.

Access to 'restricted spaces' (see 2.1 Definitions) should be managed by local departmental policies, procedures and safe systems of work.

5.2 How to request a confined space permit to work

Please complete our online [permit request form on the INVIDA system](#).

All confined space permit records, supporting RAMS, hazard assessments, rescue plans, close-out records and evidence of competence must be uploaded to and retained within INVIDA where the system is used for permit management. The Permit Office is responsible for ensuring that permit records are complete before issue and close-out. The relevant operational manager remains responsible for the quality of work-related information provided, and the Head of Estates Information and Systems is responsible for system availability and data retention arrangements.

5.3 Permit Requester responsibilities

Before you put in your permit request you will need to read the [guidance on our webpages](#), request the Hazard Assessment and forward this to the competent persons requesting the access. You need to

contact anyone who will access the controlled areas to ensure they have a clear understanding of the requirements of each permit. Permit Requesters must also obtain and review RAMS for the works and/or access proposed, to ensure that they are suitable and sufficient. These should be uploaded to the confined spaces permit. The Confined Spaces Permit Approver will approve the permit or organise a Confined Space Group meeting to discuss the application, if required. **Confined Space Contacts on campus are:**

Estates Permit Officer: Lee Cartwright - L.w.cartwright@warwick.ac.uk

Estates Mechanical Services Officer Matt Bromley - M.Bromley@warwick.ac.uk

Permit Office: permitrequest@warwick.ac.uk

If you're not sure about requirements having read our guidance, you should seek advice on the standard expected. For advice, email permitrequest@warwick.ac.uk.

As a Permit Requester, you are responsible for making sure that the people undertaking the work fully comply with the agreed safe working arrangements once the suitable and sufficient risk assessments and method statements (RAMS) are approved. You must ensure that the work is undertaken to an acceptable standard and the work area is left in a suitable condition before allowing the permit to be cancelled by the Permit Office. The Permit Approver (PA) should be present on entry into the space to run through all documents with the team entering and check certification documents for equipment. The PA should be present when the team exits the space to make sure the space is locked down and all team members and equipment are out of the space before closing the permit.

The Permit Requester shall, prior to any work being undertaken, ensure that contractors have watched the [University's Contractor Induction video](#), have been inducted to site with whatever local induction is usually carried out, and are familiar with the [University's Code of Conduct for Contractors](#). The Permit Approver will carry out a site-specific induction on the day before the work starts.

5.4 Who can issue a confined space permit to work?

The Estates Permit Office manages and coordinates the University Permit to Work and Access System for contractors, University departments and for specific activities by Estates Directly Employed Labour (DEL). Permits will only be issued by the appointed Permit Approver on duty on any given day.

Departments must not issue their own confined space permits*— only the Estates Office can issue these. Construction sites or sites under a licence to occupy should have their own permit system managed by the Principal Contractor under the CDM Regulations 2015.

*Apart from for spaces which are not physically identified as a confined space, but are restricted spaces created by the use of certain equipment, i.e. a laboratory using equipment for research purposes which might cause oxygen depletion (see sections 2.1, 3.7 and Appendix A). Local permits must be set up in consultation with the departmental Health & Safety Officer or Health & Safety Services.

5.5 When will a confined space permit to work be issued?

The Estates Permit Officer or confined space Permit Approver will only issue a permit to the Competent Person when appropriate control measures have been identified and are supported by suitable and sufficient RAMS and plan drawings.

The Estates Permit Working Group may assess a request before the AP approves the permit.

5.6 Who is the "Competent Person"?

The Competent Person is someone who has sufficient skills, knowledge, training and experience to be able to identify and evaluate health and safety risks that are inherent with the type of work undertaken (Refer to point 2.2).

Any permit requested shall only be issued to the Competent Person listed on it.

Generic RAMS will not be accepted for any permit applications.

5.7 Close out of a confined space permit to work

Permits are issued by a Permit Approver from the Estates Office. Permits must be closed out by the Permit Requester and the confined space Permit Approver in the timescale indicated on the permit and returned to permitrequest@warwick.ac.uk

5.8 Notification period

Confined space permits to work require at least 10 working days' notice.

6.0 References

1. The University Health and Safety Webpages; Current Policies: [Current Policies \(warwick.ac.uk\)](#)
2. Estates Permit Webpages:
[Permit Requests | Estates Office | University of Warwick](#)
3. The Management of Health and Safety at Work Regulations 1999:
<https://www.legislation.gov.uk/uksi/1999/3242/made>
4. The Confined Spaces Regulations 1997
[The Confined Spaces Regulations 1997 \(legislation.gov.uk\)](#)
5. University Records Retention Schedule:
<https://warwick.ac.uk/services/sim/guidance/recordsmanagement>
6. University Contractor Management Policy and guidance:
<https://warwick.ac.uk/services/healthsafetywellbeing/guidance/contractors>

7.0 Document Control

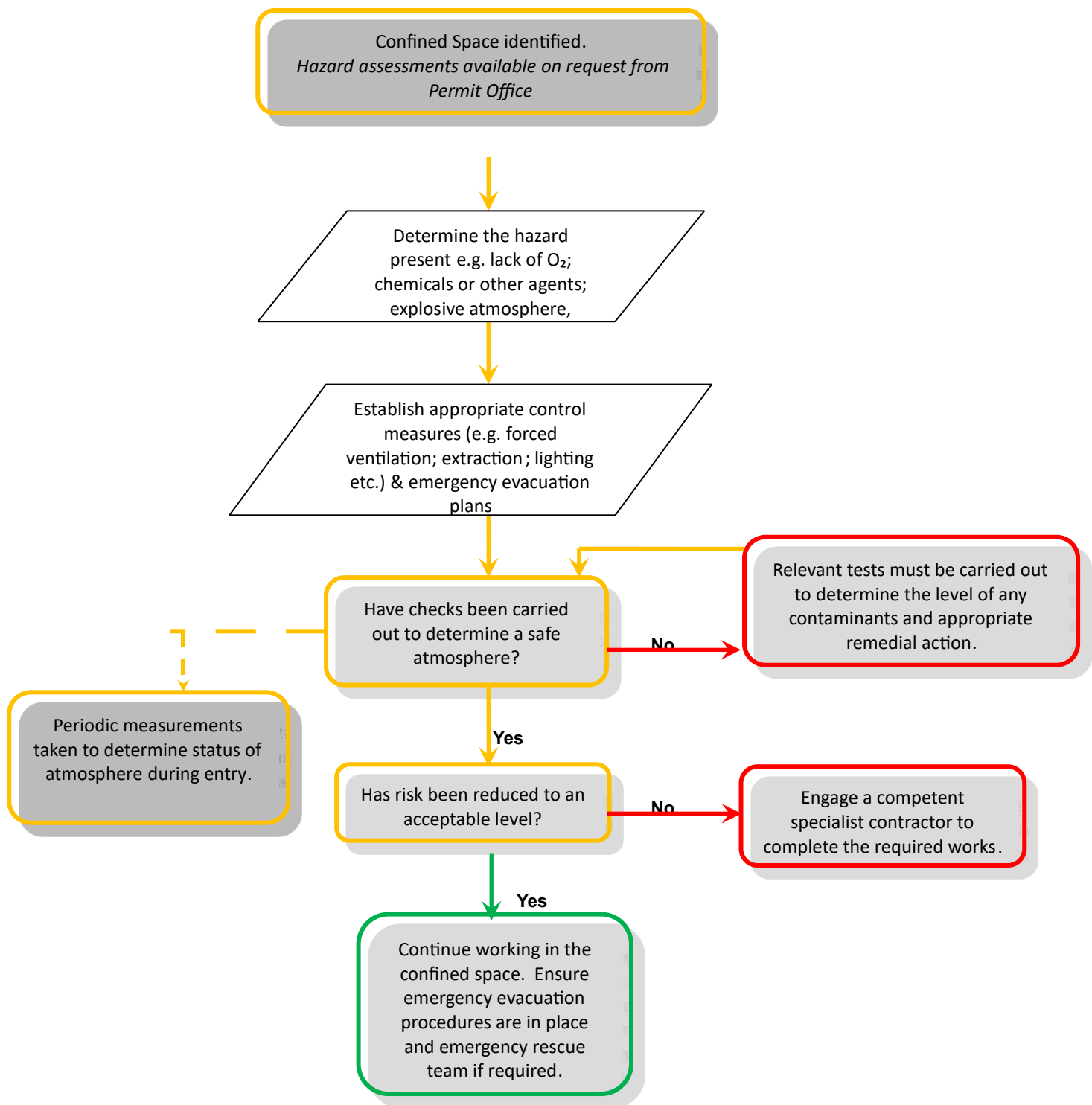
Document Control			
Version Number	Date issued	Author	Update information
v1	01.02.2024	Lee Cartwright & Jane Cummings	Initial version of document
v2	27.07.2026	Lee Cartwright / Matt Bromley	Reviewed document to include reference to Invida, added responsibilities for the Business Services Director and Director of Maintenance.
Owner: Duncan Stiles, Head of Assurance, Risk and Property			Authorised By:, Estates Director and Director of Maintenance
Source Location: M:\EO\EO_H_and_S_Group\Standard			Approval Date: 21 st July 2026
Published Location: https://warwick.ac.uk/services/healthsafetywellbeing/guidance/confinedspaces			Review date: 21 st July 2029

Appendix A

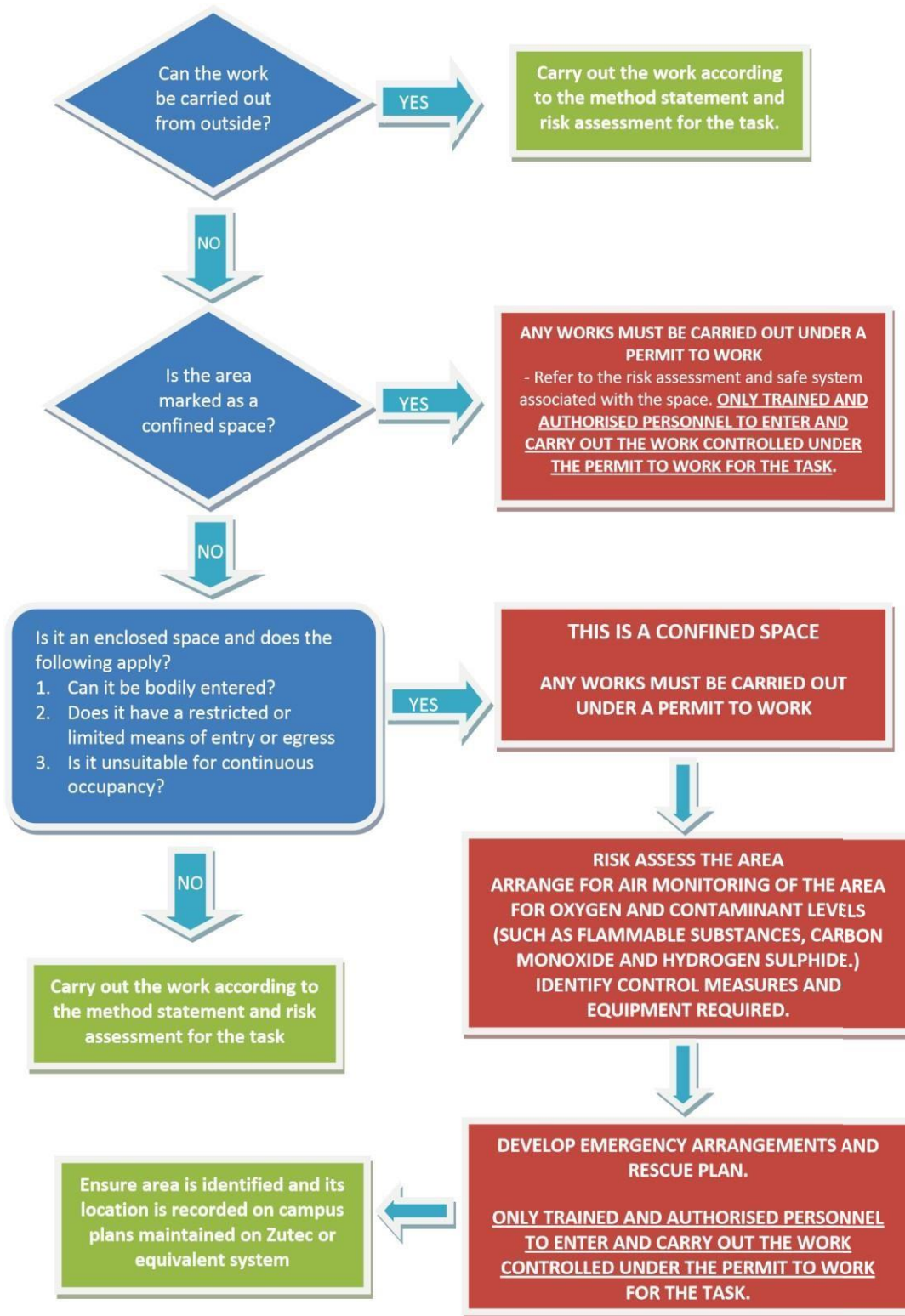
Guidance and Flowchart - Confined Spaces

A confined space is a place which is substantially enclosed (though not always entirely), and where serious injury can occur from hazardous substances or conditions within the space or nearby (e.g. lack of oxygen). Click [here](#) for the University's directive on confined spaces.

Areas of the University that may be considered as confined spaces include engineering plant rooms; enclosed drains; sewers; storerooms containing hazardous substances; laboratories where liquefied gases are in use; walk in fridges and freezers and computer server rooms. Some areas may have to be rated as confined spaces only when certain activities are being carried out within them. This would be the case when a laboratory has to be fumigated.



Checklist



Appendix B

Confined Space Entry Checklist

Date	
Task	
Location	

Classification of confined space:	Permanent (Hazard assessments and risk assessments must be reviewed to ensure it is valid)	Potential Confined Area (A hazard assessment must be carried out)	Permit to Work (CS) required:	YES/ NO
Other permits to work required: (i.e. Isolation etc.) *			YES/ NO	

Checklist completed by *	Name:	Date:
Verified by *	Name:	Date:
Person in charge *	Name:	Date:

**Must be authorised and competent with regard to confined space*

Personnel Involved in Confined Space Task

	Name:	Qualification in date:	Signature (at Confined Space):
Appointed Person			
Person in Charge			

Entry Team:			

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* Where other permits are required, these must be actioned before works / entry can commence.

Initial (peak) atmosphere readings (taken at near bottom, mid and near top of access / confined space)

H ₂ S	Top	O ₂	Top	Flammable gas (normally methane)	Top	CO	Top-	Other (Specify)	Top
	Mid		Mid		Mid		Mid.		Mid.
	Bot.		Bot.		Bot.		Bot.		Bot.
	PPM		% Vol		% LEL		PPM		PPM

Limits H₂S - <5 ppm; O₂ 19-33 ppm; Methane <10% LEL; CO - 30 ppm

NB: - Where atmospheric testing indicates that the levels cannot be brought into the 'Safe' range, and that these levels cannot be readily maintained, then entry to the space must not be allowed. Any work required in this area, including inspection, must be carried out by a company specialising in hazardous atmosphere working.

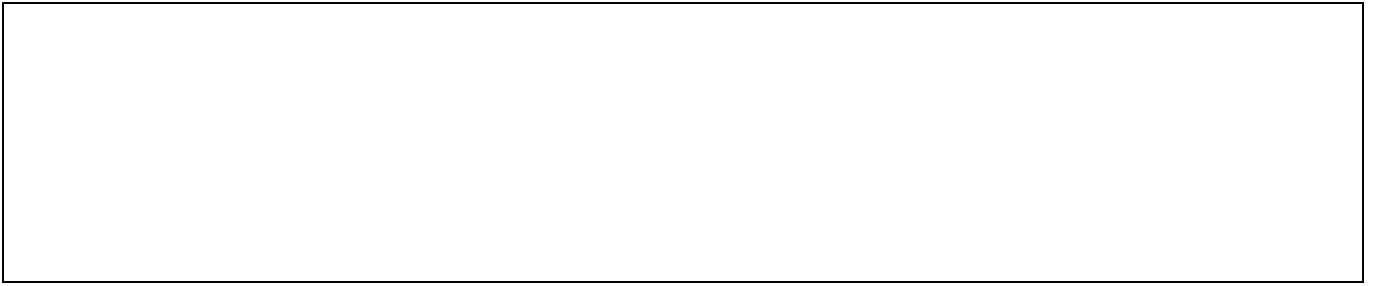
Support equipment required?	Yes	No	Support equipment required?	Yes	No
Personal gas monitors			Ropes		
Air movers			Manhole lifting key		
Tripod / winch (& harness)			Barriers		
Torches			Ladders		
Escape set			PPE		

Where equipment is identified as required, it must be tested and within date (where applicable) and visually checked to ensure it is 'fit for purpose'.

Indicate means of communication:

Entrant to entrant:	
Entrant to Person in Charge	
Person in Charge to Emergency Services:	

Weather report: (required where the weather can have an adverse effect on the workers and the confined space)



Appendix C

Confined Space – Risk Assessment

This form does not need to be completed where the space is already identified as a 'Confined Space' and the task is regular inspection / maintenance. The appropriate safe system of work must be reviewed, and any amendments agreed before work can commence.

Title of risk assessment		Department		Date	
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Description of activities:	
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Persons at risk	Staff	Trainees	*Young people	Contractors	Customers	Visitors
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Detailed description of the confined space, (incl. dimensions, access and plant within the space)

Hazards	Existing control measures	Additional control measures required	By whom/when
Include brief explanation as to how they may cause harm.	Consider; safety devices, cut-out switches, safety signs, SOPs, training, PPE etc.	Required to prevent/reduce likelihood of hazard occurring.	Person responsible and completion date.
Evaluation of risk	Severity:	Likelihood:	Risk factor:

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Evaluation of risk	Severity:		Likelihood:
Hazards	Existing control measures	Additional control measures required	By whom/when
Include brief explanation as to how they may cause harm.	Consider; safety devices, cut-out switches, safety signs, SOPs, training, PPE etc.	Required to prevent/reduce likelihood of hazard occurring.	Person responsible and completion date.
Evaluation of risk	Severity:		Likelihood:
Evaluation of risk	Severity:		Likelihood:
Evaluation of risk	Severity:		Likelihood:

Summary of assessment: The area / activity has been assessed against existing control measures in place. The assessment has identified (number) issues and made (number) recommendations for additional control measures.

Signature of Assessor: _____ Name: _____ Date: _____

Manager's Approval: **Matrix for risk evaluation**

	Severity of injury				
Likelihood	Superficial	Minor	Serious	Major	Extreme

I have reviewed this risk assessment in consultation with the Assessor and accept the issues identified along with additional control measures that will be implemented in order to reduce any residual risk to a level that is low as is reasonably practicable.

Signature of Manager: _____ Name: _____ Date: _____

Unlikely	Very low	Very low	Low	Low	Moderate
Possible	Very low	Low	Low	Moderate	High
Likely	Low	Low	Moderate	High	Very high
Very likely	Low	Moderate	High	Very high	Very high
Extremely likely	Moderate	High	Very high	Very high	Very high
Rating for severity of injury					
Superficial	Injury; none, delay only Property damage; minimal				

Minor	Injury; bruising, minor cuts, light abrasions. Health effects; mild irritation of skin or eyes, headaches, ill-health leading to temporary discomfort. Property damage; minor Lost time; < 3 days
Serious	Injury; loss of consciousness, lacerations, concussion, serious sprains, minor fractures, deafness, asthma, burns or injury resulting in absence from work. Health effects; acute health effects, e.g. harmful if inhaled/contact with skin/ or swallowed, dermatitis, ill-health leading to minor but permanent disability. Property damage; serious but confined to a workroom or area. Oxidising, flammable and highly flammable substances. Lost time; > 4 days – 3 months
Major	Injury & illness; affecting one person, permanent disability or other reportable injury/disease for example amputations/major fractures. Severely life shortening diseases, acute fatal diseases. Health effects; affecting one person, toxic by inhalation/contact with skin or swallowed. Damage to eyes, respiratory system, skin sensitization, effects on fertility, prolonged exposure risks, limited evidence of carcinogenic effects. Property damage; major. Extremely flammable and explosive substances. Lost time; > 3 months
Extreme	Injury; fatal incidents affecting more than one person Health effects; affecting more than one person or chronic medical disability due to, for example exposure to a probable carcinogen, may cause sensitisation by inhalation. Property damage; the loss of one or more buildings.
Rating for likelihood	
Unlikely	Appropriate control measures in place with effective management of risk
Possible	Appropriate control measures in place with partial management of risk

Likely	Inadequate / inappropriate control measures in place with partial management of risk
Very likely	Inadequate / inappropriate control measures with no management of risk
Extremely likely	Absence of control measures with no management of risk
Prioritisation of risk factors	
Very low	Acceptable risk; no action required
Low	Tolerable risk; reduced as low as reasonably practical, further action may not be required
Moderate	Plan required to reduce the risk as far as is reasonably practical
High	Urgent action required to allow activity to continue. Plan required for sustainable risk control.
Very high	Risk intolerable; activity must cease until the risk has been reduced

Appendix D

Confined space safety programme

CS Reference No:		Extg Hazard No:	
Date of Assessment:		Work RA No:	
Assessor's Name:		SP No:	
CS Location & General Description:			

Safety Programme Part 2 is to be completed by the individual or organisation proposing to enter the confined space to carry out the works and is to be submitted to the PA (CS) for review. It is to be read and implemented in conjunction with Safety Programme Parts 1 & 3.		
DURATION & DATE OF THE TASK:	Duration:	Proposed Date:
(Max 8 hours):		
WORK TEAM REQUIRED:		
(State the name of operative, any particular role in the Work Team and safety equipment to be used or carried)		
Name of Person in Charge: (may not enter the space)		
Name of Work Team Members:	Indicate which roles they will fulfil & any specific RPE/PPE or specialist equipment they will require	

	Safety Attendant	Winch Operator	CS Entrant	First Aider	Fire Trained		Gas Monitor	IS Torch	CS Harness	Tripod & Winch	Air Mover	EBA	SCBA
Identify any other PPE & RPE specialist equipment required for the task by the Work Teams not indicated above:	Equipment									Qty	Provided For		
METHOD OF PURGING (IF APPLICABLE):													
METHOD OF VENTILATION:													

SPECIFIC TO TASK & SITE SAFETY PRECAUTIONS: (see also Safety Programme Part 1)			
COMMUNICATIONS:			
Communications to be used for task: (proven before work commences)			
Frequency of communications from PiC to Work Team:			
Emergency evacuation signal:			
RESCUE ARRANGEMENTS:			
Primary Method of Escape:			
Primary Method of Rescue:			
Means of contacting the Emergency Services:			
Telephone number for the Emergency Services:			
Rendezvous point for Emergency Services:			
Additional Equipment Required for Rescue:	Equipment	Qty	Provided For

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This Safety Programme Part 2 has been reviewed and remains valid:					
AP/PA (CS)	Name:		Signature:		Date:
PiC(CS)	Name:		Signature:		Date:
AE(CS) High & Extreme Risk only	Name:		Signature:		Date:

Appendix E

Estates Permit Working Group

The Terms of Reference for the Group are available via the link: [Permit Working Group - ToR](#)

The Estates Permit Working Group for reviewing a confined space entry when referred to the group will consist of:

- A H&S Adviser from the university Health and Safety Services team;
- At least one qualified and competent confined space Permit Approver;
- The Head of Assurance, Risk and Property (or nominated person);
- Estates Risk and Assurance Officer;
- A Permit Requester or Contractor's Lead Competent Person or DEL Lead Competent Person in charge on the day and another representative.

Areas of the request that will be discussed:

- RAMS;
- Safety and emergency rescue plans;
- Confined space area to include the hazard assessment;
- Equipment;
- Training competences;
- Any isolation requirements;
- Details of contacts on the day of work and induction.

If the request is deemed acceptable by the group, the permit will be approved, and the Requester will be notified.

If the request is declined or further information is required, or actions required, then this will be discussed with the Requester who will then inform the Contractor or DEL of what is required.

The Permit Officer will be notified of the outcome of the meetings if not present.

Appendix F

Confined space



Please contact
Estates permit office
permitrequest@warwick.ac.uk
for further information and
Guidance