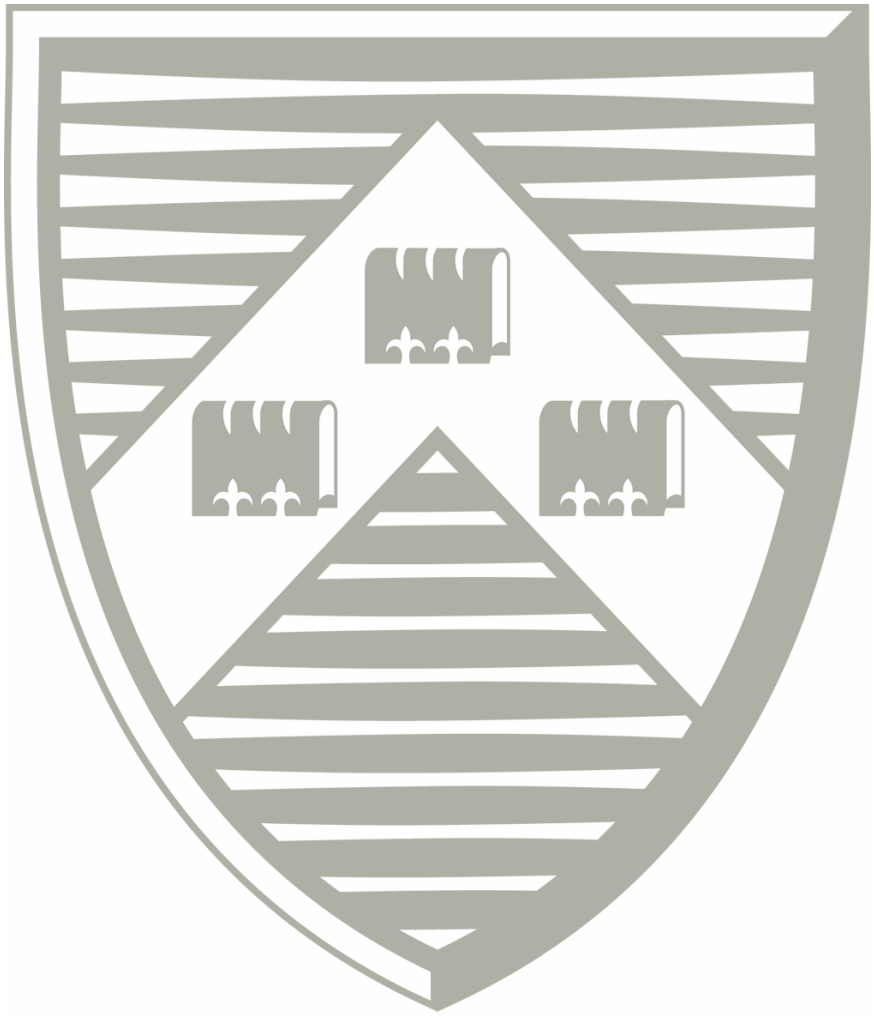
The Workplace Health and Safety Office



UNIVERSITY POLICY AND MANAGEMENT PROCEDURE

Confined Spaces

Statement

*This University Policy and Management Procedure was approved and authorised by the Health, Safety and Welfare Committee (now Workplace Health and Safety Committee) on **11 November 2008** on behalf of the University of York Council and forms part of the Health and Safety Policy of the University of York.*

This document is University Policy for good health and safety management practice. This University Policy provides Deans of Faculty, Heads of Departments, Heads of College and all managers, staff and students with the necessary information to incorporate healthy and safe practices and relevant procedures into their activities. Divergence from this University Policy may result in Deans of Faculty, Heads of Departments, Heads of College and the University of York being exposed to possible legal proceedings.

The use of this University Policy and the incorporation of its requirements into working practices and activities will ensure that the University of York and its community achieves compliance with its legal duties with regards to health and safety.

The most recent version of this Management Procedure is available at https://www.york.ac.uk/admin/hsas/safetynet/atoz.htm

Date of Review	*December 2023*	*By*	*The Director of Health and Safety*
Date of Last Review	*July 2018*	*By*	*The Director of Health, Safety and Security*
Date of Next Review	*December 2025*	*By*	

UNIVERSITY POLICY

1. INTRODUCTION

The University of York (University) recognises its management responsibilities for the risks and hazards associated with work activities involving Confined Spaces. The University will ensure that all relevant control measures are introduced and implemented to prevent injury or harm to those undertaking work or who may be affected by work activities involving Confined Spaces.

Under **The Confined Space Regulations 1997**, a Confined Space has two defining features. Firstly, it is a place which is substantially (though not always entirely) enclosed and, secondly, there will be a reasonably foreseeable risk of serious injury from hazardous substances or conditions in the space or nearby.

Risks can arise in Confined Spaces due to:

- A lack of oxygen.
- Poisonous gases, fumes or vapour.
- Liquids and solids which can suddenly fill the space or release gases into it when disturbed.
- Fire and explosion, for example from flammable vapours, excess oxygen, etc.
- Residues left in tanks, vessels, etc. or remaining on internal surfaces which can give off gases, fumes or vapour.
- Dust in high concentrations.
- Hot conditions leading to a dangerous increase in body temperature.

The Confined Spaces Regulations 1997 (SI 1997 no. 1713) made under the **Health and Safety at Work etc. Act 1974** (HSW Act) came into force on 28 January 1998. The Regulations apply in all premises and work situations subject to the HSW Act, with the exception of diving operations and work below ground in a mine.

The Confined Spaces Regulations:

- Prohibit the entry into a confined space for the purposes of carrying out work where it is reasonably practicable to carry out the work by other means.
- Require work in a confined space to be carried out only in accordance with a safe system of work.
- Impose requirements with regard to the preparation and implementation of adequate arrangements for rescue of any person at work in a Confined Space in the event of an emergency.

The Approved Code of Practice (ACoP) entitled 'Safe Working in Confined Spaces', published by the Health and Safety Executive (HSE), provides guidance with respect to the requirements of the Confined Spaces Regulations.

This University Policy and Management Procedure provides instruction on how confined space working relating to Maintenance Work and Entry into Confined Spaces is to be managed on sites and premises in work situations which are under the control of the University.

2. DEFINITIONS

Confined Space
This is any enclosed space, where there is a reasonably foreseeable specified risk associated with that enclosed space, and includes chambers, tanks, vats, silos, pits, trenches, pipes, sewers, flues, wells, plant rooms, roof voids and undercrofts, or similar spaces by virtue of its enclosed nature.

Free Flowing Solids
This is any substance consisting of solid particles and which is of, or is capable of being in, a flowing or running consistency, and includes flour, grain, sugar, sand or other similar material.

Specified Risk
This includes a risk of:

- Serious personal injury or damage to property or loss from fire or explosion for example from flammable vapours, excess of oxygen etc.
- An increase in body temperature resulting in unconsciousness.
- Unconsciousness or asphyxiation of any person at work arising from gas, fume, vapour or a lack of oxygen.
- Drowning from a rising liquid level.
- Asphyxiation from a Free Flowing Solid or entrapment in a Free Flowing Solid which prevents escape to a respirable environment.

Safe System of Work (SSoW)
This includes the provision of work equipment which is suitable and sufficient for the work activity which is maintained in good working order.

Permit to Work (PtoW)
This is a written authority issued by the Authorised Person (Confined Spaces) to undertake work on a Confined Space which specifies safety precautions taken.

Authorised Person Confined Spaces (AP CSP)
This person is appointed in writing by the Director of Health, Safety and Security (DHSS) on behalf of the Vice Chancellor (VC) to be responsible for the implementation of this University Policy and Management Procedure.

Person in Charge (PinC)
This person accepts the Permit to Work or Safety Method Statement for a particular task from the Authorised Person (Confined Spaces). The role of the PinC is to directly control the entry into a confined space.

Competent Person (CP)

This person has sufficient technical knowledge and adequate training to prevent danger or, where appropriate, injury, during his or her work. For the examination of safety equipment, they should be appointed in writing by their employer.

Work Team

This includes all persons nominated on the Safety Method Statement with roles and duties relating to Confined Space working. They are to take care in the promotion of the health and safety of themselves and of any other person who may be affected by their actions or omissions. They are only to use equipment for which they have been trained and in a manner in which they have been trained. They are to report to the PinC any defects found in the tools, plant and equipment to be, or being, used in the works.

3. APPLICATION OF THIS MANAGEMENT PROCEDURE

This Management Procedure provides a framework for the University to ensure that work in Confined Spaces is carried out in a safe manner and in compliance with legal obligations and Codes of Practice and relates to controlling work in Confined Spaces at all premises and facilities for which the University is responsible:

- Minimising the risks associated with working in Confined Spaces.
- The appointment of suitably competent persons including the AP CSP, PinC and the Work Team.
- The documentation used in the application of this Management Procedure.

If a Confined Space is part of a boiler or pressure system, or is suspected of containing a petroleum product, it is essential that there is adequate communication between the AP CSP and CP (Mechanical Systems) or the CP (Petroleum) as appropriate in planning and carrying out the work in the Confined Space.

If the Confined Space is at height (for example, a water tower) the CP (Working at Height) is to be consulted over the access arrangements. However, the lead for controlling the task remains the AP CSP.

Compliance with this Management Procedure is mandatory.

This Management Procedure does not apply to:

- The master or crew of a sea-going ship in respect of the normal shipboard activities carried out solely by a ship's crew under the direction of the master.
- Operations involving a ship's crew and shore side workers working together aboard ship.
- Any Confined Spaces below ground in a mine.
- Any diving operations to and in relation to which the **Diving at Work Regulations 1997** apply by virtue of regulation 3 of those Regulations.

4. CATEGORISATION OF A CONFINED SPACE

The features and definitions defined above will assist in identifying locations at the University that may fall within the terms of the definition. These will be classified as follows:

- A Permanent Confined Space.
- A Potential Confined Area.

Given the above definition, it follows that, if no Specified Risk is present or created by the environment or work activity, then the area need not be categorised as a Confined Space. However, a risk assessment and method statement of working is required.

4.1 Permanent Confined Spaces

Are identified as those locations in which both criteria for a Confined Space are met, for example the area is reasonably enclosed AND one or more Specified Risks can normally be expected to be present.

The following are considered examples of a Permanent Confined Space:

- All foul and storm water sewerage systems.
- All wet well pumping stations.
- All boilers/similar vessels into which man entry is required as part of an inspection.
- Underground service tunnels/cable ducts where no element of ventilation is provided.
- External water/fuel storage tanks for example, the Central Boiler House.

The above list is not exhaustive and other locations, sites and installations at the University may fall under this categorisation.

4.2 Potential Confined Areas

These are identified as those areas in which the potential for confined conditions may be created, although no Specified Risk is considered to exist under normal operating conditions. The following may be considered as typical examples of a Potential Confined Area, which is subject to risk assessment:

- Plant Rooms.
- Rooms in which solvents and hazardous chemicals are being stored.
- Room containing Fire Drench Systems.
- Underground service tunnels/cable ducts in which some element of ventilation is provided.
- Service undercrofts for example within the Department of Biology and adjacent to the JB Morrell Library.
- Excavations.
- Roof voids and service risers.

The above list is not exhaustive and other locations, sites and installations at the University

may fall under this categorisation.

ARRANGEMENTS

5. AUDITING AND MONITORING

5.1 Authorised Persons

The AP CSP will monitor the performance of Contractors, Persons in Charge (PinC) and Work Teams in carrying out their duties under this Management Procedure. Monitoring is to be carried out on a continuing basis and is to include:

- Spot checks on work in progress for compliance with safety method statements, permits, sanctions, standing instructions and other documents.
- Checking safety equipment.
- Random visits to the point of work.

The AP CSP is to take action to rectify and report in writing to the DHSS any deficiencies found. The report is to briefly detail the deficiency and the action taken. A copy of each written report and a record of any actions arising are to be retained by the AP CSP in the Confined Spaces Document Register.

6. HEALTH AND SAFETY SIGNS

In accordance with **Health and Safety (Safety Signs and Signals) Regulations** and University Policy and Management Procedure Health and Safety Signs there is a requirement for an appropriate Health and Safety Sign to be displayed, where a 'significant risk' identified under a risk assessment cannot effectively be controlled by any other means.

Within the context of the management of Confined Spaces, Health and Safety Signs play an important part. They may be equally appropriate for both Permanent Confined Spaces and Potential Confined Areas. The most useful deployment will be on the door or entry hatch into the area affected, thus providing the necessary information to any would-be entrants.

Where adequate local/general instructions are given to all personnel who may gain access to manholes etc, warning notices at the entry points may be omitted, if access is controlled by suitable covers.

Sample format for Confined Spaces' Health and Safety Signs is given at Appendix 8 to this University Policy and Management Procedure.

7. TRAINING

The University will provide adequate and appropriate health and safety training to employees required to manage, control or work in Permanent Confined Spaces or Potential Confined Areas. The amount of training those employees need, will depend on their previous experience and the type of work they will be carrying out. Training is to include:

- Recognition of hazards.
- Causes of risk.
- What can the user do to correct them?
- Correct selection and safe use of equipment including Personal Protective Equipment (PPE) and Respirable Protective Equipment (RPE).
- Equipment use and limitations.
- Risk assessment process.
- Accident procedures including First Aid arrangements.

APPENDIX 1
University Policy and Management Procedure
Confined Spaces Implementation Arrangements

Due to the wide variation and nature of Permanent Confined Spaces or Potential Confined Areas that may be encountered across University premises, the levels of risk will vary. Wherever practicable, the need to enter Permanent Confined Spaces will be avoided.

Where entry into a Permanent Confined Spaces or Potential Confined Areas is necessary, the risks connected with entering, working in such space will be assessed, and safe systems of work including suitable and sufficient arrangements for rescue in the event of an emergency are to be in place.

Before work in a Permanent Confined Spaces or Potential Confined Areas is to be undertaken, the AP CSP is to:

- Ensure all significant hazards in the working area have been identified.
- Ensure suitable and sufficient risk assessments have been carried out.
- Ensure all practicable measures to eliminate or minimise the source of any danger have been identified.
- Decide if a PtoW is appropriate.
- Ensure actions to be taken in the event of an emergency have been identified and lines of communication have been verified.
- Approve a Safety Method Statement, which details, where applicable:
  - The site location.
  - The proposed plan of work.
  - The points of isolation.
  - Any special instructions and safety measures necessary.
- Ensure permission/authority has been obtained from the Directorate of Estates and Campus Services and the person responsible for the day-to-day operation of the facility before any equipment is taken out of service in order to carry out the work.
- When required, carry out or supervise the isolation of the working area.
- Issue a PtoW or other written instruction for the work.

The PtoW procedure is an extension of the Safety Method Statement, not a replacement for it. The PtoW system does not, by itself, make a job safe.

Safe working can be achieved by:

- The careful planning of the work, carrying out a risk assessment and implementing suitable control measures.
- The persons supervising and carrying out the work taking the necessary precautions and adopting the safe work methods for which they have been trained and made responsible.

In addition, the AP CSP is to ensure that any person working in a Permanent Confined Spaces or Potential Confined Areas has adequate and suitable instructions.

Risk Assessment

The purpose of risk assessment is to identify hazards, the persons affected, and the degree of risk and to consider suitable means of controlling or eliminating the risk. The AP CSP must carry

out a general risk assessment for each Permanent Confined Space or Potential Confined Area within their area of responsibility.

The employer of the Work Team must ensure a task specific risk assessment is carried out to the standard required by the AP CSP. Depending on the task to be undertaken or the hazards identified, additional risk assessments may be required from persons with the relevant specialist experience.

The AP CSP is responsible for ensuring that adequate task specific risk assessments are undertaken before authorising work in a Permanent Confined Space or Potential Confined Area within their area of responsibility. Risk assessments will help to identify if the work can be undertaken without the need to enter the confined space.

If it cannot be considered "reasonably practicable" to carry out the work without entering the space then the risk assessment should identify the measures that need to be taken to secure safe working within the space. Generic risk assessments are suitable where a number of Permanent Confined Spaces or Potential Confined Areas are broadly the same in terms of the conditions and activities being carried out (for example sewers, manholes, service ducts, etc.) and the risks and measures to deal with them are the same. Any differences in particular cases that alter the conclusions of the generic risk assessment must be identified.

The AP CSP's responsibilities include maintaining up to date written copies of the general risk assessments for each confined space in the Permanent Confined Space or Potential Confined Area Register.

The AP CSP must ensure that there is a formal means of communicating the results of the general risk assessment to the persons involved in or affected by the work. The results of the task specific risk assessment should be included in the Safety Method Statement and taken into account in the safe system of work.

Factors to be Assessed

- The general condition of the Permanent Confined Space or Potential Confined Area to identify the potential presence of hazards.
- Any records relating to the space should be checked for relevant information.
- Information about any substances previously held in a Permanent Confined Space indicating what kind of hazard may be encountered, for example toxic or flammable gases.
- Dangers arising from any residues remaining in the space, for example sludge or detritus.
- Where there are residues safe working procedures should assume that disturbance of the residue will release fumes.
- Contamination from adjacent plants and processes, surrounding land, soil or strata by gases and liquids.
- Potential oxygen deficiency or oxygen enrichment.
- The dimensions and layout of the Permanent Confined Space or Potential Confined Area.
- The need for isolation of the Permanent Confined Space or Potential Confined Area to prevent dangers arising from outside.
- There may be a risk of hazardous substances (liquids, gases, steam, water, raw material) from nearby processes and services entering the Permanent Confined Space or Potential Confined Area.

Certain Permanent Confined Spaces or Potential Confined Areas can be affected by external events, for example, water surges from pumping station operation, heavy rainfall upstream, etc. Hazards arise from the work to be undertaken in the Permanent Confined Space or Potential Confined Area or materials taken into the space, for example chemical cleaning, welding, etc. Where such work is undertaken, a specific risk assessment is to be undertaken to determine the safe working methods.

The possibility of exposure to all persons in the vicinity of a Permanent Confined Space or Potential Confined Area from vented gases must be taken into account. Emergency rescue arrangements. Isolation of plant and equipment within the Permanent Confined Space or Potential Confined Area.

Atmosphere Monitoring

The atmosphere within a Permanent Confined Space may need testing for hazardous gas, fume or vapour or to check the concentration of oxygen prior to entry. The exact testing, retesting and monitoring requirements should be determined from the risk assessments and be defined in the Safety Method Statement. The appropriate choice of testing equipment will depend on particular circumstances and knowledge of possible contaminants.

Where a PtoW is to be issued, atmospheric checks must be carried out prior to entry into the confined space and continuously during occupation of the space. The relevant section of the PtoW must be completed by the PinC. Atmospheric testing should be carried out on each occasion the Permanent Confined Space is re-entered, even when the atmosphere was initially found to be safe.

A sufficient number of monitoring devices must be in place at the work location to provide adequate cover of the work being undertaken or in the event of a monitor failing. Atmospheric testing is to be carried out by members of the Work Team who are trained and competent to use the monitoring device/s, are aware of the existing standards for the relevant airborne contaminants being measured, have been instructed and trained in the risks involved and are capable of interpreting the results and taking any necessary action.

Ventilation and Gas Purging

Every effort should be made to maximise the natural ventilation of the Permanent Confined Space prior to entry into and during occupation of the space. Where the risk assessment has identified the presence or possible presence of flammable or toxic gases or vapours there may be the need for purging of the gases/vapours from the Permanent Confined Space. If the gas present is above the flammable limit, purging with inert gas is essential.

Where the presence of flammable or toxic gases or vapours is suspected, guidance from a person with relevant specialist experience must be obtained.

When carrying out purging/venting of a Permanent Confined Space, precautions should be taken to protect those outside the Permanent Confined Space from exposure to toxic, flammable, irritating gases and vapours etc.

In regards to sewers, at least one manhole upstream and downstream of the access manhole should be opened where practicable. Other situations require the opening of the maximum number of openings available to provide sufficient natural ventilation.

Where necessary, to achieve adequate ventilation, mechanical means of ventilation may be used, for example using a blower fan and trunking. The fresh air will need to be drawn from a point where it is not contaminated by used air or other pollutants.

Oxygen must never be used to ventilate the space or as a means to "sweeten" the air.

Removal of Residues

Appropriate measures must be taken where the risks from residues are identified. Measures to be taken may include the use of powered ventilation, specially protected electrical equipment for use in hazardous atmospheres, respiratory protective equipment and atmospheric monitoring.

Where the presence of petroleum products are suspected, the CP (Petroleum) should be consulted.

Isolation from Gases, Liquids and Other Flowing Materials

A Permanent Confined Space will often need to be isolated from the ingress of substances that could pose a risk to those working within the space. Methods of isolation include removing sections of pipe or duct, inserting blanks or locking shut valves with a safety lock.

Whatever means of isolation is used must be tested to ensure it is sufficiently reliable by checking for substances in the Permanent Confined Space to see if isolation has been effective.

Isolation from Mechanical and Electrical Equipment

Some Permanent Confined Spaces contain electrical and mechanical equipment with power supplied from outside the space. Unless the risk assessment specifically enables the system of work to allow power to remain on, either for the purposes of the task being undertaken or as vital services (lighting, vital communications, fire-fighting, pumping where flooding is a risk, or cable distributing power to other areas) the power should be disconnected, separated from the equipment, and a check made to ensure isolation has been effective. Isolation must be controlled by the CP (Electrical) and safety locks used where practicable.

Personal Protective Equipment

All persons entering a Permanent Confined Space shall be equipped with suitable Personal Protective Equipment (PPE) including Respiratory Protection Equipment (RPE) where necessary. PPE provided will depend on the hazards identified but may include:

- Fall arrest/rescue harness to an approved standard.
- Safety helmet to an approved standard.
- Suitable RPE.
- Portable atmosphere monitoring equipment.
- Suitable clothing including gloves, overalls, boots, etc.
- Safety/rescue lines.

The provision of PPE must be in accordance with the requirements of the **Personal Protective Equipment at Work Regulations 1992** no, 2966 and HSE Guidance on the regulations 1992 no, 2966 L25.

RPE will not normally be suitable unless it is a breathing apparatus. RPE of the canister respirator type or cartridge type does not protect from the risk of being overcome by high concentrations

of fumes or oxygen deficiency and, as such, is not generally appropriate for Permanent Confined Space working.

Portable Gas Cylinders and Internal Combustion Engines

Petrol fuelled internal combustion engines must never be used in Confined Spaces. Portable gas cylinders for heat, power or light, and diesel-fuelled internal combustion engines are inappropriate for use in Permanent Confined Space or Potential Confined Area unless exceptional precautions are taken.

Where their use cannot be avoided, adequate ventilation needs to be provided to prevent a build-up of harmful gas, and to allow internal combustion engines to operate properly. Fuelling of portable engine driven equipment should be conducted outside the space except in very rare cases.

Gas equipment and gas pipelines must be checked for gas leaks before entry into the Permanent Confined Space or Potential Confined Area and removed from the space at the end of all working periods.

Gas Supplied by Pipes and Hoses

Pipes and hoses for conveying oxygen or flammable gases into a Permanent Confined Space must be controlled to minimise the risks. At the end of all working periods, except short interruptions, the external supply valves for pipes and hoses must be securely closed before the pipes and hoses are withdrawn from the space to a place that is well ventilated. Where pipes and hoses cannot be removed, they should be disconnected from the gas supply at a point outside the Permanent Confined Space and their content safely vented.

Fire Safety

Generally, flammable and combustible materials should not be stored in Permanent Confined Spaces or Potential Confined Areas that have not been specifically created or allocated for that purpose. If they accumulate because of work they should be removed as soon as possible and before they begin to create a risk. Where flammable materials need to be located in a Permanent Confined Space or Potential Confined Area, the quantity of material should be kept to a minimum.

Lighting

Adequate and suitable lighting, including emergency lighting, should be provided. Lighting will need to be specially protected if used where flammable or potentially explosive atmospheres are likely to occur. Other gases may be present that could break down thermally on the unprotected hot surfaces of a lighting system and produce other toxic products. Lighting may need to be protected against knocks (for example by a wire cage) and/or be waterproof. Where water is present in the space, suitable plug/socket connectors protected by Residual Current Devices (RCD) suitable for protection against electric shock should be used. The position of lighting may also be important, for example, to give ample clearance for work or rescue to be carried out unobstructed.

Static Electricity

Static discharges and all sources of ignition should be excluded from Permanent Confined Spaces or Potential Confined Areas where there is a risk of a potentially flammable or explosive atmosphere. All conducting items such as steel trunking and airlines should be bonded and

effectively earthed. If cleaning operations are to be carried out, the risks posed by the use or presence of high resistivity materials (such as synthetic plastics) in and adjacent to the Permanent Confined Spaces or Potential Confined Areas needs to be assessed.
Some equipment is prone to static build-up due to its insulating characteristics, for example, most plastics. There is a high risk of electrostatic discharge from some equipment used for steam or water jetting. Static discharges can also arise from clothing materials. Consideration should be given to selecting safer alternative equipment and antistatic footwear and clothing.

Smoking

Smoking is prohibited in any Permanent Confined Space or Potential Confined Area. The result of the risk assessment may indicate that it is necessary to extend the exclusion area to a distance beyond the space, for example, by 10 metres.

Limiting Working Time

There may be a need to limit the time period that individuals are allowed to work in Permanent Confined Spaces. This may be appropriate where RPE is used under extreme conditions of temperature and humidity or where the Permanent Confined Space or Potential Confined Area is so small that movement is severely restricted.

Safe System of Work

Suitable and adequate means of communication will be required:

- Between the Work Team members in the Permanent Confined Space or Potential Confined Area.
- Between those inside the space and those outside.
- To summon help in case of emergency.

All Work Team members must be conversant with the communication system/s to be used. Suitable emergency rescue arrangements are to be in place and lines of communication verified prior to entry into the space.

All members of the Work Team are to be aware of the procedures to be adopted in the event of an emergency arising. Single man entry to a Permanent Confined Space should be avoided. Potential Confined Areas, single man entry may be acceptable providing an adequate logging in and out system, means of communication and emergency rescue procedures are in place.

For Permanent Confined Spaces, single man entry may be acceptable providing the entrant is attached to a safety line and there is visual contact to a member of the Working Team outside the space. For large Permanent Confined Spaces and multiple entries, a logging or tally system may be necessary to check everyone in and out and to control the duration of entry.

For Permanent Confined Spaces with vertical entry/egress, all persons entering the space should be wearing a fall arrest/rescue harness and be attached to a safety line. Unless persons entering and exiting the space are attached to a "man-riding" winch or other suitable lifting equipment then a minimum of two persons is required to remain outside the Permanent Confined Spaces to render assistance in the event of an accident.

Emergency Rescue

The arrangements for emergency rescue will depend on the nature of the Permanent Confined Spaces, the risks identified and the likely nature of an emergency rescue. The arrangements need to cover:

- Rescue and resuscitation equipment.
- Raising the alarm and rescue.
- Safeguarding the rescuers and others.
- Fire Safety.
- Control of plant.
- First Aid arrangements.
- Public emergency services and information they may require.

APPENDIX 2
University Policy and Management Procedure
Confined Spaces
Role and Responsibilities of Confined Spaces Working Teams

Authorised Person Confined Spaces (AP CSP)

The AP CSP is responsible for ensuring that work activities involving Permanent Confined Spaces or Potential Confined Areas comply with this University Policy and Management Procedure and are also responsible for:

- Reporting any incidents, breaches of and non-conformance with health and safety to their Departmental Safety Officer (DSO).
- Ensuring, as far as is reasonably practicable, that all personnel within the area of responsibility observe the requirements of this Management Procedure.
- Ensuring that risk assessments are carried out and agreed safe working methods are co-ordinated, communicated and recorded prior to any confined space working.
- Keeping copies of risk assessments, agreed Safety Method Statements and PtoW issued.
- Issuing PtoW in accordance with this Management Procedure.
- Cancelling permits in the following circumstances:
  - When the permitted work is complete.
  - If these Safety Rules and Procedures are not being followed.
  - If an unexpected hazard arises.
  - In any other unforeseen circumstances at the discretion of the Authorised Person.
- Ensuring the Work Team has a sufficient number of competent persons to carry out the proposed work safely and that their roles and duties have been defined. One member of the Work Team must be designated as the PinC.
- Assessing the competence of all persons nominated for confined space working with regard to their designated role and duties.
- Ensuring that all safety equipment to be used has been inspected and maintained in good condition and is fit for the purpose.
- Updating and maintaining the Register of Confined Spaces within the area of responsibility.
- Ensuring records of alterations or modifications to facilities which will affect future Confined Space working are forwarded to the Directorate of Estates and Campus Services.
- Ensuring that Confined Spaces are adequately signed and secured according to the assessed risk.
- Ensuring that safety and test equipment, for which the AP CSP is responsible is examined, and that records are completed, maintained and retained for three years.
- Informing the DHSS of any accident or dangerous occurrence.
- Ensuring the Work Team and other personnel are fully conversant with the Safety Method Statement and are aware of the hazards arising from improper operation or departure from the permitted procedures.
- Ensuring that all site personnel including staff, students and contractors, likely to be involved in action in an emergency are fully conversant with the emergency procedures.
- Where the risk assessment identifies the need to give prior warning of the work to the emergency services, ensuring that any information they are likely to require is readily available.

Person in Charge Confined Spaces (PinC)

The PinC is responsible for ensuring that work activities involving Permanent Confined Spaces or

Potential Confined Areas comply with this University Policy and Management Procedure and are also responsible for:

- Directly controlling the entry into a confined space.
- Ensuring that all necessary safety equipment is available, suitable and safe for use, and in good working order, prior to entry into the confined space.
- Ensuring that adequate emergency arrangements are in place before commencing the work.
- Carrying out "pre-entry" gas testing and completing the appropriate section in the PtoW.
- Reporting to the AP CSP any accident, dangerous occurrence, defects found or incidents occurring during occupation of the confined space.
- Ensuring that the only work carried out is that for which written instruction has been received.
- Following the AP CSP's instructions and ensuring all work is carried out in accordance with this Management Procedure. The PinC is to take all safety measures necessary to avoid danger and prevent injury.
- Being fully conversant and able to ensure compliance with the conditions set out in the PtoW and agreed Safety Method Statement.
- Stopping work and withdrawing all personnel, tools, plant and equipment if for any reason the conditions of the PtoW or Safety Method Statement cannot be met.
- Ensuring that all members of the Work Team are adequately trained and medically fit to carry out the work required. Evidence of the fitness and training of the Work Team must be provided if requested by the AP CSP.
- Ensuring that the Work Team is aware of the safe methods of work, the means of communication, the emergency arrangements and the requirements of this Management Procedure.
- Always being present at the work site when any work is being carried out.

Work Team Members

Members of the Work Team are responsible for ensuring that work activities involving Permanent Confined Spaces or Potential Confined Areas comply with this University Policy and Management Procedure and are also responsible for:

- Working in accordance with this Management Procedure.
- Taking reasonable care of the health and safety of themselves and of another person who may be affected by their actions or omissions.
- Only using equipment for which they have been trained and in the manner in which they have trained.
- Reporting to the PinC any defects found.
- Where more than one member of the Work Team enters a confined space, one person is to be nominated to lead the entry team and be in direct control of their activities.

Safety Programme

A Safety Programme is to be prepared by the AP CSP or by a nominated representative of the Contractor/Company/Agency whose employees are to carry out the Permanent Confined Space or Potential Confined Area work.

Where the Safety Programme is prepared by a Contractor/Company/Agency, it is to be checked, approved and countersigned by the AP CSP before the issue of any PtoW. Where the AP CSP prepares a Safety Programme for high risk situations it is to be checked, approved and countersigned by a second AP CSP or the DHSS.

The Safety Programme is to indicate:

- A description of the confined space.
- Precise site details and access.
- The work to be carried out.
- Plant and equipment to be taken out of service (where applicable).
- The results of the risk assessment.
- Arrangements for isolation from gases, liquids and flowing materials (if applicable).
- Arrangements for isolation from mechanical and electrical equipment (if applicable).
- Minimum number of personnel in the Work Team and competencies required including any specialist training requirements.
- Any special PPE, RPE or other equipment.
- Methods of ventilation, cleaning, purging and inverting (if applicable).
- Any special instructions and/or safety measures to be included on the PtoW.
- The expected date on which the work is to commence and duration or the task.
- A schematic diagram of the isolation, venting and testing arrangements (if applicable).
- The sequence of operations to be undertaken indicating:
  - The location at which each operation is to be performed.
  - The identity of each valve or component part to be operated.
  - The operation to be performed.
  - The reason for the operation.
  - Testing and monitoring of the atmosphere.
  - Any item (including keys, locks or signs) or other PtoW required.
  - Method of communication, emergency procedures and rescue arrangements.
- A standard caution to entrants that includes the following: at first sign of dizziness, eye irritation, headache, pulsing of the temples or nausea, vacate the Permanent Confined Space or Potential Confined Area.
- The name and signature of the author and AP CSP approving the method statement.

The approved Safety Programme is to be placed in a folder marked "Safety Programme" and retained in the Confined Space Document Cabinet. The Safety Programme should be cross referenced to the corresponding PtoW.

The designated PinC is to be issued with a copy of the Safety Programme for ensuring the work identified is carried out in accordance with the agreed safe method of working.

The AP CSP is to use a copy of the Safety Programme for checking the isolation arrangements and that the agreed safe method of working is being followed. When the sequence of isolation operations detailed on the Safety Programme is being carried out prior to the issue of the PtoW, the AP CSP is to note the date, time of each operation, and keep a record on file with the approved Safety Programme.

Permit to Work (PtoW)

A PtoW pad will be controlled by the DHSW and issued to the AP CSP up on his appointment. Each sheet of a PtoW is to be identified by the same printed serial number on the original and duplicate copies. When not in use, the pad is to be kept in the Confined Spaces Document Cabinet. A PtoW is not to be issued for any areas of work for which another permit remains in force.

The AP CSP is to issue the PtoW immediately before work is to commence and it is to remain in force until the work is completed, stopped by the AP CSP or PinC, or time expired.

Permits to Work are only to be issued to the designated PinC.

Content of Permits to Work

Permits to Work are to state precisely and legibly:

- The identity and description of the Permanent Confined Space to be worked in.
- The location of the Permanent Confined Space.
- The purpose of the proposed work (the task).
- The expected duration of the task, starting time and date.
- The names of all personnel involved in the task.
- The known hazards.
- A safety checklist.
- Any special instructions and/or safety measures.
- Where applicable, the serial number of related PtoW (other disciplines).

Issue and Acceptance of Permits to Work

Permits to Work are to be issued only at the point of work. The issue and cancellation of every PtoW is to be recorded. Generally, the PtoW should not be issued for a period longer than eight hours or until the end of the working shift.

The AP CSP is to ensure that, where appropriate:

- The AP CSP's Line Manager is informed of the proposed work and any loss of service.
- Permission for the intended task has been obtained from the Directorate of Estates and Campus Services and the person responsible for the day to day operation of the facility affected by the intended work.

Before signing Part 1 of the PtoW, the AP CSP is to demonstrate to the designated PinC:

- The extent of the work to be carried out.
- That the confined space has been isolated and associated Permits to Work have been obtained.
- The safety arrangements at the place of work and at points of isolation.
- Any special instructions and/or safety measures.
- That the area of work is vented and purged and that it is safe for the work to proceed.

Before accepting the PtoW, the designated PinC is to:

- Read the permit.
- Understand the extent of the work.
- Understand the safety precautions.
- Be prepared to undertake the work.
- Sign and accept the permit.

The designated PinC is to sign Part 2 of the PtoW to accept the responsibilities of the PinC. On signing for acceptance of the permit the designated person authenticates the permit as valid and becomes the PinC of the permitted work.

The signatures on Part 1 and 2 of the PtoW are to appear on the original and duplicate pages. The signature on Part 2 renders the PtoW valid for the defined task, and the original copy is issued to the PinC. The AP CSP retains the duplicate copy.
The acceptance of a PtoW makes the PinC personally responsible for supervising or undertaking the defined work.

While the work is in progress, the PinC is not permitted to leave the point of work or to undertake any other work or tests. If there is a need for the PinC to carry out any other unrelated duties or leave the point of work, the task is to be suspended. The PinC is to ensure that suitable safety precautions are taken before leaving the point of work.

If there are any adverse changes to the conditions in the Permanent Confined Space or the time limit on the PtoW has expired, the work is to be stopped and the reasons reported to the AP CSP.

Cancellation of Permits to Work

On completion of the work, the PinC is to:

- Withdraw all persons, equipment, tools and instruments from the point of work.
- Advise all persons under his or her control that they are no longer permitted to enter the Permanent Confined Space.
- Complete and sign Part 3 of the duplicate copy recording that the work has been completed.
- Return the original PtoW to the AP CSP.

The AP CSP is to satisfy himself that the work has been completed satisfactorily. The AP CSP is to remove any keys, locks, signs or other safety equipment used for the work. Where associated PtoW, sanctions or other documentation have been issued, the AP CSP is to liaise with the issuing CP or PM for the recommissioning of any plant and equipment withdrawn from service.

The AP CSP is to cancel the PtoW by destroying the original and completing Part 4 of the duplicate copy in the pad. Completed pads of permits are to be placed in a folder marked "Permits to Work - Cancelled Duplicates" and retained in the Confined Spaces Document Cabinet for a minimum period of three years after the cancellation date of the last PtoW in the pad.

If the PinC loses the original PtoW or his or her copy of the Safety Method Statement, work is to be stopped as soon as the loss is noticed. When the work has been stopped due to loss of documentation, the loss is to be recorded by the AP CSP on the duplicate copy. The PinC is to

countersign Part 4 of the duplicate copy to confirm and acknowledge the loss of the PtoW or Safety Method Statement.

The AP CSP may stop the work if for any reason he considers it necessary. Where the work is stopped by the AP CSP or PinC, the PtoW is to be withdrawn and cancelled. The PinC is to:

- Withdraw all persons and, if safe to do so, all equipment, tools and instruments from the place of work.
- Advise all persons under his or her control that they are no longer permitted to enter the Permanent Confined Space.
- Take steps to prevent further access to the Permanent Confined Space and report to the AP CSP.
- Complete Part 3 of the duplicate copy of the PtoW recording that the work has been stopped and the point of work has been made safe.
- Return the original PtoW to the AP CSP.

The AP CSP is to:

- Destroy the original copy of the PtoW and complete Part 4 of the duplicate copy recording that the work has been stopped and follow up action will be taken.
- Note the reasons for the withdrawal and any actions taken on the original Safety Method Statement.
- Issue a new PtoW before re-starting work.

Controlled Access - Potential Confined Area

All persons entering a controlled access Potential Confined Area must be supervised by a designated PinC. Before issuing the Safety Method Statement to the designated PinC the AP CSP is to demonstrate:

- The limits on the type of work that can be carried out without a PtoW.
- The risk assessment and Safety Method Statement for the work to be carried out.
- The logging in and out system, means of communication and emergency rescue procedures.

Before accepting the Safety Method Statement, the designated PinC is to:

- Read the Safety Method Statement and understand the limitation on work to be carried out.
- Understand the safety precautions.
- Counter sign the original Safety Method Statement.

The acceptance of the Safety Method Statement makes the designated PinC personally responsible for monitoring work and ensuring that only work within the limits set by the AP CSP is carried out.

While the work is in progress, the PinC is not permitted to leave the point of work or to undertake any other work or tests. If there is a need for the PinC to carry out any other unrelated duties or leave the point of work the task is to be suspended. The PinC is to ensure that suitable safety precautions are taken before leaving the point of work.

If there are any adverse changes to the conditions in the Potential Confined Area or the work is to be stopped for any other reason the PinC is to:

- Withdraw all persons from the place of work.

- Advise all persons under his or her control that they are no longer permitted to enter the Potential Confined Area.
- Take steps to prevent further access to the confined space and report to the AP CSP.

Where the work is stopped the AP CSP is to:

- Note the reasons for the stoppage and any actions taken on the original Safety Method Statement.
- Reassess the levels or risk and issue a revised Safety Method Statement and/or PtoW as appropriate.

Confined Spaces Register

For each site, location or geographical area, a Confined Spaces Register is to be kept by the AP CSP. The Confined Spaces Register is to comprise a series of folders and files containing information on Permanent Confined Spaces and Potential Confined Areas and be kept in the Confined Spaces Document Cabinet. The information must include:

- An index of the information.
- Sites plan/plans showing the reference number and location of Permanent Confined Spaces and Potential Confined Areas.
- A schedule of Confined Spaces with reference numbers, location, general description, classification and known hazards.
- A general risk assessment for each confined space.
- Log of entries affected.

Equipment Register

All test certificates and records of examinations for safety and test equipment for which the AP CSP is responsible are to be kept in the equipment register.

Records of examinations will include:

- Name and address of the Maintenance Management Organisation (MMO) responsible for the equipment.
- Particulars of the equipment and of the distinguishing number or mark, together with a description sufficient to identify it, and the name of the maker.
- Date of examination and the name and signature of the person carrying out the examination and test.
- Condition of the equipment and particulars of any defect found.
- In the case of RPE and resuscitating apparatus incorporating compressed gas cylinders or electronic motors, tests of the condition and efficiency of those parts, including tests of the pressure of the oxygen or in the supply cylinder.
- In the case of an airline fed RPE, the volume, flow and quality of air.

Where this is supplied from a mobile compressor the test should be made immediately before the first use of RPE in any new location:

- A brief description of any remedial action taken.

Records of examinations will be retained by the AP CSP for at least five years. Records may be in any suitable format but shall be kept readily available for inspection auditing.

APPENDIX 4

University Policy and Management Procedure

Standing Instruction (Potential Confined Area)

Location	
General Description	
Identity and location of the Potential Confined Area	

Statement

The above identified location has been assessed as a Potential Confined Area. Under normal operating circumstances there are no features of the location that give rise to a Specified Risk as defined under the **Confined Spaces Regulations 1997.** Under **normal** circumstances therefore, it is not classified as a Confined Space. However the introduction of materials or the carrying out of tasks within the area can give rise to localised Confined Space being created.

This Standing Instruction therefore places limitations on the nature of work activity that may be permitted with the Potential Confined Area, without further reference to the Authorised Person (Confined Spaces). The area may also be subject to other restrictions on activities placed by Authorised Persons of other disciplines, the building occupier or the Directorate of Estates and Campus Services.

Limitations on work activities

The following activities are permitted:
Note – The Authorised Person (Confined Spaces) drafting this Standing Instruction is to add any additional permitted activities in the spaces provided. Any unused spaces are to be designated as 'Not Applicable' (N/A).

Serial	Permitted Activity
1	Conduct of non-intrusive inspections
2	Taking meter reading
3	Adjusting a valve or flow regulator
4	Transit through the area
5	
6	
7	
8	

No other activity may take place without further reference to the Authorised Person (Confined Spaces)

Name		Appointment	
Date		Signature	

Revalidation

This Standing Instruction automatically expires 12 months after the date of issue, unless specifically re-validated by the Authorised Person (Confined Spaces), as indicated below:

Name		Appointment		Signature		Date	
Name		Appointment		Signature		Date	
Name		Appointment		Signature		Date	

I acknowledge receipt of this Standing Instruction and agree to abide by its content.

Name		Appointment		Signature		Date	

Authorised Person Confined Spaces (AP CSP)

The AP CSP is required to:

- Have formal technical training.
- Have completed successfully an approved Authorised Person (Confined Spaces) training course.
- Attend and complete successfully approved Authorised Person (Confined Spaces) refresher training courses at intervals not exceeding four years.
- Be trained as an appointed person for the administration of Emergency First Aid under the **Health and Safety (First Aid) Regulations 1981** and be regularly retrained in Emergency First Aid to comply with these Regulations.
- Undertake a period of familiarisation training under the supervision of a suitably experienced AP CSP or the DHSW to gain knowledge of the practical application of this University Policy and Management Procedure and the Confined Spaces in the area of responsibility.
- Undertake a period of on-site training under the supervision of a suitably experienced AP CSP or the DHSW and demonstrate aptitude before acting independently as an AP CSP.

Confined Spaces Work Team

Confined space workers are required to have successfully undertaken suitable training and meet the following criteria:

- Hold a current Confined Spaces Training Course certificate acceptable to the AP CSP.
- Refresher training will be required at maximum three year intervals.
- The frequency of refresher training will depend on how long it has been since the type of work was last done, or if there have been changes to methods of work, safety procedures or equipment have attended Emergency First Aid training to comply with statutory requirements and, if determined by the risk assessment, be trained as First Aider in the use of resuscitation equipment, or undergone special hazard training
- Emergency First Aid training should be repeated at least every three years.
- Have sufficient experience of the work to be undertaken as determined by the AP CSP.

Any employer of a Confined Space Worker is to provide such information, instruction, training and supervision to staff, as is necessary, to comply with the **Health and Safety at Work etc. Act 1974** and the **Confined Spaces Regulations 1997.** Supervisors and workers are to be given suitable training in safe working practices.

Training must include practical use of safety features and equipment, the identification of defects and involve demonstrations and practical exercises. Guidance on Confined Space Training Course requirements for personnel involved with confined space working, including members of the work team outside the confined space. The content and duration of Confined Spaces courses will vary depending on the training provider. The requirements provide a baseline for determining the suitability of a training course for a particular task.

Confined Spaces "Visitors"

Persons who do not normally undertake confined space work but may need to enter to undertake a specific task, for example an engineering inspection, may not need to have attended a formal training course subject to the results of the risk assessment.

Such persons must be under the direct control of the PinC and have been given sufficient on site instruction and information relating to safe working and emergency procedures. The AP CSP must be satisfied that the inclusion of the person does not present an increase in risk to the team entering the space.

Emergency Rescue Team

Those likely to be involved in any emergency rescue should be trained for that purpose. The training needs for each individual will vary according to their role. Overall training should include the following where appropriate:

- The likely causes of an emergency.
- Use of rescue equipment.
- Use of communications equipment.
- Checking procedures to be followed when donning and using apparatus.
- Checking of correct functioning and/or testing of emergency equipment.
- Identification of defects and how to deal with malfunctions and failures of equipment during use.
- Works, site or other local emergency procedures including the initiation of emergency responses.
- Instruction on how to shut down relevant process plants as appropriate.
- Resuscitation procedures and location of appropriate relevant equipment.
- Emergency first aid and the use of first aid equipment provided.
- Use of firefighting equipment.
- Liaison with emergency services in the event of an incident.
- Rescue techniques including periodic rehearsals.

Refresher training must be organised and available on an annual basis.

Confined Spaces Access Arrangements

Openings affording safe access to Confined Spaces, and through divisions, partitions or obstructions within such spaces, need to be sufficiently large to allow the passage of persons wearing the necessary protective clothing and equipment, and to allow access for rescue purposes. Experience has shown that the minimum size of an opening to allow access with full rescue facilities with self-contained breathing apparatus is 575mm diameter.

Different criteria apply when the critical entry dimensions extend over a significant length or height. In the case of a shaft containing a ladder or step irons, 900mm clear space between the ladder/steps and the back of the shaft may be required.

Persons should not normally enter sewers, pipes, culverts, etc. with dimensions smaller than 0.9m high by 0.6m wide.

Protective Equipment

Respiratory protective equipment (RPE) provided or used for, or in connection with, confined space entry, shall be suitable for the purpose, including the correct selection, and matched both to the job and the wearer.

Ropes, harnesses, lifelines, resuscitating apparatus, first aid equipment, protective clothing and other special equipment provided or used for, or in connection with confined space entry or in case of emergency or rescue, must be suitable for the purpose for which they are intended and account taken of recognised standards where these exist (BSI/CEN).

Standard Personal Protective Clothing and Equipment should include:

- Safety Helmet to BS 5240 Part 1 1987.
- Overalls (anti-static).
- Safety Harness (BS 1397 Type E).
- Waterproof gloves.
- Safety Footwear with safety toe caps (may have non-spark studs).

Standard Safety Equipment may include:

- Hand Lines.
- Hand Lamps (intrinsically safe).
- Cap Lamps (intrinsically safe).
- Atmosphere Monitoring Equipment (intrinsically safe).
- Rescue/Safety Lines (minimum 16mm diameter to BS3367).
- Communication Equipment (intrinsically safe).
- Breathing apparatus (self escape rescue and working/rescue sets).
- First Aid Equipment (minimum travelling first-aid kit as Health and Safety (First-Aid) Regulations 1981 Approved Code of Practice).
- Road Safety Equipment (conforming to Chapter 8 of Traffic Signs Manual).

Electrical safety equipment must be certified as intrinsically safe to BS 5501: Part 7:1977 EN50 020.

Atmospheric Testing Equipment

As a minimum, atmospheric monitoring equipment must be capable of continuously monitoring for flammable gas (methane), toxic gas (hydrogen sulphide) and oxygen enrichment/depletion. Where other atmospheric risks may be present, additional equipment to monitor for specific gases will be required.

Maintenance and Examination of Equipment

All equipment requires to be maintained in efficient working order and in good repair. When not in use, suitable storage for the equipment is to be provided. Examinations of respiratory protective equipment, ropes, harnesses and resuscitation equipment shall be carried out at least once a month by a Competent Person. A written record of the examination must be kept by the person responsible for the equipment.

Atmospheric monitoring and lifting equipment shall be examined and, where necessary, calibrated by a Competent Person at the intervals specified by the manufacturer. Records of any calibration must be kept by the person responsible for the equipment.

Where a defect is noted, it must be recorded and the equipment withdrawn from service, and the defect remedied before further use.

Test Certificates and Examination Records

Properly supplied equipment such as ropes, harnesses, lifelines, carabiners, etc. will have a certificate of test and safe working load when purchased. All test certificates will be retained by the AP CSP for all equipment for which he is responsible.

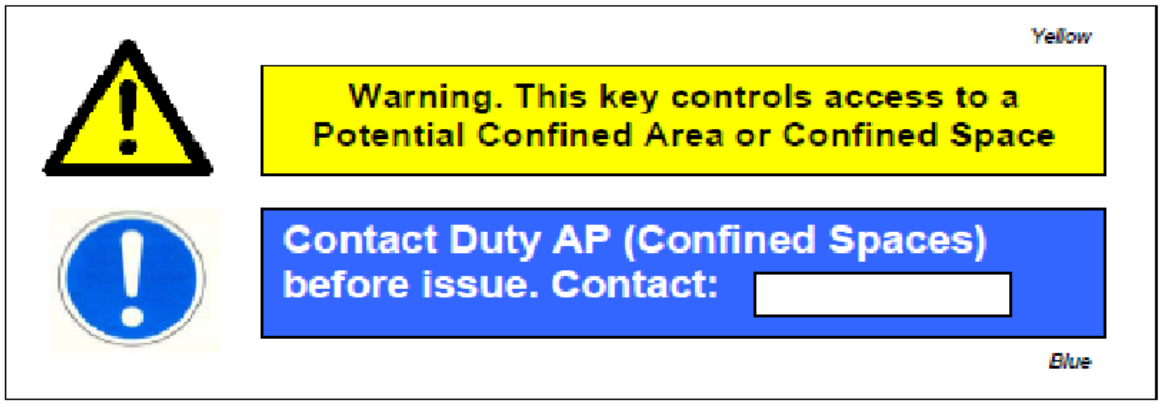
Further testing must not be undertaken as this may weaken the equipment. If damage occurs they should be scrapped or returned to the manufacturer or other competent repairer who can undertake the necessary remedial work and supply a new certificate of test and safe working. Records of examinations will include:

- Name and address of the employer or other person responsible for the equipment.
- Particulars of the equipment and of the distinguishing number or mark, together with a description sufficient to identify it, and the name of the maker.
- Date of examination and the name and signature of the person carrying out the examination and test.
- Condition of the equipment and particulars of any defect found.
- In the case of RPE and resuscitating equipment incorporating compressed air or oxygen cylinders, the pressure in the supply cylinder.
- In the case of an airline fed RPE, the volume, flow and quality of air. Where this is supplied from a mobile compressor, the test should be made immediately before the first use of RPE in any new location.

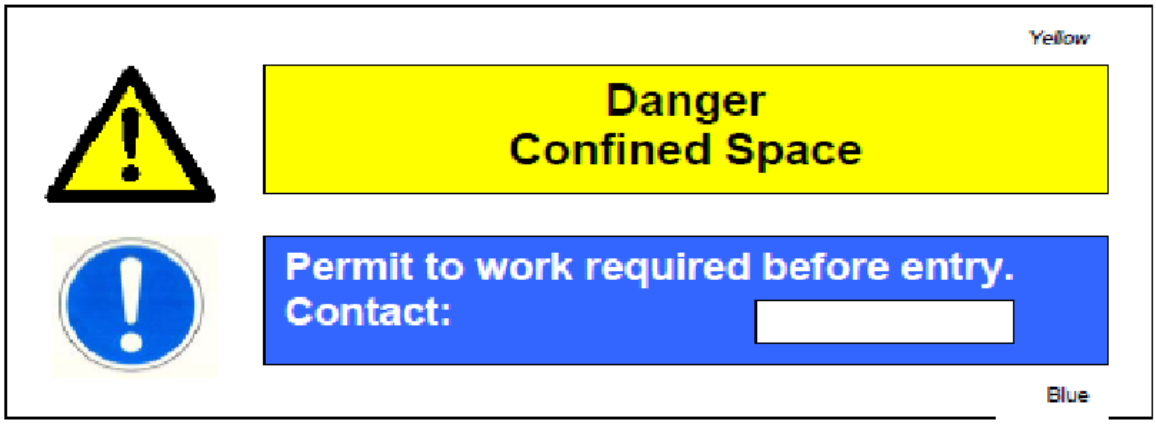
Records of examinations will be retained by the AP CSP for at least three years for equipment for which he is responsible. Records may be in any suitable format but shall be kept readily available for inspection by the relevant Enforcing Authority. Certificates and records of examination for

equipment used by the Work Team must be made available for inspection by the AP CSP prior to commencing work.

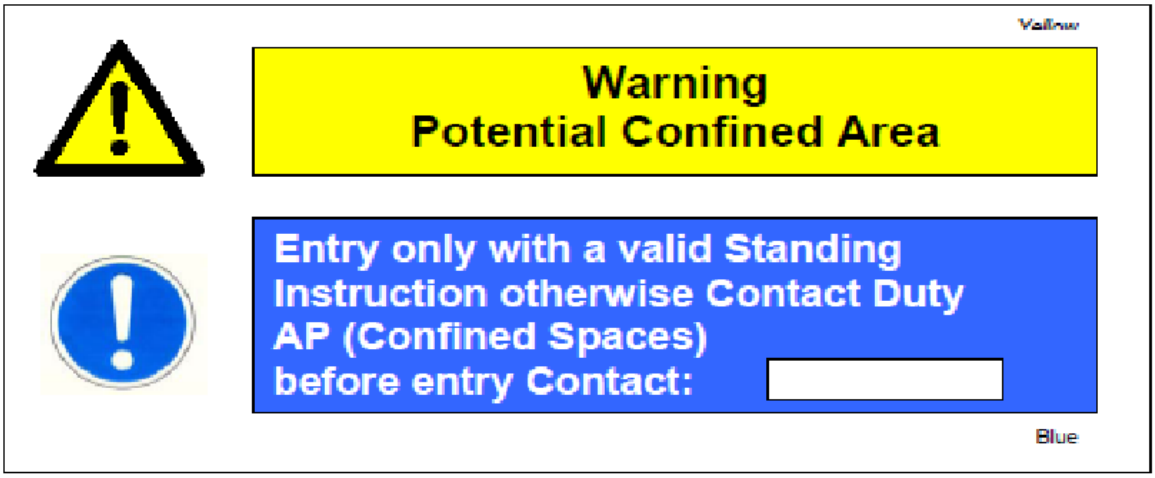
CONFINED SPACES SAFETY SIGNS



i) Confined Space / Potential Confined Area Key Tally



ii) Safety Sign to be posted (where practicable) at entrances to permanent confined spaces



iii) Sign to be posted (where practicable) at entrances to potential confined areas

Colour scheme: As per the Safety Signs & Signals Regulations.

Warning: Black device / writing on yellow background.
Obligatory: White device / writing on blue background.

APPENDIX 10

University Policy and Management Procedure

Confined Spaces Register

Serial (a)	Nature and Location of Confined Spaces (b)	Description of Confined Space (c)	Category (d)	Owner (e)	Hazard Assessment (f)	Reference (h)	Comments (i)	Known Hazards (j)
1								
2								
3								
4								
5								

APPENDIX 11
University Policy and Management Procedure
Hazard Assessment Confined Spaces

The purpose of this assessment is to document the hazards associated with a Confined Space and to confirm the categorisation of the Confined Space in accordance with the Confined Spaces Regulations. The information contained in this assessment is to be made available to a competent person within any organisation that plans to carry out work in a Confined Space, to enable them to produce their own task specific risk assessment.

This document is therefore not a substitute for a work activity risk assessment

Establishment / Site		**Specific Workplace**	
Building No / Name		**Confined Spaces Schedule Ref**	

HAZARDS IDENTIFIED

THIS AREA IS KNOWN TO CONTAIN OR GIVE RISE TO THE FOLLOWING HAZARDS. THESE MUST BE CONSIDERED WHEN ASSESSING THE RISKS OF WORKING IN THIS AREA.

Hazard Type	Details / Cause
Previous Contents	
Flammable Gases	Possibility of Methane Gas (CH_4) present through the decomposition of organic matter leading to a serious injury to any person arising from a fire or explosion.
High Ambient Temperature	
Toxic / Asphyxiant Gases	Possibility of Hydrogen Sulphide Gas (H_2S), present through the decomposition of organic matter.
Oxygen Depletion	Caused by displacement as a resulting ingress of heavier than gases, for example Carbon Dioxide (CO_2).
Flooding	Caused by a sudden rise of liquid (water) from an upstream source, for example run-off, or from adverse weather conditions.
Free Flowing Solids	
Slip and / or Trip Hazards	Caused by the physical arrangements of the environment.
Vertical Drops	
Head Injury Hazards	Caused by the physical arrangements of the environment.
Electrical / Machinery Hazards	
Noise Hazards	
Infection Hazards	Possibility of contamination of water if present by vermin (Weils Disease/Leptospirosis).
Asbestos Containing Materials	
Manual Handling Operations	
Weather Conditions	

PRECAUTIONS TO BE TAKEN

No access or task to be undertaken without prior communication with the Estates Services. Some work activities require a Permit to Work before proceeding. If in doubt check with Estates Services or the Health, Safety and Security Department 01904 322020.

Additional information:

Confined Space Classification		**Permanent Confined Space**	☐	**Potential Confined Area**	☐
Assessment Date		**Assessor's Name**			
Assessment Review		**Emergency Contact**			

APPENDIX 12
University Policy and Management Procedure
Assessment of Risk Confined Spaces

Location		**Site**	
Date		**CS Register No**	

CS Description	

No of Access & Egress Points		**Size**	x , x , x , x .		
Category of Space	**Permanent Confined Space**	☐	**Potential Confined Area**	☐	

Answer Yes or No to the following questions and complete the additional information & actions:

Serial	Risk Assessment Criteria	Yes	No	NA	Additional Information & Actions
1	Are there adequate fixed facilities for access & egress at all access & egress points?	☐	☐	☐	
2	**Are there adequate facilities for isolation of the following:**				
	Gases	☐	☐	☐	
	Liquids	☐	☐	☐	
	Free Flowing Solids (FFS)	☐	☐	☐	
	Extremes of Temperature	☐	☐	☐	
	Mechanical Services (Drive Shafts)	☐	☐	☐	
	Pressurised Systems/Services	☐	☐	☐	
	Hydraulic Systems/Services	☐	☐	☐	
3	**Are there adequate facilities for:**				
	Draining	☐	☐	☐	
	Purging	☐	☐	☐	
	Venting	☐	☐	☐	
	Dissipation of Heat	☐	☐	☐	
	Removal of Residues	☐	☐	☐	
	Earthing (static electricity dangers)	☐	☐	☐	
4	**Is there 'Suitable & Sufficient':**				
	Lighting	☐	☐	☐	
	Fixed Communications	☐	☐	☐	
	Vehicular Access	☐	☐	☐	
	Emergency Vehicle Access	☐	☐	☐	
5	Are facilities adequately installed & available to raise the alarm	☐	☐	☐	
6	Access & Egress	☐	☐	☐	
7		☐	☐	☐	
8		☐	☐	☐	

Equipment Aspects:

1	**Will the task involve the creation or introduction of the following:**				
	Gas	☐	☐	☐	
	Fumes	☐	☐	☐	
	Vapours	☐	☐	☐	
	Decline in O_2 Content	☐	☐	☐	
	Free Flowing Solids (Shot Blasting)	☐	☐	☐	

Serial	Risk Assessment Criteria	Yes	No	NA	Additional Information & Actions

2	Liquids (flammable or other)	☐	☐	☐	
	Hot Works	☐	☐	☐	
	Flammable or Oxidizing Materials	☐	☐	☐	
	Static Electricity (FFS or Liquids)	☐	☐	☐	
	Temporary Electrical Supplies	☐	☐	☐	
	Strobe or UV Lighting	☐	☐	☐	
	Manual Handling Operations	☐	☐	☐	
	Noise Producing Equipment	☐	☐	☐	
	Gas Cylinders or Lines	☐	☐	☐	
	Internal combustion engines within the space or at the entrance	☐	☐	☐	
3		☐	☐	☐	
4		☐	☐	☐	
5		☐	☐	☐	

Additional Comments or Observations:

Schematic Diagram:

Key:	

Name		**Date**	
Signature		**Appointment**	

SAFETY PROGRAMME FOR CONFINED SPACE WORKING

This Safety Programme must be read in conjunction with the task specific risk assessment and method statement for this job.

NO PERSON SHOULD ENTER A CONFINED SPACE UNLESS THERE IS NO OTHER WAY OF EXECUTING THE TASK

Location and site reference number of the Confined Space	
Description of Confined Space (including normal use and current / previous contents)	Dry pit / stormwater / sewage / potable water / free flowing solid / (other):
Precise route & access to Confined Space entrance ***(Identify any gates / doors / access covers to be released to gain access into the Confined Space)***	
Precise route & access to Confined Space entrance: ***(Identity any gates/doors/access covers etc to be released to gain access into the confined space)***	
The precise work to be carried out is as follows: **NO OTHER WORK IS TO BE CARRIED OUT WITHOUT A REVISION TO THIS METHOD STATEMENT**	
The following plant and equipment is to be taken out of service for the duration of this task:	
Isolation measures 1: Inundation risks **The following upstream sources of gas, liquid or free flowing solid are to be isolated for the duration of this task:** ***(To include piped supplies of gas, liquid, fire drench systems etc. The precise point of isolation is also to be determined on a schematic sketch to be appended to this Method Statement)***	
Isolation measures 2: Energy System Risks **The following sources of electrical energy and stored pressure are to be isolated for the duration of this task:** ***(The precise point of isolation is also to be determined on a schematic sketch to be appended to this Method Statement)***	

The following are the minimum numbers and names of staff necessary to execute this task in safety:	
Persons in Charge	
Confined Space entrants (Escape BA Trained)	
Confined Space entrants (Full BA Trained)	
Additional staff trained in rescue (Full BA Trained)	
First Aid Trained* ***(Nominated First Aider may not enter the Confined Space)***	
The following Personal Protective Equipment, Respiratory Protective Equipment or other specialist equipment will be required: ***(Include numbers of equipment and persons to whom provided)***	First Aid kit Safety Helmet PD2 Gas Monitor to measure Oxygen content, Methane, & Hydrogen Sulphide (entrant) Communications Line Escape BA (entrant) fully charged
The method to be used for ventilation and purging of the confined space prior to entry is as follows:	
Other specific safety precautions to be taken particular to THIS site and THIS task: **See also the detailed sequence of operations to be attached to this safety method statement.**	
Expected date and duration of task	

Prepared by		**For**	**The University of York**
Signed		**Date**	

Approved by		**AP CSP**	
Signed		**Date**	

APPENDIX 14
University Policy and Management Procedure
Method Statement Confined Spaces

This Method Statement must be read in conjunction with the task specific risk assessment and method statement for this job.

NO PERSON SHOULD ENTER A CONFINED SPACE UNLESS THERE IS NO OTHER WAY OF EXECUTING THE TASK

Serial	Task	Performed by	Remarks

APPENDIX 15
University Policy and Management Procedure
Confined Spaces Entry Permit to Work

CONFINED SPACES ENTRY PERMIT TO WORK	UNIVERSITY of York

Confined Spaces Entry Permit to Work Certificate Number			
Location		Plant Site Name	
Date of Issue		CS Register Number	
Expected Duration		Time Permit Expires	
Time Fire Brigade Informed (Open)		Time Fire Brigade Informed (Closed)	
Time Permit Issued		Time Permit Cancelled	

Description of Work to be Undertaken	

Known Hazards		Category of Space
		Permanent Confined Space

Safe System of Work (√) Tick Relevant Boxes	YES	N/A
A risk assessment has been undertaken, identified hazards have been communicated to those named below and copies of the risk assessment and method statement are attached to this Permit. Risk Assessment Reference Method Statement Reference	☐	
A Risk Assessment and Safety Programme has been reviewed and is suitable and sufficient for the task.	☐	
The Person in Charge and Work Team are assessed as being suitably trained and competent.	☐	
All safety and protective equipment necessary has been inspected and checked by the AP CSP & PinC.	☐	
The Emergency Arrangements are assessed as satisfactory and communication links have been proven.	☐	
All persons who may be effected by this work activity have been advised of safety precautions.	☐	☐
The Confined Space has been ventilated and will be continuously monitored during the entry.	☐	☐
Weather conditions have been assessed and do not increase the risks during this task.	☐	☐
All Road/Safety Signs/Barriers for the protection of the site and others that are required are in place.	☐	
The atmosphere in the Confined Space has been tested, as below, and found safe to enter without BA.	☐	
Is the Fire Brigade aware of the Confined Space Entry and able to effect a rescue?	☐	☐

AP CONFINED SPACES

I confirm that all persons named on this Permit are familiar with the required safety and emergency procedures, are properly equipped and trained, and that all required safety equipment is present and working.

I am satisfied that the atmosphere within the Confined Space is safe to work in at present and that it shall be monitored continuously.

Signed: _____
(AP Confined Spaces)

Persons involved in the work activity (whether or not they may enter the confined space)	
(Person in Charge)	(Entrant)
(Top Man)	(Entrant)
(Other)	(Entrant)

CAUTION TO ENTRANTS

AT THE FIRST SIGN OF DIZZINESS, EYE IRRITATION, HEADACHE, PULSATING AT THE TEMPLES OR NAUSEA, VACATE THE CONFINED SPACE AT ONCE

Record of Initial PEAK Atmospheric Test Results	
Note: Continuous monitoring of the atmosphere MUST be carried out whilst persons are in the Confined Space	
Name of Person Performing the Tests	
Serial Number of Gas Monitor	
1. Oxygen (Minimum 19% Maximum 23%) .....%	Toxic Gases / Fumes / Vapours .....PPM
2. Flammable Gases .....% of LEL	4. Dust/Fibres .....Count

CAUTION TO WORK TEAM MEMBERS OUTSIDE THE CONFINED SPACE

If you suspect that an entrant has been overcome, do not attempt to enter unless you are trained and equipped. Initiate the Emergency Plan in the Safety Programme.

PERSON IN CHARGE

I confirm that all persons named on this Permit are familiar with the required safety and emergency procedures, are properly equipped and trained, and that all required safety equipment is present and working.

I am satisfied that the atmosphere within the Confined Space is safe to work in at present and that it shall be monitored continuously.

Signed: _____
(Person in Charge)

UPON COMPLETION OR STOPPAGE OF THE CONFINED SPACE ENTRY - PERMIT TO WORK	
I confirm that the entry detailed has been completed/stopped. All entrants have exited the Confined Space and no re-entry will take place. I confirm the site has been made safe and all signs and barriers, etc. have been removed, any deficiencies have been reported and the Permit has been returned to the AP Confined Spaces.	Signed: _____ (Person in Charge)
I confirm that the above action has been taken and all entrants are accounted for. I have advised all parties necessary that any isolations/lock-offs, plant/machinery, etc. can now safely be reinstated. This Permit is now cancelled.	Signed: _____ (AP Confined Spaces)

In the event this Permit is stopped or suspended, please use the reverse to explain why the Person in Charge has stopped the work.