

S5 - Opening StatementConfined Spaces

A confined space is an enclosed area where the risk of death through exposure to hazardous substances or dangerous situations is excessively high.

A number of people are killed or seriously injured in the UK each year in confined spaces. These occur across a wide range of industries, from those involving complex plant through simple storage vessels. Those killed include not only people working in the confined spaces but those who try to rescue them without proper training or equipment.

These procedures detail how to identify confined spaces using a simple confined space checklist. Information is provided on what to consider as part of the risk assessment. There are details on control measures and permit to work as well as an emergency plan.





S5 - Confined Spaces

What is this?

This is a written procedure which covers the dangers, effects and controls associated with managing and entering confined spaces in the workplace.

The person responsible for implementing this procedure is:

What is a confined space?

A confined space is an enclosed area where the risk of death through exposure to hazardous substances or dangerous situations is excessively high. The following may be classed as confined spaces:

- Silos
- Storage tanks
- Sewers
- Drains
- → Vessels
- Chambers
- → Pits
- Chimneys.

Note: This list is by no means exhaustive and is only a basic list of potential confined spaces. The identification of a confined space can be done by answering YES to the following questions:

- Can material flow in during work?
- Can oxygen be depleted during work?
- Can any liquid build up during work?

What do responsible managers need to do?

Responsible managers must ensure that:

- Through a risk assessment, they identify all confined space hazards within the workplace
- → A specific confined space survey is undertaken at the site(s)
- → They attempt to eliminate the necessity to enter confined spaces





- They compile a formal record of confined space hazards and display this on site notice boards
- → All employees are informed of the risk assessment findings and the areas identified as confined spaces
- → Any improvements identified through the risk assessment are transferred onto a site action plan
- → Relevant employees are given training on the safe entry into confined spaces
- → Suitable equipment and resources are provided to manage and enter confined spaces
- → An emergency response plan is put into place and has been communicated to all employees (and, if applicable, contractors), and
- → All employees and contractors are aware that a permit to work must be issued prior to any person entering a confined space.

What do employees need to do?

Employees must:

- Co-operate with the responsible manager so far as is necessary to ensure that the entry into confined spaces is safe
- → Use the safety equipment provided for the entry into confined spaces
- → Not enter a confined space unless they have received suitable training
- → Report and not use any defective equipment used for the entry of confined spaces, and
- → Ensure they understand the emergency response plan.

Confined space hazards

Potential hazards in confined spaces include:

- → Fire
- → Chemical exposure
- Poor air quality
- Noise
- Vibration
- → Residual release from inside the confined space
- Structural hazards
- Restricted visibility
- Temperature movement





- Electricity
- → Slip, trips and falls.

Note: The above is not an exhaustive list, but provides an overview of the general hazards people may be faced with when entering confined spaces.

What controls are required to work in confined spaces?

The following control measures should be considered:

- Avoid the need to enter a confined space by either modifying the area or undertaking the work from outside
- Reduce the exposure time of people working in the confined space. Ensure regular rest breaks are taken
- → Ensure all persons entering a confined space have received specific training
- The confined space is suitably isolated to stop moving equipment, and the entry or egress of solids or liquids
- → The use of an air monitoring device should be used prior to entering a confined space at any time (including after lunch breaks). This will confirm that the oxygen levels are fine
- → Writing a specific safe working practice (including an emergency plan) to be used whilst operating within the confined space. The emergency plan should be tested at least once every year
- → Appoint a competent person to supervise the work being undertaken within the confined space
- → Ensure that any walkways and access platforms are safe to use
- → Ensure the confined space area is well lit
- → Issuing two-way radios or other communication methods
- → Ensure that in an emergency the entrances and exits are large enough for people wearing personal protective equipment
- Access equipment such as a tripod, lanyard and winch is made available
- → The issue of personal protective equipment to persons entering and working within a confined space
- → Warning signs should be displayed on the outside of the confined space notifying that work is being undertaken and that people are inside.

Note: A permit to work system must be introduced prior to undertaking any work within a confined space.





Permit to work

A permit to work is a tool used to document the completion of a hazard assessment for each confined space entry. The permit should include the:

- → Length of time the permit is valid for
- Name(s) of the person(s) that will enter the confined space
- → Name(s) of the supervisor
- Location of the confined space
- → Work being undertaken
- Details of any atmospheric testing
- Use of any mechanical ventilation
- Personal and emergency equipment available for use, and
- → Signatures of all relevant persons, along with the date.

Note: The permit should be posted at the confined space and remain in place until the work is completed. An additional copy should be kept by the responsible manager.

Emergency plan

A systematic rescue plan should be developed specific to confined spaces. The following should be included within the plan:

- → The responsibilities of the safety watch/supervisor
- How to retrieve people from the confined space in an emergency
- The rescue equipment that should be used to perform this task
- → The first aid provisions which are required (including first aiders)
- The names of the people to be notified of any emergency
- → The arrangements for the emergency services (location, map reference, etc).

Note: It should be stressed in the emergency plan that under no circumstances should a person attempt to rescue somebody unless he/she is competent and it is safe to do so.

Associated documentation

Confined space checklist

Legislation

Confined Space Regulations 1997

