

Confined spaces

Introduction

Not all Service Areas will have an interest in this arrangement however, it will be relevant to those whose employees undertake site work, surveys and inspections and to a certain extent emergency/rescue situations.

Some confined spaces are relatively easy to identify e.g. closed storage tanks, silos, sewers, etc. Others that are less obvious, such as subterranean rooms, trenches, fabrications and ducts, some which may not necessarily be enclosed.

Accidents in confined spaces continue to be a major source of death at work through lack of oxygen, toxic fumes, gases, of being buried by free-flowing materials (such as grain in silos), drowning in liquids, high temperature, fire and explosion and to a lesser extent electrocution from conductive surfaces.

It is the policy of Shropshire Council to take all reasonable steps to secure the health and safety of those persons in its employ who are required to make entry into confined spaces.

Shropshire Council and its Service Areas acknowledge that health and safety hazards may arise when entry into confined spaces is required and it is the intention to ensure that any risks are reduced to a minimum.

The implementation of this arrangement requires the total co-operation of all members of management and staff. There will be full consultation with employee representatives through existing channels of communication.

Arrangements for securing the health and safety of workers

Service Areas will, in consultation with employees and their representatives:-

- Provide such information, instruction and training as is necessary to enable the appointment of "competent persons" capable of carrying out risk assessment when entry into confined spaces is planned.
- Maintain a documented permit to work system which must be used whenever entry into "confined spaces" is required.
- When entry into confined spaces is required for employees: ensure the possession of sufficient serviceable sets of appropriate breathing apparatus (and, if applicable, safety belts and ropes) to ensure safe entry where there is danger from gases, fumes, vapours, etc., or where there is liable to be a deficiency of oxygen provide training in the use of breathing apparatus (and safety ropes where necessary) for those employees who may be required to use such equipment when working in confined spaces
- When entry into confined spaces by contractors and sub-contractors (including the self-employed) is required: monitor that only

serviceable sets of approved breathing apparatus (and safety ropes) are used so as to allow safe entry into confined spaces where there is danger from gases, fumes, vapours, etc., or where there is a deficiency of oxygen

- Monitor that users of breathing apparatus and safety ropes have received adequate training in its use
- Monitor that such equipment and resources as are necessary to safely carry out entry into confined spaces is provided.

Procedures for dealing with health and safety issues

Where an employee raises a matter related to health and safety associated with work in confined spaces, the Service Area will:

- Take all necessary steps to investigate the circumstances
- Take corrective measures where appropriate
- Advise the employee of actions taken.

Where a problem arises associated with work in confined spaces, the employee must adopt the following procedures:

- Inform a responsible person (supervisor/manager) immediately
- In the case of an adverse health condition consult the Occupational Health Manager and your own General Practitioner (GP).

Information and training

Service Areas will provide sufficient information, instruction and training as is necessary to ensure the health and safety of workers who are required to enter into confined spaces.

Managers and supervisors who are responsible for employees required to enter confined spaces will also be given appropriate training.

When the proper precautions are adhered to, there is no reason why employees should not safely enter confined spaces during the course of their work. Following the three steps below will help to ensure that work is without significant risk:-

- 1) Find out as much information about the confined space as possible, including details of any previous contents and their associated hazards
- 2) Never enter a confined space without the knowledge of others (colleagues, site supervisor, etc.)
- 3) Always prepare thoroughly for work and adhere strictly to the rules of any permit to work system that applies.

Record keeping

Records will be kept of the following:-

- Appointed competent persons, including date of appointment, date of review, and limitations.
- Approved breathing apparatus and its inspection and maintenance history.
- Trained "Approved Breathing Apparatus" users, including date of training, date of review and name of trainer.
- Safety harnesses or lines, reviving equipment and any other emergency equipment, as well as its inspection and maintenance history
- Calibration of atmospheric test equipment test/examination dates/results.
- Appointed examiners of breathing apparatus, etc.
- Training of attendants and rescue teams, including dates of training, date of review and name of trainer.
- Permits of work issued. The record must be in the form of a copy of the permit to work which must contain the following details:
 - a) Plant detail (location/identity)
 - b) Work to be done (detail to allow suitable and sufficient risk assessment)
 - c) Person carrying out work (Team/contractor/self-employed)
 - d) Plant out-of-service period (statement of when/period or removal from service)
 - e) Isolation carried out (electrical/fumes/mechanical/heat, etc.)
 - f) Precautions introduced (monitoring of fumes/purging of vessels)
 - g) Testing (results of any testing for contaminants)
 - h) Further precautions required (breathing apparatus/low voltage equipment)
 - i) Name of recipient.

The following information should be recorded on the permit to work when applicable:

- j) Extension of time period of work to be completed
- k) Changes in work to be carried out which are identified after commencement of work
- l) Emergency cancellation.

Summary of statutory duties

Systems of work must be safe, so far as is reasonably practicable, under s2 of the Health and Safety at Work Act 1974.

Regulation 3 of the Management of Health and Safety at Work Regulations requires an assessment of risks arising from work activities. The assessment should consider all of the work to be carried out, the methods to be used and any hazards associated with the plant or the proposed method of working. The assessment's aim is to establish the steps to be taken to make the job

safe and to decide on the precautions to be taken.

The Confined Spaces Regulations apply in all premises and work situations subject to the Health and Safety at Work etc. Act.

Diving and Underground Mining operatives are covered by other legislation.

Shropshire Council must ensure full compliance with the Confined Spaces Regulations and no person is to carry out work in a confined space when the work could be done by methods other than entering the confined space. No person is to enter a confined space to work unless it is safe and without risks to health.

The permit to work system must be adhered to.

The regulations refer to:

- Risk assessment
- Permit to work systems
- Testing, monitoring the atmosphere, gas/contaminants purging/removal
- Supervision, communications and emergency procedures
- Isolation from gases, liquids and free flowing solids, static electricity
- Personal protective equipment, respiratory equipment
- Test/monitoring equipment
- Gases supplied in hoses and pipes, ventilation
- Competence, fitness, training, smoking, working time
- Safe access and egress, dimensional limitations on access and movement.

Unless there is another adequate means of exit, the confined space must have a manhole of a specific size. Persons entering a confined space must be wearing suitable breathing apparatus, have authorisation to be there from a responsible person (permit to work) and be wearing a belt with a safety rope held at the other end by a second person keeping watch outside, who is capable of pulling the first person out in an emergency. These three requirements are not applicable if a responsible person has certified that the confined space is safe for entry for a specified period without breathing apparatus, which can only be done if measures have been taken to eliminate the risk of dangerous fumes and to provide air fit for breathing. (Sufficient reviving apparatus, oxygen, belts, ropes and approved breathing apparatus must be provided, maintained and examined monthly by a competent person).

Where breathing apparatus is required, it must be maintained and examined at least once a month and a report made of the examination.

The HSE approved code of practice Safe Work in Confined Spaces (L101) Regulations and guidance on entry into confined spaces is intended to advise those responsible for such operations on the procedures and safeguards

which are essential for such work.

The principle adopted for safe entry into confined spaces is one of adherence to a well-defined system of precautions laid down in writing in the form of a permit to work. Appointment of "competent persons" to prepare permit to work documents for entry into confined spaces is essential. The competent persons are required to have the experience and skills necessary to assess the situation and, where specialised plant is concerned, be thoroughly familiar with the law and the relevant chemistry and engineering.

It is essential that, before a person is set to work in a confined space, the competent person issuing the permit to work is completely satisfied that the person who is going to carry out the work fully understands the precautions and is aware of any limitations applying to the work.

Legislation and Guidance

Confined Spaces legislation is principally governed by:

The Health and Safety at Work Act 1974.

The Confined Spaces Regulations 1997.

The Management of Health and Safety at Work Regulations 1999.

The Control of Substances Hazardous to Health Regulations 2002 (as amended).

The Personal Protective Equipment at Work Regulations 1992 (as amended).

The Provision and Use of Work Equipment Regulations 1998.

The Control of Lead at Work Regulations 2002.

The Control of Asbestos Regulations 2012 and

Safe Working in Confined Spaces ACOP L101.

Confined Spaces, a brief guide to working safely INDG 258.

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