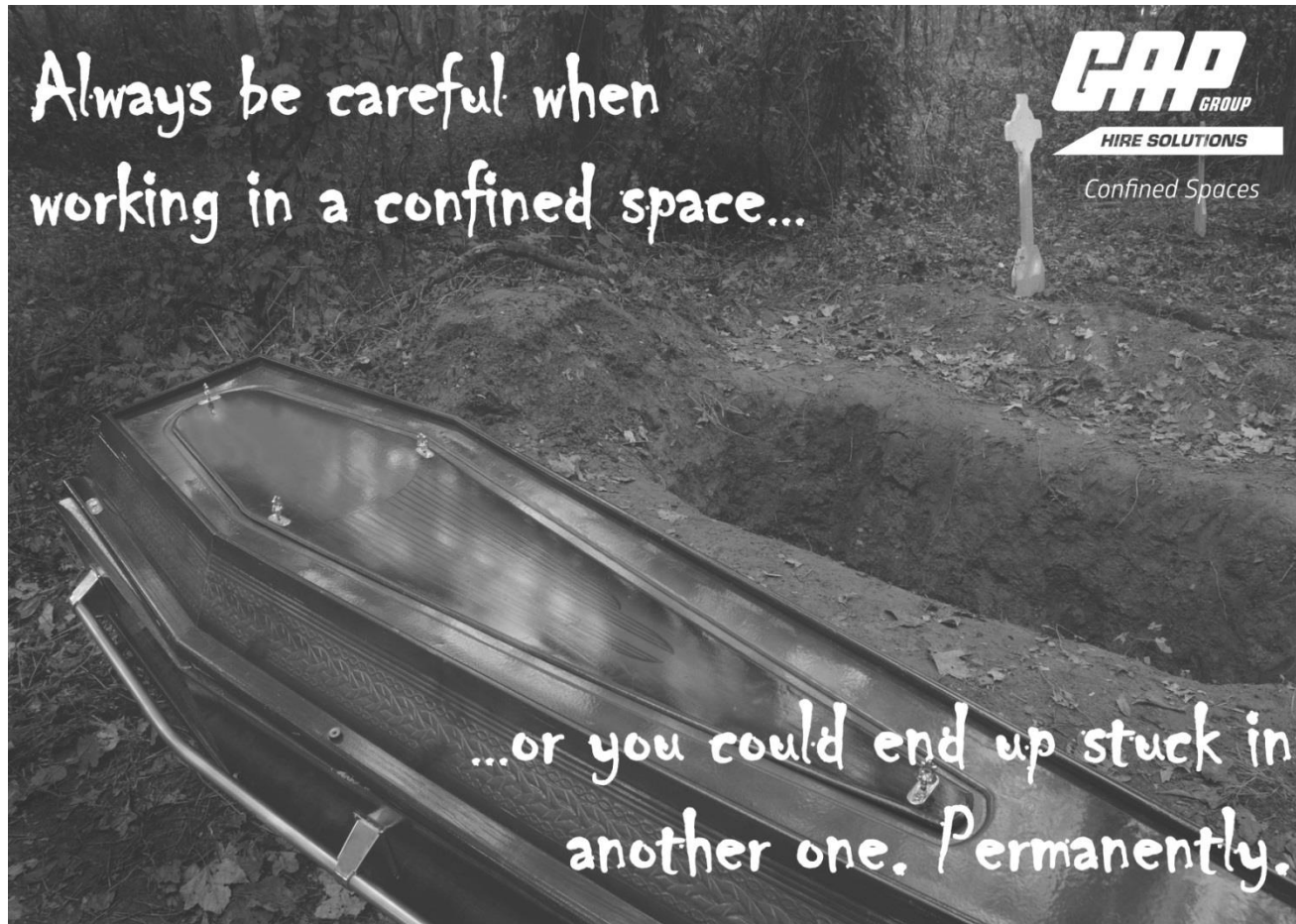


GAP Tool Box Talk: Confined Spaces



Confined spaces

- On average, work in confined spaces injures a number of people and kills approximately 15 people per year in the UK.
- This happens across different industries, ranging from storage vessels to complex plant.

Definition

- A confined space is one which is both enclosed, or largely enclosed, and which also has a reasonable foreseeable risk to workers of fire, explosion, loss of consciousness, asphyxiation or drowning.

Some examples of confined spaces are:

- Storage tanks
- Enclosed drains
- Sewers
- Vats
- Duct work
- Open-topped chambers



And there are many more, but it should be remembered that some places of work may become a confined space where work is carried out during construction or modification.

The dangers of confined spaces

Dangers can arise in confined spaces due to lack of oxygen. This can occur:

- Inside steel tanks and vessels when rust forms
- When ground water leaks on chalk or limestone which can produce carbon dioxide and displace the normal air
- When there is exposure to fumes or vapour and poisonous gas

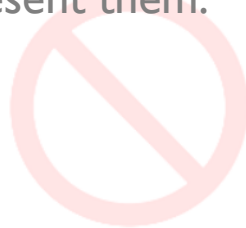
These can build up in:

- Sewers and manholes connected to the system
- Tanks and vessels from connecting pipes
- Leaks into trenches
- Fire and explosions (e.g. from flammable vapours etc.)
- Residues left in tanks or vessels
- Hot conditions leading to a dangerous increase in body temperature

Some of these conditions may arise as a result of work being carried out, or because of ineffective isolation of plant and some may already be present

The Law

- The Management of Health and Safety at Work Regulations 1999 states that; you must carry out a suitable and sufficient assessment of the risks for all work activities.
- This aids the decision on what measures are necessary for safety
- The Confined Spaces Regulations 1997
 - This Approved Code of Practice (ACOP) and guidance is for those involved in work within confined spaces, those who employ or train such people and those that represent them.



For work in confined spaces this means identifying the:

- Hazards which are present
- Assessing the risks
- Determining what precautions to take

Consideration within the assessment should include:

- The task
- The work environment
- The materials and tools being used
- The suitability of those carrying out the task
- Emergency rescue arrangements

It may be necessary to appoint competent people to:

- Manage the risks
- Ensure that employees are adequately trained and instructed

Further guidance on Risk Assessment can be obtained from the HSE (5 Steps to Risk Assessment).

Where the assessment identifies that the risks of injury are serious then The Confined Spaces Regulations 1997 apply.

Confined Space Regulations 1997

Key duties which must be followed:

- Avoid entry to a confined space
- Where entry is unavoidable, follow a safe system of work
- Ensure adequate emergency arrangements are in place prior to work commencing



Confined Space Regulations 1997

Areas to be considered include:

- Avoid entering confined space
- Development of a safe system of work
- Appoint a supervisor
- Check that the persons are suitable for the work
- Isolation
- Cleaning before entry
- Ventilation
- Testing of the air
- Special Tools
- Emergency Procedures / Arrangements
- Communications
- Is a 'Permit to Work' necessary
- First-aid procedures
- Emergency services
- Capability of rescuers
- How is the alarm raised?

There may be more considerations which may need to be looked at. These should have been identified through the risk assessment.

Dos and don'ts of working in confined spaces

Do...

- Be aware of the risks that may occur within a confined space
- Make sure the person doing the work is capable and trained in both the work and the use of any emergency equipment

Don't...

- Work in confined spaces unless it's essential to do so
- Ignore the risks – just because a confined space is safe one day doesn't mean it will always be
- Let others enter a confined space until you are sure it's safe to do so