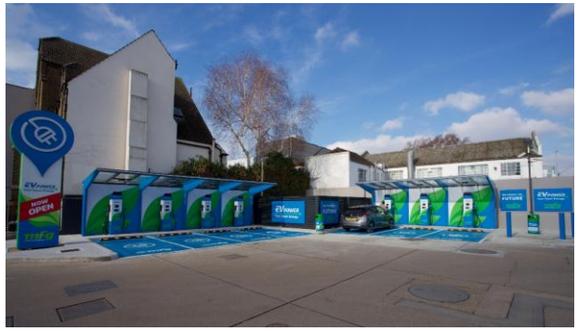
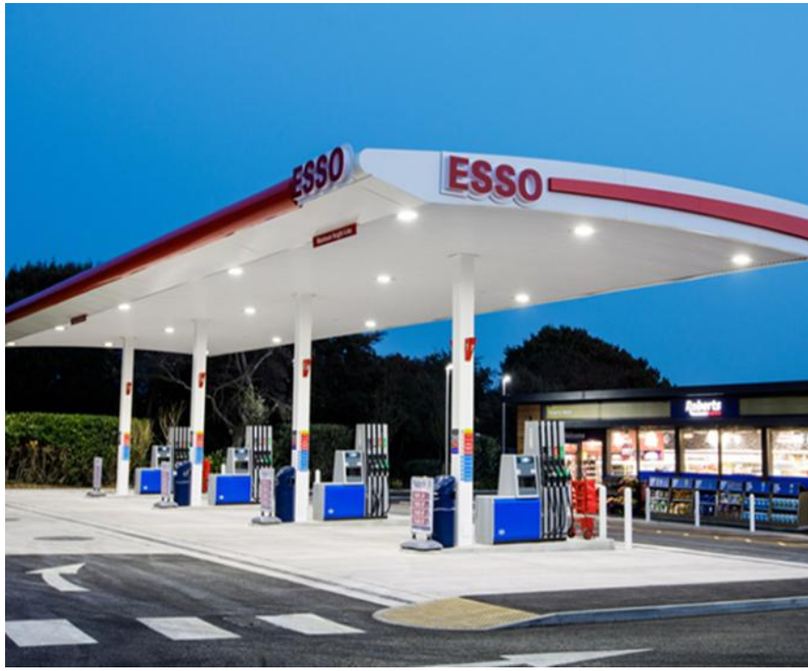
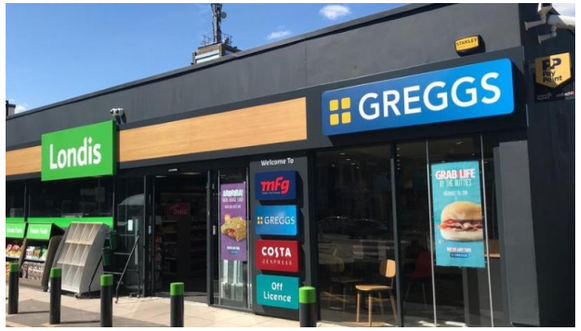
Life Saving Rules

01

Confined Space Entry







Life Saving Rules 01: Confined Space Entry

The hazards created by working in a confined space are a leading cause of fatalities

- A confined space is described as having one or more of the following characteristics:
  - Contains or has the potential to contain a hazardous atmosphere;
  - Contains material that has the potential to engulf an entrant;
  - Has walls that converge inward or floors that slope downward and taper into a smaller area which could trap or asphyxiate an entrant; or
  - Contains any other recognized safety or health hazard

Life Saving Rule:

- Prior to entering a confined space, **YOU MUST:**
  - Conduct a hazard assessment and identify the risks
  - Determine and implement all hazard control measures
  - Personally ensure that:
    - All potential sources of energy are isolated
    - Gas testing has been completed and the results verified as acceptable for entry
    - Respiratory protection is checked and used correctly
    - An Entry Attendant is stationed correctly to monitor entry
    - A Rescue Plan is in place, and rescue equipment is available

Life Saving Rules 01: Confined Space Entry

Confined spaces can be deadly:

- Each year incidents occur during confined space entry, including death and serious injury
- Those injured or killed include those working in the confined and those who try to rescue them without proper training and equipment

What is a confined space?

- Any enclosed space where there is a risk of serious injury from hazardous substances or dangerous conditions, examples include:
  - Storage tanks
  - Enclosed drains
  - Sewers
  - Oil Water Separators
  - Excavations
  - Unventilated or poorly ventilated rooms

What are the dangers of confined space entry?

- Lack of oxygen (i.e., oxygen depletion)
- Poisonous gas, fume or vapor
- Liquids or solids (e.g., soil), that can fill the space or release gases into it
- Fire and explosion, from flammable liquid or vapour or excessive oxygen (i.e., greater than 23.5%)
- Residue in tanks & separators which release gas, fume or vapour
- Hot conditions leading to significant increase on body temperature
- Other hazards created by:
  - Machinery being used outside the confined space, generating hazardous vapour (e.g., carbon monoxide)
  - Hazards fumes or vapors created by work activities (e.g., welding) inside a confined space
  - Access and egress issues that could make escape or rescue difficult

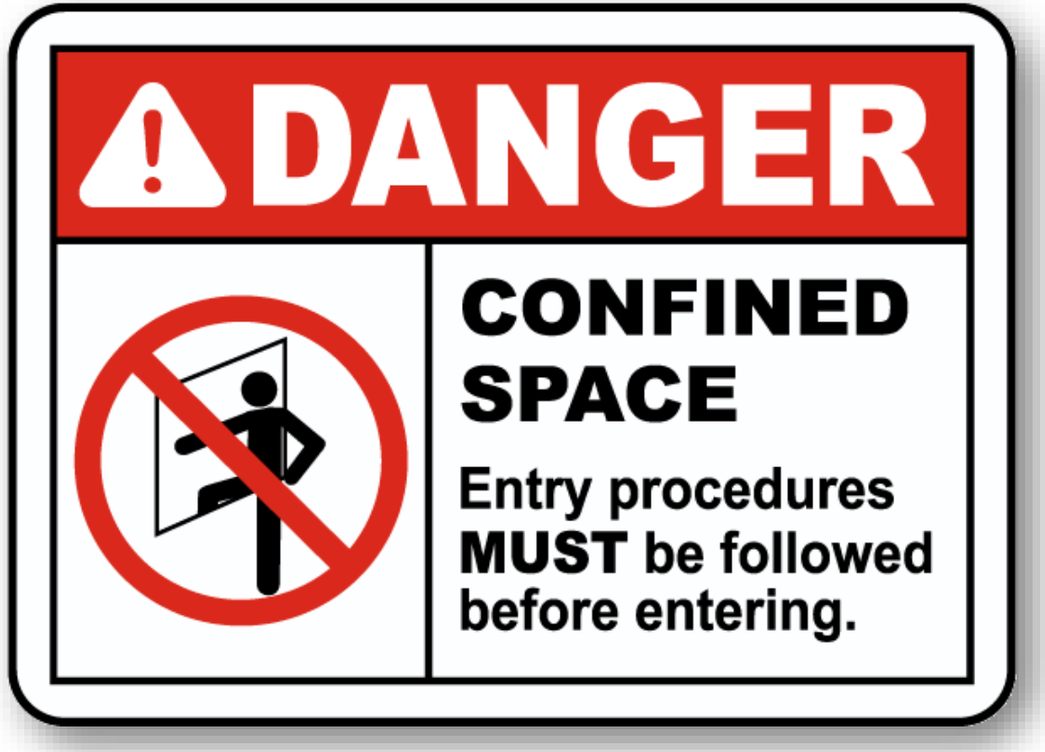
Does this look to be safe entry into a confined space?

Life Saving Rules 01: Confined Space Entry

Working safely in a confined space:

- Where possible avoid the need to enter a confined space, could you:
  - Modify the confined space itself so that entry is not necessary; and
  - Complete the work from outside the confined space
- Adopt a safe systems of working, for example:
  - Prior to any entry taking place ensure:
    - Any required cleaning is completed
    - Suitable:
      - Lighting; and
      - Ventilation is available during entry work
    - Tools and equipment are fit for purpose, for example:
      - Within test and calibration
      - Safe to use in a confined space (e.g., intrinsically safe)
    - Respiratory protection is available
  - Conduct an assessment to identify the risks associated to the:
    - Confined space, for example:
      - Type of confined space (e.g., tank, excavation, etc.)
      - Access and egress requirements
      - Previous contents (e.g., petrol, oily water, etc.)
    - Potential sources of hazardous energy that could enter the confined space

      Note: *Hazardous energy isolation requirements must be identified, implemented and verified as effective before entry takes place*
    - The types of work to be performed:
      - Within the confined space; and
      - In the immediate area around the confined space
    - Equipment to be used during confined space entry
    - Evacuation and rescue from the confined space
  - Develop a safe methods of working for:
    - Implementing the required risk control measures
    - Performing gas testing for hazardous vapours of concern
    - Entering and exiting the confined space
    - The work to be performed in the confined space; and
    - Any actions to be taken in the event a hazardous situation arises during confined space entry
  - Develop a Rescue Plan, that clearly details how a rescue is to be made, by who and what control measures are needed
  - A Permit to Work is approved and issued for confined space entry



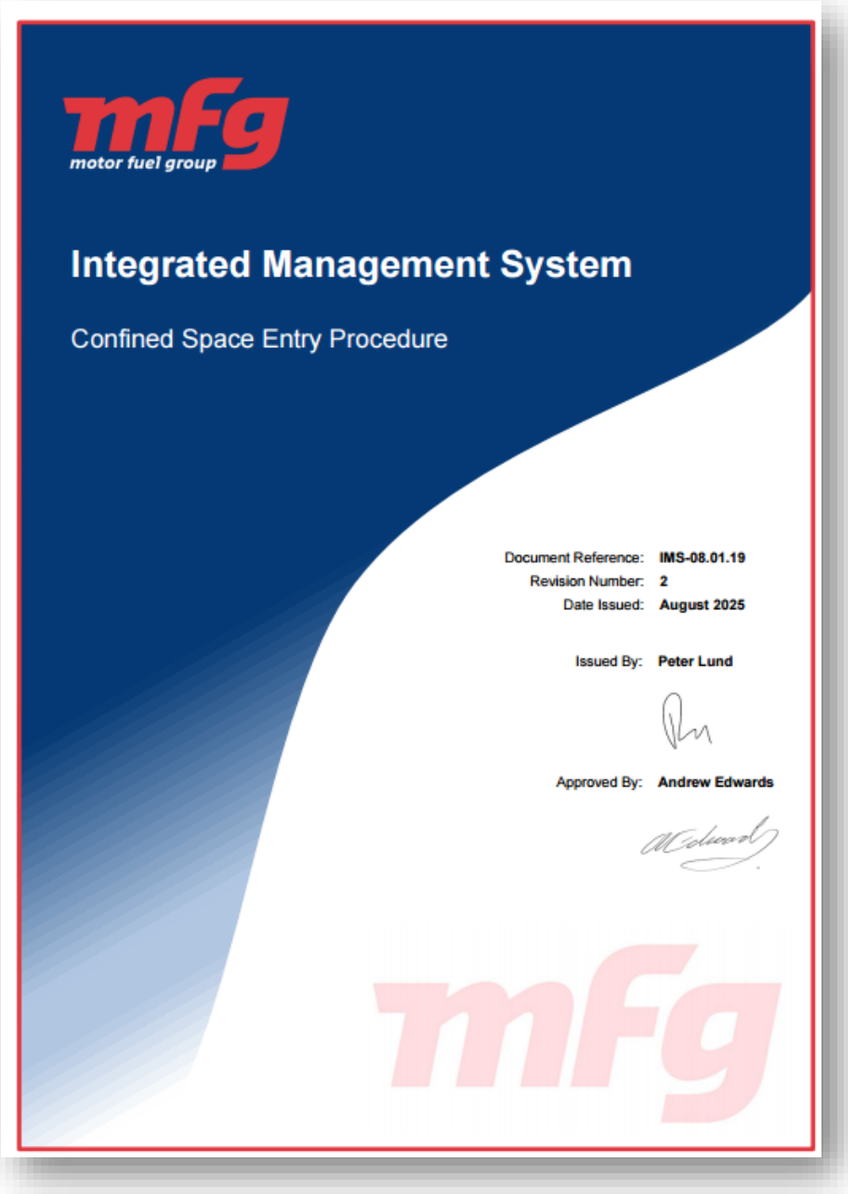
Life Saving Rules 01: Confined Space Entry

Key responsibilities for confined space entry:

- Entry Supervisor:

  Assigned responsibility of overall supervision of all activities relating to confined space entry, and must ensure:
  - Job crew are trained and competent to perform their duties
  - Equipment is certified as fit for purpose, where applicable
  - Risk control measures are implemented and maintained
  - Gas testing:
    - Is performed by an Authorised (Competent) Person; and
    - Gas test reading are within acceptable limits for entry
  - Confined space entry and exit is adequately controlled; and
  - Entry and work within the confined space is in accordance with the:
    - Risk Assessment
    - Method Statement (Referred to as RAMS when combined); and
    - Permit to Work (PTW)
- Entry Attendant (Safety Watch)

  Will be trained and competent in their role and duties, and work in accordance with the RAMS and PTW
  - The Entry Attendant will:
    - Be in position at the point of entry into the confined space whenever entry takes place
    - Monitor work within the confined space
    - Take regular gas readings when assigned that role; and
    - Instruct entrant to leave the confined space if:
      - Entrants need to take a break or change breathing air cylinders
      - Conditions within the confined space or the adjacent area change; and
      - An incident occurs within the confined space or adjacent work area



Reference: Health & Safety Executive 'Confined Spaces A Brief Guidance to Working Safely Guidance'