

# Permit Confined Space Safety



## WHAT'S AT STAKE?

Your safety is in peril if you enter any space where you are not positive that you can exit safely. A confined space can be deadly. Even if you just put your head through the opening, you are entering a confined space.

What is a confined space?

- A confined space is an enclosed or partially enclosed area that is big enough for a worker to enter.
- It is not designed for someone to work in regularly, but workers may need to enter the confined space for tasks such as inspection, cleaning, maintenance, and repair.
- Many confined spaces have small openings, which can make entry and exit difficult and can complicate rescue procedures.
- Some examples of confined spaces: tanks, boilers, silos, pipelines, sewers, storage bins, pits, manholes, water reservoirs etc.

## WHAT'S THE DANGER?

Never enter a confined space unless you have training and knowledge to work safely with the confined space. Without proper precautions being taken to enter a confined space, serious injuries and even death may occur.

Examples:

### NOT ENOUGH OXYGEN

If there is not enough oxygen in the air, you could die. If you enter a space without enough

oxygen (or even place your head inside the opening), you may not be able to escape or call for help.

### TOXIC GASES

The space might contain a toxic gas. Work such as welding or painting inside the confined space might release deadly substances into the air. Toxic gases might enter the space from piping or another opening.

### EXPLOSION

You can't smell or see some explosive gases so you might not know they are in the air. A spark or other ignition source might result in an explosion. Many dusts and chemicals can also explode.

## **BEING TRAPPED, CRUSHED, OR BURIED**

Loose or unstable materials might fall on you and trap or bury you. A liquid, a hazardous gas, or steam might flow into the space. You might get caught in a piece of equipment that starts moving.

## **HOW TO PROTECT YOURSELF**

One of the core elements that a confined spaces entry program must include is a safe entry procedure. And one of the things required for entry into a confined space is an entry permit.

The entry procedure sets out the measures, procedures and practices taken to ensure the entry is carried out safely and in accordance with regulatory requirements. At a minimum, the entry procedure must do 8 things:

1. Require identification and evaluation of permit space hazards before entry.
2. Specify acceptable conditions of entry, including but not limited to atmospheric conditions.
3. Allow for authorized entrants, i.e., workers authorized to enter the space, and/or workers' representatives to observe atmospheric monitoring and testing.
4. Require isolation of the permit space.
5. Specify the method that must be used to eliminate or control atmospheric hazards purging, inerting, flushing and/or ventilation.
6. Require that barriers to confined spaces be provided to protect entrants from hazards created by pedestrians, vehicles or other external factors.
7. Stipulate acceptable conditions must be verified throughout the duration of the entry.
8. Require cancellation of the entry permit and isolation of the permit space after the authorized entry ends or entry operation is completed.

### **Review of Entry Procedure**

The entry procedure must be reviewed at least once a year or whenever there's reason to believe that the procedure or other confined spaces safety measures aren't providing workers the necessary protection to identify and correct problems.

### **Entry Permit**

Specific examples of when an entry permit is required include any time the hazard and risk assessment determine the measures to control the risk involve the following:

- Atmospheric monitoring
- Isolation
- Lockout
- Ventilation
- Safeguarding devices
- Respiratory protection

The ENTRY PERMIT must list the following information:

1. Space to be entered
2. Location of the space

3. Purpose of entry
4. Date and authorized duration of permit
5. Names or identification numbers of:
  - Workers permitted to act as attendants.
  - Authorized entrants, i.e., workers permitted to enter the space.
6. Name of the entry supervisor and space to sign his/her name verifying entry conditions are acceptable and entry can begin.
7. Hazards of the space
8. Measures used to isolate the space and eliminate or control hazards before entry.
9. Acceptable entry conditions
10. Results of initial and periodic atmospheric tests performed and the names or initials of the testers and by an indication of when tests were performed.
11. Rescue and emergency services available and the means (such as the equipment to use and the numbers to call) for summoning those services.
12. Communication procedures used by authorized entrants and attendants to maintain contact during the entry.
13. PPE, testing equipment, communications equipment, alarm systems and rescue equipment, to be provided.
14. Any other information necessary under the circumstances to include to ensure employee safety.
15. Any additional permits, such as for hot work, that have been issued to authorize work in the permit space.

## **FINAL WORD**

Make sure you are fully trained in confined space procedures for your workplace.

Take all the sight precautions before entering a confined space, even in an emergency.