# Emphasis on Confined Space Meeting Kit

## What’s At Stake

To keep workers safe, an employer must develop a detailed plan for each confined space, train employees on the plan, and implement immediate emergency response procedures.

**EXAMPLES OF CONFINED SPACES MAY INCLUDE:**

- Water and sewer pipes
- Silos
- Utility tunnels
- Pumping stations
- Storage bins
- Crawl spaces under floors
- Manholes
- Meter vaults
- Water reservoirs
- Boilers
- Tunnels
- Holding tanks
- Vats
- Pits
- Kilns
- Vaults

## What’s the Danger

**PERMIT REQUIRED AND NON – PERMIT REQUIRED**

Permit required confined space: If additional hazards exist, workers may not enter without a permit. Such hazards include toxic or non-breathable air, the risk of the occupant being swamped or buried by movement of the stored materials, or have other serious safety and health hazards such as moving machinery.

Non-permit required confined space: If the additional hazards do not exist, workers may enter without a permit.

**CONFINED SPACE HAZARDS**

- Poisonous gases, fumes or vapors.
- Liquids or solids which fill the space or release gases into it.
- Insufficient oxygen.
- Explosions and fires related to flammable vapors.
- Residues in tanks or vessels.
- Downward-sloping floors or walls that converge inward
- Electrical hazards.
- Mechanical hazards.
- Poor visibility.
- Combustible dusts.
- Potential heat illness.

# HOW TO PROTECT YOURSELF

**PRE – PLANNING PROCEDURES BEFORE CONFINED SPACE ENTRY – COMMON PROCEDURES**

- A written permit must be obtained for all permit-required confined spaces.
    - The permit must be read and signed by everyone involved in the confined space work.
- A rescue plan must be in place.
    - Knowing a plan is in place and help is on the way will make it less likely untrained personnel will try and attempt rescue.
- Everyone has a role: **entrant, entry supervisor and attendant**. There must be an entry supervisor and attendant for each confined space.
    - Before entry, the entry supervisor must identify and evaluate all existing and potential hazards, both outside and inside of the space, and make sure the entry permit is complete.
        - Tests should be made for oxygen level,

flammability, and known or suspected toxic substances.

- The attendant must remain outside the confined space, monitor the entrant(s) and activity in and around the space, and summon emergency rescue if needed.
    - No one should enter the space unless they have been trained and have the necessary personal protective equipment and other required equipment.
    - This means attendants and entry supervisors should never enter a confined space, even to attempt rescue.
- The entrant must be trained on confined space entry, the hazards of the space and emergency procedures.

- Ventilate the area or purge it with inert gas that can't explode.
    - Inert gas can cause an oxygen deficient atmosphere, but never use pure oxygen to purge a space because it is highly flammable.
        - Remove possible sources of ignition and use non-sparking tools and lighting.
        - Isolate electrical hazards and close off lines of flowing liquids or solids.
        - Have all PPE and rescue and communication equipment ready and available prior to entry.
    - This includes lifelines, retrieval harnesses, testing devices, lighting and communications equipment.
        - Prevent pedestrians or vehicles from entering the work area.

**TRAINING, TRAINING AND MORE TRAINING**

Confined spaces safety training must be provided to any worker who:

- Enters and works within a confined space;
- Is responsible for carrying out emergency response or rescue operations within a confined space;
- Oversees or serves as an attending worker for a confined

space entry; and
- Otherwise works near a confined space.

Workers must receive confined spaces safety training before they can enter a confined space. Safety training for confined space work, in other words, can’t be a learn-as-you-go experience. Training should be provided at the time of the initial hire if the job duties involve confined space entry and when workers who don’t work in confined spaces are assigned to jobs that do involve confined space entry.

**Retraining should also be provided:**

- Any time there’s a change in entry, exit or work procedures within the space;
- Any time new equipment is to be used in the space;
- Any time there’s a significant change of conditions inside the space; and
- After incidents or injuries occur inside the space.

It`s recommended that all workers receive regular refresher training on confined space entry no less than once a year. While not required by law, the seriousness of the hazards in working in and around confined spaces mean that everyone involved in the program should be well trained.

# FINAL WORD

Work in confined spaces is extremely hazardous. Dozens of workers are killed or seriously injured in confined spaces each year. Almost all of these injuries could have been prevented if the victim had received proper safety training.