

11.17.22

## CONFINED SPACE

### KNOW WHEN NOT TO GO IN.

This procedure applies to work activities where the Company will be solely responsible for administering Confined Space Entry (CSE) practices for employee-owners. For instances where a subcontractor is responsible for CSE operations, they may utilize their own company procedure or request a copy of our checklist as long as they have a qualified Competent Person onsite.

#### DEFINITIONS

**“Authorized Entrant”** - An employee-owner who is authorized by the entry supervisor to enter a permit space.

**“Attendant”** - An individual stationed outside one or more permit spaces who assesses the status of Authorized Entrants and who must perform necessary duties.

**“Entry Supervisor”** - A Qualified Person responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required. An Entry Supervisor also may serve as an Attendant or as an Authorized Entrant, as long as that person is trained and equipped as required for each role. Duties may be passed from one individual to another during the course of the operation.

**“Qualified Person”** - One who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated his ability to solve or resolve problems relating to the subject matter, the work, or the project.

**“Competent Person”** - One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are hazardous or dangerous to employee-owners and who has the authorization to take prompt corrective measures to eliminate them.

**“Confined Space”** - A space that:

- Is large enough and so configured that an employee-owner can bodily enter it.
- Has limited or restricted means for entry and exit.
- Is not designed for continuous employee-owner occupancy.

**“Non-Permit Confined Space”** - A Confined Space that meets the definition of a Confined Space but does not meet the requirements for a Permit-Required Confined Space as defined in this procedure.

**“Permit-Required Confined Space” (PRCS)** - A Confined Space that has one or more of the following characteristics:

- Contains or has a potential to contain a hazardous atmosphere
- Contains a material that has the potential for engulfing an entrant
- Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section
- Contains any other recognized serious safety or health hazard

**“Excavations”** - The Regulation §29 CFR 1926.1200 Confined Spaces in Construction does not cover Excavations. Hazardous atmospheres in Excavations is covered in the Regulation §29 CFR 1926. c651(g) Excavations which states: “Where oxygen deficiency (atmospheres containing less than 19.5 percent oxygen) or a hazardous atmosphere exists or could reasonably be expected to exist, such as in excavations in landfill areas or excavations in areas where hazardous substances are stored nearby, the atmospheres in the excavation may need to be tested before employee-owners enter excavations greater than 4 feet (1.22m) in depth.”

**“Controlling Contractor”** - The employer that has overall responsibility for construction at the jobsite.

**“Host Employer”** - The employer that owns or manages the property where the construction work is taking place.

**“Entry Employer”** - Any employer who decides that an employee-owner it directs will enter a permit space.

**“Hazardous Atmosphere”** - An atmosphere that may expose employee-owners to the risk of death, incapacitation, impairment of ability of self-rescue (that is, escape unaided from a permit space), injury, or acute illness from one or more of the following causes:

- Flammable gas, vapor, or mist in excess of 10 percent of its lower flammable limit (LFL)
- Airborne combustible dust at a concentration that meets or exceeds its LFL
  - + Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent
- Atmospheric concentration of any substance for which a dose or a permissible exposure limit is published in §29 CFR 1926, Construction Industry Regulations, Subpart D
- Occupational Health and Environmental Controls or Subpart Z - Toxic and Hazardous Substances, and which could result in employee-owner exposure in excess of its dose or permissible exposure limit
- Any other atmospheric condition that is immediately dangerous to life or health (IDLH)

#### ROLES & RESPONSIBILITIES

##### Project Supervision

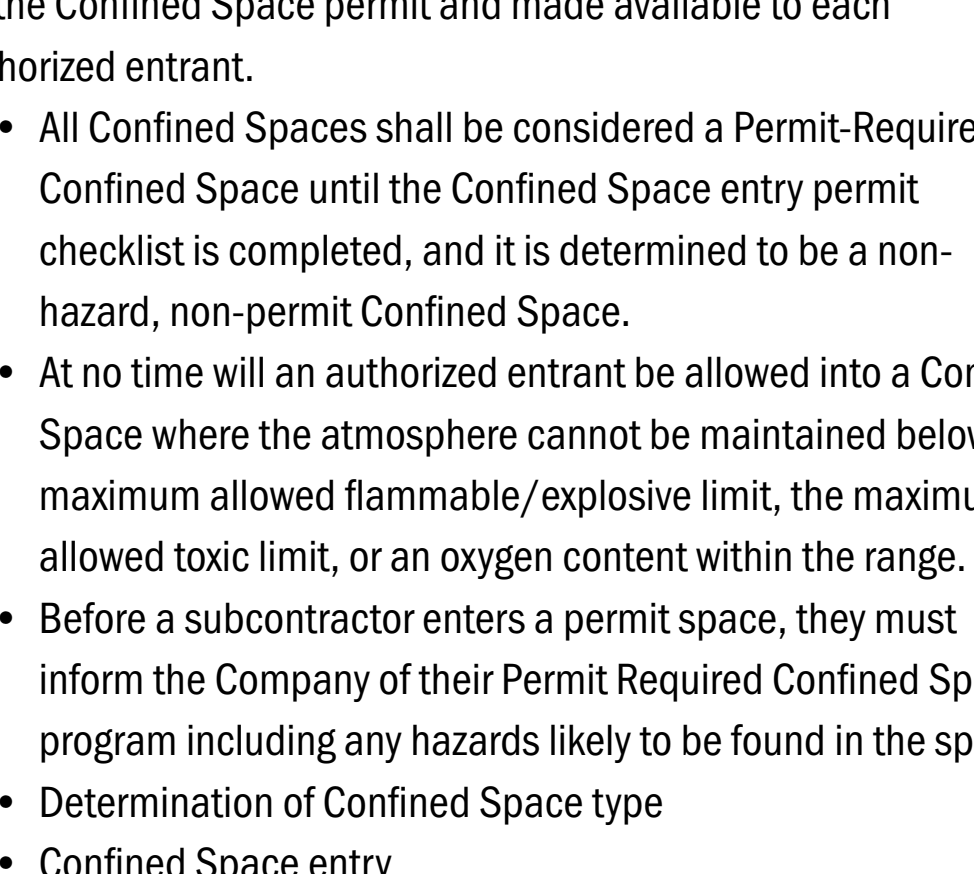
- Identify, label, and communicate any Confined Spaces they anticipate working in.
- Obtain information from the host employer.
- Develop entry and rescue procedures to be used when employee-owners are involved in CSE.
- Ensure that adequate atmospheric testing of Confined Spaces is completed.
- Provide all necessary entry-rescue equipment required for all CSE (tripod, full body harness and lifeline or equivalent, etc.).
- Provide necessary training to all employee-owners involved in CSE. The Safety Manager can provide this training upon request.

##### Host Employer

- Provide the following to the controlling contractor:
  - + The location of each known permit space along with the hazards or potential hazards in each space
  - + Precautions previous CSE contractors/employers implemented for protection in that permit space

Exhibit 3.11.001

#### OSHA Host Employer Flow Chart



#### PROCEDURES

##### General Requirements

- If there is a permit space identified on the jobsite, then all employers on the site must be notified and the space shall be posted at the same time.
- If a permit space is identified it may be possible for employee-owners to enter if all of the following conditions are met:
  - + It can be demonstrated that all physical hazards in the space are eliminated or isolated through engineering controls so that the only hazard posed by the permit space is an actual or potentially hazardous atmosphere.
  - + It can be demonstrated that continuous forced air ventilation alone is sufficient to maintain that permit space safe for entry, and in the event the ventilation system stops working, entrants can exit the space safely.
  - + Monitoring and inspection data will be required.

The determinations and supporting data required shall be recorded on the Confined Space permit and made available to each authorized entrant.

- All Confined Spaces shall be considered a Permit-Required Confined Space until the Confined Space entry permit checklist is completed, and it is determined to be a non-hazard, non-permit Confined Space.

- At no time will an authorized entrant be allowed into a Confined Space where the atmosphere cannot be maintained below the maximum allowed flammable/explosive limit, the maximum allowed toxic limit, or an oxygen content within the range.

- Before a subcontractor enters a permit space, they must inform the Company of their Permit Required Confined Space program including any hazards likely to be found in the space.

- Determination of Confined Space type
- Confined Space entry

#### PERMIT REQUIRED CONFINED SPACE - STANDARD OPERATING PROCEDURES

##### Entry Supervisor

- Entry supervisors are responsible for the overall Permit Required Confined Space (PRCS) and must coordinate all entry procedures, tests, permits, equipment, etc.
- Know the applicable hazards and controls.
- Conduct a pre-entry briefing at the beginning of each shift and/or upon the introduction of new workers to the space.
- Ensure that permits are completed and removed when work is finished.
- Ensure that personnel is evacuated when necessary.
- Ensure that all necessary equipment is returned to its proper location

##### Entry Attendants

- Required to be at the entrance of the Confined Space while personnel is inside PCRS. Under no circumstances are they allowed to leave.
- Ensure the safety and well-being of the entrants and those working in proximity to the PRCS.
- Attend the pre-entry briefing.
- Know the applicable hazards and controls.
- Control access to the space.
- Maintain communication with the entrants.
- Order a space evacuation when the conditions warrant.
- Maintain an accurate count of the number of entrants.
- Perform non-entry rescue (when the situation applies) or summon emergency services.
- Assist rescue efforts outside the space.

##### Entrants

- All entrants must be authorized by the entry supervisor to enter the applicable PRCS.
- Attend the pre-entry briefing.
- Know the applicable hazards and controls.
- Use equipment properly.
- Exit the space if an alarm is activated, communication is lost, unknown exposures are encountered, or if ordered to do so by an entry supervisor, attendant, and/or supervisor.
- Prior to entry, the Confined Space entry permit checklist must be completed to determine if the Confined Space is safe to enter and that the following necessary precautions have been taken:

- Air monitoring before a Confined Space is entered shall include one or more of the following tests, dependent on the type of atmosphere suspected, and using the noted equipment.

- Oxygen (O<sub>2</sub>) level/combustible vapors (LEL).
- Toxic vapors (solvents/hydrocarbons/H<sub>2</sub>S).

- Each piece of equipment must be examined daily to verify that it is in good condition and ready for use. Exact procedures for calibrating and checking the testing equipment for airflow are contained in the instrument manufacturer's instructions.

- Provide the opportunity for each authorized entrant to observe the pre-entry testing.

- Tests shall be taken continuously during each work shift. These tests must be supervised by an entry supervisor with training in the proper operation of the air monitoring equipment.

- Readings are to be taken at all levels of the Confined Space where authorized entrants are working.

An attendant positioned outside of the Confined Space shall at all times be in visual or voice contact with the workers inside the Confined Space.

- The attendant shall have appropriate approved respiratory protective equipment, if applicable.
- The attendant must have a valid certificate in first aid and CPR training from the American Red Cross or equivalent training verified by documentary evidence.
- Ventilation/exhaust systems shall be properly designed and of the positive flow type. Solvents and atomized coating particles are generally heavier than air, and will tend to settle and concentrate on the lowest parts of a confined space. When designing a ventilation system for these areas, particular attention should be paid to the lowest, most remote spots.

- The criteria for determining if a confined space atmosphere is safe to enter (nonhazardous) are as follows:

- + Oxygen (O<sub>2</sub>) content is between 19.5% and 23.5%.
- + Combustible vapors are less than or equal to 10% of the lower explosive limit (LEL).
- + Toxic levels are below the maximum allowed PPM for the substance being tested. Check electrical and mechanical equipment and lock and tag them out of service, if required.

- Anyone entering a Confined Space and entering more than 5 feet must be attached to a retrieval system.

#### EMERGENCY RESCUE & RESPONSE

##### General Requirements

- Project supervision shall evaluate each Confined Space for rescue procedures. Project supervision shall develop a procedure specific to each Confined Space, utilizing the Confined Space entry permit checklist, which will be reviewed with the Safety Manager, or their designate. This will include the following:

- + Sketch of the Confined Space and internal configuration.
- + Method to summon emergency rescue and response services.
- + Non-entry rescue provisions, including specific retrieval equipment to be utilized.
- + This requirement can only be eliminated if the retrieval system would increase the risk of entry or would not contribute to the rescue.

#### TRAINING

##### General Training Requirements

- Authorized entrants and attendees must be trained in the hazards of CSE, including operating and rescue procedures, the use of respiratory equipment, and instructions as to the hazards they may encounter.
- The training should follow the Confined Space Entry Employee Training Record Form and be recorded on the Confined Space Training Attendance Roster.