

Awareness Level Training

Permit-Required Confined Spaces

29 CFR 1910.146



Why Comply????

- Confined space entry is a leading cause of occupational fatalities in this country.



OSHA Regulation

- OSHA's Permit-Required Confined Space regulation was issued in 1993 to protect all workers who must enter and work in hazardous/confined spaces. Confined spaces include, but not limited to areas such as storage tanks, compartments of ships, process vessels, pits, silos, vats, wells, sewers, digesters, degreasers, reaction vessels, boilers, ventilation and exhaust ducts, furnaces, railroad tank cars, tunnels, under ground utility vaults, and pipelines.

How do I know if a space is considered a “*Confined Space*” Under the Rule ?

Permit vs. Non-Permit Spaces

- Must meet ALL of these criteria:
 - Bodily Enter
 - Limited entry & exit
 - Not designed for human occupancy
- And at least one of these criteria:
 - Hazardous atmosphere
 - Engulfment potential
 - Internal configuration that can cause injury
 - Other hazard (blades)

Typical Permit-Required Spaces

- Chemical storage tanks
- Waste or storage pits
- Grain bins
- Tank trailers
- Process vats
- Just because a tank is never entered, or if its an open top tank; it still can be a confined space under the standard



Employers Responsibilities

Under the standard employers and employees have responsibilities.

Employers must evaluate the workplace to determine if any spaces are permit-required confined spaces. If the workplace contains permit spaces, the employer must inform exposed employees, by posting danger signs at that the existence and location of and the danger posed by the permit spaces.

Employer Must

- Implement the measures necessary to prevent unauthorized entry.
 - Signage for each space
 - Security measures to keep persons from entering such as locks on ladders, fencing, replacing covers or caution tape.



Employer Must

- Implement the measures necessary to prevent unauthorized entry
- ➔ Identify and evaluate hazardous conditions
- ➔ Set up a safety procedure for each task to be performed in the confined space
- ➔ Establish procedures and practices for safe entry, including testing, monitoring, ventilating, lockout, selecting appropriate entry equipment and PPE, communications, and specific work procedures

Employer Must

- Ensure that all workers and supervisors are trained in safe entry procedures, respiratory protection, lifelines and retrieval systems, and protective clothing
- Develop procedures for emergency rescue, either in-house or using an outside rescue service
- Develop a system for preparing, issuing, using and canceling entry permits

Employer Must

- Test or monitor the permit space necessary to determine if acceptable entry conditions are being maintained during the course of entry operation
- When testing for atmospheric hazards, test first for oxygen, then for combustible gases and vapors, and then for toxic gases and vapors
 - NIOSH developed a classification scheme for atmospheric hazards in confined spaces based on the oxygen content, characteristics of gases or vapors, and the concentration of toxic substances

General Environment Controls

Subpart J

Permit-Required Confined Spaces
Subpart J

General Requirements - 1910.146

If the employer decides that its employees will enter permit spaces, the employer must develop and implement a written permit space program and be readily available for inspection by employees and authorized representatives.

THIS TRAINING IS AWARENESS ONLY – ADDITIONAL TRAINING IS NECESSARY IF YOU WILL BE REQUIRED TO ENTER SPACES

Permit-Required Confined Spaces (permit space program) - 1910.146

Employer must:

- Implement the measures necessary to prevent unauthorized entry
- Identify and evaluate hazardous conditions
- Set up a job safety analysis for each task to be performed in the confined space
- Establish procedures and practices for safe entry, including testing, monitoring, ventilating, lockout, selecting appropriate entry equipment and PPE, communications, and specific work procedures

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Permit-Required Confined Space Permit System - 1910.146

Permit System

A written entry permit is required for every space that is classified as a permit space. A person designated as the entry supervisor must authorize each entry, prepare and sign written permits, order corrective measures if necessary and cancel permits when conditions within the space change or the work is completed.

Note: Permits must be available for all entrants and all canceled permits must be retained for a year to facilitate review of the confined space program.

Permit-Required Confined Space Training - 1910.146

Training

- All employees involved in permit-required confined spaces entries must be trained, based on their assigned job responsibilities, prior to entry.
- Initial and subsequent refresher training provides entrants with the necessary knowledge to perform their duties safely
- Note: Refresher training is necessary whenever:
 - changes occur within the operation
 - deviation from the permit space entry procedures occur
 - inadequacies in employees knowledge and use of the procedures are present



Potential Confined Space Hazards

- Engulfment
- Oxygen deficiency (19.5% or less)
- Oxygen enrichment (23.5% or higher)
- Flammable gases or vapors
- Combustible dusts
- Toxic substances
- IDLH atmospheres
- Physical hazards

Other related permit process used along with the Confined Space Program

- LockOut / TagOut
 - Hotwork
 - Working From Heights
 - Other
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- We will cover these in more detail in other modules

Review

- Is he in a confined space ?



This is not Confined Space Entry Training

- This is just an awareness training
- **Never Enter a Confined Space until properly trained and equipped**
- This facility has Permit Entry Confined Spaces.
- Many Job Sites you May Go To Have Confined Space

Permit Entry Confined Spaces

- Water Treatment Tanks
- Manholes





Questions