

# Confined Space in Construction



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# 1926 Subpart AA

## Confined Spaces in Construction

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# 1926.1201 Scope

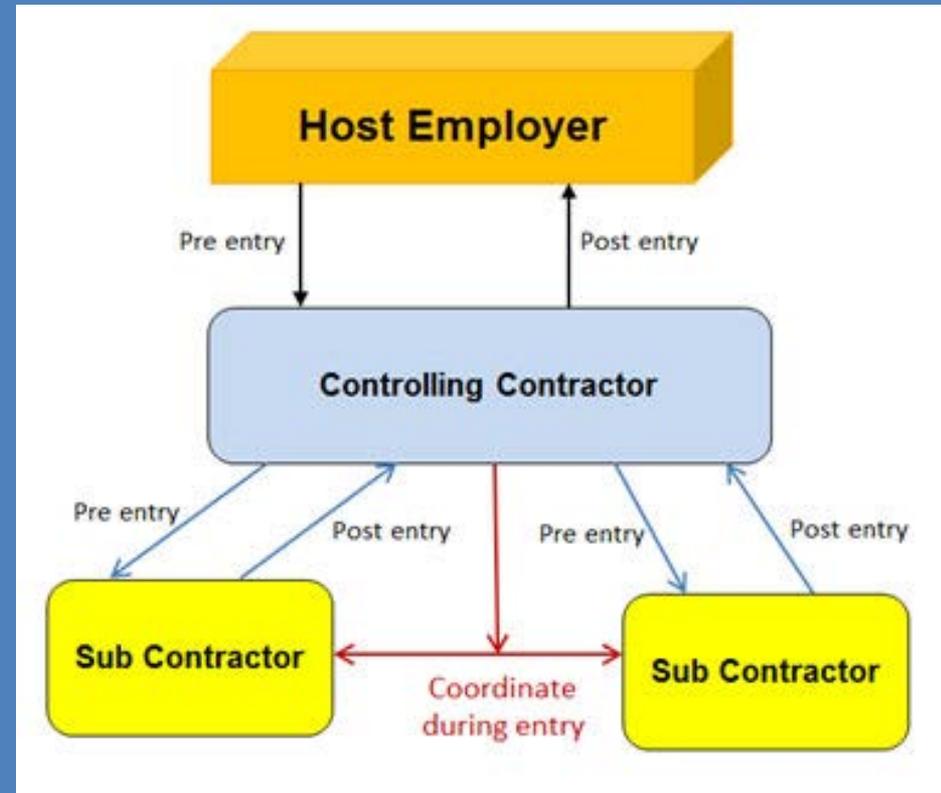
- Applies at construction sites with one or more confined spaces.
- Does not apply to:
  - Subpart P – Excavations
  - Subpart S – Underground Construction, Caissons, Cofferdams and Compressed Air
  - Subpart Y – Diving
- Where this standard applies and there is a provision that addresses confined space in another OSHA standard the employer must comply with both standards.

# 1926.1202 Definitions

- ***Confined Space*** – means a space that:
  - Is large enough and so configured that an employee can bodily enter
  - Has limited means of entry and exit
  - Is not designed for continuous human occupancy
- ***Permit Required Confined Space*** – is a confined space that has one or more of the following:
  - An actual or potential hazardous atmosphere
  - An engulfment hazard
  - Internal configuration such that an entrant could be trapped
  - Any other recognized safety or health hazard

# 1926.1202 Definitions

- **Controlling Contractor** is the employer that has overall responsibility for construction at the worksite.
- **Host employer** means the employer that owns or manages the property where the construction work is taking place.



# 1926.1203 General Requirements

- Before work begins, each employer must ensure that a ***competent person*** identifies each space that is a permit space, through consideration and evaluation of the elements of that space, including testing as necessary.
- The employer must either prevent entry or establish an entry program.



# 1926.1203 General Requirements



- If the workplace contains one or more permit spaces, the employer who identifies or receives notice must:
  - Inform exposed employees by posting danger signs or other effective means
  - Inform, in a timely manner and in a manner other than posting, authorized representatives and the controlling contractor, of the existence, location and the danger posed by each permit space.

# 1926.1203 General Requirements

- Alternate Procedures - paragraph (e )(2)
  - All physical hazards eliminated
  - Only hazard is actual or potential hazardous atmosphere
  - Forced air alone can maintain safe for entry
  - The employer develops monitoring and inspection data that supports the determinations above.



# 1926.1203 General Requirements

- Reclassification - paragraph (g)
  - No actual or potential atmospheric hazards.
  - All physical hazards eliminated prior to entry.
  - Document the basis for determining that all hazards have been eliminated through a certification containing:
    - The date
    - Location of space
    - Signature of person making determination

# 1926.1203 General Requirements

- (h) Permit Space Entry Communication and Coordination
  - Before entry operations begin, host employer must provide:
    - Location of each known permit space
    - Hazards or potential hazards in each space
    - Any precautions implemented by another employer for the protection of employees.

# 1926.1203 General Requirements

- (h) Permit Space Entry Communication and Coordination
  - Before entry operations begin, The Controlling Contractor must:
    - Obtain the host employer's information about permit space hazards and previous entries.
    - Provide the following information to each entity entering a permit space:
      - Information received from the host employer
      - Additional information the Controlling Contractor has about the space.
      - Precautions that have been used for protection in previous entries

# 1926.1203 General Requirements

- (h) Permit Space Entry Communication and Coordination
  - Each entry employer must:
    - Obtain all of the Controlling Contractor's information regarding permit space hazards and entry operations
    - Inform the Controlling Contractor of the permit space program the entry employer will follow, including any hazards likely to be confronted or created in the space

# 1926.1204 Permit Required Confined Space Program

- Each entry employer must:
  - Implement measures to prevent unauthorized entry
  - Identify and evaluate the hazards of permit spaces before entry
  - Develop the means, procedures and practices for safe entry
  - Provide the proper equipment for safe entry



# 1926.1205 Permitting Process

- Permit must be documented and signed prior to entry.
- Cancel permit when job is over or hazards are discovered.
- Retain cancelled permit for at least one year.

# 1926.1206 Entry Permit

- Space to be entered
- Purpose of entry
- Date and duration
- Authorized entrants
- Means of detecting atmospheric hazards
- Names of attendants
- Entry Supervisor(s)
- Hazards of the space
- Measures to isolate, eliminate or control hazards
- Acceptable entry conditions
- Results of tests and monitoring
- Rescue and emergency services
- Communication procedures
- PPE and other equipment necessary
- Other necessary information
- Any additional permits necessary (i.e. hot work)

# CONFINED SPACE ENTRY PERMIT

PERMIT IS NOT VALID UNLESS ALL APPROPRIATE ITEMS ARE COMPLETED AND ALL SAFE CONDITIONS ARE SATISFIED.

DATE: \_\_\_\_\_ ADDRESS / LOCATION: \_\_\_\_\_  
 TIME: \_\_\_\_\_ AM / PM CITY & STATE: \_\_\_\_\_

SCOPE OF WORK / PURPOSE	_____
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## PARTICIPANTS

MINIMUM OF ONE (1) ATTENDANT AND ONE (1) SUPERVISOR REQUIRED.

ROLE	PRINT NAME	SIGNATURE	CONFINED SPACE ENTRY TRAINING DATE
ENTRY SUPERVISOR			
ENTRY ATTENDANT			
ENTRY ATTENDANT			
ENTRANT			

COMMUNICATION METHODS (VERBAL, RADIO, HAND, ETC.): \_\_\_\_\_

## IN CASE OF EMERGENCY

RESCUE SERVICE ON STANDBY: \_\_\_\_\_ PHONE: \_\_\_\_\_

## EQUIPMENT

RETRIEVAL SYSTEM IN PLACE: Y / N RETRIEVAL HARNESS(ES) INSPECTED BY: \_\_\_\_\_  
 TRIPOD / WINCH REQUIRED: Y / N FIRE EXTINGUISHER INSPECTION DATE: \_\_\_\_\_  
 DESCRIBE NON-ENTRY RETRIEVAL PLAN: \_\_\_\_\_

## WORKZONE, PEDESTRIAN & VEHICLE PROTECTION

LIST SITE SECUREMENT PRECAUTIONS: \_\_\_\_\_  
 TAFFIC CONTROL PLAN IN PLACE: Y / N WARNING SIGN POSTED: Y / N CONFINED SPACE ENTRY COMMUNICATED TO OTHER CONTRACTORS PRESENT: Y / N  
 LIST OTHER CONTRACTORS PRESENT: \_\_\_\_\_  
 LIST CONFINED SPACE ENTRANCE BARRIERS: \_\_\_\_\_

## CONFINED SPACE ENTRY PREPARATION

CONFINED SPACE FULLY VENTILATED PRIOR TO ENTRY\*\* \*\*? Y / N \*REFER TO VENTILATION NOMOGRAPH ON PAGE 2.  
 OTHER FACILITIES PRESENT IN CONFINED SPACE? Y / N \*\*CONTINUOUS VENTILATION IS REQUIRED DURING PRESENCE OF ENTRANT(S)  
 NOTES ON ISOLATING OTHER FACILITIES: \_\_\_\_\_  
 WELDING OR HOT WORK REQUIRED\*? Y / N \*IF YES, PAGE 5 (CONFINED SPACE HOT WORK PERMIT) MUST BE COMPLETED AND ACCOMPANY THIS FORM

## ATMOSPHERIC TESTING

4-GAS MONITOR: RECORD CONTINUOUS MONITORING RESULTS EVERY 2 HOURS INITIAL ATMOSPHERIC TESTING TIME, PRIOR TO ENTRY: \_\_\_\_\_ AM / PM

TEST	PERMISSIBLE LEVELS	INITIAL TEST	TIME:	TIME:	TIME:	TIME:	TIME:
OXYGEN	19.5% - 23.5%	%	%	%	%	%	%
LOWER EXPOSIVE LIMIT	< 10%	%	%	%	%	%	%
HYDROGEN SULFIDE	< 10 PPM	PPM	PPM	PPM	PPM	PPM	PPM
CARBON MONOXIDE	< 35 PPM	PPM	PPM	PPM	PPM	PPM	PPM

## CONFINED SPACE ENTRY & EXIT TIMES

ENTRANT	TIME IN	TIME OUT	TIME IN	TIME OUT	TIME IN	TIME OUT

THIS CONFINED SPACE ENTRY PERMIT IS ONLY VALID FOR A SINGLE WORK SHIFT. (29 CFR 1910.146(e)(4))

## HAZARD IDENTIFICATION

HAZARD	LIST CONTROLS / SOLUTIONS TO EFFECTIVELY REDUCE OR ELIMINATE THE HAZARD
<input type="checkbox"/> ATMOSPHERE	
<input type="checkbox"/> HAZMAT	SDS(s) on site or readily available? <u>Y / N</u>
<input type="checkbox"/> FIRE / EXPLOSION	
<input type="checkbox"/> ELECTRICAL	
<input type="checkbox"/> ENGULFMENT	
<input type="checkbox"/> ENTRAPMENT	
<input type="checkbox"/> LIGHTING / VISIBILITY	
<input type="checkbox"/> SITE SECURITY	
<input type="checkbox"/> TEMPERATURE	
<input type="checkbox"/> TOXIC GAS / VAPORS	
<input type="checkbox"/> LO/TO CONTROLS	
<input type="checkbox"/> SLIPS / FALLS	
<input type="checkbox"/>	
<input type="checkbox"/>	

## PERMIT APPROVAL

DESIGNATED EVALUATOR  
 NAME: \_\_\_\_\_ SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_  
 ENTRY SUPERVISOR  
 NAME: \_\_\_\_\_ SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

## PERMIT CANCELLATION

ENTRY SUPERVISOR  
 NAME: \_\_\_\_\_ SIGNATURE: \_\_\_\_\_ TIME: \_\_\_\_\_ AM / PM

# 1926.1207 Training

- Employees must be trained to ensure that they possess the understanding, knowledge and skills necessary for the safe performance of their duties.
- The training must establish employee proficiency in the duties required.
- A record of training must be maintained.

# 1926.1208 Duties of Authorized Entrants

- The employer must ensure that all entrants:
  - Are familiar with the hazards of the space.
  - Properly use required equipment.
  - Communicate with attendant as necessary
    - Alert attendant of warning sign or symptom
    - Upon detection of a prohibited condition
  - Exit the space when necessary.

# 1926.1209 Duties of Attendants

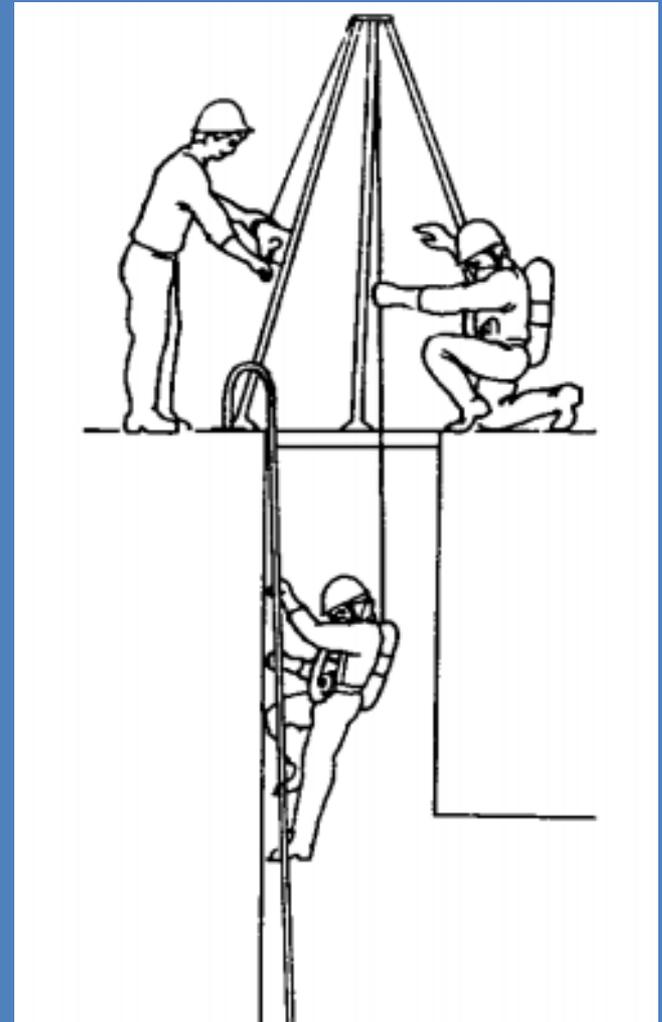
- Familiar and aware of hazards.
- Maintains an accurate count of entrants.
- Assesses activities to ensure safe entry.
- Summons rescue and emergency services.
- Performs non-entry rescue.
- Performs no duties that would interfere with the attendants duty to monitor the space.

# 1926.1210 Duties of Entry Supervisors

- Is familiar and understands the hazards
- Verifies, by checking that the appropriate entries have been made on the permit, and that all pre-entry activities have been conducted.
- Verifies that rescue services are available and that the means for summoning them are operable, and that the employer will be notified as soon as the services become unavailable.

# Non-entry Rescue

- Non-entry rescue is mandatory unless the retrieval equipment would increase the risk of entry.
- When non-entry rescue is selected, the entry employer must also confirm before entry that “emergency assistance” is available if the non-entry rescue fails.
- Emergency assistance would usually be provided by a local fire department or similar service.



# Entry Rescue

- Used when non-entry rescue is not feasible.
- On site team
  - Contractors own employees
  - Rescue Contractor
- Off site team
  - Local CSE trained fire service
  - Rescue Contractor



# 1926.1211 Rescue and Emergency Services

- (a) Off Site Service
  - Has capability and equipment to reach entrant in a timely manner
  - Agrees to notify the employer immediately in the event that the rescue service becomes unavailable.
- (b) On Site Service/Own employees
  - Trained to perform assigned rescue duties
  - At least one member training first aid and CPR
  - Practice rescue at least once every 12 months
- (c ) Non Entry Rescue is required
- (d) Safety Data Sheet required

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