

Permit-Required Confined Space	S.O.P. 3H		Page 1 of 6
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STANDARD OPERATING PROCEDURE			

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I. SCOPE AND PURPOSE

- A. To provide safe work procedures to be followed for Permit-Required Confined Space Work.
- B. Employees engaged in the supervision, attendance or entrance of Permit-Required Confined Spaces shall comply with the provisions presented in this procedure.

II. RELATED PROCEDURES AND RESOURCES

- A. S.O.P. 3G, Personal Protection Equipment
- B. S.O.P. 5F, Respiratory Protection
- C. S.O.P. 5G, Hazard Communication
- D. Appendix Attachment Form 3H.1a, Confined Space Attendance Log
- E. Appendix Attachment Form 3H.1b, Confined Space Monitor Log
- F. Permit-Confined Space Field Training Module
- G. 29 CFR 1910.146, Permit-Required Confined Space
- H. 29 CFR 1926.21, Safety training and education

III. DEFINITIONS

- A. **Confined Space** - a space that:
 - 1. Is large enough and so configured to allow entry; and
 - 2. Has limited or restricted means for entry or exit; and
 - 3. Is not designed for continuous occupancy.
 - 4. Confined or enclosed spaces include, but are not limited to
 - a. Storage tanks, process vessels, bins, boilers, ventilation or exhaust ducts.

- b. Sewers, and open top spaces more than 4 feet in depth such as pits, tubs, vaults, and vessels.
- B. **Permit-Required Confined Space** - any space having a limited means of egress (entry/exit), which is subject to the accumulation of toxic or flammable contaminants or has an oxygen deficient atmosphere.
 - 1. A Permit-Required Confined Space has one or more of the following characteristics:
 - a. Contains or has the potential to contain a hazardous atmosphere.
 - b. Contains a material that has the potential for engulfing an entrant.
 - c. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging wall or by a floor, which slopes downward and tapers to a smaller cross-section.
 - d. Or contains any other recognized serious safety or health hazard.

IV PERSONAL RESPONSIBILITY

- A. Director of Safety
 - 1. Shall review this S.O.P. annually for its effectiveness and/or as regulatory changes occur and make the appropriate policy changes to ensure its compliance and effectiveness.
 - 2. Shall ensure all incidents involving confined space are investigated.
 - 3. Shall ensure implementation of changes to this S.O.P. as determined through the investigation.
- B. Supervisor
 - 1. Administer, verify, and document all work related to Confined Space Entry.
 - 2. Ensure that employees, under their supervision, comply with all applicable portions of this procedure.
 - 3. Ensure the employees and subcontractors under their supervision follow all applicable federal, state, local laws and Contractor/Client provisions.
 - 4. Request a copy of the Contractor/Client's Confined Space Program, and forward it their Project Manager and Safety Coordinator. When the prime Contractor/Client's Confined Space program exceeds the requirements of this procedure; it shall be the followed.
 - 5. Ensure that an attendant is responsible for only one confined space at a time.
 - 6. Ensure that all required documentation is completed in full.
 - a. Appendix Attachment Form 3H.1a, Confined Space Attendance Log. One log for each Confined Space location, shall be completed daily for each shift.
 - b. Appendix Attachment Form 3H.1b, Confined Space Monitor Log. One log for each Confined Space location, shall be completed daily for each shift.

NOTE: The Supervisor and the Confined Space Entry Supervisor may be the same person.

C. Confined Space Entry Supervisor Duties

1. Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of exposure to such hazards.
2. Ensure that conditions are acceptable for entry. Verify, by checking that the appropriate entries have been made on the permit, that all tests specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before signing the permit and allowing entry to begin. If the Contractor/Client's Confined Space Permitting Process will be used, all components shall be reviewed and verified.
3. If required, verify that all Confined Space personnel are listed on the permit.
4. Review all hazards associated with entry, permitting requirements, and monitoring results with all attendants, entrants, and rescue services.
5. Authorize Entrants and Attendants.
6. Establish, document, and communicate to the employees and prime Contractor/Client the communication system that will be utilized to coordinate all phases of entry operation.
7. Establish and document in conjunction with the prime Contractor/Client who will be providing rescue services for Confined Space Entrants and how the rescue will be activated.

D. Confined Space Attendant Duties

1. Maintain a daily "Confined Space Attendance Log" that details the name, both printed name and signature, date and count of all entrants for each Confined Space location.
2. Verify that all Confined Space Entrants have the appropriate training required for entry and work within the Confined Space.
3. Be knowledgeable of any information related to the mode, signs, symptoms and consequences of exposure to any chemical hazards in the Confined Space.
4. Participate in the review of the Entry Permit and sign it.
5. Monitor entrant status and alert entrants of the need to evacuate the space.
6. In the event that the entrants are unable to exit the Confined Space, activate the rescue system.
7. Prohibit any unauthorized personnel from entering the Confined Space. In the event of an unauthorized entrant, immediately notify the Confined Space Supervisor and/or the Superintendent of the unauthorized entrant.
8. Never perform or accept a duty that may interfere with the duty to monitor and protect the authorized entrants.
9. Never perform Attendant duties for more than one confined space at the same time.
9. Remain in position outside the Confined Space, until relieved by another authorized attendant. A relief system will be established for all people assigned as an attendant. The relief attendant will be briefed on existing

conditions and be named on the permit as such before relieving the primary attendant

10. Confined Space Attendant Equipment:
 - a. Fluorescent Vest (to be worn at all times)
 - b. Communication Equipment that is capable of communicating with entrant and activating a Confined Space Rescue System, i.e., two-way radio, air horn.
 - c. Log Book
 - d. Timekeeping device
 - e. Multi-gas Monitor, if required with extra batteries.
 - f. Flashlight, if assigned for night shift or in low light areas.

E. Confined Space Entrant Duties

1. Participate in and/or review the Entry Permit requirements and sign the permit.
2. Be aware of all hazards that exist in the Confined Space, know what the signs or symptoms of exposure are, and know what to do in case of an emergency.
3. Follow the instructions given by the Attendant, Supervisor, Superintendent and Rescue Crew.
4. Show proof of “Confined Space Training” to the Attendant upon entry into the Confined Space.
5. Alert the attendant of any unanticipated hazards within the Confined Space including physical and biological hazards.
6. Understand that they are entitled to request additional monitoring at any time.

V. GENERAL REQUIREMENTS

- A. **Entry Permit System:** “The Company” will use the Entry Permit System of the Client.
- B. **Authorized Personnel:** Only designated and authorized; entrants, attendants, and supervisors shall perform work associated with Permit-Required Confined Spaces. Only designated and authorized personnel shall test or monitor the atmosphere associated with the Permit-Required Confined Space.
- C. **Protection of employees during entry into permit-required confined spaces:**
 1. Protection from external hazards. Provisions and procedures shall be made to prevent unauthorized persons from entering the confined space and to prevent vehicles from getting in close proximity to the confined space.
 2. Protection within and during entry. Provisions and procedures shall be made to continuously monitor the confined space while employees are working within.
 - a. Results of continuous monitoring shall be documented on Appendix Attachment Form 3H.1b “Confined Space Monitor Log.”
 - b. Entrants will be trained and participate in a Lockout/Tagout process

specific to the confined space the entrants will be within.

- D. **Multi-employer within the confined space:** The Confined Space Entry Supervisor shall coordinate with other employers/contractors prior to entry, to ensure that procedures are defined and implemented to prevent endangering each other.
- E. **Unexpected Hazards or Conditions:** In the event that conditions change or hazards exist that were not expected, the Entry Supervisor must stop work in the confined space, revise the entry permit, and correct the hazard or make provisions to protect from the hazard. This includes but is not limited to unauthorized entry, hazards not covered by the permit, insufficient lighting, ventilation, equipment, or means of egress (ladders, scaffolds), the occurrence of an injury or near-miss and employee complaints or requests for additional monitoring.
- F. **Rescue and Emergency Services:** Third party subcontractor or Owner/Operators of entry spaces shall provide rescue and emergency services and meet the requirements of 29 CFR 1910.146.
- G. **Permit Location:** The attendant and entrants must know the specific location of the Confined Space permit and shall be allowed to review the permit prior to entry or at any time thereafter.

VI. COMMUNICATION

- A. The entrants within the space are to be capable of or have equipment capable of communicating with the attendant at all times while in the space.
- B. The entrants will immediately be removed from the space if the communication system among the Superintendent, Attendant, Entrant and Rescue Crew becomes inoperable and unsecured.

VII. TRAINING

- A. All Confined Space personnel will receive “Confined Space” training and achieve an efficiency percentile of at least 75% from at least the following prior to working in any confined space:
 - 1. Contractor Safety Council (Coastal Bend, Texas Mid-Coast, Houston, etc.) or Basic Industries of South Texas safety department, and
 - 2. Contractor/Client’s Confined Space Permitting System.
- B. Confined Space personnel will have available a certification card/badge certifying completion of training.
- C. Each Confined Space personnel will receive specific training that relates to the particular Confined Space location that they will work in. This information will be available through the Owner’s “Confined Space Profile and Checklist”.
- D. Prior to entering the Confined Space, all entrants will be trained in the use of all Personal Protective Equipment that will be utilized, not to exclude PPE training for the assigned task to be performed within the Confined Space.
- E. Prior to entering the Confined Space, all entrants will be trained in the use of the appropriate Lockout/Tagout process to be used during entry.

VIII. POSTINGS

- A. A sign will be designated for each location.
- B. This sign will clearly state that the location is “Confined Space-Permit Required” or such language that will convey the space as a hazard.