The Confined Space Entry Program is provided to protect authorized employees that will enter confined spaces and may be exposed to hazardous atmospheres, engulfment in materials, conditions that may trap or asphyxiate due to converging or sloping walls, or contains any other safety or health hazards.

NOTE: This policy is designed to address Confined Space exposures, in compliance with Cal/OSHA safety standards, Section 5158. Note: Employers required to comply with Section 5158 are not required to implement a permit system. Only written operating and rescue procedures are required.

Confined Space is defined by the concurrent existence of the following conditions:
- Existing ventilation is insufficient to remove dangerous air contamination, oxygen enrichment and/or oxygen deficiency that may exist or develop, and
- Ready access or egress for the removal of a suddenly disabled employee is difficult due to the location and/or size of the opening(s)

Refer to the Confined Space Evaluation Flowchart on page 6 to determine if individual spaces meet the criteria for confined space exposures.

This policy is designed to address the following areas:
- Responsibilities
- Pre-Entry Requirements
- Entry and Work in Confined Spaces
- Multi-Employer Worksite Exposures
- Confined Space Emergencies

RESPONSIBILITIES

Management
- Development of Confined Space Entry program to meet Cal/OSHA requirements
- Ensure proper training for entry & rescue teams
- Provide proper equipment for entry & rescue teams
- Ensure field supervisors are trained to conduct confined space assessments
- Annually review this program and all Entry Permits

Field Supervisors (Superintendents and Foremen)
- Adhere to program requirements
- Ensure that proper signs are posted at entry points
- Ensure all field employees are educated and trained on Confined Space exposures
- Coordinate work-activities with affected employers on multi-employer worksites
- Survey surrounding area to avoid/identify hazards such as drifting vapors from tanks, piping and sewers
- Report any previously unidentified hazards associated with confined spaces

PRE-ENTRY REQUIREMENTS:

1. Lines that may convey flammable, injurious, or incapacitating substances into the space shall be disconnected, blinded, or blocked off by other positive means to prevent the development of dangerous air contamination, oxygen enrichment and/or oxygen deficiency within the space. The disconnection or blind shall be located or done in such a manner that inadvertent reconnection of the line or removal of the blind are effectively prevented. (Does not apply to public utility gas distribution systems)
2. The space must be emptied, flushed, or otherwise purged of flammable, injurious or incapacitating substances to the extent feasible.

3. The air shall be tested with an appropriate devise or method to determine whether dangerous air contamination, oxygen enrichment and/or an oxygen deficiency exists.
   - A written record of such testing results shall be made and kept at the work site for the duration of the work.
   - Affected employees and/or their representative shall be afforded an opportunity to review and record the testing results.
   - If an electronic or thermal device is used to test a confined space that contains or is likely to develop a dangerous air contamination due to flammable and/or explosive substances, then the devise must be approved for such use.

4. Where interconnected spaces are blinded off as a unit, each space must be tested and the results recorded, and the most hazardous condition so found shall govern procedures to be followed.

5. If dangerous air contamination, oxygen enrichment and/or oxygen deficiency does not exist within the space, as demonstrated by tests performed, entry into and work within the space may be subject to the following provisions:
   a. Testing must be conducted with sufficient frequency to ensure that the development of dangerous air contamination, oxygen enrichment and/or oxygen deficiency does not occur during the performance of any operation.
   b. If the development of dangerous air contamination, oxygen enrichment and/or an oxygen deficiency is imminent, the requirements under Confined Space Operations will also apply.

6. Where the existence of dangerous air contamination, oxygen enrichment and/or oxygen deficiency is demonstrated by tests performed, existing ventilation must be improved/corrected by appropriate means.

7. When additional ventilation provided has removed dangerous air contamination, oxygen enrichment and/or oxygen deficiency as demonstrated by additional testing conducted (and recorded), entry into and work within the space may proceed.

8. No source of ignition shall be introduced until the implementation of appropriate provisions have ensured that dangerous air contamination due to oxygen enrichment, flammable and/or explosive substances does not exist.

9. Whenever oxygen consuming equipment such as salamanders, plumbers’ torches or furnaces, and the like, are to be used, measures must be taken to ensure adequate combustion air and exhaust gas venting.

10. To the extent possible, provisions must be made to permit ready entry and exit.

ENTRY AND WORK IN CONFINED SPACES:

The requirements of this section apply to entry into and work within a confined space whenever an atmosphere free of dangerous air contamination, oxygen enrichment and/or oxygen deficiency cannot be ensured through the PRE-ENTRY process, or whenever, due to the existence of an emergency, it is not feasible to ensure the removal of dangerous air contamination, oxygen enrichment and/or an oxygen deficiency through the implementation of the PRE-ENTRY process.

1. Tanks, vessels, or other confined spaces with side and top openings must be entered from side openings (within 3 ½ fee of the bottom) when practicable.

2. Appropriate, approved respiratory protective equipment must be provided and worn.

3. An approved safety belt with an attached line must be used. The free end of the line must be secured outside the entry opening. The line must be at least ½ inch diameter and 2,000 pounds test. (Exception: When it can be shown that a safety belt and attached line would further endanger the life of the employee)
4. At least one employee must stand by on the outside of the confined space ready to give assistance in case of emergency.
   - The standby employee must have appropriate, approved, respiratory protection equipment, including an independent source of breathing air available for immediate use.
   - The standby employee may enter the confined space, but only in case of emergency and only after alerting at least one additional employee outside of the confined space of the existence of an emergency and of the standby employee’s intent to enter the confined space.

5. At least one additional employee who may have other duties must be within sight or call of the standby employee(s).

6. When entry must be made through a top opening, the following requirements will apply:
   - The safety belt must be of the harness type that suspends a person in an upright position.
   - A hoisting device or other effective means must be provided for lifting employees out of the space.

7. Work involving the use of flame, arc, spark, or other source of ignition is prohibited within a confined space that contains or is likely to develop, oxygen enrichment or dangerous air contamination due to flammable and/or explosive substances.

8. Whenever gases such as nitrogen are used to provide an inert atmosphere for preventing the ignition of flammable gases or vapors, no flame, arc, spark, or other source of ignition shall be permitted unless the oxygen concentration is maintained at less than 20 percent of the concentration that will support combustion.
   - Testing of the oxygen content shall be conducted with sufficient frequency to ensure conformance with this requirement.
   - A written record of the results of such testing must be made and kept at the work site for the duration of the work.
   - Affected employees and/or their representative must be provided an opportunity to review and record the testing results.

9. Only approved lighting and electrical equipment, in accordance with Low-voltage Electrical Safety Orders must be used in confined spaces subject to oxygen enrichment or dangerous air contamination by flammable and/or explosive substances.

10. Employees working in confined spaces that have last contained substances corrosive to the skin or substances that can be absorbed through the skin must be provided with, and shall be required to wear, appropriate personal protective clothing or devices.

MULTI-EMPLOYER WORKSITE REQUIREMENTS:

11. If GCC arranges to have employees of another employer (contractor) perform work that involves a confined space entry:
   - The contractor has been informed that the workplace contains a confined space and that confined space entry is allowed only through compliance with a confined space program meeting the requirements of Cal/OSHA safety standards, depending on which Cal/OSHA section applies to the contractor;
   - The contractor must be informed of the elements, including the hazards identified and GCC’s experience with the confined space, that make the space in question confined space;
   - The contractor must be informed of any precautions or procedures that GCC has implemented for the protection of employees in or near the confined space where the contractor’s personnel will be working;
   - Coordinate entry operations with the contractor, when both GCC personnel and contractor personnel will be working in or near the confined space; and
• Debrief the contractor at the conclusion of the confined space operation regarding the confined space program followed and any hazards confronted or created in the confined space during entry operations.

12. Each contractor who is retained to perform confined space entry operations must:
   1. Obtain any available information regarding confined space hazards and entry operations from the host employer;
   2. Coordination entry operations with the host employer, when both host employer personnel and contractor personnel will be working in or near a confined space; and
   3. Inform the host employer of the confined space program that the contractor will follow and of any hazards confronted or created in the confined space, either through a debriefing or during the entry operation.

CONFINED SPACE EMERGENCIES

In the event of an emergency, call 911!

1. At least one person trained in first aid and cardiopulmonary resuscitation (CPR) must be immediately available whenever the use of respiratory protective equipment is required.

2. An effective means of communication between employees inside a confined space and a standby employee will be utilized if respiratory protective equipment is being used, or whenever employees inside a confined space are out of sight of the standby employee(s). All affected employees will be trained on the applicable communication system, and the system must be tested before each use to confirm its effective operation.

3. Only trained and qualified rescuer can perform rescues. Qualifications must include knowledge of and experience working with all hazards associated with rescue and confined space entry operations.

4. Depending on the severity of the emergency, different rescue method can be used:
   • **Self-Rescue**: When the emergency is minor, self-rescue is the best approach.
   • **Non-Entry Rescue**: When the worker is disabled, the use of equipment and other rescue aids should be used when possible, without creating additional hazard or injury to the trapped employee.
   • **Entry Rescue**: Entry rescues can only be performed by trained and qualified individuals. Call 911 for emergency assistance.
CONFINED SPACE EVALUATION FLOWCHART

A guide for determining whether individual spaces meet the OSHA criteria for confined space, or permit required confined space (29 CFR 1910.146)

- Is the space large enough, and so configured that an individual can enter and perform work?
  - NO
  - YES

- Does the space have a limited means for entry or exit?
  - NO
  - YES

- Is the space designed for continuous occupancy?
  - NO
  - YES

STOP
This is not a confined space

This is a confined space. You must now determine whether it is a permit required confined space

DANGER
Permit Required Confined Space - obtain permit prior to entry

This is a Permit Required Confined Space and must be as posted. Follow established permit and entry procedures prior to conducting work in the space.

Note: A space which which can be reassessed as outlined in Section (5)(c)(3)(A) is still a permit required confined space and must be so treated, for EACH entry, until all hazards have been eliminated from the space.

Note: While the OSHA confined space standard does not specifically define "limited means for entry or exit," the original promulgation of the rule (39 FR 4477-8) states "OSHA notes that small doors and other portals through which a person can walk are not considered to be limited means for entry or exit." Additionally, walls 6 feet high or other obstruction may limit a person's ability to exit the space quickly.

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