



CONFINED SPACES PROGRAM

Meets California OSHA Requirements
Integrated Water Services, Inc.
(the Company)



Purpose

The purpose of this program is to ensure the safety of all employees and contractors working for the Company and to comply with all regulations and host clients that pertain to confined spaces in California and shall be conducted in accordance with Cal/OSHA California Code of Regulations, Title 8, Section 5157.

Scope

This program covers all employees and other workers that may be involved in confined space entry in California. When work is performed on a non-owned or operated site, the operator's program shall take precedence. This document covers Company employees and contractors and shall be used on owned premises, or when an operator's program doesn't exist or is less stringent.

Definitions

Acceptable entry conditions - the conditions that must exist in a confined space to allow entry and to ensure that employees involved with a confined space entry can safely enter into and work within the space.

Attendant - an individual stationed outside one or more Confined spaces who monitors the authorized Entrants and who performs all Attendant's duties assigned in the Company Confined Spaces Program. Attendants must have sufficiently completed and fully understands the Confined Space training and is approved by the HSE Manager to work in a confined space as an Attendant.

Authorized Entrant - an individual who is authorized by the Company to enter a confined space. Entrants must have sufficiently completed and fully understands the Confined Space training and is approved by the HSE Manager to work in a confined space as an Authorized Entrant.

Blanking or Blinding - the absolute closure of a pipe, line, or duct by the fastening of a solid plate (such as a spectacle blind or a skillet blind) that completely covers the bore and that is capable of withstanding the maximum pressure of the pipe, line, or duct with no leakage beyond the plate.

Confined Space

- A space that is large enough and so configured that an employee can bodily enter and perform assigned work;
- Has limited or restricted means for entry or exit (for example, tanks, vessels, coolers, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry); and
- Is not designed for continuous occupancy.

Double block and bleed - the closure of a line, duct, or pipe by closing and locking or tagging two in-line valves and by opening and locking or tagging a drain or vent valve in the line between the two closed valves.

Emergency - any occurrence (including any failure of hazard control or monitoring equipment) or an event internal or external to the confined space that could endanger Entrants.

Engulfment - the surrounding and effective capture of a person by a liquid or finely divided (flowable) solid substance that can be aspirated to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction, or crushing.



Entry - the action by which a person passes through an opening into a confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the Entrant's body breaks the plane of an opening into the space.

Entry permit – means the written or printed document that is provided by the Company to allow and control entry into a confined space that contains the information specified in this program.

Entry Supervisor - the person responsible for determining if acceptable entry conditions are present at a confined space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required by this section.

- Entry Supervisors must have sufficiently completed and fully understands the Confined Space training and is approved by the HSE Manager to work in a confined space.
- 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 by this section for each role he or she fills. Also, the duties of Entry Supervisor may be passed from one individual to another during the course of an entry operation.
- The Entry Supervisor is responsible to test and monitor the atmosphere conditions.

Hazardous atmosphere - an atmosphere that may expose employees to the risk of death, incapacitation, and impairment of ability to self-rescue (that is, escape unaided from a confined 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), (0% is normal).
- Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent, (20.9 % is normal).
- Any other atmospheric condition that is immediately dangerous to life or health. (Ex.-H2S 10%, 0% is normal).
- Note: For air contaminants for which OSHA has not determined a dose or permissible exposure limit, other sources of information, such as Material Safety Data Sheets that comply with the Hazard Communication Standard, published information, and internal documents can provide guidance in establishing acceptable atmospheric conditions.

Hot work permit - the written authorization to perform operations (for example, riveting, welding, cutting, burning, and heating) capable of providing a source of ignition.

Immediately dangerous to life or health (IDLH) - any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual's ability to escape unaided from a confined space.

- Note: Some materials -- hydrogen fluoride gas and cadmium vapor, for example -- may produce immediate transient effects that, even if severe, may pass without medical attention, but are followed by sudden, possibly fatal collapse 12-72 hours after exposure. The victim "feels normal" from recovery from transient effects until collapse. Such materials in hazardous quantities are considered to be "immediately dangerous to life or health".

Inerting - the displacement of the atmosphere in a permit space by a non-combustible gas (such as nitrogen) to such an extent that the resulting atmosphere is non-combustible. This procedure produces an IDLH oxygen deficient atmosphere.

Isolation - the process by which a confined space is removed from service and completely protected against the release of energy and material into the space by such means as: blanking or blinding; misaligning or removing



sections of lines, pipes, or ducts; a double block and bleed system; lockout or tagout of all sources of energy; or blocking or disconnecting all mechanical linkages.

Line Breaking - the intentional opening of a pipe, line, or duct that is or has been carrying flammable, corrosive, or toxic material, an inert gas, or any fluid at a volume, pressure, or temperature capable of causing injury.

Non-Permit Confined Space - A confined space that does not contain or, with respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm.

Oxygen deficient atmosphere - an atmosphere containing less than 19.5 percent oxygen by volume.

Oxygen enriched atmosphere - an atmosphere containing more than 23.5 percent oxygen by volume.

Permit-Required Confined Space - 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.

Permit system - the employer's written procedure for preparing and issuing permits for entry and for returning the confined space to service following termination of entry.

Prohibited condition - any condition in a confined space that is not allowed by the permit during the period when entry is authorized.

Rescue service - the personnel designated to rescue employees from Permit-Required Confined Spaces.

Retrieval system - the equipment (including a retrieval line, chest or full-body harness, wristlets, if appropriate, and a lifting device or anchor) used for non-entry rescue of persons from confined spaces.

Testing - the process by which the hazards that may confront Entrants of a confined space are identified and evaluated. Testing includes specifying the tests that are to be performed in the permit space.



Responsibilities

Managers/Supervisors

- Shall ensure that all employees have been trained and fully understand the requirements of this program.
- Shall ensure that all confined space assessments have been conducted and documented.
- Shall ensure that provisions and procedures are in place for the protection of employees from external hazards including but not limited to pedestrians, vehicles and other barriers and by use of the pre-entry checklist verifying that conditions in the permit space are acceptable for entry during its duration.
- Shall ensure that all Permit-Required Confined Spaces permits are posted.
- Shall ensure that confined spaces are identified properly as either a Non-Permit Confined Space or a Permit-Required Confined Space.
- Responsible for posting permit-required confined spaces with warning signs to alert employees. If the workplace contains permit spaces, the Company shall inform exposed employees and other employees performing work in the area, by posting danger signs or by any other equally effective means, of the existence, location of and the danger posed by the permit spaces.
- Shall ensure that all confined spaces that have been identified as “no entry” have signs that state, “DANGER- DO NOT ENTER”.
- Shall ensure signs have been posted at all Permit-Required Confined Space areas that state, “DANGER – PERMIT ENTRY CONFINED SPACE” along with the proper warning word such as “ASPHYXIAN, FLAMMABILITY or TOXIC HAZARD”
- Necessary equipment is provided at no cost to the employees, maintained properly and used properly. Equipment (PPE, communication, testing, ventilation, etc.) shall be provided to the employee at no cost and maintained in the proper manner.
- The Company is responsible for conducting an annual review of the confined space entry program. The Company will review the confined permit space program, using the canceled permits retained for one year after each entry. The Company will revise the program as necessary, to ensure that employees participating in entry operations are protected from permit space hazards.

Affected Employee

- Shall attend Confined Space Entry training commensurate with their duties and when duties change as required.
- Shall comply with all aspects of this program.
- Authorized Entrants, Attendants and Entry Supervisors may be any Company employee that is authorized by management to work in a confined space setting and that has been trained and is proficient in the understanding of program requirements.

Authorized Entry Supervisor Duties

- Shall have a tailgate safety meeting, with all workers to be involved in the confined space entry and review the job to be performed and what safety concerns may be present.
- Shall confirm that all isolation, Lock/out and Tag/outs have been completed prior to entry into a confined space.
- Shall ensure that the requirements of this program are followed and maintained.
- Shall test all atmosphere conditions prior to entry and shall complete and maintain the confined space permit form, and have it accessible for review on the job site at all times.
- Shall notify the Company supervisor of entry into a confined space, and notify the supervisor of any changes that may occur, during an entry.



- If the confined space poses a hazard that cannot be eliminated, the Entry Supervisor must arrange for a rescue services.
- If the confined space poses no hazards to the Entrants, the Entry Supervisor can reclassify the confined space to a Non-Permit Confined Space.
- A stand-by rescue team is not required to be on site for Non-Permit Confined Space entries.

Authorized Attendant Duties

- Knows the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
- Is aware of possible behavioral effects of hazard exposure in authorized Entrants.
- Continuously maintains communication and an accurate count of authorized Entrants in the confined space and ensures that the means used to identify authorized Entrants, and accurately identifies who is in the confined space.
- Remains outside the confined space during entry operations until relieved by another Attendant.
- The Company has procedures to be used by a single attendant monitoring several confined spaces during an emergency. If more than one confined space is to be monitored by a single attendant, the program must include the means and procedures that will be used in order to enable the attendant to respond to emergencies in one or more permit spaces that he/she is monitoring without distraction from all responsibilities. This will include radio communications with emergency responders or other methods of summoning aid, directing entrants to leave the confined spaces, etc. The procedures shall be on the confined space permit.
- Monitors activities inside and outside the confined space to determine if it is safe for Entrants to remain in the space and orders the authorized Entrants to evacuate the confined space immediately under any of the following conditions:
 - If the Attendant detects a prohibited condition;
 - If the Attendant detects the behavioral effects of hazard exposure in an authorized Entrant;
 - If the Attendant detects a situation outside the space that could endanger the authorized Entrants;
 - If the Attendant cannot effectively and safely perform all the duties required.
- Summon rescue and other emergency services as soon as the Attendant determines that authorized Entrants may need assistance to escape from confined space hazards.
- Takes the following actions when unauthorized persons approach or enter a confined space while entry is underway:
 - Warn the unauthorized persons that they must stay away from the confined space;
 - Advise the unauthorized persons to exit the confined space immediately, if they have entered the space;
 - Inform the authorized Entrants and the Entry Supervisor if unauthorized persons have entered the confined space.
- Performs no duties that might interfere with the Attendant's primary duty to monitor and protect the authorized Entrants.
- Authorized Attendants shall not monitor more than one confined space at a time.

Authorized Entrant Duties

- Knows the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure;



- Uses appropriate personal protective equipment properly, e.g., face and eye protection, and other forms of barrier protection such as gloves aprons, coveralls, and breathing equipment;
- Is aware of possible behavioral effects of hazard exposure in authorized Entrants;
- Shall witness and verify calibrated air monitoring data and if approved, sign off, before entry is made.
- Is entitled to request additional monitoring at any time.
- Maintain communication with the Attendants to enable the Attendant to monitor the Entrants status as well as to alert the Entrant to evacuate if needed; and
- Exit from confined spaces as soon as possible when ordered by an Attendant or Entry Supervisor, when the Entrant recognizes the warning signs or symptoms of an exposure exists, or when a prohibited condition exists, or when an alarm is activated.

Procedure

Process for Confined Space Operations That May Be Performed by Contractors

When an employer (host employer) arranges to have employees of another employer (contractor) perform work that involves permit space entry or confined space entries, the host employer shall:

- Inform the contractor that the workplace contains permit spaces and that permit space entry is allowed only through compliance with a permit space program meeting the requirements of this section(c)(8), section 5158 or section 8355 of Cal/OSHA California Code of Regulations, Title 8, depending on which section applies to the contractor;
- Apprise the contractor of the elements, including the hazards identified and the host employer's experience with the space, that make the space in question a permit space;
- Apprise the contractor of any precautions or procedures that the host employer has implemented for the protection of employees in or near permit spaces where contractor personnel will be working;
- Coordinate entry operations with the contractor, when both host employer personnel and contractor personnel will be working in or near permit spaces, as required by subsection (d)(11) of Cal/OSHA California Code of Regulations, Title 8; and
- Debrief the contractor at the conclusion of the entry operations regarding the permit spaced program followed and regarding any hazards confronted or created in permit spaces during entry operations.

Written Confined Space Policy/Program

If the Company decides that its employees will enter permit spaces, the Company shall develop and implement a written permit space program that complies with Cal/OSHA California Code of Regulations, Title 8, Section 5157. The written program shall be available for inspection by employees and their authorized representatives.

Process to Identify and Classify Confined Spaces That May Exist at a Work Site

- Evaluation of the workplace is required to determine if any spaces are permit-required confined spaces.
- The Company shall identify and evaluate the hazards of permit spaces before employees enter them.
- If the workplace contains permit spaces, The Company shall inform exposed employees and other employees performing work in the area, by posting danger signs or by any other equally effective means, of the existence, location of and the danger posed by the permit spaces.
- When there are changes in the use or configuration of a non-permit confined space that might increase the hazards to entrants, The Company shall re-evaluate that space and, if necessary, reclassify it as a permit-required confined space.
- A space classified by the Company as a permit-required confined space may be reclassified as a non-permit confined space under the following procedures:



- If the permit space poses no actual or potential atmospheric hazards and if all hazards within the space are eliminated without entry into the space, the permit space may be reclassified as a non-permit confined space for as long as the non-atmospheric hazards remain eliminated.
- If it is necessary to enter the permit space to eliminate hazards, such entry shall be performed as required by the regulation.
- If testing and inspection during that entry demonstrate that the hazards within the permit space have been eliminated, the permit space may be reclassified as a non-permit confined space for as long as the hazards remain eliminated.
- If hazards arise within a permit space that has been declassified to a non-permit space, each employee in the space shall exit the space. The Company shall then re-evaluate the space and determine whether it must be reclassified as a permit space.

Confined Space Entry Procedures

The Company is responsible for performing a hazard assessment of the permit-required confined space(s). The Company shall identify and evaluate the hazards of permit spaces before employees enter them.

Safe entry procedures, detailing who may enter and under what conditions, for all permit-required confined spaces shall be established per this policy. The Company will develop and implement the means, procedures, and practices necessary for safe permit space entry operations, including isolating the permit space. Isolation means the process by which a permit space is removed from service and completely protected against the release of energy and material into the space by such means as blanking or blinding; misaligning or removing sections of lines, pipes or ducts; a double block and bleed system; lockout or tagout of all sources of energy; or blocking or disconnecting all mechanical linkages. Additional requirements include.:

- A. Specifying acceptable entry conditions;
- B. Isolating the permit space;
- C. Purging, inerting, flushing, or ventilating the permit space as necessary to eliminate or control atmospheric hazards;
- D. Barriers/barricades are used to prevent unauthorized entry into a confined space. Provisions and procedures for pedestrian, vehicle and other barriers as necessary to protect entrants from external hazards and a method for verifying that conditions in the permit space are acceptable for entry during its duration are required. Take the following actions when unauthorized persons approach or enter a permit space while entry is underway:
 - Warn the unauthorized persons that they must stay away from the permit space;
 - Advise the unauthorized persons that they must exit immediately if they have entered the permit space; and
 - Inform the authorized entrants and the entry supervisor if unauthorized persons have entered the permit space; and
- E. Verifying that conditions in the permit space are acceptable for entry throughout the duration of an authorized entry.

Use of Confined Space Entry Permits

The Company has developed and implemented a system for the preparation, issuance, use and cancellation of entry permits.

Before entry is authorized, The Company shall document the completion of required measures by preparing an entry permit.

Before entry begins, the entry supervisor identified on the permit shall sign the entry permit to authorize entry.



The completed permit shall be made available at the time of entry to all authorized entrants or their authorized representatives, by posting it at the entry portal or by any other equally effective means, so that the entrants can confirm that pre-entry preparations have been completed.

The duration of the permit may not exceed the time required to complete the assigned task of job identified on the permit in accordance with subsection.

The entry supervisor shall terminate entry and cancel the entry permit when the entry operations covered by the entry permit have been completed or a condition that is not allowed under the entry permit arises in or near the permit space.

The Company shall retain each canceled entry permit for at least 1 year to facilitate the review of the permit space program. Any problems encountered during an entry operation shall be noted on the pertinent permit so that appropriate revisions to the permit space program can be made.

Additional Requirements include:

- Complete the Company Confined Space Entry Permit before proceeding with work in a Permit-Required Confined Space.
- All authorized persons shall review and sign the confined space permit.
- At least one trained Attendant must always be outside the Permit-Required Confined Space.
- The Attendant must monitor the authorized Entrants for the duration of the entry operation.
- Only authorized Entrants may enter a Permit-Required Confined Space.
- All Entrants must sign in and out on the entry permit when entering and leaving a Permit-Required Confined Space.
- Post signs and barricades outside all Permit-Required Confined Spaces to notify personnel that a confined space entry is in progress and unauthorized entry is prohibited.
- Conditions must be continuously monitored where Entrants are working to determine that acceptable conditions are maintained during entry.
- If a hazardous atmosphere is detected during an entry, personnel must immediately evacuate the space.
 - The Entry Supervisor shall cancel the entry permit.
 - Re-evaluate the space to determine how the hazardous atmosphere developed.
 - Take action to protect personnel before any subsequent activity to re-enter the space takes place.
 - Re-issue the Company Confined Space Entry Permit before allowing Entrants to re-enter the space.
 - Employees or their representatives are entitled to request additional monitoring at any time.

Pre-Job Planning and Space Preparation

- The Entry Supervisor must determine that the confined space is properly isolated by blinding, disconnecting, and/or by following local Lockout/Tagout procedures.
- The Entry Supervisor must discuss with all Entrants the hazards of the space, communication methods and emergency procedures during the confined space entry.
- Eliminate any condition making it unsafe to open the equipment to atmosphere.
- Promptly guard the opening to prevent an accidental fall through the opening and to protect each employee working in the space from foreign objects entering the space.
- If applicable, wash, steam, ventilate or degas the confined space to properly free it of possible contaminants. Vent vapors to a safe location.



If performing hot work in the confined space, precautions must be taken consistent with the Company Hot Work Permit procedure.

Ensure that vehicle or other equipment exhaust does not enter the space.

Pre-Entry Safety Meeting

- The Entry Supervisor must declare when the confined space is ready for entry.
- The Entry Supervisor shall hold a pre-entry safety meeting to discuss all requirements and procedures with all authorized Entrant(s) and Attendant(s) involved with the entry. He/she will discuss other concerns such as previous contents, vessel coating, PPE required etc., during this meeting.
- The Entry Supervisor must coordinate entry operations when employees of more than one company are working simultaneously in the confined space. This coordination is necessary so that one company's work does not endanger the employees of another company.

Equipment

Check all work equipment to ensure that it has the proper safety features and is approved for the locations where it will be used. The Entry Supervisor shall ensure that all equipment is properly maintained in a safe condition and that Entrants use the equipment properly.

The following equipment must be considered and may be required when entering a confined space:

- Atmospheric Testing and Monitoring Equipment.
- Barriers, Shields, and Signs – Post signs and barricades outside all Permit-Required Confined Spaces to notify personnel that a confined space entry is in progress and unauthorized entry is prohibited. Any signs used must state "Danger – Permit Entry Confined Space" along with the proper warning word such as "Asphyxiant, Flammability or Toxic Hazard". All barricades must be capable of preventing a person from inadvertently walking into or kicking an object into the space.
- Communications Equipment – Only use intrinsically safe equipment in areas where a hazardous atmosphere may exist. Use a communication system that will keep the Attendant in constant, direct communication with the Entrant(s) working in the confined space. Also, use a communication system that allows the Attendant to summon help from rescue or emergency service.
- Entry and Exit Equipment – (For example: ladders may be needed for safe entry and exit).
- Lighting Equipment – Needed for safe entry, work within the space and exit. Lighting equipment used in the confined space must be certified safe for the location.
- Portable electric lighting used in wet and/or other conductive locations (drums, tanks, vessels) must be operated at 12 volts or less. 120 volt lights may be used if protected by a ground-fault circuit interrupter.
- Personal Protective Equipment – Ensure that personnel wear the required personal protective equipment. For respiratory protection requirements, refer to the Respiratory Protection Program.
- Rescue and Emergency Equipment – Except if provided by outside rescue services.
- The Attendants must also have an approved first aid kit.
- Vacuum Trucks – When used, trucks must be properly grounded or bonded to prevent static sparks.
- Ventilating Equipment – Local exhaust air movers used to obtain acceptable atmospheric entry conditions (e.g., Copus air movers).

Atmospheric Testing

The Company must ensure that pre-entry atmospheric tests must be made before entering a confined space and the atmosphere must be periodically tested while persons are within the confined space. Requirements include:



- Evaluate permit space conditions as follows when entry operations are conducted:
 - Test conditions in the permit space to determine if acceptable entry conditions exist before entry is authorized to begin, except that, if isolation of the space is infeasible because the space is large or is part of a continuous system (such as a sewer), pre-entry testing shall be performed to the extent feasible before entry is authorized and, if entry is authorized, entry conditions shall be continuously monitored in the areas where authorized entrants are working;
 - Test or monitor the permit space as necessary to determine if acceptable entry conditions are being maintained during the course of entry operations; and
 - When testing for atmospheric hazards, test first for oxygen, then for combustible gases and vapors, and then for toxic gases and vapors;
 - Provide each authorized entrant or that employee's authorized representative an opportunity to observe the pre-entry and any subsequent testing or monitoring of permit spaces;
 - Reevaluate the permit space in the presence of any authorized entrant or that employee's authorized representative who requests that the employer conduct such reevaluation because the entrant or representative has reason to believe that the evaluation of that space may not have been adequate;
 - Immediately provide each authorized entrant or that employee's authorized representative with the results of any testing conducted in accord with subsection of Cal/OSHA T8 CCR 5157 (d)(5).
- Ensure all atmospheric testing or monitoring equipment is functioning and/or calibrated per manufacturer's requirements.
- Ensure all employees are training to properly use atmospheric testing or monitoring equipment.

Ventilation

Continuous forced air ventilation must be used and tested as follows:

- An employee may not enter the space until the forced air ventilation has eliminated any hazardous atmosphere;
- The forced air ventilation shall be so directed as to ventilate the immediate areas where an employee is or will be present within the space and shall continue until all employees have left the space;
- The air supply for the forced air ventilation shall be from a clean source and may not increase the hazards in the space.
- The atmosphere within the space shall be periodically tested as necessary to ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere. Any employee, who enters the space, or that employee's authorized representative, shall be provided with an opportunity to observe the periodic testing and may request additional monitoring at any time.
- If a hazardous atmosphere is detected during entry each employee shall leave the space immediately and the space shall be evaluated to determine how the hazardous atmosphere developed; and measures shall be implemented to protect employees from the hazardous atmosphere before any subsequent entry takes place.

Multiple Employer Procedure

In order not to endanger the employees of any other employer, the Entry Supervisor shall:

- Verify that all contractor employees have been trained in confined space and that all contractor employees fully understand the Company procedures pertaining to Confined Space.
- Inform the contractor that the workplace contains permit spaces and that permit space entry is allowed only through compliance with a permit space program meeting the requirements of this section.
- Apprise the contractor of the elements, including the hazards identified and the employees experience with the space, that make the space in question a permit space.



- Inform the contractor of any precautions or procedures that the Company has implemented for the protection of employees in or near permit spaces where contractor personnel will be working.
- Coordinate entry operations with the contractor, when both Company personnel and contractor personnel will be working in or near confined spaces.
- Debrief the contractor at the conclusion of the entry operations regarding the permit space program followed and regarding any hazards confronted or created in confined spaces during entry operations.
- In addition to complying with the confined space requirements that apply to all employees; each contractor, who is retained to perform permit space entry operations, shall:
 - Obtain any available information regarding confined space hazards and entry operations from the Company Entry Supervisor.
 - Coordinate entry operations with the Company Entry Supervisor, when both Company personnel and contractor personnel will be working in or near permit spaces.
 - Inform the Company 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.

Rescue Procedures as Part of Permit-Required Confined Space Entries

Rescue personnel and equipment are readily available. At least one standby person must be trained and immediately available to perform rescue and emergency services. Each member of the rescue service is provided with, and is trained to use properly, the personal protective equipment and rescue equipment necessary for making rescues from permit spaces. Each member of the rescue service shall be trained to perform the assigned rescue duties. Each member of the rescue service shall also receive the training required of authorized entrants. To facilitate non-entry rescue, retrieval systems or methods shall be used whenever an authorized entrant enters a permit space, unless the retrieval equipment would increase the overall risk of entry or would not contribute to the rescue of the entrant.

A standby person is available at each confined space to perform rescue in an emergency. The Company shall provide at least one attendant outside the permit space into which entry is authorized for the duration of entry operations. Attendants may be assigned to monitor more than one permit space provided the required duties of the Attendant can be effectively performed for each permit confined space that is monitored and includes the means and procedures that will be used in order to enable the attendant to respond to emergencies in one or more permit spaces that he/she is monitoring without distraction from all responsibilities. The Company normally will not allow an Attendant to monitor multiple spaces but when and only when a single Attendant can maintain continual communication with entrants and rescue personnel and visual monitoring of the openings can occur will this be considered.

Rescue service must be on-site for immediately dangerous to life and health (IDLH) conditions while work is being performed. Rescue services must be either:

- Provided by the host facility,
- Provided by an outside service which is given an opportunity to examine the entry site, practice rescue and decline as appropriate, or
- Provided by the Company by selecting a rescue team that is equipped and trained to perform the needed rescue services.
- The Attendant shall order the other Entrants not to move the injured nor allow untrained or unauthorized workers into the space that are not trained to handle a confined space rescue.

Permit-Required Confined Space Rescue:



- When the Attendant becomes aware of the need for rescue, the Attendant shall immediately summon the onsite rescue team by the agreed upon communication method, verbally, radio or cell phone, without leaving the vicinity of the confined space. The Attendant shall prevent unauthorized personnel from attempting a rescue.
- After the rescue team has been notified, the Attendant shall alert the Entry Supervisor of the emergency via the same communication methods. The preferred means of providing rescue service is through the use of a qualified outside rescue service vendor (client host). The outside rescue service vendor must be:
 - Informed of the hazards that they may confront during a rescue;
 - Provided access to the Permit-Required Confined Space to examine the entry site, practice rescue, and decline as appropriate.
 - Access to the space allows the rescue service and local supervision to jointly develop appropriate rescue plans.
 - If the host operator is designated to provide rescue services for the Company, the agreement of services must be included in contract for the job.
- If the Company employees are to perform Permit-Required Confined Space rescues, they must be:
 - Provided and trained in the use of the proper personal protective equipment necessary to make the rescue;
 - Trained to perform the assigned duties;
 - Required to practice making rescues at least once every 12 months;
 - Trained in basic first aid and CPR.
 - A minimum of one member of the rescue team must hold a current certification in first aid and CPR.

Non-entry Rescue

- To facilitate non-entry rescue, an Entrant must be attached to a retrieval system whenever he/she enters a Permit-Required Confined Space with a vertical depth of more than 5 feet. The retrieval equipment is not required if it will increase the overall risk of the entry, e.g., creating an entanglement hazard, or will not contribute to the rescue of the Entrant.
- Each Entrant shall use a full body harness equipped with a “D” ring located between the shoulders or above the head. Wristlets may be used instead of the full body harness, if the use of the full body harness is not feasible or creates a greater hazard *and* that using wristlets is the safest and most effective alternative.
- The retrieval line must be attached to the “D” ring and the other end of the retrieval line attached to a retrieval device or fixed point located outside the space so that rescue can begin as soon as the rescuer becomes aware that rescue is necessary.

Training

Workers are provided confined space training. Training shall be provided to each affected employee:

- Before the employee is first assigned duties under this section;
- Before there is a change in assigned duties;
- Whenever there is a change in permit space operations that presents a hazard about which an employee has not previously been trained;
- Whenever the Company has reason to believe either that there are deviations from the permit space entry procedures required by subsection (d)(3) of Cal/OSHA California Code of Regulations, Title 8, Section 5157 or that there are inadequacies in the employee's knowledge or use of these procedures.



Training is documented. The Company shall certify that the training required has been accomplished. The certification shall contain each employee's name, the signatures or initials of the trainers and the dates of training. The certification shall be available for inspection by employees and their authorized representatives.

Permit

The Confined Space Entry Permit is located at the Company safety support center in the Permits tab:
<https://iws.support/electronic-permits>