

Confined Spaces Observations

"Entry" means the action by which a person passes through an opening into a permit-required 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. **Most employees do not take this seriously. Employees have died from toxic fumes coming out of the confined space entry opening before entering the space.**

"Immediately dangerous to life or health (IDLH)" means 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 permit space. **Continuously monitor the space whenever possible. 10% LEL was always considered an IDLH atmosphere and the entrant was removed from the space at this time.**

1910.146(c)(2): If the workplace contains permit spaces, the employer shall inform exposed employees, by posting danger signs or by any other equally effective means, of the existence and location of and the danger posed by the permit spaces. **Does this statement mean that all spaces are required to have a sign posted? No. As long as employees can recognize a PRCS and its associated danger, then the standard's intent has been met.**

1910.146(c)(4): If the employer decides that its employees will enter permit spaces, the employer shall develop and implement a written permit space program that complies with this section. The written program shall be available for inspection by employees and their authorized representatives. **Develop and comprehensive written program and a permit that has a checklist of items to follow before approving the space for entry.**

1910.146(c)(5)(ii)(C): Before an employee enters the space, the internal atmosphere shall be tested, with a calibrated direct-reading instrument, for oxygen content, for flammable gases and vapors, and for potential toxic air contaminants, in that order. Any employee who enters the space, or that employee's authorized representative, shall be provided an opportunity to observe the pre-entry testing required by this paragraph. **This is a very important step. I typically would take the entrant with me a conduct this step together. If so configured the space may have pockets where dead air can accumulate. Make sure you can monitor all the dead areas before entry. Make sure instrumentation is calibrated properly and on a routine basis.**

1910.146(c)(5)(ii)(G)(3)

Measures shall be implemented to protect employees from the hazardous atmosphere before any subsequent entry takes place.

1910.146(d)(5)(iii)

When testing for atmospheric hazards, test first for oxygen, then for combustible gases and vapors, and then for toxic gases and vapors. **With multi-gas monitors this is not an issue. If you use separate monitors then follow this order.**

1910.146(d)(9)

Develop and implement procedures for summoning rescue and emergency services, for rescuing entrants from permit spaces, for providing necessary emergency services to rescued employees, and for preventing unauthorized personnel from attempting a rescue; **60% of confined space fatalities are "would be rescuers." Rescue must be completed in a "timely manner." Consider setting up each entry so as "Non-entry Rescue" can be utilized. Typically using a tripod. Non-entry rescue is quick and keeps your company from needing to train a rescue team which can be quite cumbersome.**

1910.146(d)(14)

Review the permit space program, using the canceled permits retained under paragraph (e)(6) of this section within 1 year after each entry and revise the program as necessary, to ensure that employees participating in entry operations are protected from permit space hazards. **Most companies do not even know this is a requirement. Place this in your calendar.**

1910.146(e)(4)

The duration of the permit may not exceed the time required to complete the assigned task or job identified on the permit in accordance with paragraph (f)(2) of this section. **There is no limit to the duration of the permit.**

1910.146(k)(2)(iii)

Train affected employees in basic first-aid and cardiopulmonary resuscitation (CPR). The employer shall ensure that at least one member of the rescue team or service holding a current certification in first aid and CPR is available. **Provide this training to several employees and make them available during the confined space entry.**