



## MONTHLY SAFETY BRIEF: CONFINED SPACES

As we continue our journey to highlight some of our safety policies in 2017, this month we look at key aspects of our confined space program.

Many workplaces contain spaces that are considered "confined" because their configurations hinder the activities of employees who must enter, work in, and exit them. A confined space has limited or restricted means for entry or exit, and it is not designed for continuous employee occupancy. A permit confined space, in brief, is a confined space with an added potential serious safety or health hazard present.

Hygieneering's policy is that workers are not allowed to enter permit confined spaces, without proper authorization from the Project Manager and appropriate training. If the job task requires an employee to enter a permit required confined space, the employee shall receive proper training as outlined in 1910.146 of the OSHA regulations, prior to entry.

### Some Key Definitions to be familiar with:

#### ***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.
- Is not designed for continuous employee occupancy.

***Entry:*** 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.

***Hazardous Atmosphere:*** an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue, 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).
- Airborne combustible dust at a concentration that meets or exceeds its LFL.
- Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent.
- Atmospheric concentration, which could result in employee exposure in excess of its dose or permissible exposure limit (PEL).
- Any other atmospheric condition that is immediately dangerous to life or health.

***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.

***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; or
- Contains any other recognized serious safety or health hazard.



## **What is a confined space?**

It can be any space of an enclosed nature where there is a risk of death or serious injury from hazardous substances or dangerous conditions (e.g., lack of oxygen). Some confined spaces are fairly easy to identify, e.g., enclosures with limited openings: ■ storage tanks; ■ silos; ■ reaction vessels; ■ enclosed drains; ■ vaults or sewers.

Others may be less obvious, but can be equally dangerous, for example: ■ open-topped chambers; ■ vats; ■ combustion chambers in furnaces etc.; ■ ductwork; ■ unventilated or poorly ventilated rooms.

It is not possible to provide a comprehensive list of confined spaces. Some places may become confined spaces when work is carried out, or during their construction, fabrication or subsequent modification.

Hygieneering employees may encounter “potential” confined space while onsite that have not been labeled or identified by our clients. If our onsite work tasks require us to enter a “potential” confined space that has not been labeled/identified by the client, our employees are instructed to contact the client representative to obtain further information regarding the space identified.

Hygieneering employees may not enter those Permit Required Confined Spaces that cannot be reclassified as a non-permit confined space under OSHA 1910.146(c)(7). As always, ask your Project Manager if you are unsure of any work environment. Special training will be provided to those individuals that may need to enter a permit required confined space for project work with the authorization of their Project Manager.

Hygieneering employees that encounter potential confined spaces while onsite (especially those that have not been demarcated by the client), must contact their Project Manager to assist in evaluating if the space is a permit or non-permit confined space. Entry into these spaces must not be performed until this evaluation / discussion has been performed.

More Information:

Here is a link to OSHA’s quick reference guide to permit required confined spaces:

<https://safetyresourcesblog.files.wordpress.com/2014/11/confined-space-quickcard.pdf>



### Confined Space Safety Quiz

1. As a Hygieneering employee, you may enter a non-permit required confined space on a job site with the authorization from your Project Manager.  
 True  
 False
2. As a Hygieneering employee, you may enter a permit required confined space on a job site if you have been provided appropriate training and have the authorization of your Project Manager.  
 True  
 False
3. The air filter chamber in a large downtown office building HVAC system is a permit required confined space.  
 True  
 False
4. High pressure steam lines in poor condition in a tunnel system may be considered a significant hazard that changes a confined space to a permit required confined space.  
 True  
 False

**SCORE: PASS / FAIL**

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date