

Confined space requirements

Oregon OSHA's Confined Spaces standard, OAR 437-002-0146, is designed to protect workers who enter permit-required confined spaces (permit spaces). General industry and construction employers are covered by this rule. Employers must evaluate the workplace to determine if confined spaces exist. If the answer is yes, are there hazards that make it a permit space? If hazards are found or introduced, the employer must comply with this rule. When you have mobile employees, determine if they will be exposed to confined spaces and identify any physical or atmospheric hazards that make it a permit space.

Permit space entry

When employees enter a permit space, you must develop and implement a written program. A permit-required confined space program is the employer's plan for controlling and protecting employees from permit-space hazards and regulating employee entry.

The following critical activities lay the foundation for an effective permit-space program:

 Identify permit spaces, evaluate space hazards (may include monitoring for atmospheric hazards)

Confined space

All three of the following criteria must be present:

- Large enough to enter and perform work
 Space large enough to completely enter. Entry
 occurs when any body part breaks the plane.
- Not designed for continuous occupancy

 Space unsuitable for occupancy under normal operating conditions without safety and health considerations.
- 3 Limited access and egress
 Entry and exit difficult, hinders ability to escape.

Permit-required confined space

One or more of the following hazards must be present:

- Engulfment hazard
- Configuration hazard
- Atmospheric hazard
- Other recognized hazards



- Decide if workers will enter (an important component of entry is hazard recognition; evaluate the magnitude of the hazard and who is affected, likelihood of hazard occurrence and consequences, and the potential for changing conditions)
- Eliminate or control the hazards; maintain safe entry conditions for the duration of entry
- Establish entry procedures and prepare an entry permit
- Train employees on entry operations and their responsibilities
- Plan for emergencies

Written program elements: For fixed sites, your program must include the location of all permit spaces. You will need to develop a way for employees to identify the space as a permit space; signs, labels, or tags can be used to accomplish this. Your program must include:

- A procedure for issuing an entry permit
- Provisions for training employees about the written program and entry permits
- Measures taken to prohibit unauthorized employees from entering permit spaces
- The roles of entrants, attendants, entry supervisors, rescuers, and those who test or monitor the atmosphere in the space
- Provisions for training employees about their roles
- Duties of designated employees
- Instructions for identifying and evaluating hazards
- Methods for eliminating or controlling hazards
- Instructions for using and maintaining equipment
- Instructions for coordinating entry with another employer
- Procedures for concluding entry and canceling the entry permit

Entry permits: A permit is written authorization to enter a space and perform work. The permit has a number of components that must be completed before entry.

These include the space to be entered and the purpose of the entry; date, start, and stop times; space hazards and acceptable entry conditions; names of entrants and attendants; equipment for safe entry; and monitoring results. The entry supervisor must sign the permit.

Program and permit review: Permits must be reviewed within one year of cancellation to evaluate employee protection and the overall permit program. You must also review your permit program when there is reason to believe that employees are not adequately protected and then update your program as necessary.

Training: You need to train each employee involved in permit space activities so they have the knowledge and skills necessary to safely perform their duties. Train employees that are designated as entrants, attendants, entry supervisors, and rescue personnel. Awareness training is required for all employees who do not necessarily enter spaces, but whose work operations may be in an area where permit spaces are present. Awareness training does not apply to employees whose exposure is negligible.

Equipment: You must provide all necessary equipment for employees to safely enter and perform work in permit spaces and ensure that all equipment is used and maintained according to the manufacturer's instructions and recommendations. Employees who use equipment must be trained to use that equipment. Some equipment, particularly gas meters, may need to be checked daily (like a bump test) before they are used to ensure they are working properly.

Rescue: A permit entry into a confined space requires a rescue method. Before employees enter a permit space, you must develop and implement procedures to remove entrants in the event of an emergency or when they are unable to self-rescue. Where feasible, use non-entry rescue retrieval systems unless it will increase the overall risk to the entrant. A space more



than 5 feet deep requires a mechanical device and a chest or full-body harness attached to a retrieval line. Entry rescue procedures include the process for summoning rescue services, summoning emergency medical services, or transporting injured entrants to a medical facility.

You must ensure all rescuers are trained in basic first aid and cardiopulmonary resuscitation (CPR). At least one member must be certified in first aid and CPR. Rescuers must practice performing permit space rescues at least once every 12 months. Mobile workers only need to practice rescues before beginning entry operations. If you use a third-party rescue service (i.e., not your employees), they must agree to it in writing before the entry. This includes fire departments.

Records: You must keep canceled permits for at least one year from the date the permit expires. Additional record retention may apply under 1910.1020, Access to Employee Medical and Exposure Records.

Alternate entry process: There are circumstances where a permit space may be entered using the alternate entry process. The space remains classified as a permit space, but entry is allowed when:

- All hazards have been eliminated; or
- All physical hazards have been eliminated and all atmospheric hazards are controlled with continuous forced-air ventilation. You must perform continuous monitoring for atmospheric hazards during the entry.

Entry procedures: You must develop and implement procedures for each space you enter under alternate entry procedures. They are not required to be written. The Alternate Entry rule, 437-002-0146(10), defines what must be addressed in the procedures.

Continuous systems: Alternate entry cannot be used to enter a continuous system unless you can positively isolate the area from the rest of the space or can

demonstrate and document that the conditions that caused the hazard no longer exist within the system. Positive isolation means that a specific procedure is used to physically separate the area to be entered from the rest of the system so that air, liquids, or solid materials cannot pass between the entry area and the rest of the system.

Documentation: You must document each entry, components established in the rule, and maintain this documentation for the duration of the entry at the location. Once the entry is complete, there is no requirement for keeping the document; however, an analysis of these entries may help in determining the overall effectiveness of your confined space program.

Rescue: The rule does not have a rescue provision for alternate entry because physical hazards should have been eliminated and atmospheric hazards eliminated or controlled. Employees in the space must have a two-way radio, cell phone, or other effective way to get help should the need arise.

More information

- ☐ Confined space A-Z topic page
- Not designed to be occupied Oregon OSHA's guide to confined space safety for general industry and construction work



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