

# Confined Space

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**Confined Space** - means 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, silos, storage bins, hoppers, vaults and pits are spaces that may have limited means of entry.)
- Is not designed for continuous employee occupancy

A confined space may contain atmospheric, mechanical, or inherent design hazards that may trap or injure anyone entering the space.

**Permit-Required Confined Space (as defined by OSHA standard):** a confined space that has one or more of the following characteristics:

- Contains or has the potential to contain a hazardous atmosphere
- Contains a material that has the potential for entrapping, engulfing or suffocating 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

**Non-Permit Required Confined Space (as defined by OSHA standard):** a confined space that does not contain or have the potential to contain any atmospheric hazard capable of causing death or serious physical harm.

**NOTE:** When work is performed in permit or non-permit required confined spaces by an outside contractor, the outside contractor's personnel are required to be confined-space trained and follow their confined space program.

## Updated

January 7, 2011

## Source

Michigan Occupational Safety and Health Administration (part 90, 12 and Part 490)

Washtenaw County Technical Rescue Team

## More Information

<http://www.wamaa.com/WCTRT/WCTRTframe.htm>

<http://www.michigan.gov/dleg/0,1607,7-154-11407---,00.html>

<http://www.oseh.umich.edu/pdf/guideline/guidcse.pdf>

## **Prevention / Mitigation / Preparedness - Confined Space**

Work with the University of Michigan OSEH (734) 647-1143 for guidance if there is need for individuals to enter a space that may be confined or labeled as confined space. Ideally, confined space areas on campus should be identified and marked as such.

Designate and empower individuals who will be responsible for the preparation and implementation of your departmental confined space entry program. Designated individuals should use the OSEH Confined Space Entry Guideline to develop a program specific to their department's needs.

Ensure an environment where supervisors and employees are encouraged to follow this guideline

Ensure that access to confined spaces within your department is controlled by:

- Training potential users in how to recognize and evaluate confined spaces. Training is provided by OSEH upon request (647-1142)
- Locking all entrances to confined spaces, when feasible
- Posting warning signs at confined spaces, when feasible.

Ensure that employees are fully informed and trained about confined space entry requirements and procedures outlined in the OSEH guideline document, the hazards associated with confined spaces, applicable regulations and safety standards, and prudent safety practices to protect themselves and fellow employees.

Monitor the need for additional or refresher training for employees based on changes in assigned duties, changes in confined spaces, changes in the UM confined space program or deficiencies in the employee's knowledge. This responsibility is shared between the supervisor and their OSEH Representative.

Upon receiving confined space training, conduct assigned tasks as an entrant, attendant or Entry Supervisor in a safe manner. Wear appropriate personal protective equipment, and only use equipment (such as air monitoring equipment) in which formally trained.

Outside contractors need to contact Architecture, Engineering and Construction (AEC) prior to confined space access for the following assistance:

- Contractors will need to be informed of all permit-required confined spaces they will be working in.
- Contractors will need to comply with all applicable and federal regulations as per the General Standard Conditions and contract specifications
- Contractors will need to conduct pre-entry coordination and debrief meetings as required by OSEH guidelines.
- Contractors are required to develop their own operating safety plan.

Work in confined spaces should be limited to trained staff / contractors with entry permitting and emergency rescue adequately addressed.

Contact OSEH at 647-1142 to review the space, the potential hazards and control methods implemented. The following areas need to be considered prior to confined space entry:

- Evaluation of Confined Spaces
- Determining the permit type ( general, hot work, or hazardous)
- Completing the Permit process
- Obtaining the entry permit
- Monitoring of hazardous atmospheres (OSEH only)
- Implementation of control measures
- Selection of PPE
- Establish communication
- Evacuation and rescue plans
- Closeout and cancellation of the permit

A standby person is required at all confined space entry projects. Since rescue of personnel inside the confined space may become necessary, sufficient manpower and rescue equipment shall be kept available outside the space. At least one standby person, physically capable of rescuing personnel if the need arises, shall remain at the entry point. This person must be equipped with the same protective clothing and equipment as those who enter the space, if the size of the space permits. The standby person will:

- Remain at the entry point as long as anyone is in the space
- Wear safety harness and have a horn, air-supplied mask, and special "v" -shaped lifeline available and ready for use.
- Know who is in the space at all times. Maintain communication with the people in the confined space. Confirm frequently that each is all right. Alert them to any hazards. Prevent fouling of air hoses and lifelines.
- He/she will not allow unauthorized persons from entering the space.
- The attendant will not perform other duties that would distract from monitoring the space.
- Assist in handling materials, tools and messages.

## **Response - Confined Space**

Do not enter a confined space to attempt rescue if you are not properly trained and equipped to do so.

## Recovery - Confined Space

Notify 911 immediately and provide as much information as possible about the situation if an emergency rescue is needed. Information that should be conveyed is:

- How many people are involved
- Where is the location
- Are there any injuries

DPS relies on outside emergency services (fire department) for entry rescues.

As part of the safety program, the following should occur:

The confined space attendant should immediately summon help, and then attempt to rescue entrant(s) using non-entry emergency equipment already in place. Attendant shall not enter the confined space or otherwise endanger himself; rather, wait until hazards are determined and protective action taken

Where the non-entry retrieval of an entry worker becomes necessary, the confined space attendant is responsible for initiating emergency/rescue procedures as defined on the confined space permit.

When an injured entrant has been exposed to a substance for which a Material Safety Data Sheet (MSDS) or other information is available, that MSDS or other information will be provided to the medical facility treating the exposed entrant

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Work with the University OSEH department (734) 647-1142 as needed to request technical assistance and help in identifying and controlling confined space on campus.

Follow Work~Connections procedures if there is an accident or injury.  
<http://www.umich.edu/~connect/forms.htm>.

Collect copies of permits at the end of the job and mail to OSEH.