

Confined Space Program -- Questions & Answers

Background

Why do we have to do this?

State and Federal regulatory agencies have determined that confined spaces have a higher potential for serious harm than other locations in the workplace. Every year several hundred people are killed or injured in confined spaces, most of them, while they were just doing their job. This program is for your safety.

Source: Worker Deaths in Confined Spaces, A Summary of Surveillance Findings and Investigative Case Reports, NIOSH/CDC, January 1994.

The State of Wisconsin has recently adopted the federal regulations, while OSHA has continued to clarify aspects of their confined spaces regulations.

How are we going to train new people?

Supervisors will be responsible for arranging the training of new workers.

What if someone tells me I don't need to do all of this?

Governor Thompson's [Executive Order #194](#) mandates that state government should lead by example by complying with all state and federal health and safety requirements, including confined space entry requirements. This program has the support of all levels of management.

What are the different classes of confined spaces?

- Permit Spaces (C4)
- Alternate Entry Spaces (C5)
- Hazards Eliminated Spaces (C7)

Why not treat all confined spaces as Alternate Entry - Continuous Ventilation Required (C5) spaces until they can be proven to be Reclassed as Hazards Eliminated (C7) spaces?

Good strategy.

Why aren't all the spaces labeled? Or even identified?

This will be an ongoing effort, with continual review and improvement. OSHA does not require labeling of confined spaces. OSHA does require you to be familiar with the confined space policies and procedures. Appropriate signs and labels are part of that familiarity.

You may well recognize additional confined spaces in your workplaces which have not been identified. Please report these to your supervisor or to your safety committee representative. We will try to evaluate the space and add it to the inventory. Your contributions are vital to the success of this program.

The labeling of the confined spaces is an on-going effort by your safety committee. Please report any unlabeled confined space to your supervisor by filling out a trouble report, if you think labeling that space would increase the awareness of the hazard and the required precautions.

What about the inventory?

The inventory catalogs all the documented confined spaces on campus, at Kenilworth and the Great Lakes WATER Institute (GLWI), and at some of the other remote work places at UWM. We hope the confined space inventory will be used as a training tool and a reference. Additions, omissions and corrections to the inventory should be brought to the attention of your

supervisor. You should become familiar with the inventory and know its usefulness and limitations.

What if a space is missing from the inventory?

Report it to your supervisor.

Can we still use the tripod/retrieval system if it isn't a Permit Required Space (C-4)?

Yes. The requirements listed should be considered the minimum requirements. If you think additional safety systems are needed, inform your supervisor before you enter.

What if we have been in a pit a hundred times; can't we just reclass that pit as a Hazards Eliminated Space (C7) based upon no air contamination ever happening there?

OSHA requires that each Reclassified Space - Hazards Eliminated (C7) space undergo a hazard evaluation for the reclass. This evaluation has to be documented and made part of the written confined space plan. While previous entries can be part of the evaluation, air monitoring records that show no contamination over time is what is expected by OSHA and the Department of Commerce.

How often do people need to be retrained?

Training is necessary whenever a significant change occurs in the work practices or in the regulations.

General Procedures

What type of communication should be on site for all these spaces?

- For Alternate-Entry Continuous Ventilation Required spaces, or Hazards Eliminated Space, notify your supervisor when you intend to enter the space. Provide an estimate of the amount of time you plan to be in the confined space. Estimate the maximum time you'll work there. Notify your supervisor after you leave the space.
- For Permit Confined Spaces, two-way radios, cellular phones or another reliable 2-way device must be used unless direct line of sight is maintained and noise levels do not hinder voice communications. The method must be specified on the permit.

How many people are allowed in the confined space?

One, if the space is determined to be a permit-required (C4) space. If you want more people to enter, more equipment for potential emergencies must be obtained. If the space is rated as an Alternate Entry - Ventilate (C5) space, or a Reclassified - Hazards Eliminated (C7) space, as many people as can safely work in the space are allowed.

Do I need an attendant every time I go into one of these spaces?

Check the inventory. All permit confined space will require a second person as an attendant. Any other space which requires the Emergency Retrieval System, also requires an attendant.

What other personal protective equipment is required for confined space entry?

Each work space must be evaluated separately. The need for shoes, eye wear, hard hat, protective clothing and gloves should be evaluated separately from the confined space hazards. Respirators should only be worn in conjunction with an approved respiratory protection program, which includes medical surveillance, fit testing, written plans and more.

What about confined spaces that don't have fixed ladders?

A portable ladder may be used to gain entry into a confined space. The tripod and winch assembly may be used to lower a person into a confined space. However, if a winch is used for lowering someone into a pit greater than six feet deep a second system of fall protection must be added. In other words, the same winch and cable can be used for fall protection and retrieval, but not for all three (lowering, fall protection and emergency retrieval).

How do we protect openings when working in confined spaces?

When the opening is in a public walkway, ADA-compliant barricades must be set up to protect the public. You must set up barricades to protect pedestrian traffic from all possible directions. Barricades must be lit during hours of darkness.

When out of pedestrian traffic lanes and sidewalks, the tripod and attendant should be sufficient to protect the public from the confined space openings. The attendant should not be distracted from their attendant responsibilities by having to direct traffic or otherwise protect the opening at the expense of attending to the entrant.

For an Alternate Entry using continuous ventilation, use the pedestrian barricade to protect the opening.

What are the attendant's responsibilities?

Other than assisting and protecting the entrant, protecting the public is the most important task for the attendant. The attendant must not be given duties which could interfere with either of these responsibilities. If the attendant cannot accomplish both simultaneously, extra attendants or barricades must be established before the entry can continue.

The attendant must also be able to effectively operate the emergency retrieval system. In an emergency, the attendant must be able to make timely and accurate decisions to ensure emergency procedures are effective.

What about bringing chemicals into confined spaces?

Be sure that this additional potential hazard is controlled. Chemicals can add additional atmospheric hazards in a confined space, which must be monitored. Chemicals may contribute additional hazards (fire risk, contact hazards, etc.) which must be controlled. Supplemental ventilation and other controls may be needed. Be sure that a competent confined space supervisor and safety professional have reviewed the design of the additional precautions. These special requirements will be added to the confined space inventory for future reference.

Air Monitoring

What if gas detector alarm goes off before I go into the space?

Do Not Enter the Space! Notify your supervisor. The source for the abnormal condition(s) must be identified and controlled. Additional precautions will be necessary.

What if the gas detector registers an oxygen deficit, combustible or toxic potential but it doesn't alarm? Then what?

Do Not Enter the Space! If you're already in the space, you should leave immediately. Reentry must be postponed pending further investigation. Notify your supervisor. The source for the abnormal condition(s) must be identified and controlled. Additional precautions will be necessary.

What if the gas detectors alarm while I am in the space?

Leave the Confined Space Immediately! Seconds may count. Notify your supervisor. The source for the abnormal condition(s) must be identified and controlled. Additional precautions will be necessary.

Non-Entry Rescue

What do I do in an emergency situation?

Written [emergency response guidelines](#) have been adopted. Be sure to be familiar with these guidelines before beginning confined space entry.

What if the person in the space is incapacitated and needs immediate rescue? What should I do first?

Do Not Enter the Space Yourself! Call for help. Use your two-way communication to get assistance. Call the campus police at 9-911. Relay your location, the nature of the incident and emphasize the incident has occurred in a confined space. Once help has been called, you may use the retrieval system to get your partner out of the space, only if the rescue is a simple vertical withdrawal.

Do not attempt a non-entry rescue if your partner might be dragged around a corner or between obstacles which could entangle or injure him/her. Do not move your partner if you suspect a head or neck injury may have occurred.

Special Cases

What if I can't fit in the space?

Engineering or administrative controls will be needed. A smaller person might need to be assigned to a task requiring entry into a small space.

What if the space doesn't have a standard opening?

Most spaces which require an Emergency Retrieval System allow for the use of the tripod and the standard issue retrieval equipment. Those spaces where the tripod cannot be used, such as vertical access openings, will require alternate methods of retrieval. Some of these spaces will have engineered solutions specific to that one space. Anchor points may need to be mounted across from vertical openings or other engineered solutions may be required. These exceptions will be noted on the inventory.

What if space doesn't allow putting up the tripod?

An engineered solution may be needed. Notify your supervisor or safety committee representative.

Fall Protection

What's the rule-of-thumb on fall protection for confined spaces?

Any potential fall over 6 feet requires fall protection, excepting ladder or elevated lifts (cherry picker, scissors lift). So if fall potential exceeds 6 feet and you are not on a ladder or lift, then you need fall protection equipment.

Welding

What if I have to weld in confined spaces?

As with other welding operations, sufficient precautions must be taken. In a confined space the atmospheric conditions become vitally important and must be monitored. Welding can both introduce new contaminants and use up limited oxygen. The multi-gas detector is vital in these situations.

Supplemental ventilation and special Personal Protective Equipment (PPE) may be necessary. In most circumstances, reclassification to a Permit Required Space (C4) will be necessary.

Respirators

What if a space requires respiratory protection?

Requirements of both respiratory protection and confined space entry will need to be followed. Respirator programs require medical monitoring, training, fit testing, respirator selection and

more. If a confined space entry requires a respirator, question whether you should be involved in the entry. Respirator use **CANNOT** override the multi-gas detector alarm.

Summary

After all this has been said, what basic equipment is always required?

It really depends on the circumstances. Generally all spaces will require air monitoring. Also, two-way communication or a pre- and post- supervisor notification is usually required. Look on the inventory for additional requirements.

What if something appears unsafe despite the precautions mandated?

Contact your supervisor. Your training and experience should give you a good basis for using sound judgment when working in confined spaces. **Do Not Take Shortcuts!**
