

## **Confined Space in Construction**

### History

OSHA has been working on a confined space rule for construction since 1994. In 1993 OSHA passed a Permit Required Confined Space Rule however the provisions applied only to general industry work. A short time later OSHA agreed to propose a standard for construction as part of a settlement following a legal challenge filed by the United Steelworkers of America. At that time until now the only confined space rule applicable to construction was a single training provision, 1926.21(b)(6). On May 17, 1994 the OSHA Advisory Committee for Construction Safety and Health formed a work group to make suggestions and submit a draft confined space standard for construction. NUCA participated in this work group. The draft was submitted but apparently OSHA did not follow through with the suggestions and it sat dormant for many years until OSHA proposed a Confined Space for Construction on November 28, 2007.

However, the construction industry quickly realized that when they were performing work in general industry facilities, which I like to refer to as inside the fence, they were going to have to follow the general industry confined space rule. When working outside the fence, performing maintenance or new construction involving confined spaces, utility contractors were not sure what was expected of them.

When it was decided that NUCA would create a Confined Space Entry Training Program in 1994 I decided to base it on the general industry Permit Required Confined Space standard, 1910.146. Fortunately this worked out very well and NUCA members and others have been educated utilizing NUCA Confined Space Entry training program featuring the general industry standard.

Years later OSHA proposed a very different confined space standard for construction on November 28, 2007, however the construction industry was not happy with this proposed rule. Comments and testimony were submitted by NUCA and many other organizations most of which indicated their opposition to the newly proposed standard.

Many organizations suggested that OSHA utilize the general industry rule with minor changes to address construction issues because the industry has become accustomed to using the general industry requirements. Many organizations within the industry believe that creating a completely different rule would cause much confusion within the industry especially for contractors who work both inside and outside the fence.

After the comment period was over, OSHA took all the comments into consideration and created a final rule for confined space entry in construction that is very similar to the general industry Permit Required Confined Space standard. Utility contractors that set up permit-required confined space programs based on the knowledge and information provided by NUCA's confined space entry program should only need to make a few changes to be in compliance. However, for companies that have not created a permit required confined space entry training program now is the time to get started.

### Final Rule

The Confined Space in Construction final rule was promulgated May 4, 2015 and will become effective in 90 days however; several associations including NUCA are planning to request an

extension to give contractors who do not already have a permit-required confined space program in place time to create and implement one. As it stands at this time August 3, 2015 is the date that OSHA will start enforcing the new rules.

The rule requires every construction employer that has employees who may enter into a confined space to have a written Permit-Required Confined Space Program that meets the requirements of the standard. The program must be designed to control and protect employees on the jobsite from permit-space hazards and to regulate entry into permit regulated confined spaces.

## Confined Spaces

I realize NUCA members and utility contractors already know what a confined space is but just to be sure the following is the definition of a confined space:

Confined space is a space that:

1. Is large enough and so configured that an employee can bodily enter it;
2. Has limited or restricted means for entry and exit; and
3. Is not designed for continuous employee occupancy.

This standard sets forth requirements for practices and procedures to protect employees engaged in construction activities at worksites with one or more confined spaces. Some examples of confined spaces utility contractors work in include but may not be limited to the following: pits, pipes, manholes, tanks, concrete pier holes, sewers, storm drains, water mains, drilled shafts, lift stations, cesspools, sludge gates, transformers, wind turbines, and underground vaults. The standard lists others.

The standard does not apply to construction work that is covered by Subpart P -- Excavations which is good news for utility contractors. Therefore NUCA's argument that excavations and trenches are not confined spaces holds true. This does not mean that manholes, pipes, vaults and other confined spaces placed in trenches or excavations are not covered but it does mean excavations and trenches are not confined spaces. In addition construction work covered by Subpart S – Underground Construction, Caissons, Cofferdams and Compressed Air which applies to tunneling is also not covered.

In the final rule OSHA has backed off on the proposed definitions for confined spaces that were included in the proposed rule. Similar to the general industry standard OSHA has defined three types of confined spaces. All confined spaces start out as permit-required but may be reclassified where applicable. The following is a brief overview of the confined space classifications:

- Permit-Required Confined Space means a confined space that has one or more of the following characteristics:
  1. Contains or has a potential to contain a hazardous atmosphere;
  2. Contains a material that has the potential for engulfing an entrant;
  3. 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
  4. Contains any other recognized serious safety and health hazard.

OSHA has determined that active sewers are permit-required unless isolated from a potential hazardous atmosphere. Early warning systems will also be required to alert attendants and entrants that an engulfment hazard may be developing. In addition, new lines not connected to an active sewer may be downgraded if they meet the conditions set forth in the following two types of confined spaces.

- Alternate Procedure Permit Confined Space means a permit-required confined space that may be reclassified by a competent person if the following conditions are met:
  1. All physical hazards such as electrical, mechanical, chemical, etc. are eliminated or isolated through engineering controls( e.g., lockout/tagged out).
  2. Continuous forced air ventilation alone is sufficient to maintain the atmosphere in the space safe for entry and if the ventilation stops working, workers in the space can vacate the space safely.
  3. Employer maintains monitoring and inspection data which supports 1 and 2.
  4. If it is necessary to enter the space to obtain the data and eliminate/isolate the hazards the entry is performed as required for a permit-required confined space.
  5. Determinations and supporting data are documented and made available to each employee who enters the space or the employees authorized representative.
  6. Entry into this type of permit space includes the following:
    - Removal of entrance cover is made safe.
    - Opening to vertical spaces are guarded by railing, temporary cover, barrier to protect an accidental fall into the space or objects from entering the space.
    - The internal atmosphere is tested before entry and continuously monitored when possible with a direct-reading gas monitor.
    - No hazardous atmosphere is permitted while workers are in the space.
    - Continuous forced air ventilation is used while workers are in the space
    - Safe method of entering and exiting the space is provided.
    - Employer's competent person must certify in writing that the space is safe to enter.
    - If a hazard is detected during entry employees must leave the space, the cause of the hazard must be determined by a competent person and measures must be taken to protect employees before re-entry begins which may require changing the classification of the space to a permit-required confined space.
    - All data and other information are made available to affected employees or their authorized representative.
  
- Non-permit Confined Space means a permit-required confined space that may only be reclassified as a non-permit space if the competent person determines the following conditions have been met:
  1. The space poses no actual or potential atmospheric hazards and all hazards within the space are eliminated or isolated.
  2. Hazards are eliminated or isolated without entry into the space.
  3. Employer's competent person must document the basis for the determination that all hazards have been eliminated or isolated and certify in writing that the space is safe to enter.
  4. Certification is made available to all entrants or their authorized representative.
  5. If a hazard is detected during entry employees must leave the space and the space must be reevaluated and reclassified by the competent person.

Note: Control of the atmospheric hazards within the space through forced air ventilation does not constitute elimination or isolation of the hazards.

## General Industry verses Construction

In addition to classifying the type of each permit-required confined space that employees will enter into there have been some changes to the general industry standard which are applicable to construction operations. Some of the aspects of the construction industry standard that are not included in the general industry standard include requirements for having a competent person evaluate all confined spaces before work begins and having a qualified person as a entry supervisor. The standard includes information exchange requirements for host employers, controlling contractors and entry employers to ensure multiple employers on a jobsite share important confined space safety information. Additionally, requirements have been added for providing and posting warnings for workers at jobsites with confined spaces.

OSHA also adjusted the construction rule to account for advances in technology and equipment that allow for continuous monitoring of atmospheric hazards and early-warning systems to prevent engulfment.

Other differences between the regulatory text of the general industry rule and this standard reflect improvements in clarity of the regulatory language. OSHA has also determined that construction employers who are in compliance with this new standard will also be considered to be in compliance with the general industry standard when need be. A rescue plan must be included in the PRCS program but OSHA has clarified the implementation of non-entry rescue and what must be done to ensure the availability of an entry rescue service as needed.

In addition to the Definitions and General Requirements OSHA has included sections within the standard to address and clarify the Permit-Required Confined Space Program; Permitting Process; Entry Permit; Training; Duties of Authorized Entrants, Attendants, and Entry Supervisors; Rescue; and Employee Participation.

## Conclusion

NUCA plans to revise and update its Confined Space Entry Training program and to provide all active NUCA approved instructors with updates and information about the new standard. In most situations employees who have attended NUCA training and who have complied with that training may not need to retake the program however, they will require some form of refresher to provide them with information and requirements that have changed. NUCA recommends that employers send their employees to a NUCA class after the program has been updated. For those employees who have already attended a class a refresher after 3-5 years is always suggested to ensure that employees don't get complacent.

The Confined Space in Construction Standard 1926.1200 to 1213 has been twenty years in the making. We knew it was coming we just did not know when. It could not have been avoided because confined spaces present a serious hazard to construction workers that had to be addressed. Now that it has been made final and promulgated there is no question as to what construction employers are expected to do to protect employees who must enter into and work around confined spaces.

For a copy of the new Confined Space in Construction standard visit the OSHA website at [https://www.osha.gov/FedReg\\_osa\\_pdf/FED20150504.pdf](https://www.osha.gov/FedReg_osa_pdf/FED20150504.pdf) or the reader friendly version at [https://www.osha.gov/confinedspaces/1926\\_subpart\\_aa.pdf](https://www.osha.gov/confinedspaces/1926_subpart_aa.pdf).