Overview of the OSHA Confined Spaces in Construction Final Rule

On May 4, 2015 the U.S. Occupational Safety and Health Administration (OSHA) issued the Final Rule on Confined Spaces in Construction. Confined spaces, such as manholes, tanks, or sewers, are work areas that are not designed for continuous occupancy and may be difficult to exit in the event of an emergency. OSHA has determined that this new standard (Subpart AA of 29 CFR 1926) will help prevent construction workers from being hurt or killed by eliminating and isolating hazards in confined spaces at construction sites and is expected to prevent eight fatalities and 812 non-fatal injuries each year.

The requirements of this rule will become effective **Aug. 3, 2015**.

The new rule has a myriad of new requirements and applies to a wide range of employers, including general contractors and it is likely to have an impact on the home building industry because this standard covers people who must work in confined spaces. Although the new confined space in construction standard is similar to the general industry confined space standard, there are some differences between the two. Key provisions of the Confined Spaces in Construction final rule, as it applies to home building, include the following parameters.

**Scope of the Rule**
This standard contains the requirements for practices and procedures to protect workers engaged in construction activities at a worksite with one or more confined spaces.

A confined space has:

- Limited means of entry and/or exit
- Is large enough for a worker to enter it
- Is not intended for regular or continuous occupancy

Examples of confined spaces in home building may include, but are not limited to: manholes, sewer systems, stormwater drains, water mains, crawl spaces, attics, heating, ventilation, and air-conditioning (HVAC) ducts, and pits.

**A permit-required** confined space (permit space) 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 that slopes downward and tapers to a smaller cross-section
4. Contains any other recognized serious safety or health hazard
IMPORTANT! If a space meets the definition of confined space and contains recognized serious health or safety hazards, it is a permit-required confined space and OSHA requires workers to have a permit to enter these spaces. A space with no potential to have atmospheric hazards may be classified as a non-permit confined space only when all hazards are eliminated in accordance with the standard.

Exclusions
This rule does not cover construction work regulated by §1926 Subpart P—Excavations.

Competent Person
Before work begins, a competent person must evaluate the work site and identify confined spaces, including permit spaces. When there are changes in use or configuration to the non-permit space, the competent person must also reevaluate the space and reclassify it, if necessary.

Employee Notification
If a workplace contains permit spaces, the employer must inform exposed employees of their existence, location and the hazards they pose by posting danger signs or other effective means. Employers must also take effective measures to prevent unauthorized employees from entering permit spaces.

Written Confined Space Program
If employees will enter a permit space, employers must develop and implement a written permit space program. The written program should establish the means, procedures and practices to eliminate or control hazards necessary for safe permit space entry operations and must comply with §1926.1204 (Permit-Required Confined Space Program).

Alternative to a Full Permit Entry
Under certain conditions, the employer may use alternate procedures for worker entry into a permit space, as specified in §1926.1203 (e).

Controlling Contractor/Host Employer/Entry Employer
The controlling contractor (i.e., general contractor) is the employer that has overall responsibility for construction at the worksite, while the host employer is the employer that owns or manages the property where the construction work is taking place. The rule makes the controlling contractor the primary point of contact for information about permit spaces at the work site. The entry employer is the employer whose employees enter a permit-required confined space.

NOTE: If the controlling contractor owns or manages the property, then it is both a controlling employer and a host employer.

The controlling contractor is required to:

- Pass information—if available—about permit confined spaces at the worksite (i.e., location of permit space, hazards in each space, precautions previously taken when working in the space) to the employers whose employees will enter the spaces (entry employers). Likewise, entry employers must give the controlling contractor information about their entry program and hazards they encounter in the space, and the controlling contractor passes that information on to other entry employers. See Figure 1.
- Make sure employers outside a space know not to create hazards in the space, and that entry employers working in a space at the same time do not create hazards for one another’s workers. An example would be a generator running near the entrance of a confined space causing a buildup of carbon monoxide within the space.

![Diagram of information flow and coordination between employers.](image)

**Figure 1. Shows the information flow and coordination between employers.**

**Equipment for Safe Entry**
In addition to personal protective equipment, other equipment must be provided—at no cost to employees—which includes:

- Testing, monitoring, ventilating, communications and lighting equipment
- Barriers and shields
- Ladders
- Retrieval devices (i.e., rescue equipment)

This equipment must be maintained and employees must be trained how to properly use it.

**Evaluating Permit Space Conditions**
The employer must evaluate the permit space conditions, prior to entry, to detect hazardous conditions and determine if acceptable entry conditions exist. Atmospheric monitoring for oxygen, combustible, gases/vapors, and toxic gasses/vapor must be continuous, whenever possible.

Engulfment hazards must also be monitored continuously. For example, when workers are performing work in a storm sewer, a storm upstream from the workers could cause flash flooding. An electronic sensor or observer posted upstream from the work site could alert workers in the space at the first sign of the hazard, giving the workers time to evacuate the space safely.

**Entry Permits**
Before entry begins, the entry supervisor must sign the permit authorizing entry into the space and it must be posted at the entry portal or otherwise made available to entrants before they enter a permit space so entrants can confirm pre-entry preparations have been completed. The duration of entry permits must not exceed the time required to complete an assignment.
The entry supervisor must cancel entry permits when an assignment is completed or when new conditions exist. The **suspension of a permit, instead of cancellation, is allowed** in the event of changes from the entry conditions listed on the permit or an unexpected event requiring evacuation of the space. The space must be returned to the entry conditions listed on the permit before re-entry. Entry permits must comply with §1926.1206 (Entry Permit) and all canceled entry permits must be kept for at least one year.

**Worker Training**

Employers must ensure that their workers know about the existence, location and dangers posed by each permit-required confined space, and that they may not enter such spaces without authorization. Employers must train workers involved in permit-required confined space operations so that they can perform their duties safely and understand the hazards in permit spaces and the methods used to isolate, control or protect workers from these hazards. Workers not authorized to perform entry rescues must be trained on the dangers of attempting such measures. Training must be provided in a language and vocabulary that the worker understands and training records must be maintained to show training has been accomplished.

**Authorized Entrant Duties**

Authorized entrants are required to:

- Know and understand space hazards, including information on the means of exposure such as inhalation or dermal absorption, signs of symptoms and consequences of the exposure
- Use equipment properly
- Maintain communication with attendants as necessary to enable them to monitor the entrant’s status and alert the entrant to evacuate when necessary
- Alert the attendant when a prohibited condition exists or when warning signs or symptoms of exposure exist
- Exit from the permit space as quickly as possible when:
  - Ordered by the attendant or entry supervisor
  - There is a warning sign or symptom of a dangerous situation
  - A prohibited condition exists
  - An evacuation alarm is activated

**Attendant Duties**

The attendant is required to:

- Remain outside the permit space during entry operations unless relieved by another authorized attendant
- Perform non-entry rescues when specified by the employer’s rescue procedure
- Know existing and potential hazards, including information on the mode of exposure, signs or symptoms, consequences and physiological and behavioral effects
- Maintain communication with and keep an accurate account of those workers entering the permit space
- Order evacuation of the permit space when:
  - A prohibited condition exists
  - A worker shows signs of physiological or behavioral effects of hazard exposure
  - An emergency outside the confined space exists
  - The attendant cannot effectively and safely perform required duties
- Summon rescue and other services during an emergency
- Ensure that unauthorized people stay away from permit spaces or exit immediately if they have entered the permit space
- Inform authorized entrants and the entry supervisor if any unauthorized person enters the permit space
- Perform no other duties that interfere with the attendant’s primary duties
Entry Supervisor Duties
Entry supervisors are required to:

- Know space hazards including information on the mode of exposure, signs or symptoms and consequences
- Verify emergency plans and specified entry conditions such as permits, tests, procedures and equipment before allowing entry
- Terminate entry and cancel or suspend permits when entry operations are completed or if a new condition exists
- Verify that rescue services are available and that the means for summoning them are operable
- Take appropriate measures to remove unauthorized entrants
- Ensure that entry operations remain consistent with the entry permit and that acceptable entry conditions are maintained

Emergencies and Rescue
Employers must ensure that responders are capable of responding to an emergency in a timely manner. There are several options for responding to emergencies:

- Designating local rescue and emergency services. Employers must evaluate the rescuers ability to respond.
- Employers provide rescue and emergency services. Rescue service personnel must be provided with personnel personal protective and rescue equipment and training in how to perform rescue duties.
- Non-entry rescue (harnesses and retrieval lines). Authorized entrants who enter a permit space must wear a chest or full body harness with a retrieval line attached to the center of their backs near shoulder level or above their heads, unless the retrieval would increase the overall risk of entry.

If an injured entrant is exposed to a substance for which a Safety Data Sheet (SDS) or other similar written information is required to be kept at the worksite, that SDS or other written information must be made available to the medical facility personnel treating the exposed entrant.

NOTE: Employers who are relying on local emergency services for emergency services must arrange for responders to give the employer advance notice if they will be unable to respond for a period of time (because they are responding to another emergency, attending department-wide training, etc.).

State Plan States
State plans must issue job safety and health standards that are at least as effective as comparable federal standards within six months of federal issuance. However, state plans also have the option to promulgate more stringent standards or standards covering hazards not addressed by federal standards.

More information on OSHA’s Final Rule on Confined Spaces in Construction can be found at https://www.osha.gov/confinedspaces/index.html.

If you have any questions about this OSHA rule or other construction safety issues, please contact the National Association of Home Builders (NAHB) Labor, Safety and Health Policy staff: Rob Matuga at 202-266-8507 / rmatuga@nahb.org or Chelsea Vetick at 202-266-8590 / cvetick@nahb.org.

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