Demystifying OSHA's Confined Space Standard

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The Confined Space Standard

- Standard not new
  - Implemented Manufacturing 1993
- Construction CS Standard closely mirrors Manufacturing

Differences Mfr & Construction

Per OSHA's FAQ the following are the key differences between General Industry 1910.146 and Construction 1926 Subpart AA:

- "More detailed provisions requiring coordinated activities when there are multiple employers at the worksite. This will ensure hazards are not introduced into a confined space by workers performing tasks outside the space. An example would be a generator running near the entrance of a confined space causing a buildup of carbon monoxide within the space."
- "Requiring a competent person to evaluate the work site and identify confined spaces, including permit spaces."
- "Requiring continuous atmospheric monitoring whenever possible."
- "Requiring continuous monitoring of engulfment hazards. 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."
- "Allowing for the suspension of a permit, instead of cancellation, in the event of changes from the entry conditions list 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."

- "Requiring that employers who direct workers to enter a space without using a complete permit system prevent workers' exposure to physical hazards through elimination of the hazard or isolation methods such as lockout/tagout."

- "Requiring that employers who are relying on local emergency services for emergency services 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.)."
- "Requiring employers to provide training in a language and vocabulary that the worker understands."

Why a Confined Space Standard

- Many fatalities have occurred in Confined Spaces
- Several have have been well intended rescuers

Simplifying the Rule

- If there is a hazard in a Confined Space that could injure or incapacitate a worker impacting their ability to self rescue, a Permit System is required that monitors Safety in the Confined Space and trained rescue services must be readily available.

Definition of a Confined Space

- Large enough and so configured that an employee can bodily enter
- Has limited means of entry and exit; and
- Is not designated for continuous employee occupancy

Common Mis-conception

- Many people believe size of entry makes a space a permit required confined space.
  - This is not true!

Federal Register Vol.80 No. 85 Monday May 4, 2015 page 25374

commenter argued that the permit requirements of this final rule, including the requirement to have a rescue service available, should apply to all confined spaces, even those spaces in which another hazard does not exist. This approach would apparently treat all confined spaces as permit spaces, which would be a radical departure from OSHA's longstanding treatment of confined spaces in the general industry. OSHA does not agree that such a departure, or the additional costs that employers would incur because of such departure, are warranted in the absence of employee exposure to some hazard inside the confined space. Limited egress in a confined space is a safety concern only when an employee cannot readily exit a confined space to avoid being exposed to a hazard within the space. Limited egress, by itself, is unlikely to injure or kill an employee. If limited egress is the only safety concern, then OSHA concludes that it is not reasonable to require employers to comply with the provisions of this final rule that pertain to permit spaces. In

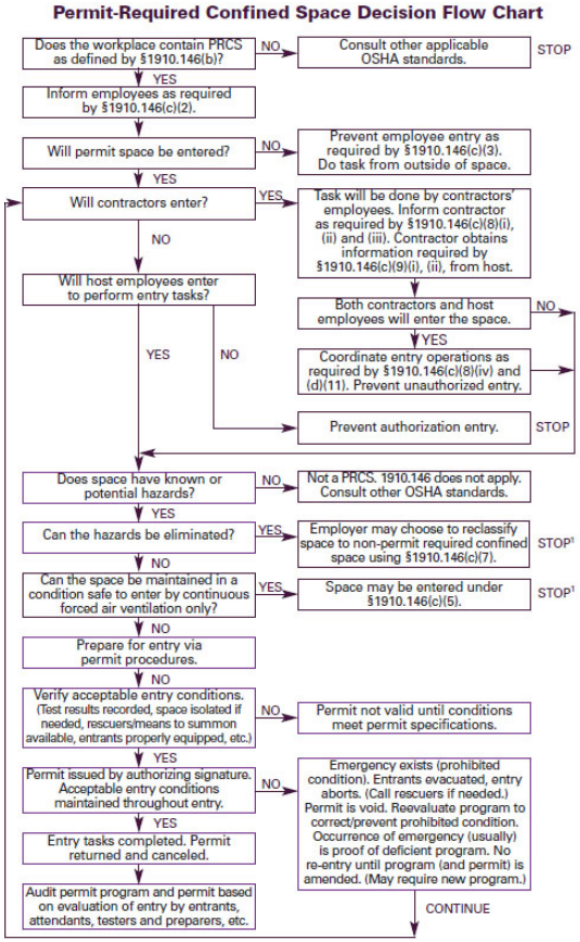
Permit Required Confined Space

1. Contains or has the potential to contain a hazardous atmosphere;
2. Contains a material that has the potential to engulf 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 an tapers to a smaller cross-section; or
4. Contains any other recognized serious safety or health hazard.

Confined Space or Permit Required Confined Space

- Confined space requires all 3 defining criteria be present.
  - Limited means of entry and exit, not meant for continuous human occupancy, large enough to enter
- Permit Required confined space must have one of the 4 defining criteria present.
  - Hazardous Atmosphere, Danger of Engulfment, Danger of Entrapment, any other recognize Health or Safety Hazard

Recommend – Engineer Out Need for Permit Required Procedures – Eliminate Hazards



Safety Manager's Hierarchy of Safety Hazard Controls

- Eliminate the Hazard
- Engineering Controls
  - i.e. line blocking, barriers, etc.
- Administrative Controls
  - i.e. job rotation, scheduling
- Personal Protective Equipment
  - Should always be the last consideration

Ruling Out Permit Required Confined Space

- Competent Person evaluates space – identifies if any hazards exist
- Determine if hazards can be eliminated
- If hazards can be eliminated the space is not a Permit Required Confined Space

Permit Required Confined Space Requirements

- Isolate the space – prevent unauthorized entry
- Implement procedures for safe entry
- Provide training of duties and safe procedures for the specific space;
  - Entry Supervisor
  - Attendants
  - Entrants
  - Rescue Team
- Implement Permit
  - Including Entrant Roster (accurate in/out)
- Periodically monitor the space for compliance

Permit Required Confined Space Requirements

- Debrief Attendant, Entrants
- Terminate entry procedures
- Barricade entry to space with appropriate warning signage

Alternate Work Methods

- While still technically being a Permit Required Permit Space if an employer can demonstrate the only hazard in the space is an atmospheric hazard that is eliminated by ventilation – then the Permit Process need not be implemented
- Should ventilation stop or space conditions change entrants must immediately evacuate

Exercise

- What are hazards associated with applying SPF in a Residential New Construction Attic?
- How can these hazards be controlled?
- Do hazards other than atmospheric hazards controlled by ventilation exist?
- Is this a Confined Space or Permit Confined Space?
- Must a Permit System be Utilized?

Summary

- Ensure hazards is space are eliminated
- Ensure workers can self rescue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Questions?