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Occupational Safety
and Health Administration

Confined Spaces in Construction
29 CFR 1926 Subpart AA

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Background

- General Industry Standard published 1993
- United Steelworkers settlement 1994

Rule development:

- Consultation with ACCSH (1990s-2002)
- stakeholder meetings,
- SBREFA panel (2003)

Rule development

- Proposed rule published in 2007
  - Comment period & public hearing

- Final Rule published May 4, 2015; effective August 3, 2015

Bottom line

- Final standard is very similar to the general industry standard

Basics

- What is a confined space?
  - Big enough to enter and difficult to exit
  - Not for regular occupancy

- Examples of spaces--sewers, pits, crawl spaces, attics, boilers, tanks, etc.

Basics…..

- What is a permit-required confined space?

---A confined space with either:

a hazardous atmosphere,

engulfment hazard or sloping surfaces, or

a serious safety or health hazard.

Basics…

- What are common hazards?

  Low oxygen,

  hazardous or toxic atmospheres, flammable vapors,

  electric shock,

  hazards from the work (welding, sprays).

General requirements

- Site evaluation: identify any confined spaces and permit-required confined spaces (permit spaces).
- Post permit spaces.
- Prevent unauthorized entry of permit spaces.
- Training of all workers exposed to permit space hazards, including hazards of unauthorized rescue.

When must I have a program?

- When your employees are going to enter a permit space.

Do I need a written program?

Yes, if employees are going to enter permit spaces.

Is there an alternative way to enter a permit space?

Yes, if you can follow all of the alternative procedures—1926.1203(e)(1) and (2)

(e)(1) (main points):

- eliminate/isolate physical hazards;
- air ventilation alone controls atmospheric hazards;
- some documentation, then

More alternative….

you can enter a permit space under para. (e)(2) which requires (main points):

- ensure entry access is safe
- test the atmosphere
- continuously ventilate (with enough air to allow time to exit if ventilation fails)
- continuously monitor atmosphere.

Other alternative?

If you can remove atmospheric hazards and other hazards are eliminated/isolated, you can re-classify the space.

Note: ventilation can control but not eliminate an atmospheric hazard.

What's in a written program for regular confined space work?

1926.1204 Permit-required confined space program (main points, for entry employers):

- Plan for safe entry operations, including
  - --identify hazards in permit spaces
  - --control atmospheric hazards
  - --address physical hazards
  - --prepare for air testing and monitoring.

More program……

--control access into the space

--provide equipment (air testing, ventilation, communications, PPE, lighting, etc.)

--provide attendants for permit spaces

--have procedures for rescue

More program…..

--written permits (to identify and track authorized entrants)

--maintain safe conditions for duration

--plans for emergency first aid and medical support

--regular or annual review of permits to identify areas to improve.

Other provisions:

- Training for attendants, entry workers, entry supervisor.

- Communication between employers—host, controlling, entry employers.

More provisions…..

- Rescue:

  --non-entry rescue required unless increases risk

If rely on entry rescue, must either

- train and equip own employees, or
- pre-arrange entry rescue service

Proper Prior Planning…

- Awareness of hazards and spaces
- Addressing hazards before beginning work
- Contingency plans (multiple layers of protection) in case something goes wrong.
- With planning and forethought, many construction employers will be able to avoid the need for a permit space program.

Who does what?

- Site evaluation:
  - Any employer whose employees are exposed to confined space hazards must ensure that the site is evaluated by a competent person and spaces are posted.
- Permit issuance:
  - Entry employers (employers who direct workers to perform work in a space) must develop and post permits.

What's Different?

- General Industry, plus—same requirements as 1910.146, with some additions:
  - Continuous monitoring of atmospheric and engulfment hazards
  - Clarifies with explicit statement that employers relying on local emergency services for rescue must arrange for responders to notify in advance if they will be unavailable.
  - Permits may be suspended instead of cancelled, provided the space is returned to permit conditions prior to re-entry.

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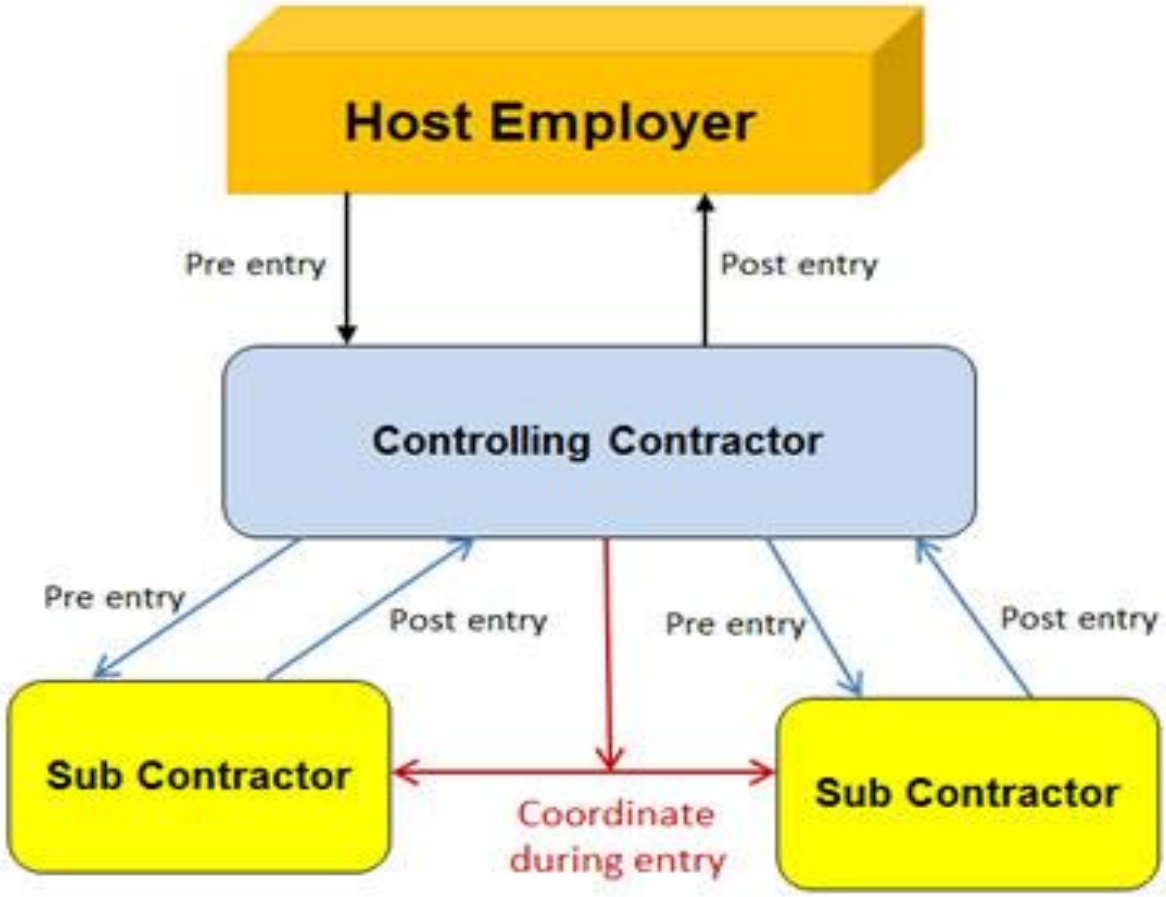
General industry, plus (cont'd)

- Competent person evaluates spaces.
- Specific information exchange requirements for multi-employer work sites.

Information Exchange



What standard to follow?

- What if an employer does construction and maintenance/general industry work in the same space at the same time?
  - Employers with workers engaged in both types of work will be in compliance with both standards if they follow 1926 Subpart AA.

Double Fatality: August 28, 2014

- Bo Taylor entered a manhole at a construction site to apply aerosol sealant. He was overcome by fumes and fell face first into 3 feet of water at the bottom.
- Trent Sorenson, the site superintendent and Bo's uncle, entered the manhole to attempt rescue. He became unconscious and fell on top of Bo.

Double Fatality: August 28, 2014

- Tyler Sorenson left the site in order to call emergency services. He returned with a volunteer who had his own SCBA.
- The volunteer attempted rescue, but a crack in the mask forced him to stop.
- EMTs arrived and extracted the victims 45 minutes after Bo's initial loss of consciousness.

Residential Incidents

- Plumber performing renovation work in a crawl space was electrocuted when someone in the house turned the circuit back on – LOTO would have prevented.
- Explosion in attic during spray-foam insulation installation.
- Cable installer electrocuted in crawl space.

Information and Outreach

- http://www.osha.gov/confinedspaces/index.html#
  - Fact Sheets and FAQs
  - Small Entity Guide forthcoming
  - Additional outreach documents forthcoming
  - Webinars and presentations
    - NAHB webinar on July 7, 2015

Contact

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OR

202-693-2020


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