



The Construction Confined Space Statute

Bruce A. Donato, CSP, CHMM, CECD
K & A First Aid & Safety, LLC



TRAINING DISCLAIMER

These materials were developed by K & A First Aid, LLC, and are intended to assist employers, workers, and others as they strive to improve workplace health and safety. While we attempt to thoroughly address specific topics, it is not possible to include discussion of everything necessary to ensure a healthy and safe working environment in a presentation of this nature. Thus, this information must be understood as a tool for addressing workplace hazards, rather than an exhaustive statement of an employer's legal obligations, which are defined by statute, regulations, and standards. Likewise, to the extent that this information references practices or procedures that may enhance health or safety, but which are not required by a statute, regulation, or standard, it cannot, and does not, create additional legal obligations. Finally, over time, regulators may modify rules and interpretations in light of new technology, information, or circumstances; to keep apprised of such developments, or to review information on a wide range of occupational safety and health topics, you can visit regulatory web sites such as the Department of Transportation at www.dot.gov or OSHA's website at www.osha.gov.

Copyright K & A First Aid, LLC 2016



Contact information

Bruce A. Donato, CSP, CHMM, CECD
K & A First Aid & Safety, LLC
337 Little Quarry Road
Gaithersburg, MD 20878-5705
301-208-0000
bdonato@kafirstaid.com
www.kafirstaid.com

Copyright K & A First Aid, LLC 2016



K&A

FIRST AID & SAFETY

Training and Safety Compliance

3

Agenda

1. What is a confined space?
2. Permit vs. Non-Permit
3. Key People (traditional)
4. History of the Construction Confined Space Standard
5. What's the Same (or Similar)
6. What's different
7. What's the latest

Copyright K & A First Aid, LLC 2016



K&A

FIRST AID & SAFETY

Training and Safety Compliance

4

Confined Space



A space that:

- Is large enough and so configured that an employee can bodily enter and perform assigned work
- Has limited or restricted entry/**exit** means
- Is not designed for continuous **Employee** occupancy

AND
AND

Copyright K & A First Aid, LLC 2016



K&A

FIRST AID & SAFETY

Training and Safety Compliance

Permit-required confined space

A confined space with either:

- ▶ a hazardous atmosphere;
- ▶ an engulfment hazard;
- ▶ sloping surfaces; or
- ▶ a serious safety or health hazard.

Copyright K & A First Aid, LLC 2016



K&A

FIRST AID & SAFETY

Training and Safety Compliance

Attendant

- ▶ Individual stationed outside the permit space who **monitors** entrants
- ▶ Must have communication
- ▶ Can alert rescue
- ▶ Does not enter
- ▶ Knows hazards



Copyright K & A First Aid, LLC 2016

Entrant

- ▶ Authorized entrant means an employee who is authorized by the entry supervisor to enter a permit space.
- ▶ Knows the hazards
- ▶ Knows how to do the job.



Copyright K & A First Aid, LLC 2016

The qualified person (such as the employer, foreman, or crew chief) responsible for determining if

- ▶ acceptable entry conditions are present at a permit space where entry is planned;
- ▶ for authorizing entry and;
- ▶ overseeing entry operations.

Copyright K & A First Aid, LLC 2016

- ▶ General Industry Standard published 1993
- ▶ Construction standard development started shortly afterward. Proposed rule published in 2007.
- ▶ 29CFR1926.21(B)(6)(i) – Safety Training and Education only reference to confined space previously.
- ▶ Construction Confined Spaces viewed as dynamic.

Background

- ▶ Final Rule issued May 4, 2015
- ▶ Effective August 3, 2015 for federal plan states.
(60 day grace period to get equipment)
- ▶ State plan states have 6 months to implement.

Copyright K & A First Aid, LLC 2016



K&A

FIRST AID & SAFETY

Training and Safety Compliance

Similarities GI vs. Const.

The construction standard follows the General Industry (GI) standard in many areas. The following are similarities between the two.

- ▶ Reclassification of a Permit required to Non-Permit required confined space
- ▶ An attendant may be responsible for multiple PRCs's
- ▶ Anklets or wristlets may be used.
- ▶ Cross training of Supervisor as Attendant/Entrant is permitted.
- ▶ Duties of the Entrant & Attendant are similar.

Copyright K & A First Aid, LLC 2016



K&A

FIRST AID & SAFETY

Training and Safety Compliance

Differences GI vs. Const.

- ▶ The GI standard bases its practices on the assumption that confined space entry is in a fairly stable work environment with minimal changes occurring at the same time.
- ▶ The Construction standard assumes that there may be multiple trades/groups working in the same area and that hazards change much more quickly than in GI.

The following slides will highlight some key differences.



Communication

General Industry

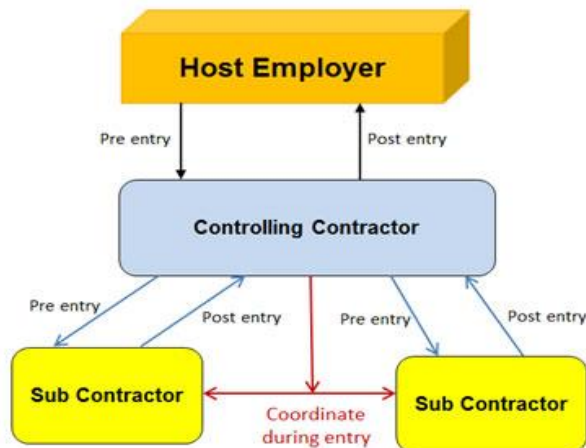
- ▶ Inform contractor that the workplace contains PRCS's and a PRCS program is required to enter.
- ▶ Host employer coordinates entry from multiple employers.

Construction

- ▶ Host Employer
- ▶ Controlling Contractor
- ▶ Entry Employer



Information Exchange



Copyright K & A First Aid, LLC 2016



K&A FIRST AID & SAFETY
Training and Safety Compliance

Host Employer

The employer who owns or manages the property.

- ▶ Before entry operations begin, the host employer must provide the following information, if it has it, to the controlling contractor:
 - The location of each known permit space;
 - The hazards or potential hazards in each space or the reason it is a permit space; and
 - Any precautions that the host employer or any previous controlling contractor or entry employer implemented for the protection of employees in the permit space

Note: If the owner of the property on which the construction activity occurs has contracted with an entity for the general management of that property, and has transferred to that entity the information specified in §1926.1203(h)(1), OSHA will treat the contracted management entity as the host employer for as long as that entity manages the property

Copyright K & A First Aid, LLC 2016



K&A FIRST AID & SAFETY
Training and Safety Compliance

Controlling Contractor

Employer that has overall responsibility for construction at the worksite.

- ▶ Note to the definition of “Controlling Contractor”. If the controlling contractor owns or manages the property, then it is both a controlling employer and a host employer.

Copyright K & A First Aid, LLC 2016



K&A

FIRST AID & SAFETY

Training and Safety Compliance

Controlling Contractor

Before entry operations begin, the controlling contractor must:

- ▶ Obtain the host employer’s information about the permit space hazards and previous entry operations; and
- ▶ Provide the following information to each entity entering a permit space and any other entity at the worksite whose activities could foreseeably result in a hazard in the permit space.

Copyright K & A First Aid, LLC 2016



K&A

FIRST AID & SAFETY

Training and Safety Compliance

Controlling Contractor

After entry operations:

- ▶ The controlling contractor must debrief each entity that entered a permit space regarding the permit space program followed and any hazards confronted or created in the permit space(s) during entry operations;
- ▶ The controlling contractor must apprise the host employer of the information exchanged with the entry entities pursuant to this subparagraph.

Copyright K & A First Aid, LLC 2016



K&A

FIRST AID & SAFETY

Training and Safety Compliance

Entry Employer



Employer who decides that an employee it directs will enter a PRCS.

- ▶ Before entry operations begin, each entry employer must:
 - Obtain all of the controlling contractor's information regarding permit space hazards and entry operations; and
 - Inform the controlling contractor of the permit space program that the entry employer will follow, including any hazards likely to be confronted or created in each permit space.

Copyright K & A First Aid, LLC 2016



K&A

FIRST AID & SAFETY

Training and Safety Compliance

Entry Employer

For Permit Spaces

- ▶ Implement the measures necessary to prevent unauthorized entry;
- ▶ Identify and evaluate the hazards of permit spaces before employees enter them;
- ▶ Specifying acceptable entry conditions;
- ▶ Providing each authorized entrant or that employee's authorized representative with the opportunity to observe any monitoring or testing
- ▶ Isolating the permit space and physical hazard(s) within the space;



Copyright K & A First Aid, LLC 2016

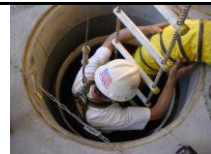


K&A FIRST AID & SAFETY
Training and Safety Compliance

Entry Employer

For Permit Spaces

- ▶ Purging, inerting, flushing, or ventilating the permit space as necessary to eliminate or control atmospheric hazards of permit spaces;
- ▶ Determining that, in the event the ventilation system stops working, the monitoring procedures will detect an increase in atmospheric hazard levels in sufficient time for the entrants to safely exit the permit space;
- ▶ Providing pedestrian, vehicle, or other barriers as necessary to protect entrants from external hazards;
- ▶ Eliminating any conditions (for example, high pressure) that could make it unsafe to remove an entrance cover.



Copyright K & A First Aid, LLC 2016



K&A FIRST AID & SAFETY
Training and Safety Compliance



Entry Employer



For Permit Spaces

- ▶ Develop and implement procedures for summoning rescue and emergency services (including procedures for summoning emergency assistance in the event of a failed non-entry rescue);
- ▶ Review the permit space program, using the canceled permits retained, within 1 year after each entry and revise the program as necessary.
- ▶ Note to paragraph (n). Employers may perform a single annual review covering all entries performed during a 12-month period.
- ▶ If no entry is performed during a 12-month period, no review is necessary

Copyright K & A First Aid, LLC 2016



K&A

FIRST AID & SAFETY

Training and Safety Compliance

Entry Employer

For Permit Spaces that cannot be isolated (sewers or similar) and entry is authorized

- ▶ Continuously monitor entry conditions in the areas where authorized entrants are working
- ▶ Provide an early-warning system that continuously monitors for non-isolated engulfment hazards. The system must allow sufficient time for the authorized entrants to safely exit the space.
- ▶ Test the internal atmosphere of the permit space with a calibrated, direct-reading instrument before any employee enters the space.

Copyright K & A First Aid, LLC 2016

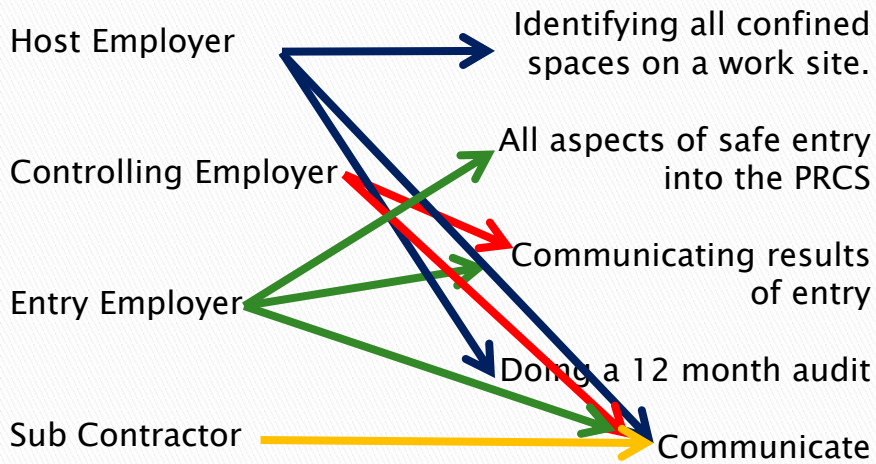


K&A

FIRST AID & SAFETY

Training and Safety Compliance

Whose responsible for?

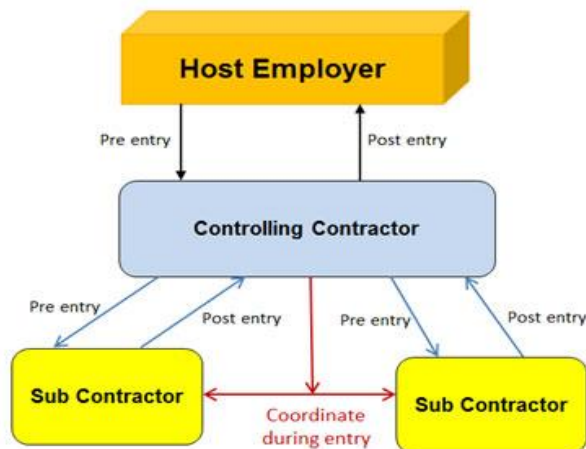


Draw lines to what each is responsible for.

Copyright K & A First Aid, LLC 2016

K&A FIRST AID & SAFETY
Training and Safety Compliance

Information Exchange



Copyright K & A First Aid, LLC 2016

K&A FIRST AID & SAFETY
Training and Safety Compliance

Early Warning System

General Industry

- ▶ Not required.
- ▶ (Must be trained to recognize warning signs of danger.)



Construction

- ▶ Provide an early-warning system that **continuously** monitors for non-isolated engulfment hazards.
- ▶ The system must alert entrants early enough to safely exit.
- ▶ Can be used where isolation can not be done (e.g. sewer)

Copyright K & A First Aid, LLC 2016



K&A

FIRST AID & SAFETY

Training and Safety Compliance

27

Engulfment Monitoring

General Industry

- ▶ Not specifically called out.

Construction

- ▶ Monitoring required to notify entrant with enough time to exit the space.

Copyright K & A First Aid, LLC 2016



K&A

FIRST AID & SAFETY

Training and Safety Compliance

28

Rescue Teams – In House

General Industry

- ▶ Can use in-house team and need hands-on training every 12 months.

Construction

- ▶ Can use in-house team and need hands-on training every 12 months.
- ▶ Must prevent unauthorized entry for untrained rescuers.

Copyright K & A First Aid, LLC 2016



29

Rescue Teams – Contracted

General Industry

- ▶ Employer needs to assure contracted response team is vetted.
- ▶ Can reach victims in an appropriate time frame.

Construction

- ▶ Employer needs to assure contracted response team is vetted.
- ▶ Contracted need to be able to respond in a *timely* fashion (even if non-entry rescue is planned).
- ▶ Contracted rescue team needs to notify employer if they are taken out of service.

Copyright K & A First Aid, LLC 2016



30

Retrieval Systems

General Industry

- ▶ Equipment used for non-entry rescue

Construction

- ▶ Equipment used for non-entry rescue
- ▶ System must be designed for personnel hoisting.
- ▶ Job made systems must be approved by a *registered professional engineer*.

Copyright K & A First Aid, LLC 2016



K&A

FIRST AID & SAFETY

Training and Safety Compliance

31

Competent Person

General Industry

- ▶ No requirement.
- ▶ Confined spaces are identified by the employer
- ▶ Permit requirement is done by the employer

Construction

- ▶ Each employer must assure that a “competent” person must identify all confined spaces at a worksite which an employee may work in.
- ▶ The competent person must determine if it is a permit required or not space.

Copyright K & A First Aid, LLC 2016



K&A

FIRST AID & SAFETY

Training and Safety Compliance

32

Training Requirements

General Industry

- ▶ Must certify proficiencies.

Construction

- ▶ Must establish proficiencies.
- ▶ Must maintain training records for length of employment.
- ▶ All employees exposed to PRCs must be trained.

Training Requirements

Construction Specific

The employer must provide training

- ▶ To each employee regulated by this standard, at no cost
- ▶ Ensure understanding, knowledge, and skills necessary for the safe performance of the duties assigned
- ▶ Must result in an understanding of the hazards in the permit space and the methods used to isolate, control or in other ways protect employees
- ▶ For those employees not authorized to perform entry rescues, in the dangers of attempting such rescues.
- ▶ The training must establish employee proficiency in the duties required.

Written Programs

General Industry

- ▶ Required if employees will enter.



Construction

- ▶ Required if employees it directs will enter.
- ▶ The plan for safe entry operations, includes:
 - identify hazards in permit spaces
 - address physical hazards
 - prepare for air testing and monitoring.
 - control access into the space
 - provide equipment (air testing, ventilation, communications, PPE, lighting, etc.)
 - have procedures for rescue, etc.

Copyright K & A First Aid, LLC 2016



35

Cancelling, Suspending, Reusing a Permit

General Industry

- ▶ Once canceled, a new permit must be issued.

Construction

- ▶ Can be suspended, and/or reused.

Copyright K & A First Aid, LLC 2016



36

Prevention of Entry

General Industry

- ▶ Prevention of unauthorized entry must be done.

Construction

- ▶ Effective measures to prevention unauthorized entry must be immediate.

Copyright K & A First Aid, LLC 2016



37

Alternate Entry: Use of Forced Ventilation

General Industry

- ▶ If an employer can demonstrate that continuous forced air ventilation alone is sufficient to maintain that permit space safe for entry.

Construction

- ▶ If an employer can demonstrate that continuous forced air ventilation alone is sufficient to maintain that permit space safe for entry and that in the event of a failure the entrant can exit safely.

Copyright K & A First Aid, LLC 2016



38

Monitoring of the Space

General Industry

- ▶ As necessary

Construction

- ▶ Continuous unless employer demonstrates equipment is not available or that the atmosphere is controlled at a safe level.



Supervisor Duties

General Industry

- ▶ Is responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry

Construction

- ▶ Is a *qualified* person responsible for determining if acceptable entry conditions are present for entry and overseeing entry operations and terminating entry.



Sewers / Pits / Attics

General Industry

- ▶ Not specifically mentioned

Construction

- ▶ Specifically mentioned in OSHA Fact Sheets.

Exemptions

- ▶ Subpart P – Trenching and Excavations
- ▶ Subpart S – Underground Construction, Cofferdams, Caissons, Compressed Air
- ▶ Subpart V – Power Transmission and Distribution

What's new

- ▶ Telecommunications that fall under 1910.268 may be exempt.
- ▶ Residential Construction waiver expired 3/8/16
- ▶ Continuous Monitoring – no letter or interpretation out on it yet.
- ▶ MOSH adopted by reference
- ▶ VOSH adopted by reference



Contact information

Bruce A. Donato, CSP, CHMM, CECD
K & A First Aid & Safety, LLC
337 Little Quarry Road
Gaithersburg, MD 20878-5705
301-208-0000
bdonato@kafirstaid.com
www.kafirstaid.com

