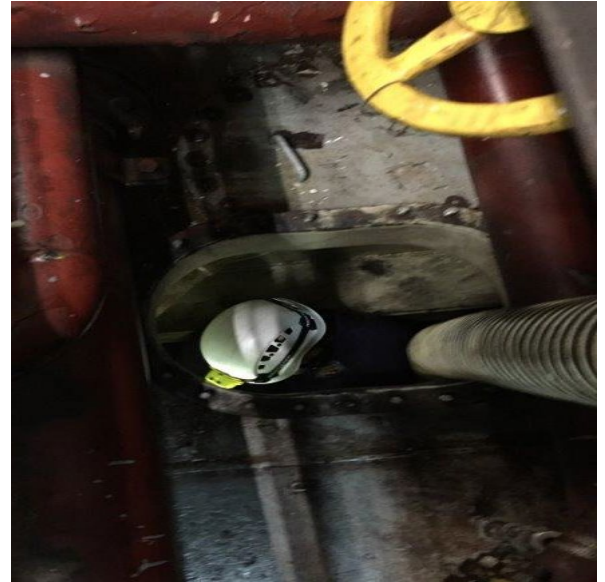


AN OVERVIEW OF OSHA MARITIME CONFINED SPACE STANDARDS

Many maritime workplaces contain areas that are considered "confined spaces" because while they are not necessarily designed for people, they are large enough for workers to enter and perform certain jobs. In marine environments, confined spaces include, but are not limited to double bottom tanks, cofferdams, or other spaces which by its small size and confined nature can readily create or aggravate a hazardous exposure. Before any employee can enter a confined space, a competent person or Marine Chemist must visually inspect the space and test its atmosphere for oxygen content, and the presence of flammable and toxic vapors or gasses.



OSHA's general industry and construction standards (29 CFR 1910 and 1926) use the term "permit-required confined space" (permit space) to describe a confined space that has one or more of the following characteristics:

- Contains or has the potential to contain a hazardous atmosphere,
- Contains material that has the potential to engulf an entrant,
- Has walls that converge inward or floors that slope downward and taper into a smaller area which could trap or asphyxiate an entrant,
- Contains any other recognized safety or health hazard such as unguarded machinery, exposed live wires, or heat stress.

Separate industry standards address confined space hazards, depending on the type of work taking place, and the requirements often overlap. Determining which standard applies can often be confusing, especially with maritime work. For example, employers with employees engaged in the loading and unloading of cargo at a marine terminal would need to comply with [29 CFR Part 1917](#) during shore-side activity and [29 CFR Part 1918](#) for cargo handling taking place on the vessel (ship). If while in port that same vessel were to undergo vessel repair or confined space work, the employer would also need to comply with [29 CFR Part 1915](#) for those activities.

29 CFR Part 1915 standards apply to all ship repair, shipbuilding, and shipbreaking employments and related employments on the navigable waters of the United States (includes dry docks, graving docks, and marine railways) or at facilities located adjacent to navigable waters. 29 CFR Part 1915, Subpart B -- Confined and Enclosed Spaces and Other Dangerous Atmospheres in Shipyard Employment, 29 CFR Part 1915, Subpart I -- Personal Protective Equipment, and 29 CFR Part 1915, Subpart P -- Fire Protection in Shipyard Employment, apply to shipyard employment work on vessels and vessel sections, and on land-side operations, regardless of geographic location. In addition, where coverage of a shipyard employment hazard by a 29 CFR Part 1915 standard is absent, 29 CFR Part 1910 standard provisions apply.

Some of the OSHA standards for maritime workers include:

- 29 CFR Part 1915 for ship repair, shipbuilding, and shipbreaking (including 29 CFR Part 1910 requirements applicable to shipyards); see Appendix A of OSHA's Shipyard Employment "Tool Bag" Directive); [Confined spaces [29 CFR Part 1915, Subpart B].
- 29 CFR Part 1917 for marine terminal operations;
- 29 CFR Part 1918 for longshoring operations;
- 29 CFR Part 1919 for cargo handling gear as referenced under 29 CFR 1915.115(a)(1) shipyard employment requirements, 29 CFR 1917.50 marine terminal requirements and 29 CFR 1918.11 longshoring requirements
- 29 CFR Part 1926 for construction, including marine construction activities;
- 29 CFR Part 1910 for general working conditions not otherwise regulated, such as the working conditions on uninspected vessels that are not addressed by U.S. Coast Guard regulations; and
- Section 5(a)(1), the general duty clause of the Occupational Safety and Health Act (OSH Act), for recognized hazards that are causing or are likely to cause death or serious physical harm to employees for which there are no specific OSHA standards or U.S. Coast Guard regulations.

Note: *For the above listed standards, the entire standard applies to maritime workers for all work-related activities, not just those involving confined spaces.*

There may be more than one applicable confined space standard at a site depending on the situation. Take for example an employer operating an uninspected vessel. While performing ship repair functions such as alterations, conversions, installations, cleaning, painting, and maintenance 29 CFR Part 1915, Subpart B, Confined and Enclosed Spaces and Other Dangerous Atmospheres in Shipyard Employment applies. However, when employees are performing various routine tasks, such as retrieving ropes from confined spaces, which is not considered ship repair, the 29 CFR 1910.146 confined space standard would apply. Crossover situations like this can occur where individual employers are faced with two contending confined space entry procedures at the same site. This can lead to confusion, inadvertent errors, and possibly reduced employee safety.

Generally, when a shipyard standard is specifically applicable to a condition, practice, means, method, operation, or process, it takes precedence over any general industry standard provision that might otherwise be applicable. Where a Part 1915 shipyard employment standard is applicable, but the employer has complied with a Part 1910 general industry provision that provides equivalent protection for the same workplace condition or hazard, OSHA will consider the employer to be in *de minimis* violation of OSHA regulations. That said, it is important to remember that this would not apply to a situation where the Part 1915 shipyard employment standard provides greater or additional employee protection. For example, while employees entering wing, bow, and/or stern tanks on uninspected vessels are required to comply with 29 CFR Part 1915, Subpart B, an employer may choose to follow the procedures contained in 29 CFR 1910.146, *Permit-Required Confined Spaces*. OSHA would consider the employer in compliance where wing, bow, and/or stern tanks are treated as permit-required confined spaces and the requirements of 29 CFR 1910.146 are followed, as long as no hot work is being performed. For entry involving hot work, the employer is always required to comply with 29 CFR Part 1915, Subpart B.

This could also apply to facilities work in a shipyard. The use of the maritime standard (29 CFR 1915) for confined spaces is permitted throughout a shipyard, although many vendors or contractors are not familiar with the maritime confined space standard, and they may use either the general industry or construction confined

space standard. This is generally acceptable unless hot work is performed, which may involve flammable, combustible, or toxic products. In this case, it is best to refer to the contracting shipyard for help.

The goal of all confined space standards is to ensure worker safety when entering a confined space. Each standard was crafted to meet the requirements of a particular industry. However, workers tend to follow requirements they are most familiar with. Employers should always get as much information as possible to ensure the confined space standard used is compatible with the work performed. If there is still a question as to which industry standard applies, a good best practice is to follow the most stringent requirements.

Additional Resources:

- [OSHA eTool - Confined or Enclosed Spaces and Other Dangerous Atmospheres](#). Helps workers identify and control the hazards that cause the most serious confined space-related injuries
- **OSHA Directive, CPL 02-01-061** [CPL 02-01-051] - National - [29 CFR Part 1915, Subpart B, Confined and Enclosed Spaces and Other Dangerous Atmospheres in Shipyard Employment](#) - 05/22/2019
- **OSHA Directive, CPL 02-00-162** [CPL 02-00-157] - National - [Shipyard Employment "Tool Bag" Directive](#) - 05/22/2019