

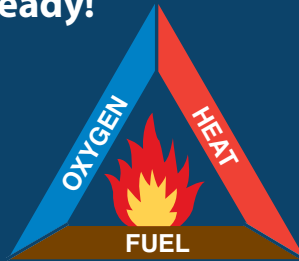
- If designated as a fire watch, know how to operate fire response equipment and the hazards associated with the use of the equipment. (29 CFR 1915.508)
- Wherever possible use service lines with quick disconnect fittings in hot work areas so that fire and watertight doors can be closed quickly if a fire occurs.
- Turn off machinery when not in use. Disconnect all fuel gas and oxygen hose lines at the supply manifold at the end of each shift. (29 CFR 1915.503(b)(2)(iii))

Preventing Fires on Vessels

SHIPYARD EMPLOYMENT

Make sure your shipyard is ready!

- Control oxygen content
- Remove heat and ignition sources
- Avoid fueling the fire



For more information:

1-800-321-OSHA (6742)

TTY 1-877-889-5627

[osha.gov/maritime/resources](https://www.osha.gov/maritime/resources)



Maintenance and repair work on vessels can result in fires that burn out of control quickly. Knowing the hazards and working with your employer can help prevent:

- The buildup of combustible gases and toxic fumes in enclosed and confined spaces.
- Oxygen-enriched atmospheres that cause ordinary fire-resistant materials to burn readily.
- Fires during hot work, when combustible materials, such as fuels, cargo, debris, and building materials are unprotected from welding, grinding, torch cutting, and spark-producing activities.



Steps Employers Must Take to Protect Workers:

- Establish a written fire safety plan that outlines what to do in the event of a fire. Review and update the plan annually. (29 CFR 1915.502)
- Train workers on the fire safety plan procedures for emergency alarm signals and evacuation routes. Provide additional training, such as the use and hazards of fire response equipment, for workers designated for fire response. (29 CFR 1915.502(c), 1915.504, and 1915.508)
- Designate an in-house fire response team or arrange for an off-site source that can provide prompt fire response. (29 CFR 1915.505)
- Ensure fire detection and fire response equipment are operational. (29 CFR 1915.505(f)(2) and 1915.507)
- Inspect work areas and verify:
 - Flammable and combustible substances do not accumulate at jobsites and are removed or protected during hot work. (29 CFR 1915.53 and 1915.503(b)(1))

- Explosion proof, self-contained lights are used in areas that contain flammable vapors at or above 10 percent of the lower explosive limit. (29 CFR 1915.82(d))
 - Damaged wires or cables are removed from service. (29 CFR 1915.83(c)(3))
 - Authorized hot work areas remain free of fire hazards or that any physical isolation, fire watches, or other positive means to prevent fires is maintained. (29 CFR 1915.503)
- Post fire watches in hot work areas and adjacent spaces. (29 CFR 1915.504(b)). Maintain fire watches for at least 30 minutes after hot work is completed, unless a fire hazard no longer exists. (29 CFR 1915.504(c)(2)(iv))
 - Ensure spaces and adjacent areas suspected of containing flammable or explosive atmospheres are tested by a Marine Chemist, U.S. Coast Guard authorized person, or competent person and labeled as “Safe for Hot Work” before hot work starts. (29 CFR 1915.14)

How Workers Can Protect Themselves and Others

- Follow established fire safety plan procedures for alarms, evacuations, and recognizing and reporting hazards. (29 CFR 1915.502)
- Check the Marine Chemist Certificate or Shipyard Competent Person Log of inspections before starting hot work to ensure it is safe to do so. (29 CFR 1915.503(a)(2)(i))
- Remove, cover, or shield any combustible materials that are within 35 feet of hot work. Use flame-proof covers, metal, and fire-resistant guards or curtains. (29 CFR 1915.504(b)(3))

