

§ 1915.508

29 CFR Ch. XVII (7–1–06 Edition)

the specific recommendations in NFPA 14–2000 Standard for the Installation of Standpipe, Private Hydrant, and Hose Systems (incorporated by reference, see § 1915.5).

(c) *General requirements for fixed extinguishing systems.* The employer must:

(1) Ensure that any fixed extinguishing system component or extinguishing agent is approved by an OSHA Nationally Recognized Testing Laboratory, meeting the requirements of 29 CFR 1910.7, for use on the specific hazards the employer expects it to control or extinguish;

(2) Notify employees and take the necessary precautions to ensure employees are safe from fire if for any reason a fire extinguishing system stops working, until the system is working again;

(3) Ensure all repairs to fire extinguishing systems and equipment are done by a qualified technician or mechanic;

(4) Provide and ensure employees use proper personal protective equipment when entering discharge areas in which the atmosphere remains hazardous to employee safety or health, or provide safeguards to prevent employees from entering those areas. See § 1915.12 for additional requirements applicable to safe entry into spaces containing dangerous atmospheres;

(5) Post hazard warning or caution signs at both the entrance to and inside of areas protected by fixed extinguishing systems that use extinguishing agents in concentrations known to be hazardous to employee safety or health; and

(6) Select, install, inspect, maintain, and test all automatic fire detection systems and emergency alarms according to NFPA 72–1999 National Fire Alarm Code (incorporated by reference, see § 1915.5).

(d) *Fixed extinguishing systems.* The employer must select, install, maintain, inspect, and test all fixed systems required by OSHA as follows:

(1) Standpipe and hose systems according to NFPA 14–2000 Standard for the Installation of Standpipe, Private Hydrant, and Hose Systems (incorporated by reference, see § 1915.5);

(2) Automatic sprinkler systems according to NFPA 25–2002 Standard for

the Inspection, Testing, and Maintenance of Water-based Fire Protection Systems, (incorporated by reference, see § 1915.5), and either NFPA 13–1999 Standard for the Installation of Sprinkler Systems (incorporated by reference, see § 1915.5) or NFPA 750–2000 Standard on Water Mist Fire Protection Systems (incorporated by reference, see § 1915.5);

(3) Fixed extinguishing systems that use water or foam as the extinguishing agent according to NFPA 15–2001 Standard for Water Spray Fixed Systems for Fire Protection (incorporated by reference, see § 1915.5); NFPA 11–1998 Standard for Low-Expansion Foam (incorporated by reference, see § 1915.5); and NFPA 11A–1999 Standard for Medium- and High-Expansion Foam Systems (incorporated by reference, see 1915.5);

(4) Fixed extinguishing systems using dry chemical as the extinguishing agent according to NFPA 17–2002 Standard for Dry Chemical Extinguishing Systems (incorporated by reference, see § 1915.5); and

(5) Fixed extinguishing systems using gas as the extinguishing agent according to NFPA 12–2000 Standard on Carbon Dioxide Extinguishing Systems (incorporated by reference, see § 1915.5); NFPA 12A–1997 Standard on Halon 1301 Fire Extinguishing Systems (incorporated by reference, see § 1915.5); and NFPA 2001–2000 Standard on Clean Agent Fire Extinguishing Systems (incorporated by reference, see § 1915.5).

§ 1915.508 Training.

(a) The employer must train employees in the applicable requirements of this section:

(1) Within 90 days of December 14, 2004, for employees currently working;

(2) Upon initial assignment for new employees; and

(3) When necessary to maintain proficiency for employees previously trained.

(b) *Employee training.* The employer must ensure that all employees are trained on:

(1) The emergency alarm signals, including system discharge alarms and employee evacuation alarms; and

(2) The primary and secondary evacuation routes that employees must use

in the event of a fire in the workplace. While all vessels and vessel sections must have a primary evacuation route, a secondary evacuation route is not required when impracticable.

(c) *Additional training requirements for employees expected to fight incipient stage fires.* The employer must ensure that employees expected to fight incipient stage fires are trained on the following:

(1) The general principles of using fire extinguishers or hose lines, the hazards involved with incipient fire-fighting, and the procedures used to reduce these hazards;

(2) The hazards associated with fixed and portable fire protection systems that employees may use or to which they may be exposed during discharge of those systems; and

(3) The activation and operation of fixed and portable fire protection systems that the employer expects employees to use in the workplace.

(d) *Additional training requirements for shipyard employees designated for fire response.* The employer must:

(1) Have a written training policy stating that fire response employees must be trained and capable of carrying out their duties and responsibilities at all times;

(2) Keep written standard operating procedures that address anticipated emergency operations and update these procedures as necessary;

(3) Review fire response employee training programs and hands-on sessions before they are used in fire response training to make sure that fire response employees are protected from hazards associated with fire response training;

(4) Provide training for fire response employees that ensures they are capable of carrying out their duties and responsibilities under the employer's standard operating procedures;

(5) Train new fire response employees before they engage in emergency operations;

(6) At least quarterly, provide training on the written operating procedures to fire response employees who are expected to fight fires;

(7) Use qualified instructors to conduct the training;

(8) Conduct any training that involves live fire response exercises in

accordance with NFPA 1403-2002 Standard on Live Fire Training Evolutions (incorporated by reference, see §1915.5);

(9) Conduct semi-annual drills according to the employer's written procedures for fire response employees that cover site-specific operations, occupancies, buildings, vessels and vessel sections, and fire-related hazards; and

(10) Prohibit the use of smoke generating devices that create a dangerous atmosphere in training exercises.

(e) *Additional training requirements for fire watch duty.* (1) The employer must ensure that each fire watch is trained by an instructor with adequate fire watch knowledge and experience to cover the items as follows:

(i) Before being assigned to fire watch duty;

(ii) Whenever there is a change in operations that presents a new or different hazard;

(iii) Whenever the employer has reason to believe that the fire watch's knowledge, skills, or understanding of the training previously provided is inadequate; and

(iv) Annually.

(2) The employer must ensure that each employee who stands fire watch duty is trained in:

(i) The basics of fire behavior, the different classes of fire and of extinguishing agents, the stages of fire, and methods for extinguishing fires;

(ii) Extinguishing live fire scenarios whenever allowed by local and federal law;

(iii) The recognition of the adverse health effects that may be caused by exposure to fire;

(iv) The physical characteristics of the hot work area;

(v) The hazards associated with fire watch duties;

(vi) The personal protective equipment (PPE) needed to perform fire watch duties safely;

(vii) The use of PPE;

(viii) The selection and use of any fire extinguishers and fire hoses likely to be used by a fire watch in the work area;

(ix) The location and use of barriers;

(x) The means of communication designated by the employer for fire watches;

(xi) When and how to start fire alarm procedures; and

(xii) The employer's evacuation plan.

(3) The employer must ensure that each fire watch is trained to alert others to exit the space whenever:

(i) The fire watch perceives an unsafe condition;

(ii) The fire watch perceives that a worker performing hot work is in danger;

(iii) The employer or a representative of the employer orders an evacuation; or

(iv) An evacuation signal, such as an alarm, is activated.

(f) *Records.* The employer must keep records that demonstrate that employees have been trained as required by paragraphs (a) through (e) of this section.

(1) The employer must ensure that the records include the employee's name; the trainer's name; the type of training; and the date(s) on which the training took place.

(2) The employer must keep each training record for one year from the time it was made or until it is replaced with a new training record, whichever is shorter, and make it available for inspection and copying by OSHA on request.

§ 1915.509 Definitions applicable to this subpart.

Alarm—a signal or message from a person or device that indicates that there is a fire, medical emergency, or other situation that requires emergency response or evacuation. At some shipyards, this may be called an "incident" or a "call for service."

Alarm system—a system that warns employees at the worksite of danger.

Body harness—a system of straps that may be secured about the employee in a manner that will distribute the fall arrest forces over at least the thighs, shoulders, chest, and pelvis, with means for attaching it to other components of a personal fall arrest system.

Class II standpipe system—a 1½ inch (3.8 cm) hose system which provides a means for the control or extinguishment of incipient stage fires.

Contract employer—an employer, such as a painter, joiner, carpenter, or scaffolding sub-contractor, who performs

work under contract to the host employer or to another employer under contract to the host employer at the host employer's worksite. This excludes employers who provide incidental services that do not influence shipyard employment (such as mail delivery or office supply services).

Dangerous atmosphere—an atmosphere that may expose employees to the risk of death, incapacitation, injury, acute illness, or impairment of ability to self-rescue (*i.e.*, escape unaided from a confined or enclosed space).

Designated area—an area established for hot work after an inspection that is free of fire hazards.

Drop Test—a method utilizing gauges to ensure the integrity of an oxygen fuel gas burning system. The method requires that the burning torch is installed to one end of the oxygen and fuel gas lines and then the gauges are attached to the other end of the hoses. The manifold or cylinder supply valve is opened and the system is pressurized. The manifold or cylinder supply valve is then closed and the gauges are watched for at least sixty (60) seconds. Any drop in pressure indicates a leak.

Emergency operations—activities performed by fire response organizations that are related to: rescue, fire suppression, emergency medical care, and special operations or activities that include responding to the scene of an incident and all activities performed at that scene.

Fire hazard—a condition or material that may start or contribute to the spread of fire.

Fire protection—methods of providing fire prevention, response, detection, control, extinguishment, and engineering.

Fire response—the activity taken by the employer at the time of an emergency incident involving a fire at the worksite, including fire suppression activities carried out by internal or external resources or a combination of both, or total or partial employee evacuation of the area exposed to the fire.

Fire response employee—a shipyard employee who carries out the duties and responsibilities of shipyard fire-fighting in accordance with the fire safety plan.