

**§ 1915.83**

(3) Connections and insulation on electric cords are maintained in a safe condition;

(4) Lights and lighting stringers are not suspended solely by their electric cords unless they are designed by the manufacturer to be suspended in this way;

(5) Lighting stringers do not overload branch circuits;

(6) Branch circuits are equipped with over-current protection with a capacity that does not exceed the rated current-carrying capacity of the cord used;

(7) Splices have insulation with a capacity that exceeds that of the original insulation of the cord; and

(8) Exposed, non-current-carrying metal parts of lights are grounded. The employer shall ensure that grounding is provided either through a third wire in the cord containing the circuit conductors or through a separate wire that is grounded at the source of the current. Grounding shall be done in accordance with the requirements of 29 CFR 1910, subpart S.

(c) *Portable lights.* (1) In any dark area that does not have permanent or temporary lights, where lights are not working, or where lights are not readily accessible, the employer shall provide portable or emergency lights and ensure that employees do not enter those areas without such lights.

(2) Where the only means of illumination on a vessel or vessel section are from lighting sources that are not part of the vessel or vessel section, the employer shall provide portable or emergency lights for the safe movement of each employee. If natural sunlight provides sufficient illumination, portable or emergency lights are not required.

(d) *Explosion-proof, self-contained lights.* The employer shall provide and ensure that each employee uses only explosion-proof, self-contained temporary and portable lights, approved for hazardous conditions by a nationally recognized testing laboratory (NRTL), in any area that the atmosphere is determined to contain a concentration of flammable vapors that are at or above 10 percent of the lower explosive limit (LEL) as specified in 29 CFR part 1915, subparts B and C.

**29 CFR Ch. XVII (7-1-13 Edition)**

**§ 1915.83 Utilities.**

(a) *Steam supply system.* (1) The employer shall ensure that the vessel's steam piping system, including hoses, is designed to safely handle the working pressure prior to supplying steam from an outside source. The employer shall obtain a written or oral determination from a responsible vessel's representative, a contractor, or any other person who is qualified by training, knowledge, or experience to make such determination that the working pressure of the vessel's steam piping system is safe.

(2) The employer shall ensure that each outside steam supply connected to a vessel's steam piping system meets the following requirements:

(i) A pressure gauge and a relief valve are installed at the point where the temporary steam hose joins the vessel's steam piping system;

(ii) Each relief valve is set to relieve excess steam at, and is capable of relieving steam at, a pressure that does not exceed the safe working pressure of the system in its present condition;

(iii) There are no means of inadvertently disconnecting any relief valve from the system that it protects;

(iv) Each pressure gauge and relief valve is legible and located so it is visible and readily accessible; and

(v) Each relief valve is positioned so it is not likely to cause injury if steam is released.

(b) *Steam hoses.* The employer shall ensure that each steam hose meets the following requirements:

(1) The steam hose and its fittings are used in accordance with manufacturer's specifications;

(2) Each steam hose is hung tightly with short bights that prevent chafing and to reduce tension on the hose and its fittings;

(3) Each steam hose is protected from damage; and

(4) Each steam hose or temporary steam piping, including metal fittings and couplings, that pass through a walking or working area is shielded to protect employees from contact.

(c) *Electric shore power.* When a vessel is supplied with electric shore power, the employer shall take the following precautions prior to energizing any of the vessel's circuits:

(1) Ensure that the vessel is grounded;

(2) Equip each circuit to be energized with over-current protection that does not exceed the rated current-carrying capacity of the conductors; and

(3) Ensure that each circuit to be energized is in a safe condition. The employer must obtain a determination of the safe condition, either orally or in writing, from a responsible vessel's representative, a contractor, or any other person who is qualified by training, knowledge, or experience to make such determination.

(d) *Heat lamps.* The employer shall ensure that each heat lamp, including the face, is equipped with surround-type guards to prevent contact with the lamp and bulb.

#### § 1915.84 Working alone.

(a) Except as provided in § 1915.51(c)(3) of this part, whenever an employee is working alone, such as in a confined space or isolated location, the employer shall account for each employee:

(1) Throughout each workshift at regular intervals appropriate to the job assignment to ensure the employee's safety and health; and

(2) At the end of the job assignment or at the end of the workshift, whichever occurs first.

(b) The employer shall account for each employee by sight or verbal communication.

#### § 1915.85 Vessel radar and communication systems.

(a) The employer shall service each vessel's radar and communication systems in accordance with 29 CFR 1915.89, Control of Hazardous Energy.

(b) The employer shall secure each vessel's radar and communication system so it is incapable of energizing or emitting radiation before any employee begins work:

(1) On or in the vicinity of the system;

(2) On or in the vicinity of a system equipped with a dummy load; or

(3) Aloft, such as on a mast or king post.

(c) When a vessel's radar or communication system is operated, serviced,

repaired, or tested, the employer shall ensure that:

(1) There is no other work in progress aloft; and

(2) No employee is closer to the system's antenna or transmitter than the manufacturer's specified safe minimum distance for the type, model, and power of the equipment.

(d) The employer shall ensure that no employee enters an area designated as hazardous by manufacturers' specifications while a radar or communication system is capable of emitting radiation.

(e) The requirements of this section do not apply when a radar or communication system is incapable of emitting radiation at levels that could injure workers in the vicinity of the system, or if the radar or communication system is incapable of energizing in a manner than could injure workers working on or in the vicinity of the system.

#### § 1915.86 Lifeboats.

(a) Before any employee works in or on a stowed or suspended lifeboat, the employer shall secure the lifeboat independently from the releasing gear to prevent it from falling or capsizing.

(b) The employer shall not permit any employee to be in a lifeboat while it is being hoisted or lowered, except when the employer demonstrates that it is necessary to conduct operational tests or drills over water, or in the event of an emergency.

(c) The employer shall not permit any employee to work on the outboard side of a lifeboat that is stowed on chocks unless the lifeboat is secured by gripes or another device that prevents it from swinging.

#### § 1915.87 Medical services and first aid.

(a) *General requirement.* The employer shall ensure that emergency medical services and first aid are readily accessible.

(b) *Advice and consultation.* The employer shall ensure that healthcare professionals are readily available for advice and consultation on matters of workplace health.

(c) *First aid providers.* (1) The employer shall ensure that there is an