

PART 181—FIRE PROTECTION EQUIPMENT

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AUTHORITY: 46 U.S.C. 2103, 3306; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46.

SOURCE: CGD 85-080, 61 FR 982, Jan. 10, 1996, unless otherwise noted.

Subpart A—General Provisions

§ 181.115 Applicability to existing vessels.

(a) Except as otherwise required by paragraphs (b) and (c) of this section, an existing vessel must comply with the fire protection equipment regulations applicable to the vessel on March 10, 1996, or, as an alternative, the vessel may comply with the regulations in this part.

(b) An existing vessel with a hull, or a machinery space boundary bulkhead or deck, composed of wood or fiber reinforced plastic, or sheathed on the interior in fiber reinforced plastic, must

comply with the requirements of § 181.400 of this part on or before March 11, 1999.

(c) New installations of fire protection equipment on an existing vessel, which are completed to the satisfaction of the cognizant Officer in Charge, Marine Inspection (OCMI) on or after March 11, 1996, must comply with the regulations of this part. Replacement of existing equipment installed on the vessel prior to March 11, 1996, need not comply with the regulations in this part.

§ 181.120 Equipment installed but not required.

Fire extinguishing and detecting equipment installed on a vessel in excess of the requirements of §§ 181.400 and 181.500 must be designed, constructed, installed and maintained in accordance with a recognized industry standard acceptable to the Commandant.

Subpart B [Reserved]

Subpart C—Fire Main System

§ 181.300 Fire pumps.

(a) A self priming, power driven fire pump must be installed on each vessel:

- (i) Of not more than 19.8 meters (65 feet) in length which is a ferry vessel;
- (ii) Of not more than 19.8 meters (65 feet) in length that carries more than 49 passengers; or
- (iii) Of more than 19.8 meters (65 feet) in length.

(b) On a vessel of not more than 19.8 meters (65 feet) in length carrying more than 49 passengers, and on a vessel of more than 19.8 meters (65 feet) in length, the minimum capacity of the fire pump must be 189 liters (50 gallons) per minute at a pressure of not less than 414 kPa (60 psi) at the pump outlet. The pump outlet must be fitted with a pressure gauge.

(c) On a ferry vessel of not more than 19.8 meters (65 feet) in length carrying not more than 49 passengers, the minimum capacity of the fire pump must be 38 liters (10 gallons) per minute. The fire pump must be capable of projecting a hose stream from the highest hydrant, through the hose and nozzle

required by § 181.320 of this part, a distance of 7.6 meters (25 feet).

(d) A fire pump may be driven by a propulsion engine. A fire pump must be permanently connected to the fire main and may be connected to the bilge system to meet the requirements of § 182.520 of this chapter.

(e) A fire pump must be capable of both remote operation from the operating station and local operations at the pump.

[CGD 85-080, 61 FR 982, Jan. 10, 1996, as amended at 62 FR 51358, Sept. 30, 1997]

§ 181.310 Fire main and hydrants.

(a) A vessel that has a power driven fire pump must have a sufficient number of fire hydrants to reach any part of the vessel using a single length of fire hose.

(b) Piping, valves, and fittings in a fire main system must comply with subpart G, part 182, of this chapter.

(c) Each fire hydrant must have a valve installed to allow the fire hose to be removed while the fire main is under pressure.

[CGD 85-080, 61 FR 982, Jan. 10, 1996, as amended at 62 FR 51358, Sept. 30, 1997]

§ 181.320 Fire hoses and nozzles.

(a) A fire hose with a nozzle must be attached to each fire hydrant at all times. For fire hydrants located on open decks or cargo decks, where no protection is provided, hoses may be temporarily removed during heavy weather or cargo handling operations, respectively. Hoses so removed must be stored in nearby accessible locations.

(b) On a vessel of not more than 19.8 meters (65 feet) in length carrying more than 49 passengers, and on a vessel of more than 19.8 meters (65 feet) in length, each hose must:

(1) Be lined commercial fire hose that conforms to Underwriters Laboratory (UL) 19 "Lined Fire Hose and Hose Assemblies," or hose that is listed and labeled by an independent laboratory recognized by the Commandant as being equivalent in performance;

(2) Be 15.25 meters (50 feet) in length and 40 millimeters (1.5 inches) in diameter; and

(3) Have fittings of brass or other suitable corrosion-resistant material

that comply with National Fire Protection Association (NFPA) 1963 "Standard for Fire Hose Connections," or other standard specified by the Commandant.

(c) Each fire hose on a vessel of not more than 19.8 meters (65 feet) in length carrying not more than 49 passengers must:

(1) Comply with paragraphs (b)(1) and (b)(3) of this section or be garden type hose of not less than 16 millimeters (0.625 inches) nominal inside diameter;

(2) Be of one piece not less than 7.6 meters (25 feet) and not more than 15.25 meters (50 feet) in length; and

(3) If of the garden type, be of a good commercial grade constructed of an inner rubber tube, plies of braided fabric reinforcement, and an outer cover of rubber or equivalent material, and of sufficient strength to withstand the maximum pressure that can be produced by the fire pump. All fittings on the hose must be of suitable corrosion-resistant material.

(d) Each nozzle must be of corrosion-resistant material and be capable of being changed between a solid stream and a spray pattern. A nozzle on a vessel of not more than 19.8 meters (65 feet) in length carrying more than 49 passengers, and on a vessel of more than 19.8 meters (65 feet) in length, must:

(1) Be of a type approved in accordance with approval series 162.027; or

(2) Be of a type recognized by the Commandant as being equivalent in performance.

[CGD 85-080, 61 FR 982, Jan. 10, 1996; 61 FR 20557, May 7, 1996; 61 FR 24464, May 15, 1996, as amended at 62 FR 51358, Sept. 30, 1997]

Subpart D—Fixed Fire Extinguishing and Detecting Systems

§ 181.400 Where required.

(a) The following spaces must be equipped with a fixed gas fire extinguishing system, in compliance with § 181.410, or other fixed fire extinguishing system specifically approved by the Commandant, except as otherwise allowed by paragraph (b) of this section: