

(b) All piping, valves, and fittings of ferrous materials shall be protected inside and outside against corrosion unless specifically approved otherwise by the Commandant.

(c) Where a smoke detecting system serves a space used alternately for liquid and dry cargo, a valve shall be installed between the tank and the detecting cabinet so that the line may be shut off when liquids are carried. When the smoke detecting system is combined with a fire extinguishing system, the operation of the valve shall not affect the operation of the fire extinguishing system.

(d) All piping, valves, and fittings shall be securely supported, and where necessary, protected against injury. The piping shall be installed with as easy bends as practicable, and shall be installed to grade to low points for drainage.

(e) Drains and dirt tapes shall be fitted where necessary to prevent the accumulation of dirt or moisture.

[CGFR 65-50, 30 FR 16940, Dec. 30, 1965, as amended by USCG-2012-0832, 77 FR 59779, Oct. 1, 2012]

**§ 76.33-20 Operation and installation.**

(a) The system shall be so arranged and installed that the presence of smoke in any of the protected spaces will automatically be indicated visually to an observer directly in front of the detecting cabinet. The visible notice shall automatically indicate the zone in which the smoke originated. The detecting cabinet shall normally be located in the pilothouse or fire control station. On vessels over 5,000 gross tons, there shall also be an automatic audible alarm in the wheelhouse together with an auxiliary audible alarm in the engine room.

(b) If the detecting cabinet is not located in the pilothouse or fire control station, it shall be located in convenient proximity to the valve control station of the extinguishing system. In this case, there shall be in the pilothouse or fire control station automatic visual alarms, one for each zone in which an alarm may originate, as well as an automatic audible alarm. There shall also be an auxiliary audible alarm in the engine room. For installations contracted for on or after January 1,

1962, where detecting cabinets are not located in the pilothouse or an adjacent fire control station having direct access to the pilothouse, an efficient means of direct communication shall be provided between the pilothouse and the stations where the detecting cabinets are located.

(c) A sufficient quantity of exhaust from the detecting cabinet shall be discharged in the vicinity of the cabinet to permit the detection of fire by odor. A valve shall be installed in such space to direct the exhaust, if obnoxious, to the outside.

(d) The smoke detecting system shall be used for no other purpose except that it may be incorporated with the fire extinguishing system to the spaces covered by the smoke detecting system.

(e) The accumulators, detecting cabinet, interconnecting valves with the fire extinguishing system, alarms, and indicating devices shall be of an approved type.

(f) All wiring and electrical circuits and equipment shall meet the applicable requirements of subchapter J (Electrical Engineering) of this chapter.

(g) A framed chart or diagram shall be installed adjacent to the detecting cabinet and auxiliary panel indicating the location of the various zones and giving instructions for the operation, maintenance, and testing of the system. The chart at the cabinet location or a separate card or booklet to be kept near the chart, shall have tabulated spaces for the date and signature of the licensed officer of the vessel who shall witness or conduct the periodic tests.

(h) The audible smoke detecting alarms shall be identified as required by § 78.47-13 of this subchapter.

**§ 76.33-90 Installations contracted for prior to November 19, 1952.**

(a) Installations contracted for prior to November 19, 1952, shall meet the following requirements:

(1) Existing arrangements, material, and equipment previously approved shall be considered satisfactory so long as they meet the minimum requirements of this paragraph and they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and

alterations may be made to the same standards as the original installation.

(2) The details of the systems shall be in general agreement with §§ 76.33-5 through 76.33-15 insofar as is reasonable and practicable.

(b) [Reserved]

### **Subpart 76.35—Manual Alarm System, Details**

#### **§ 76.35-1 Application.**

(a) Where a manual alarm system is installed, the provisions of this subpart, with the exception of § 76.35-90, shall apply to all installations contracted for on or after November 19, 1952. Installations contracted for prior to November 19, 1952, shall meet the requirements of § 76.35-90.

(b) [Reserved]

#### **§ 76.35-5 Zoning.**

(a) The zoning of the manual alarm system shall meet the same requirements as for the electric fire detecting system, § 76.27-5.

(b) [Reserved]

#### **§ 76.35-10 Location and spacing of manual alarm boxes.**

(a) There shall be at least one manual alarm box in each zone.

(b) Manual alarms shall be located in main passageways, stairway enclosures, public spaces, or similar locations where they will be readily available and easily seen in case of need.

(c) In general, a sufficient number of manual alarm boxes shall be employed that a person escaping from any space would find a manual alarm box convenient on his normal route of escape.

#### **§ 76.35-15 Operation and installation.**

(a) The system shall be so arranged and installed that the presence of a fire may be reported from any of the protected spaces and be automatically registered visibly and audibly in the pilothouse or fire control station. The visible notice shall indicate the zone in which the alarm originated. There shall also be an audible alarm in the engine room.

(b) The manual alarm boxes, cabinet, and alarms shall be of an approved type.

(c) The manual alarm system shall be used for no other purpose, except that it may be incorporated with the fire detecting system.

(d) All wiring and electrical circuits and equipment shall meet the applicable requirements of subchapter J (Electrical Engineering) of this chapter.

(e) A framed chart or diagram shall be installed in the wheelhouse or control station adjacent to the detecting cabinet indicating the location of the various detecting zones and giving instructions for the operation, maintenance, and testing of the system. This chart, or a separate booklet to be kept near the chart, shall have tabulated spaces for the date and signature of the licensed officer of the vessel who shall witness or conduct the periodic tests.

(f) The manual alarm boxes and bells shall be identified as required by § 78.47-10 of this subchapter.

#### **§ 76.35-90 Installations contracted for prior to November 19, 1952.**

(a) Installations contracted for prior to November 19, 1952, shall meet the following requirements:

(1) Existing arrangements, materials, and equipment previously approved shall be considered satisfactory so long as they meet the minimum requirements of this paragraph, and they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to the same standards as the original installation.

(2) The details of the systems shall be in general agreement with §§ 76.35-5 through 76.35-15 insofar as is reasonable and practicable.

(b) [Reserved]

### **Subpart 76.50—Hand Portable Fire Extinguishers and Semiportable Fire Extinguishing Systems, Arrangements and Details**

#### **§ 76.50-1 Application.**

(a) The provisions of this subpart, with the exception of § 76.50-90, shall apply to all vessels contracted for on or after November 19, 1952. Vessels contracted for prior to November 19, 1952,