than 500 a fire in any one compartment would put all the fire pumps out of action there shall be provided a fixed independently driven emergency fire pump complying with the provisions of clause 16(8) of the general code.

Provided that in the case of such a ship with a gross tonnage of less than 1000 the emergency fire pump may be manually operated, complying with the requirements of clause 16(9) of the general code.

(5) Every ship to which Part I of this Code of Practice applies with a gross tonnage of 500 or over with a periodically unattended machinery space or when only 1 person is required on watch there shall be immediate water delivery from the fire main system at a suitable pressure, either by remote starting of one of the main fire pumps with remote starting from the navigating bridge and fire control station, if any, or permanent pressurisation of the fire main system by one of the main fire pumps, except that the Chief Surveyor may waive this requirement for such ships with a gross tonnage of less than 1600 if the arrangement of the machinery space access makes it unnecessary.

**5.** Fire main, water-service pipes, hydrants, hoses, and nozzles—(1) Every ship to which Part I of this Code of Practice applies with a gross tonnage of 500 or over shall be provided with a fire main, water-service pipes and hydrants, complying with the provisions of clause 17 of the general code, and with fire hoses and nozzles complying with the provisions of clause 18 of the general code.

(2) In every ship to which Part I of this Code of Pratice applies which piles within extreme limits and with a gross tonnage of 500 or over the arrangement of fire main and water-service pipes and the number and position of fire hydrants shall be such that:

(a) At least 2 jets of water not emanating from the same hydrant, 1 of which shall be from a single length of hose, may reach any part of the ship normally accessible to the passengers or crew while the ship is being navigated and any part of any cargo space when empty including any ro-ro cargo space. Such hydrants shall be positioned near the accesses to the protected spaces.

(b) Every space containing oil-fired boilers or propelling machinery of internal-combustion type shall be provided with 2 fire hydrants, 1 on the port side and 1 on the starboard side.

(c) In any ship to which Part 1 of this Code of Practice applies in which there is access to the machinery spaces by way of a shaft tunnel, a fire hydrant shall be provided in the tunnel at the end adjacent to the machinery space.

(3) Every ship to which Part 1 of this Code of Practice applies which plies within extreme limits and with a gross tonnage of 500 or over shall be provided with:

(a) 1 hose and 1 dual-purpose nozzle for every hydrant in spaces containing oil-fired boilers or internal-combustion type machinery or in a shaft tunnel; and

(b) 1 hose and 1 dual-purpose nozzle for every 30m of length of the ship or part thereof, plus 1 spare fire hose and dual-purpose nozzle; but in no case less than 5 hoses and nozzles in any ship with a gross tonnage of 1000 or over and not less than 3 hoses and nozzles in the case of a ship with a gross tonnage of less than 1000 but not less than 500.

6. Portable fire extinguishers: In accommodation and service spaces—Every ship to which Part I of this Code of Practice applies with a gross tonnage of 500 or over shall be provided with a sufficient number of portable fire extinguishers to ensure that at least 1 such extinguisher will be readily available for use in any part of the accommodation or service spaces. The number of such extinguishers shall not be less than 5 in a ship with a gross tonnage of 1000 or over and not less than 3 in a ship with a gross tonnage of 500 or over but under 1000. In addition, at least 1 portable fire extinguisher and 1 fire blanket shall be provided in every galley and where

the superficial deck area of any galley exceeds  $45m^2$  at least 2 portable fire extinguishers and 2 fire blankets shall be provided.

7. Fire protection arrangements in cargo spaces—(1) Except for cargo spaces covered by clauses 5 or 6 of the General Code cargo spaces in every ship of this class and length which plies within extreme limits and with a gross tonnage of 2000 or over shall be protected by a fixed fire smothering gas installation complying with clause 24 of the general code or by a fire-extinguishing system which in the opinion of the Chief Surveyor gives equivalent protection.

(2) The Chief Surveyor may exempt any ship from the requirement of subclause (1) of this clause if he is satisfied that:

(a) The cargo spaces therein are provided with steel hatch covers and effective means of closing all ventilators and other openings leading to the cargo spaces; and

(b) The ship is constructed for, and solely intended for carrying ore, coal, grain, unseasoned timber or cargoes which, in the opinion of the Chief Surveyor, constitute a low fire risk; or

(c) To require compliance with the requirements of that subclause would be unreasonable on account of the short duration of the voyages on which the ship is engaged.

8. Machinery spaces of Category A containing oil-fired boilers or oil-burning equipment—In every ship to which Part I of this Code of Practice applies with a gross tonnage of 500 or over, there shall be provided for the protection of any machinery space of Category A containing any oil-fired boiler, oil-fuel settling tank, or oil-fuel unit:

(a) Any 1 of the following fixed fire-extinguishing installations:  $\label{eq:alpha}$ 

- (i) A pressure water-spraying system complying with the requirements of the Performance Standard referred to in clause 22 of the general code;
- (ii) A fire-smothering gas installation complying with the requirements of the Performance Standard referred to in clause 24 of the general code.
- (iii) A high-expansion foam fire-extinguishing system complying with the requirements of the Performance Standard referred to in clause 25 of the general code;

and if the engine and boiler rooms are not entirely separate or if fuel oil can drain from the boiler room into the engine room, the combined engine and boiler room shall for the purpose of this subclause be regarded as a single space.

(b) In each boiler room at least 1 set of portable air-foam equipment complying with the requirements of the Performance Standard referred to in clause 27 of the general code.

(c) In each firing space in each boiler room and in each space which contains any part of any oil fuel installation, at least 2 portable fire extinguishers.

(d) In each boiler room 1 or more foam fire extinguisher each of at least 135 litres capacity, or carbon dioxide fire extinguisher each of at least 45kg capacity placed in such positions so as to be readily accessible in the event of fire and shall be sufficient in number to enable the foam or carbon dioxide to be directed on to any part of the oil fuel installation.

(e) In each firing space a receptacle containing at least 250 litres of sand or other dry material suitable for quenching oil fires, together with a scoop for its distribution, or alternatively, an additional portable fire extinguisher suitable for extinguishing oil fires.

**9.** Machinery spaces of Category A containing internalcombustion type machinery—In every ship to which Part I of this Code of Practice applies with a gross tonnage of 500 or over there shall be provided for the protection of every machinery space of Category A: