(5) Every such cargo space shall be provided with such number of portable fire extinguishers as the Chief Surveyor may deem sufficient, provided that there is at least 1 portable extinguisher located at each access to such spaces.

6. Requirements for ships, other than passenger ships, having ro-ro cargo spaces—(1) The requirements of this clause apply to every ship other than a passenger ship, having ro-ro cargo spaces.

(2) There shall be provided in ro-ro cargo spaces a fixed fire detection and fire alarm system complying with the provisions of clause 29 of this code.

(3) There shall be provided in ro-ro cargo spaces capable of being sealed a fixed fire smothering gas installation complying with clause 24 of this code provided that:

(a) If a carbon dioxide system is fitted, the quantity of gas available shall be at least sufficient to give a minimum volume of free gas equal to 45 percent of the gross volume of the largest cargo space which is capable of being sealed, and the arrangements shall be such as to ensure that at least two thirds of the gas required for the relevant space shall be introduced during 10 minutes;

(b) Any other fixed gas fire-extinguishing system or fixed high expansion foam fire-extinguishing system may be fitted provided that Chief Surveyor is satisfied that an equivalent protection is achieved.

(4) As an alternative to the fixed fire-extinguishing system required by sub paragraph (2) of this clause a fixed pressure water spraying system complying with the provisions clause 23 of this code may be fitted in such spaces provided the requirements for freeing the ship of water as provided Codes of Practice issued under The Shipping (Construction) Regulations 1989 as appropriate are complied with.

(5) Ro-ro cargo spaces not capable of being sealed shall be fitted with a fixed pressure water spraying system complying with the provisions of clause 23 of this code provided the requirements for freeing the ship of water as provided in the Codes of Practice issued under The Shipping (Construction) Regulations 1989 as appropriate are complied with.

(6) There shall be provided for use in any ro-ro cargo space such number of portable fire extinguishers as the Chief Surveyor may deem sufficient. At least 1 portable extinguisher shall be located at each access to such cargo space.

(7) Every ro-ro space intended for the carriage of motor vehicles with fuel in their tanks for their own propulsion shall be provided with:

(a) At least 3 water fog applicators;

(b) 1 portable foam applicator unit complying with the provisions of clause 27 of this code provided that at least 2 such units are available in the ship for use in such ro-ro cargo spaces.

7. Special requirements for ships carrying dangerous goods—(1) Subject to paragraph (2) of this clause, ships which are intended, or which contain cargo spaces which are intended, for the carriage of dangerous goods shall comply with the protective requirements prescribed in paragraphs (4) to (11) of this clause and the Tables at the end of this clause.

(2) This clause shall not apply to ships or spaces intended for the carriage of dangerous goods in limited quantities as referred to in section 18 of the general introduction to the International Maritime Dangerous Goods Code.

(3) Nothing in this clause shall be taken to require duplication of anything already provided in a ship in compliance with The Code of Practice issued under the Shipping (Fire Appliances) Regulations 1989.

(4) The following requirements shall govern the application of the Tables.

(5) For the purpose of determining the application of the requirements of paragraphs (a)—(i) of sub-clause (6) of this

clause, ships and cargo spaces are divided into categories $A{-}E$ as set out below.

- A ships and cargo spaces not specifically designed for the carriage of freight containers but intended for the carriage of dangerous goods in package form including goods in freight containers and portable tanks;
- B purpose built container ships and cargo spaces intended for the carriage of dangerous goods in freight containers and portable tanks;
- C spaces intended for the carriage of dangerous goods which are:
- (i) closed ro-ro cargo spaces,
- (ii) open ro-ro cargo spaces, or
- (iii) ro-ro cargo spaces on the weather deck.
- D ships and cargo spaces intended for the carriage of solid dangerous goods in bulk;
- E ships and cargo spaces intended for the carriage of dangerous goods other than liquids and gases in bulk in shipborne barges.

Such categories are listed in the top horizontal row of Table 1.

(6) The applicable requirements for the purposes of this clause are set out in the following paragraphs:

(a) arrangements shall be made to ensure immediate availability of a supply of water from the fire main at the required pressure either by a permanent pressurisation of the firemain or by suitably placed remote starting arrangements for the fire pumps;

(b) the quantity of water delivered shall be capable of supplying four nozzles of a size and at pressures as specified in clause 17 and clause 18 of this Code capable of being trained on any part of the cargo space when empty. This amount of water may be applied by equivalent means to the satisfaction of the Chief Surveyor;

(c) means of effectively cooling the designated under deck cargo space by copious quantities of water, either by a fixed pressure water spraying system complying with clause 23 of this code or flooding the cargo space with water, shall be provided. Hoses may be used for this purpose in small cargo spaces and in small areas of larger cargo spaces at the discretion of the Chief Surveyor. The drainage and pumping arrangements shall be such as to prevent the build up of free surfaces. If this is not possible, the adverse effect upon stability of the added weight and free surface of water shall be taken into account as necessary in calculating stability;

(d) provision to flood a designated under deck cargo space with suitable specified media may be substituted for the requirements in sub-clause (c) of this clause;

(e) all enclosed cargo spaces including closed ro-ro cargo spaces and special category spaces shall be fitted with a fixed fire detection and fire alarm system complying with the requirements of clause 29 of this code;

(f) four sets of full protective clothing resistant to chemical attack shall be provided in addition to the fire crew outfits required in fire appliances (Codes of Practice). Protective clothing shall cover all skin so that no part of the body is unprotected;

(g) at least two sets of self-contained breathing apparatus complying with the performance standard for breathing apparatus shall be provided in addition to the breathing apparatus otherwise required in the Codes of Practice issued under The Shipping (Fire Appliances) Regulations 1989;

(h) at least three portable fire extinguishers of the dry powder type or equivalent complying with clause 20 of this code shall be provided for each cargo space. These extinguishers shall be in addition to any portable fire extinguishers required elsewhere in the Codes of Practice