Table 3—Application of the Requirements to Different Classes of Dangerous Goods Except Solid Dangerous Goods in Bulk

Clause 7 (6)	Class of Dangerous Goods						
	1	2	3	4	5.1	5.2	6.1
(a) Immediate availability of water supplies	X	X	X	Хh	X	Xh	Х
b) Quantity of water	X	X	X	Xh	X	Xh	_
c) Water cooling	X^t	_	_				
d) Cargo space flooding	X^t	_	_		_		_
e) Fire detection	X	X	X	X	X		Х
f) & (g) Personnel protection		X	X	X	X	Xh	X
h) Fire extinguishers		_	X	X	X	Xh	Xh
i) Water Spray	X	X	Χg	Xh	X	_	Χg

Notes (Table 3)

- Except dangerous goods of class 1 in division 1.4 compatibility group S.

 Applicable only to liquids having a flashpoint below 23°C (closed cup test).

 Further requirements which may be applicable are contained in the International Maritime Dangerous Goods Code (resolution A81(IV) as amended) or the Code of Safe Practice for Solid Bulk Cargoes (resolution A434(XI) as amended) as appropriate.
- 8. Cargo tank protection for tankers—(1) Every tanker to which The Codes of Practice issued under The Shipping (Fire Appliances) Regulations 1989 apply of 20,000 tonnes deadweight and upwards the protection of the cargo tanks deck area and cargo tanks shall be achieved by a fixed deck foam system and a fixed inert gas system in accordance with the requirements of clause 9 and clause 10 of this Code except that, in lieu of the above installations, the Chief Surveyor after having given consideration to the ship's arrangement and equipment, may accept other combinations of fixed installations if they afford protection equivalent to the above.
- (2) To be considered equivalent, the system proposed in lieu of the deck foam system shall:
- (a) be capable of extinguishing spill fires and also preclude ignition of spilled oil not yet ignited; and
 - (b) be capable of combating fires in ruptured tanks.
- (3) To be considered equivalent, the system proposed in lieu of the fixed inert gas system shall:
- (a) be capable of preventing dangerous accumulations of explosive mixtures in intact cargo tanks during normal service throughout the ballast voyage and necessary in-tank operations; and
- (b) be so designed as to minimise the risk of ignition from the generation of static electricity by the system itself.
- (4) All tankers operating with a cargo tank cleaning procedure using crude oil washing shall be fitted with a inert gas system complying with the requirements of clause 10 of this Code and with fixed tank washing machines.
- (5) All tankers fitted with a fixed inert gas system shall be provided with a closed ullage system.
- (6) Tankers of less than 20,000 tonnes deadweight shall be provided with a fixed deck foam system complying with the requirements of clause 9 of this code.
- 9. Fixed deck foam systems for tankers—(1) Every tanker to which this clause applies shall be provided with arrangements capable of providing and delivering foam to the entire cargo tanks deck area as well as into any cargo tank the deck of which has been ruptured.
- (2) The deck foam system shall be capable of simple and rapid operation. The main control station for the system shall be suitably located outside the cargo area, adjacent to the accommodation spaces and readily accessible and operable in the event of fire in the areas protected.
- (3) The design, construction, installation and operational capabilities of the fixed deck foam system shall comply with the requirements of the Performance Standards for such a system referred to in clause 2 of this code.
- 10. Inert gas systems for tankers—(1) The inert gas system referred to in clause 8 (4) of this Code shall be so designed and operated as to render and maintain the atmosphere of the cargo tanks non-flammable at all times, except when such tanks are required to be gas free. In the event that the inert gas system is unable to meet the operational requirement set out above and it has been assessed that it is impractical to effect a

- repair, then cargo discharge, deballasting and necessary tank cleaning shall only be resumed when the "emergency conditions" laid down in the guidelines on inert gas systems as adopted by the I.M.O. Maritime Safety Committee at its forty eighth session in June 1983 are complied with.
- (2) The design, construction, installation and operational capabilities of the inert gas systems shall comply with the requirements of the Performance Standard for such a system referred to in clause 2 of this code.
- 11. Requirements for cargo pump rooms in tankers—(1) Each cargo pump room shall be provided with 1 of the following fixed fire-extinguishing systems operated from a readily accessible position outside the pump room.
- (a) A carbon dioxide system complying with clause 24 of this Code and with the following:
- (i) the alarms referred to in clause 29 of this Code shall be safe for use in a flammable cargo vapour/air mixture;
 - (ii) a notice shall be exhibited
- at the controls stating that due to the electrostatic ignition hazard, the system is to be used only for fire extinguishing and or for inerting purposes; or
- (b) A high expansion foam system complying with the provisions of clause 25 of this Code provided that the foam concentrate supply is suitable for extinguishing fires involving the cargoes carried; or
- (c) A fixed pressure water-spraying system complying with the provisions of clause 23 of this Code.
- (2) Where the extinguishing medium used in the cargo pump room system is also used in systems serving other spaces, the quantity of medium provided or its delivery rate need not be more than the maximum required for the largest compartment.
- 12. Requirements for combination carriers—Every ship to which fire appliances the Codes of Practice issued under The Shipping (Fire Appliances) Regulations 1989 apply which is a tanker and a combination carrier shall comply with the provisions of Codes of Practice as they apply. An approved fixed gas warning system capable of monitoring flammable vapours shall be provided in cargo pump-rooms and pipe ducts and cofferdams adjacent to slop tanks. Suitable arrangements shall be made to facilitate measurement of flammable vapours in all other spaces within the cargo area. Such measurements shall be made possible from open deck or easily accessible positions.
- 13. Requirements for gas carriers—Every ship to which fire appliances the Codes of Practice issue under The Shipping (Fire Appliances) Regulations 1989 apply which is a gas carrier shall comply with the provisions of the Fire Appliances (Codes of Practice) Notice 1989 as they apply a ship of class VII, VIII or IX as appropriate and in addition shall be provided fire protection in compliance with the requirements of the IMO International Code for the Construction and Equipment of Ships Carrying Liquefied Gas in Bulk as from time to time amended or substituted.