No. 437.

# Hong Kong.

ORDINANCE No. 10 of 1899. (MERCHANT SHIPPING).

In exercise of the powers conferred by section 10 (6) and section 13 (1) and section 37 (2) of the Merchant Shipping Ordinance, 1899, as amended by the Merchant Shipping Amendment Ordinance, 1935, and of all other powers thereunto enabling, the Governor in Council makes the following regulations as to fire appliances:—

#### Citation.

1. These Regulations may be cited as the Merchant Shipping (Fire Appliances) Regulations, 1935, and shall come into operation on the fifteenth day of July, 1936.

## Classification of Ships.

**2.** For the purposes of these regulations ships are divided into the several Groups and Classes set forth in Regulation 1 of the Merchant Shipping (Life Saving Appliances) Regulations 1935.

## Application.

**3.** These regulations shall apply to all new ships of Classes 3, 4, 5, 6, 7, 8, 9 and 10 in Group I (hereinafter referred to as Class A) and to all new ships in Group II (hereinafter referred to as Class B), and to all existing ships of those classes save in so far as the Governor may in the exercise of the power conferred on him by section 10 (6) a of the Merchant Shipping Ordinance, 1899, as amended by the Merchant Shipping Amendment Ordinance, 1935, treat such existing ships as complying with the requirements of these regulations.

These regulations do not apply to ships of Classes 1 and 2 in Group I, to which ships the Board of Trade Rules apply, or to ships of Classes 11, 12 and 13 in Group I.

## Interpretation.

- **4.** In these regulations,
- (1) "Motor Ship" means a ship propelled by internal combustion engines.
  - "Length" as applied to a ship means registered length.
- (2) So far as the same are not inconsistent with the provisions of these regulations the definitions contained in Regulation 2 of the Merchant Shipping (Life Saving Appliances) Regulations, 1935, shall apply in the interpretation of these regulations.

## Patrols and Detection.

- 5.—(1) An efficient patrol system shall be maintained on every ship of Class A, so that any outbreak of fire may be promptly detected.
- (2) On every ship of Class A an approved fire alarm or fire detecting system shall be provided which will automatically register at one or more points or stations in the ship where it can be most quickly observed by officers and crew, the presence or indication of fire in any part of the ship which is in the opinion of the Government Marine Surveyor not accessible to the patrol system.

### Exemptions.

- **6.**—(1) The Governor may in his discretion exempt any ship to which these regulations apply, from the requirements of an approved fire alarm or fire detecting system.
- (2) The Governor may in the case of ships of less than 1,000 tons gross tonnage if satisfied that adequate arrangements for the extinction of fire have been made that it is neither practicable nor reasonable to enforce full compliance with the requirements of these regulations with relation to Fire Appliances, modify to that extent the requirements of these regulations.

## Fire Extinguishing Appliances.

#### SHIPS OF CLASS A.

Spaces occupied by Passengers and Crew.

- 7.—(1) Every ship of Class A shall be provided with apparatus whereby at least two powerful jets of water can be rapidly and simultaneously brought to bear upon any part of each deck or space occupied by passengers or crew, when the watertight and fire resisting doors are closed.
- (2) Every ship of Class A shall be provided with such number of approved portable fluid fire extinguishers as the Government Marine Surveyor may deem sufficient.

## Cargo Spaces.

- **8.**—(1) Every ship of Class A shall be provided with apparatus whereby at least two powerful jets of water can be rapidly and simultaneously directed into any cargo space.
- (2) Every ship of Class A of 1,000 tons gross tonnage and upwards shall be provided with apparatus whereby fire smothering gas sufficient to give a minimum volume of free gas equal to 30 per cent. of the gross volume of the largest hold in the ship can be promptly conveyed by a permanent piping system into any compartment in which cargo is carried.

Provided that, in the case of ships propelled by steam engines the Government Marine Surveyor may allow the use of steam in lieu of smothering gas if satisfied that a volume of steam equivalent to the volume of gas required by this regulation will always be available.

(3) The Government Marine Surveyor may exempt ships which do not proceed beyond River Trade Limits from the requirements of Regulation 8 (2) if it is deemed impracticable or unreasonable to require compliance therewith.

## Machinery and Bunker Spaces.

- **9.** Every ship of Class A shall be provided with apparatus whereby at least two powerful jets of water can be rapidly and simultaneously directed into any part of the coal bunker spaces, boiler rooms and machinery spaces.
- 10. Every ship of Class A in which the main boilers are coal fired shall be provided with at least two approved portable fluid fire extinguishers in each of the boiler rooms and machinery spaces.
- 11.—(1) Every ship of Class A in which the main boilers are oil fired shall be provided with:—
- (a) Conductors for spraying water on oil without undue disturbance of the surface.
- (b) A receptacle containing at least 10 cubic feet of sand, sawdust impregnated with soda, or other approved dry materials in each firing space and scoops for distributing such material.
- (c) Two approved portable extinguishers, constructed to discharge froth or other approved medium suitable for quenching oil fires, in each boiler room and in each of the machinery spaces in which a part of the oil fuel installation is situated.
- (d) Approved apparatus whereby froth can be rapidly discharged and distributed over the whole of the lower part of the boiler room or of any one boiler room, if there is more than one, or of any machinery space in which oil fuel units, or settling tanks are situated. The quantity of froth which can be discharged shall be sufficient to cover to a depth of 6 inches the whole area of the plating formed in any one compartment by the inner bottom plating, or by the shell plating of the vessel if there is no double bottom tank. If the engine and boiler rooms are not entirely separate and fuel oil can drain from the boiler room bilges into the engine room, the combined engine and boiler rooms shall be considered as one compartment. The apparatus shall be controlled from outside the compartments into which it is required to discharge froth.
- (e) One approved extinguisher, constructed to discharge froth, of at least 30 gallons capacity in the case of ships having one boiler room, and two such extinguishers in the case of ships with more than one boiler room. These extinguishers shall be provided with hoses on reels suitable for reaching any part of the boiler rooms and spaces containing oil fuel units.
- (2) All containers and the valves by which such containers are operated shall be easily accessible and so placed that they will not readily be cut off from use by an outbreak of fire.
- 12.—(1) Every motor ship of Class A shall comply with the requirements of sub-paragraph (a) of Regulation 11 (1) and shall be provided in each of the machinery spaces with at least one approved 10-gallon extinguisher constructed to discharge froth and also with one approved two-gallon extinguisher constructed to discharge froth for each 1,000 B.H.P. of the engines or part thereof, so however that the total number of two-gallon extinguishers so provided shall not be less than two and need not exceed six.

(2) If in any such ship a donkey boiler is situated in a machinery space, there shall be provided in that space, in place of the 10-gallon extinguisher required by paragraph (1) of this regulation an extinguisher of 30-gallon capacity, fitted with suitable hose attachments or other approved means for distributing the froth.

# Pumps.

- **13.**—(1) Every ship of Class A of 4,000 tons gross tonnage and upwards shall be provided with at least three fire pumps operated by steam or other motive power, and every such ship of under 4,000 tons gross tonnage with at least two such fire pumps.
- (2) Each of such fire pumps shall be capable of delivering such quantity of water as the Government Marine Surveyor may deem sufficient in two powerful jets simultaneously in any part of the ship.
- (3) Each of such fire pumps shall be provided with effective escape valves suitably adjusted and so placed as to prevent excessive pressure in any part of the water-service system.
- (4) When more than two such pumps are required they shall not all be fitted in the same space.
- (5) In ships in which the main boilers are oil-fired, if the engine and boiler rooms are not entirely separated by a steel bulkhead, and if fuel oil can drain from the boiler room bilges into the engine room, one of the fire pumps shall be situated in the tunnel or in some other space outside the machinery compartment.

# Water Service Pipes.

- 14.—(1) Every ship of Class A shall be provided with water service pipes of ample size and made of suitable material to the satisfaction of the Government Marine Surveyor.
- (2) On every ship of Class A the branch water-service pipes and hydrants shall be so placed on each deck that the fire hoses may be easily coupled to them.

## Fire Hoses.

- 15.—(1) Every ship of Class A shall be provided with such number of fire hoses as the Government Marine Surveyor may deem sufficient. The fire hoses shall be of approved material and provided with the necessary fittings.
- (2) Each of the hoses shall be of sufficient length to project a jet of water to any part of the space in which it is intended to be used.

# Smoke Helmets and Safety Lamps.

16.—(1) Every ship of Class A shall be provided with at least two approved equipments, each consisting of a breathing apparatus or smoke helmet and a safety lamp, and these equipments shall be kept ready for use in widely separated places.

(2) The Government Marine Surveyor may exempt ships which do not proceed beyond River Trade limits from Regulation 16 (1) if it is deemed impracticable or unreasonable to require compliance therewith.

## Emergency Appliances.

17. Every ship of Class A shall be provided with such outfit of emergency fire appliances as the Government Marine Surveyor may deem sufficient.

### SHIPS OF CLASS B.

#### FERRY VESSELS.

# Spaces occupied by Passengers and Crew.

- 18.—(1) Every ferry vessel of Class B shall be provided with apparatus whereby a powerful jet of water can be rapidly brought to bear upon any part of each deck or space occupied by passengers or crew.
- (2) Every ferry vessel of Class B shall be provided with such number of approved portable fire extinguishers as the Government Marine Surveyor may deem sufficient.

## Store Rooms, etc.

19. Every ferry vessel of Class B shall be provided with apparatus whereby a powerful jet of water can be rapidly directed into any store room or cargo space.

### Machinery and Bunker Spaces.

- **20.** Every ferry vessel of Class B shall be provided with apparatus whereby a powerful jet of water can be rapidly directed into any part of the coal bunker spaces, boiler rooms and machinery spaces.
- **21.**—(1) Every ferry vessel of Class B in which the boiler or boilers are oil-fired shall be provided with:—
- (a) Conductors for spraying water on oil without undue disturbance of the surface.
- (b) A receptacle containing a suitable quantity of sand, sawdust impregnated with soda or other approved dry materials in each firing space, and scoops for distributing such material.
- (c) Two approved portable extinguishers constructed to discharge froth, or other approved medium suitable for quenching oil fires, in the boiler room and in each of the machinery spaces in which a part of the oil fuel installation is situated.
- (d) At least one approved extinguisher, constructed to discharge froth, of 10 gallons capacity with hoses suitable for reaching any part of the boiler room and spaces containing oil fuel units.

- (2) All containers and the valves by which such containers are operated shall be easily accessible and so placed that they will not readily be cut off from use by an outbreak of fire.
- 22. Every ferry vessel of class B propelled by internal combustion engines consuming oil of a flash point of not less than 150°F, shall be provided with such number of approved fire extinguishers as the Government Marine Surveyor may deem sufficient.

## Pumps.

**23.** Every ferry vessel of class B shall be provided with at least one fire pump of ample capacity operated by steam or other motive power.

# Water Service Pipes and Fire Hoses.

**24.** Every ferry vessel of class B shall comply with the requirements of regulations 14 and 15.

Wood ships and other ships requiring special consideration.

25. Wood ships and ships in which the flash point of the oil used as fuel is lower than 150°F, shall comply with the requirements of the foregoing regulations with such modifications as the Government Marine Surveyor may deem necessary.

### STEAM AND MOTOR LAUNCHES.

#### Buckets and Balers.

26. Every launch of class B shall be provided with such number of buckets and balers as the Government Marine Surveyor may deem sufficient and such buckets and balers shall be placed in convenient and accessible positions on the ship so that they will be readily available in case of fire.

### Fire Extinguishers.

27. Every launch of class B in which the boiler or boilers are oil-fired, and every motor launch shall be provided with such number of approved fire extinguishers as the Government Marine Surveyor may deem sufficient.

#### Sand.

**28.** Every launch of class B in which the boiler or boilers are oil-fired, and every motor launch shall be provided with a box containing a suitable quantity of sand, sawdust impregnated with soda or other approved dry materials, and a scoop for distributing such material.

# MOTOR BOATS.

**29.** Every motor boat of class B shall be provided with a baler and a bilge pump.

### Fire Extinguishers.

- **30.** Every motor boat of class B shall be provided with approved fire extinguishers in accordance with the following scale:—
  - (a) Open motor boats not exceeding 30 feet in length,

Two tetrachloride fluid extinguishers of the hand pump type and a froth or foam fluid extinguisher, each of a capacity of at least one gallon.

(b) Open motor boats over 30 feet but not exceeding 50 feet in length,

Two tetrachloride fluid extinguishers of the hand pump type and two froth or foam fluid extinguishers each of a capacity of at least one gallon.

(c) Open motor boats over 50 feet in length,

Such number of tetrachloride and froth or foam fluid extinguishers as the Government Marine Surveyor may deem sufficient.

**31.** Such fire extinguishers shall be placed in positions ready for immediate use.

### Sand.

**32.** Every motor boat of class B shall be provided with a receptacle containing at least one cubic foot of sand and a suitable scoop for distributing the material.

### SHIPS OF CLASS A AND CLASS B.

## General.

**33.** All fire extinguishing apparatus and appliances shall at all times be in working order and available for immediate use.

## Equivalents.

**34.** Where these regulations require that a particular fitting, appliance or apparatus or type thereof, shall be fitted or carried in a ship, or that any particular provision shall be made in a ship, the Government Marine Surveyor may allow any other fitting, appliance or apparatus or type thereof to be fitted or carried or any other provision to be made if he is satisfied that that other fitting, appliance or apparatus or type thereof, or provision, is at least as effective as that required by these regulations.

R. A. D. FORREST, Clerk of Councils.

Council Chamber, 23rd April, 1936.