Prevention of Pollution of the Sea (Oil) (Amendment) Regulations 2007

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No. S 393

PREVENTION OF POLLUTION OF THE SEA ACT
(CHAPTER 243)

PREVENTION OF POLLUTION OF THE SEA (OIL) (AMENDMENT) REGULATIONS 2007

In exercise of the powers conferred by sections 7 (4), 12 and 34 of the Prevention of Pollution of the Sea Act, the Maritime and Port Authority of Singapore, with the approval of the Minister for Transport, hereby makes the following Regulations:

Citation and commencement

1. These Regulations may be cited as the Prevention of Pollution of the Sea (Oil) (Amendment) Regulations 2007 and shall come into operation on 1st August 2007.

Amendment of First Schedule

2. The First Schedule to the Prevention of Pollution of the Sea (Oil) Regulations 2006 (G.N. No. S 685/2006) is amended —

(a) by inserting, immediately after paragraph 28.8 of regulation 1, the following paragraph:

"**28.**—9 *ship delivered on or after 1 August 2010* means a ship:

1 for which the building contract is placed on or after 1 August 2007; or

2 in the absence of a building contract, the keels of which are laid or which are at a similar stage of construction on or after 1 February 2008; or

3 the delivery of which is on or after 1 August 2010; or

4 which have undergone a major conversion:

1 for which the contract is placed after 1 August 2007; or

2 in the absence of contract, the construction work of which is begun after 1 February 2008; or

3 which is completed after 1 August 2010.";

(*b*) by inserting, immediately after regulation 12, the following regulation:

"OTHER REGULATION 12A

OIL FUEL TANK PROTECTION

1. This regulation shall apply to all ships with an aggregate oil fuel capacity of 600 m^3 and above which are delivered on or after 1 August 2010, as defined in regulation 1.28.9 of this Annex.

2. The application of this regulation in determining the location of tanks used to carry oil fuel does not govern over the provisions of regulation 19 of this Annex.

3. For the purpose of this regulation, the following definitions shall apply:

1 "Oil fuel" means any oil used as fuel oil in connection with the propulsion and auxiliary machinery of the ship in which such oil is carried.

2 "Load line draught (d_S)" is the vertical distance, in metres, from the moulded baseline at mid-length to the waterline corresponding to the summer freeboard draught to be assigned to the ship.

3 "Light ship draught" is the moulded draught amidships corresponding to the lightweight.

4 "Partial load line draught (d_P)" is the light ship draught plus 60% of the difference between the light ship draught and the load line draught d_S. The partial load line draught (d_p) shall be measured in metres.

5 "Waterline (d_B)" is the vertical distance, in metres, from the moulded baseline at mid-length to the waterline corresponding to 30% of the depth D_S.

6 "Breadth (B_S)" is the greatest moulded breadth of the ship, in metres, at or below the deepest load line draught (d_S).

7 "Breadth (B_B)" is the greatest moulded breadth of the ship, in metres, at or below the waterline (d_B).

8 "Depth (D_S)" is the moulded depth, in metres, measured at mid-length to the upper deck at side. For the purpose of the application, "upper deck" means the highest deck to which the watertight transverse bulkheads except aft peak bulkheads extend.

9 "Length (L)" means 96% of the total length on a waterline at 85% of the least moulded depth measured from the top of the keel, or the length from the foreside of the stem to the axis of the rudder stock on that waterline, if that be greater. In ships designed with a rake of keel the waterline on which this length is measured shall be parallel to the designed waterline. The length (L) shall be measured in metres.

10 "Breadth (B)" means the maximum breadth of the ship, in metres, measured amidships to the moulded line of the frame in a ship with a metal shell and to the outer surface of the hull in a ship with a shell of any other material.

11 "Oil fuel tank" means a tank in which oil fuel is carried, but excludes those tanks which would not contain oil fuel in normal operation, such as overflow tanks.

12 "Small oil fuel tank" is an oil fuel tank with a maximum individual capacity not greater than 30 m^3.

13 "C" is the ship's total volume of oil fuel, including that of the small oil fuel tanks, in m^3, at 98% tank filling.

14 "Oil fuel capacity" means the volume of a tank in m^3, at 98% filling.

4. The provisions of this regulation shall apply to all oil fuel tanks except small oil fuel tanks, as defined in 3.12, provided that the aggregate capacity of such excluded tanks is not greater than 600 m^3.

5. Individual oil fuel tanks shall not have a capacity of over 2,500 m^3.

6. For ships, other than self-elevating drilling units, having an aggregate oil fuel capacity of 600 m^3 and above, oil fuel tanks shall be located above the moulded line of the bottom shell plating nowhere less than the distance *h* as specified below:

h = B/20 m or,
h = 2.0 m, whichever is the lesser.

The minimum value of *h* = 0.76 m

In the turn of the bilge area and at locations without a clearly defined turn of the bilge, the oil fuel tank boundary line shall run parallel to the line of the midship flat bottom as shown in Figure 1.

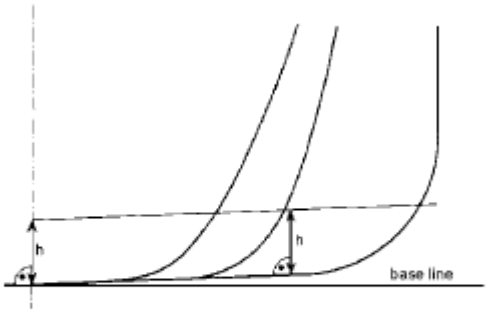

Figure 1 — *Oil fuel tank boundary lines for the purpose of paragraph 6*

7. For ships having an aggregate oil fuel capacity of 600 m^3 or more but less than 5,000 m^3, oil fuel tanks shall be located inboard of the moulded line of the side shell plating, nowhere less than the distance *w* which, as shown in Figure 2, is measured at any cross-section at right angles to the side shell, as specified below:

$$w = 0.4 + 2.4\ C/20{,}000\ \text{m}$$

The minimum value of *w* = 1.0 m, however for individual tanks with an oil fuel capacity of less than 500 m^3 the minimum value is 0.76 m.

8. For ships having an aggregate oil fuel capacity of 5,000 m^3 and over, oil fuel tanks shall be located inboard of the moulded line of the side shell plating, nowhere less than the distance w which, as shown in Figure 2, is measured at any cross-section at right angles to the side shell, as specified below:

$$w = 0.5 + C/20{,}000\ \text{m or}$$
$$w = 2.0\ \text{m, whichever is the lesser.}$$

The minimum value of *w* = 1.0 m

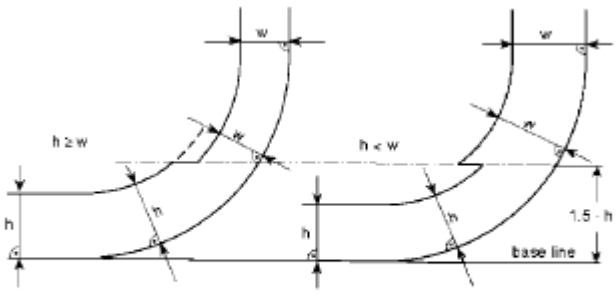

Figure 2 — *Oil fuel tank boundary lines for the purpose of paragraphs 7 and 8*

9. Lines of oil fuel piping located at a distance from the ship's bottom of less than *h*, as defined in paragraph 6, or from the ship's side less than *w*, as defined in paragraphs 7 and 8 shall be fitted with valves or similar closing devices within or immediately adjacent to the oil fuel tank. These valves shall be capable of being brought into operation from a readily accessible enclosed space the location of which is accessible from the navigation bridge or propulsion machinery control position without traversing exposed freeboard or superstructure decks. The valves shall close in case of remote control system failure (fail in a closed position) and shall be kept closed at sea at any time when the tank contains oil fuel except that they may be opened during oil fuel transfer operations.

10. Suction wells in oil fuel tanks may protrude into the double bottom below the boundary line defined by the distance *h* provided that such wells are as small as practicable and the distance between the well bottom and the bottom shell plating is not less than 0.5 *h*.

11. Alternatively to paragraphs 6 and either 7 or 8, ships shall comply with the accidental oil fuel outflow performance standard specified below:

1 The level of protection against oil fuel pollution in the event of collision or grounding shall be assessed on the basis of the mean oil outflow parameter as follows:

	OM < 0.0157-1.14E-6•C	600 $m^3 \leq C < 5{,}000\ m^3$		
	OM < 0.010	$C \leq 5{,}000\ m^3$		
	where:	OM = mean oil outflow parameter; and		
		C = total oil fuel volume.		

2 The following general assumptions shall apply when calculating the mean oil outflow parameter:

1 the ship shall be assumed loaded to the partial load line draught d^P without trim or heel;

2 all oil fuel tanks shall be assumed loaded to 98% of their volumetric capacity;