

- .5 For ships fitted with homogenizers, sludge incinerators or other recognized means on board for the control of sludge, the minimum sludge tank capacity should be:
  - .5.1 50% of the value calculated according to item .4 above; or
  - .5.2 1 m<sup>3</sup> for ships of 400 gross tonnage and above but less than 4000 gross tonnage or 2 m<sup>3</sup> for ships of 4000 gross tonnage and above; whichever is the greater.

15.2 Administrations should establish that in a ship the keel of which is laid or which is at a similar stage of construction on or after 31 December 1990, adequate tank capacity, which may include the sludge tank(s) referred to under 15.1 above, is available also for leakage, drain and waste oils from the machinery installations. In existing installations this should be taken into consideration as far as reasonable and practicable.

#### 16 Overboard connection of sludge tanks

Reg. 12.2

Ships having piping to and from sludge tanks to overboard discharge outlets, other than the standard discharge connection referred to in regulation 13, installed prior to 4 April 1993 may comply with regulation 12.2 by the installation of blanks in this piping.

#### 17 Cleaning of sludge tanks and discharge of residues

Reg. 12.3

17.1 To assist Administrations in determining the adequacy of the design and construction of sludge tanks to facilitate their cleaning and the discharge of residues to reception facilities, the following guidance is provided, having effect on ships the keel of which is laid or which is at a similar stage of construction on or after 31 December 1990:

- .1 sufficient man-holes should be provided such that, taking into consideration the internal structure of the sludge tanks, all parts of the tank can be reached to facilitate cleaning;
- .2 sludge tanks in ships operating with heavy oil, that needs to be purified for use, should be fitted with adequate heating arrangements or other suitable means to facilitate the pumpability and discharge of the tank content;
- .3 there should be no interconnections between the sludge tank discharge piping and bilge-water piping other than possible common piping leading to the standard discharge connection referred to in regulation 13. However, arrangements may be made for draining of settled water from the sludge tanks by means of manually operated self-closing valves or equivalent arrangements; and
- .4 the sludge tank should be provided with a designated pump for the discharge of the tank content to reception facilities. The pump should be of a suitable type, capacity and discharge head, having regard to the characteristics of the liquid being pumped and the size and position of tank(s) and the overall discharge time.