

of this section and meeting the design and equipment requirements under Subpart E of this part.

(3) Special ballast arrangements acceptable to the Coast Guard.

(b) In any ballast condition during any part of a voyage, including that of lightweight with either segregated ballast in segregated ballast tanks or clean ballast in dedicated clean ballast tanks, each vessel under paragraph (a)(1) or (a)(2) of this section must have the capability of meeting each of the following:

(1) The molded draft amidship (dm), in meters, without taking into account vessel deformation, must not be less than “dm” in the following mathematical relationship:

dm=2.00+0.020L for vessels of 150 meters or more in length

dm=1.25+0.025L for vessels less than 150 meters in length

(2) The drafts, in meters, at the forward and after perpendiculars must correspond to those determined by the draft amidship under paragraph (b)(1) of this section, in association with a trim, in meters, by the stern (t) of no more than “t” in the following mathematical relationship:

t=0.015L for vessels of 150 meters or more in length

t=1.5+0.005L for vessels less than 150 meters in length

(3) The minimum draft at the after perpendicular is that which is necessary to obtain full immersion of the propeller.

(c) Special ballast arrangements are accepted under the procedures in paragraph (d) of this section if:

(1) The vessel is dedicated to one specific route;

(2) Each offshore transfer facility on the route is less than 50 miles from shore;

(3) The duration of the ballast voyage is less than 10 hours;

(4) They prevent the mixing of ballast water and oil; and

(5) They provide suitable draft and trim to allow for the safe navigation of the vessel on the intended route.

(d) The owner or operator of a vessel that meets paragraph (c) of this section must apply for acceptance of the spe-

cial ballast arrangement, in writing, to the Officer in Charge, Marine Inspection, of the zone in which the vessel operates. The application must contain:

(1) The specific route on which the vessel would operate;

(2) The type of ballast to be carried;

(3) The location of the ballast on the vessel;

(4) Calculations of draft and trim for maximum ballast conditions; and

(5) The associated operating requirements or limitations necessary to ensure safe navigation of the vessel.

NOTE: Operating requirements or limitations necessary to ensure safe navigation of the vessel could include (but are not limited to) weather conditions under which the vessel would not operate and weather conditions under which cargo would be carried in certain cargo tanks on the ballast voyage.

(e) The Coast Guard will inform each applicant for special ballast arrangements under paragraph (d) of this section whether or not the arrangements are accepted. If they are not accepted, the reasons why they are not accepted will be stated.

(f) Each tank vessel under this section may be designed to carry ballast water in cargo tanks, as allowed under § 157.35.

[CGD 79-152, 45 FR 82249, Dec. 15, 1980]

§ 157.10c Segregated ballast tanks, crude oil washing systems, and dedicated clean ballast tanks for certain new and existing tankships of 20,000 to 40,000 DWT.

(a) This section applies to each tankship of 20,000 DWT or more, but less than 40,000 DWT, except each one that—

(1) Is constructed under a building contract awarded after June 1, 1979;

(2) In the absence of a building contract, has the keel laid or is at a similar stage of construction after January 1, 1980;

(3) Is delivered after June 1, 1982; or

(4) Has undergone a major conversion, for which—

(i) The contract is awarded after June 1, 1979; or

(ii) Conversion is completed after June 1, 1982.

(b) On January 1, 1986, or 15 years after the date it was delivered to the original owner or 15 years after the

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completion of a major conversion, whichever is later, a vessel under this section that carries crude oil must have—

(1) Segregated ballast tanks that have a total capacity to allow the vessel to meet the draft and trim requirements in § 157.09(b); or

(2) A crude oil washing system that meets the design, equipment, and installation requirements of §§ 157.122 through 157.138.

(c) On January 1, 1986, or 15 years after the date it was delivered to the original owner or 15 years after the completion of a major conversion, whichever is later, a vessel under this section that carries product must have—

(1) Segregated ballast tanks that have total capacity to allow the vessel to meet the draft and trim requirements in § 157.09(b); or

(2) Dedicated clean ballast tanks that meet the design and equipment requirements under §§ 157.220, 157.222, and 157.224 and have total capacity to allow the vessel to meet the draft and trim requirements in § 157.09(b).

(d) If the arrangement of tanks on a vessel under this section is such that, when using the tankage necessary to comply with the draft and trim requirements in § 157.09(b), the draft amidships exceeds the minimum required draft by more than 10 percent, or the arrangement results in the propeller being fully immersed by more than 10 percent of its diameter, alternative arrangements may be accepted provided—

(1) At least 80 percent of the propeller diameter is immersed; and

(2) The moulded draft amidships is at least 80 percent of that required under § 157.09(b)(1).

[CGD 82-28, 50 FR 11626, Mar. 22, 1985; 50 FR 12800, Apr. 1, 1985]

§ 157.10d Double hulls on tank vessels.

(a) With the exceptions stated in § 157.08(n), this section applies to a tank vessel—

(1) For which the building contract is awarded after June 30, 1990;

(2) That is delivered after December 31, 1993;

(3) That undergoes a major conversion for which;

(i) The contract is awarded after June 30, 1990; or

(ii) Conversion is completed after December 31, 1993; or

(4) That is otherwise required to have a double hull by 46 U.S.C. 3703a(c).

NOTE: The double hull compliance dates of 46 U.S.C. 3703a(c) are set out in appendix G to this part. To determine a tank vessel's double hull compliance date under OPA 90, use the vessel's hull configuration (*i.e.*, single hull; single hull with double sides; or single hull with double bottom) on August 18, 1990.

(b) Each vessel to which this section applies must be fitted with:

(1) A double hull in accordance with this section; and

(2) If § 157.10 applies, segregated ballast tanks and a crude oil washing system in accordance with that section.

(c) Except on a vessel to which § 157.10d(d) applies, tanks within the cargo tank length that carry any oil must be protected by double sides and a double bottom as follows:

(1) Double sides must extend for the full depth of the vessel's side or from the uppermost deck, disregarding a rounded gunwale where fitted, to the top of the double bottom. At any cross section, the molded width of the double side, measured at right angles to the side shell plating, from the side of tanks containing oil to the side shell plating, must not be less than the distance *w* as shown in Figure 157.10d(c) and specified as follows:

(i) For a vessel of 5,000 DWT and above: $w = [0.5 + (DWT/20,000)]$ meters; or, $w = 2.0$ meters (79 in.), whichever is less, but in no case less than 1.0 meter (39 in.).

(ii) For a vessel of less than 5,000 DWT: $w = [0.4 + (2.4)(DWT/20,000)]$ meters, but in no case less than 0.76 meter (30 in.).

(iii) For a vessel to which paragraph (a)(4) of this section applies: $w = 0.76$ meter (30 in.), provided that the double side was fitted under a construction or conversion contract awarded prior to June 30, 1990.