AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

Subpart 151.13—Cargo Segregation

§ 151.13–1 General.

This subpart prescribes the requirements for cargo segregation for cargo tanks. These requirements are based on considerations of cargo reactivity, stability, and contamination of the surroundings and other cargoes.

[CGD 88–100. 54 FR 40029, Sept. 29, 1989, as amended by CGD 96–041, 61 FR 50731, Sept. 27, 1996]

§ 151.13–5 Cargo segregation—tanks.

(a) The configurations listed in this paragraph refer to the separation of the cargo from its surroundings and list the various degrees of segregation required. Paragraphs and (2) of this section explain the symbols used in lines 1 and 2, in order, under the tank segregation column of Table 151.05.

(1) Segregation of cargo from surrounding waters (Line 1 of Table 151.05).

i=Skin of vessel (single skin) only required. Cargo tank wall can be vessel's hull.

ii=Double skin required. Cargo tank wall cannot be vessel's hull.

NA=Nonapplicable for this case. Independent tanks already have such segregation built in through design.

(2) Segregation of cargo space from machinery spaces and other spaces which have or could have a source of ignition (Line 2 of Table 151.05).

i=Single bulkhead only required. Tank wall can be sole separating medium.

ii=Double bulkhead, required. Cofferdam, empty tank, pumproom, tank with Grade E Liquid (if compatible with cargo) is satisfactory.

(b) [Reserved]

(c) If a cofferdam is required for segregation purposes and a secondary barrier is required for low temperature protection by § 151.15–3(d)(4), the void space between the primary and secondary barriers shall not be acceptable in lieu of the required cofferdam.

[CGFR 70–10, 35 FR 3714, Feb. 25, 1970, as amended by CGD 75–59, 45 FR 70273, Oct. 23, 19805; CGD 96–041, 61 FR 50731, Sept. 27, 1996]

Subpart 151.15—Tanks

§ 151.15–1 Tank types.

This section lists the definitions of the various tank types required for cargo containment by Table 151.05.

(a) *Integral.* A cargo containment envelope which forms a part of the vessel's hull in which it is built, and may be stressed in the same manner and by the same loads which stress the contiguous hull structure. An integral tank is essential to the structural completeness of its vessel's hull.

(b) *Independent.* A cargo containment envelope which is not a contiguous part of the hull structure. An independent tank is built and installed so as to eliminate, wherever possible (or, in any event, to minimize) its stressing as a result of stressing or motion of the adjacent hull structure. In general, therefore, motion of parts of the tank relative to the adjacent hull structure is possible. An independent tank is not essential to the structural completeness of its carrying vessel's hull.

(c) *Gravity.* Tanks having a design pressure (as described in Part 54 of this chapter) not greater than 10 pounds per square inch gauge and of prismatic shape or other geometry where stress analysis is neither readily nor completely determinate. (Integral tanks are of the gravity type.)

(d) *Pressure.* Independent tanks whose design pressure (as described in Part 54 of this chapter) is above 10 pounds per square inch gauge and fabricated in accordance with part 54, of this chapter. Independent gravity tanks which are of normal pressure vessel configuration (i.e., bodies of revolution, in which the stresses are readily determinate) shall be classed as pressure vessel type tanks even though their maximum allowable working pressure is less than 10 pounds per square inch gauge. Pressure vessel tanks shall be of Classes I, I–L, II, II–L, or III, as defined in subchapter F of this chapter.