

(d) Each package of Division 2.3 (poisonous gas) material or Division 6.1 (poison) material which also bears a FLAMMABLE LIQUID or FLAMMABLE GAS label must be stowed in a mechanically ventilated space, kept as cool as reasonably practicable, and be stowed away from all sources of heat and ignition.

[Amdt. 176–30, 55 FR 52708, Dec. 21, 1990, as amended at 57 FR 45465, Oct. 1, 1992; Amdt. 176–35, 59 FR 49134, Sept. 26, 1994; Amdt. 176–42, 62 FR 1236, Jan. 8, 1997; 64 FR 10782, Mar. 5, 1999]

§ 176.605 Care following leakage or sifting of Division 2.3 (poisonous gas) and Division 6.1 (poisonous) materials.

A hold or compartment containing a package of a Division 2.3 (poisonous gas) or Division 6.1 (poisonous) material which has leaked or sifted must be thoroughly cleaned and decontaminated after the cargo is unloaded and before the hold or compartment is used for the stowage of any other cargo.

Subpart M—Detailed Requirements for Radioactive Materials

SOURCE: Amdt. 176–15, 48 FR 10245, Mar. 10, 1983, unless otherwise noted.

§ 176.700 General stowage requirements.

- (a) [Reserved]
- (b) A package of radioactive materials which in still air has a surface temperature more than 5 °C (9 °F) above the ambient air may not be overstowed with any other cargo. If the package is stowed under deck, the hold or compartment in which it is stowed must be ventilated.
- (c) Each fissile material, controlled shipment must be stowed in a separate hold, compartment, or defined deck area and be separated by a distance of at least 6 m (20 feet) from all other RADIOACTIVE YELLOW–II or YELLOW–III labeled packages.
- (d) For a shipment of radioactive materials requiring supplemental operational procedures, the shipper must

furnish the master or person in charge of the vessel a copy of the necessary operational instructions.

(e) A person may not remain unnecessarily in a hold, or compartment, or in the immediate vicinity of any package on deck, containing radioactive materials.

(The information collection requirements in paragraph (d) were approved by the Office of Management and Budget under control numbers 2137–0534, 2137–0535 and 2137–0536)

[Amdt. 176–15, 48 FR 10245, Mar. 10, 1983, as amended by Amdt. 176–15, 48 FR 31220, July 7, 1983; Amdt. 176–23, 50 FR 41523, Oct. 11, 1985; Amdt. 176–37, 60 FR 50333, Sept. 28, 1995; 66 FR 45385, Aug. 28, 2001]

§ 176.704 Requirements relating to transport indexes.

(a) The sum of the transport indexes for all packages of Class 7 (radioactive) materials on board a vessel may not exceed the limits specified in table III.

(b) For packages in freight containers, the radiation level may not exceed 2 mSv per hour (200 mrem per hour) at any point on the surface and 0.1 mSv per hour (10 mrem per hour) at 2 m (6.6 feet) from the outside surface of the freight container.

(c) The limitations specified in table III do not apply to consignments of LSA materials if the packages are marked “RADIOACTIVE LSA” and no fissile Class 7 (radioactive) materials are included in the shipment.

(d) Each group of fissile packages must be separated from other Class 7 (radioactive) material by a distance of at least 6 m (20 feet) at all times.

(e) The limitations specified in paragraphs (a) through (c) of this section do not apply when the entire vessel is reserved or chartered for use by a single offeror under exclusive use conditions if—

(1) The number of fissile packages of Class 7 (radioactive) materials aboard the vessel does not exceed the amount authorized in §§173.457 and 173.459 of this subchapter; and

(2) The entire shipment operation is approved by the Associate Administrator in advance.

(f) Table III is as follows:

TABLE III—TI LIMITS FOR FREIGHT CONTAINERS AND CONVEYANCES

Type of freight container or conveyance	Limit on total sum of transport indexes in a single freight container or aboard a conveyance			
	Not under exclusive use		Under exclusive use	
	Non-fissile material	Fissile material	Non-fissile material	Fissile material ^a
Freight container—Small	50	50	N/A	N/A.
Freight container—Large	50	50	No limit ...	100 ^b .
Vessel:				
1. Hold, compartment or defined deck area:				
Packages, overpacks, small freight containers	50	50	No limit	100 ^b .
Large freight containers	200 ^d	50	No limit	100 ^b .
2. Total vessel:				
Packages, etc.	200 ^d	200 ^d	No limit ^c ..	200 ^c .
Large freight containers	No limit ^d ...	No limit ^d ...	No limit	No limit ^d .

^aProvided that transport is direct from the consignor to the consignee without any intermediate in-transit storage, where the total TI exceed 50.

^bIn cases in which the total TI is greater than 50, the consignment must be so handled and stowed so that it is always separated from any package, overpack, portable tank or freight container carrying Class 7 (radioactive) materials by at least 6 m (20 feet).

^cFor vessels the requirements given in 1 and 2 must be fulfilled.

^dProvided that the packages, overpacks, portable tanks or freight containers, as applicable, are stowed so that the total sum of the TI's in any group does not exceed 50, and that each group is handled and stowed so that the groups are separate from each other by at least 6 m (20 feet).

^ePackages or overpacks carried in or on a transport vehicle which are offered for transport under the provisions of § 173.441(b) of this subchapter may be transported by vessel provided that they are not removed from the vehicle at anytime while on board the vessel.

[Amdt. 176-37, 60 FR 50333, Sept. 28, 1995, as amended by 176-37, 61 FR 20753, May 8, 1996; 63 FR 52850, Oct. 1, 1998; 66 FR 45384, 45385, Aug. 28, 2001]

§ 176.708 Segregation distance table.

(a) Table IV applies to the stowage of packages of Class 7 (radioactive) materials on board a vessel with regard to transport index numbers which are shown on the labels of individual packages.

(b) RADIOACTIVE YELLOW-II or YELLOW-III labeled packages may not be stowed any closer to living accommodations, regularly occupied working spaces, spaces that may be continually occupied by any person (except those spaces exclusively reserved for couriers specifically authorized to accompany such packages), or undeveloped film than the distances specified in TABLE IV.

(c) Where only one consignment of a Class 7 (radioactive) material is to be loaded on board a vessel under exclusive use conditions, the appropriate segregation distance may be established by demonstrating that the direct measurement of the radiation level at

regularly occupied working spaces and living quarters is less than 7.5 microsieverts per hour (0.75 mrem per hour).

(d) More than one consignment may be loaded on board a vessel with the appropriate segregation distance established by demonstrating that direct measurement of the radiation level at regularly occupied working spaces and living quarters is less than 7.5 microSieverts per hour (0.75 mrem per hour), provided that:

(1) The vessel has been chartered for the exclusive use of a competent person specialized in the carriage of Class 7 (radioactive) material; and

(2) Stowage arrangements have been predetermined for the entire voyage, including any Class 7 (radioactive) material to be loaded at ports of call enroute.

(e) The radiation level must be measured by a responsible person skilled in the use of monitoring instruments.

(f) Table IV is as follows: