

176.340 Combustible liquids in portable tanks.

**Subpart J—Detailed Requirements for Class 4 (Flammable Solids), Class 5 (Oxidizers and Organic Peroxides), and Division 1.5 Materials**

176.400 Stowage of Division 1.5, Class 4 (flammable solids) and Class 5 (oxidizers and organic peroxides) materials.

176.405 Stowage of charcoal.

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176.907 Polymeric Beads and Plastic Molding Compounds.

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**Subpart A—General**

**§ 176.1 Purpose and scope.**

This part prescribes requirements in addition to those contained in parts 171, 172, and 173 of this subchapter to be observed with respect to the transportation of hazardous materials by vessel.

**§ 176.2 Definitions.**

As used in this part—

*Cantline* means the v-shaped groove between two abutting, parallel horizontal cylinders.

*Cargo net* means a net made of fiber or wire used to provide convenience in handling loose or packaged cargo to and from a vessel.

*Cargo transport unit* means a transport vehicle, a freight container, a portable tank or a multiple element gas container (MEGC). A *closed cargo transport unit* means a cargo transport unit in which the contents are totally enclosed by permanent structures. An *open cargo transport unit* means a cargo transport unit that is not a closed cargo transport unit. Cargo transport units with fabric sides or tops are not closed cargo transport units for the purposes of this part.

*Clear of living quarters* means that the hazardous material must be located so that in the event of release of the material, leakage or vapors will not penetrate accommodations, machinery spaces or other work areas by means of entrances or other openings in bulkheads or ventilation ducts.

*Closed freight container* means a freight container which totally encloses its contents by permanent structures. A freight container formed partly by a tarpaulin, plastic sheet, or similar material is not a closed freight container.

*Closed cargo transport unit for Class 1 (explosive) materials* means a freight container or transport vehicle that fully encloses the contents by permanent structures and can be secured to the ship's structure and are, except for the carriage of division 1.4 explosives, structurally serviceable (see §176.172). Portable magazines conforming to §176.137 are also considered closed cargo transport units for Class 1. Small compartments such as deck houses and

mast lockers are included. Cargo transport units with fabric sides or tops are not closed cargo transport units. The floor of any closed cargo transport unit must either be constructed of wood, close-boarded or so arranged that goods are stowed on sparred gratings, wooden pallets or dunnage.

*Commandant (CG-522), USCG* means the Chief, Office of Operating and Environmental Standards, United States Coast Guard, Washington, DC 20593-0001.

*Compartment* means any space on a vessel that is enclosed by the vessel's decks and its sides or permanent steel bulkheads.

*CSC safety approval plate* means the safety approval plate specified in Annex I of the International Convention for Safe Containers (1972) and conforming to the specifications in 49 CFR 451.23 and 451.25. The plate is evidence that a freight container was designed, constructed, and tested under international rules incorporated into U.S. regulations in 49 CFR parts 450 through 453. The plate is found in the door area of the container.

*Deck structure* means a structure of substantial weight and size located on the weather deck of a vessel and integral with the deck. This term includes superstructures, deck houses, mast houses, and bridge structures.

*Draft* means a load or combination of loads capable of being hoisted into or out of a vessel in a single lift.

*Dunnage* means lumber of not less than 25 mm (0.98 inch) commercial thickness or equivalent material laid over or against structures such as tank tops, decks, bulkheads, frames, plating, or ladders, or used for filling voids or fitting around cargo, to prevent damage during transportation.

*Explosives anchorage* means an anchorage so designated under 33 CFR part 110, subpart B.

*Explosive article* means an article or device that contains one or more explosive substances. Individual explosive substances are identified in column 17 of the Dangerous Goods List in the IMDG Code (IBR, see §171.7 of this subchapter).

*Explosives handling facility* means—

(1) A “designated waterfront facility” designated under 33 CFR part 126

when loading, handling, and unloading Class 1 (explosives) materials; or

(2) A facility for loading, unloading, and handling military Class 1 (explosives) materials which is operated or controlled by an agency of the Department of Defense.

*Explosive substance* means a solid or liquid material, or a mixture of materials, which is in itself capable by chemical reaction of producing gas at such a temperature and pressure and at such a speed as to cause damage to its surroundings. Individual explosive substances are identified in column 17 of the Dangerous Goods List in the IMDG Code.

*Handling* means the operation of loading and unloading a vessel; transfer to, from, or within a vessel, and any ancillary operations.

*Hold* means a compartment below deck that is used exclusively for the carriage of cargo.

*In containers or the like* means any clean, substantial, weatherproof box structure which can be secured to the vessel's structure, including a portable magazine or a closed cargo transport unit. Whenever this stowage is specified, stowage in deckhouses, mast lockers and oversized weatherproof packages (overpacks) is also acceptable.

*Incompatible materials* means two materials whose stowage together may result in undue hazards in the case of leakage, spillage, or other accident.

*INF cargo* means packaged irradiated nuclear fuel, plutonium or high-level radioactive wastes as those terms are defined in the “International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes on Board Ships” (INF Code) contained in the IMDG Code.

*Landing mat* means a shock absorbing pad used in loading Class 1 (explosive) materials on vessels.

*Machinery Spaces of Category A* are those spaces, and trunks to such spaces, which contain:

(1) Internal combustion machinery used for main propulsion;

(2) Internal combustion machinery used for purposes other than main propulsion where such machinery has in the aggregate a total power output of not less than 375 kw; or

(3) any oil-fired boiler or fuel unit.

*Magazine* means an enclosure designed to protect certain goods of Class 1 (explosive) materials from damage by other cargo and adverse weather conditions during loading, unloading, and when in transit; and to prevent unauthorized access. A magazine may be a fixed structure or compartment in the vessel, a closed freight container, a closed transport vehicle, or a portable magazine. Magazines may be positioned in any part of the ship conforming with the relevant provisions for Class 1 (explosive) materials contained in Subpart G of this part provided that magazines which are fixed structures are sited so that their doors, where fitted, are easily accessible.

*Master of the Vessel*, as used in this part, includes the person in charge of an unmanned vessel or barge.

*Open freight container* means a freight container that does not totally enclose its contents by permanent structures.

*Overstowed* means a package or container is stowed directly on top of another. However, with regard to Class 1 (explosive) stowage, such goods may themselves be stacked to a safe level but other goods should not be stowed directly on top of them.

*Pallet* means a portable platform for stowing, handling, and moving cargo.

*Palletized unit* means packages or unpackaged objects stacked on a pallet, banded and secured to the pallet by metal, fabric, or plastic straps for the purpose of handling as a single unit.

*Pie plate* means a round, oval, or hexagonal pallet without sideboards, used in conjunction with a cargo net to handle loose cargo on board a vessel.

*Portable magazine* means a strong, closed, prefabricated, steel or wooden, closed box or container, other than a freight container, designed and used to handle Class 1 (explosive) materials either by hand or mechanical means.

*Potential or possible sources of ignition* means, but is not limited to, open fires, machinery exhausts, galley uptakes, electrical outlets and electrical equipment including those on refrigerated or heated cargo transport units unless they are of a type designed to operate in a hazardous environment.

*Protected from sources of heat* means that packages and cargo transport

units must be stowed at least 2.4 m from heated ship structures, where the surface temperature is liable to exceed 131 °F (55 °C). Examples of heated structures are steam pipes, heating coils, top or side walls of heated fuel and cargo tanks, and bulkheads of machinery spaces. In addition, packages not loaded inside a cargo transport unit and stowed on deck must be shaded from direct sunlight. The surface of a cargo transport unit can heat rapidly when in direct sunlight in nearly windless conditions and the cargo may also become heated. Depending on the nature of the goods in the cargo transport unit, and the planned voyage, precautions must be taken to ensure that exposure to direct sunlight is reduced.

*Readily combustible material* means a material which may or may not be classed as a hazardous material but which is easily ignited and supports combustion. Examples of readily combustible materials include wood, paper, straw, vegetable fibers, products made from such materials, coal, lubricants, and oils. This definition does not apply to packaging material or dunnage.

*Responsible person* means a person empowered by the master of the vessel to make all decisions relating to his or her specific task, and having the necessary knowledge and experience for that purpose.

*Safe working load* means the maximum gross weight that cargo handling equipment is approved to lift.

*Skilled person* means a person having the knowledge and experience to perform a certain duty.

*Skipboard* means a square or rectangular pallet without sideboards, usually used in conjunction with a cargo net to handle loose cargo on board a vessel.

*Splice* as used in §176.172 of this part, means any repair of a freight container main structural member which replaces material, other than complete replacement of the member.

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*Tray* means a type of pallet constructed to specific dimensions for handling a particular load.

[Amdt. 176-30, 55 FR 52687, Dec. 21, 1990, as amended at 66 FR 8647, Feb. 1, 2001; 66 FR 33438, June 21, 2001; 66 FR 45184, Aug. 28, 2001; 67 FR 61015, Sept. 27, 2002; 68 FR 75747, 75748, Dec. 31, 2003; 69 FR 76179, Dec. 20, 2004; 73 FR 57006, Oct. 1, 2008; 74 FR 2268, Jan. 14, 2009; 76 FR 3384, Jan. 19, 2011; 78 FR 1093, Jan. 7, 2013]

### § 176.3 Unacceptable hazardous materials shipments.

(a) A carrier may not transport by vessel any shipment of a hazardous material that is not prepared for transportation in accordance with parts 172 and 173 of this subchapter, or as authorized by subpart C of part 171 of this subchapter.

(b) A carrier may not transport by vessel any explosive or explosive composition described in § 173.54 of this subchapter.

[Amdt. 176-1, 41 FR 16110, Apr. 15, 1976, as amended by Amdt. 176-30, 55 FR 52688, Dec. 21, 1990; 74 FR 2268, Jan. 14, 2009]

### § 176.4 Port security and safety regulations.

(a) Each carrier, master, agent, and charterer of a vessel and all other persons engaged in handling hazardous materials on board vessels shall comply with the applicable provisions of 33 CFR parts 6, 109, 110, 125, 126, and 160.

(b) Division 1.1 and 1.2 (explosive) materials may only be loaded on and unloaded from a vessel at—

(1) A facility of particular hazard as defined in 33 CFR 126.05(b);

(2) An explosives anchorage listed in 33 CFR part 110; or

(3) A facility operated or controlled by the Department of Defense.

(c) With the concurrence of the COTP, Division 1.1 and 1.2 (explosive) materials may be loaded on or unloaded from a vessel in any location acceptable to the COTP.

[Amdt. 176-30, 55 FR 52688, Dec. 21, 1990, as amended at 66 FR 45384, Aug. 28, 2001]

### § 176.5 Application to vessels.

(a) Except as provided in paragraph (b) of this section, this subchapter applies to each domestic or foreign vessel when in the navigable waters of the United States, regardless of its char-

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acter, tonnage, size, or service, and whether self-propelled or not, whether arriving or departing, underway, moored, anchored, aground, or while in dry dock.

(b) This subchapter does not apply to:

(1) A public vessel not engaged in commercial service;

(2) A vessel constructed or converted for the principal purpose of carrying flammable or combustible liquid cargo in bulk in its own tanks, when only carrying these liquid cargoes;

(3) A vessel of 15 gross tons or smaller when not engaged in carrying passengers for hire;

(4) A vessel used exclusively for pleasure;

(5) A vessel of 500 gross tons or smaller when engaged in fisheries;

(6) A tug or towing vessel, except when towing another vessel having Class 1 (explosive) materials, Class 3 (flammable liquids), or Division 2.1 (flammable gas) materials, in which case the owner/operator of the tug or towing vessel shall make such provisions to guard against and extinguish fire as the Coast Guard may prescribe;

(7) A cable vessel, dredge, elevator vessel, fireboat, icebreaker, pile driver, pilot boat, welding vessel, salvage vessel, or wrecking vessel; or

(8) A foreign vessel transiting the territorial sea of the United States without entering the internal waters of the United States, if all hazardous materials being carried on board are being carried in accordance with the requirements of the IMDG Code (IBR, see § 171.7 of this subchapter).

(c) [Reserved]

(d) Except for transportation in bulk packagings (as defined in § 171.8 of this subchapter), the bulk carriage of hazardous materials by water is governed by 46 CFR chapter I, subchapters D, I, N and O.

[Amdt. 176-1, 41 FR 16110, Apr. 15, 1976, as amended by Amdt. 176-1A, 41 FR 40687, Sept. 20, 1976; Amdt. 176-14, 47 FR 44471, Oct. 7, 1982; Amdt. 176-24, 51 FR 5974, Feb. 18, 1986; Amdt. 176-30, 55 FR 52688, Dec. 21, 1990; 56 FR 66281, Dec. 20, 1991; Amdt. 176-34, 58 FR 51533, Oct. 1, 1993; 66 FR 8647, Feb. 1, 2001; 68 FR 75747, Dec. 31, 2003]