

onboard the following plans and information which except for the certificates under paragraph (c)(1) of this section, are in English:

(1) The vessel's Cargo Ship Safety Construction Certificate and Cargo Ship Safety Equipment Certificate issued under the International Convention for Safety of Life at Sea, 1974.

(2) A description and schematic plan of the arrangement for inerting cargo tanks, hold spaces, and interbarrier spaces.

(3) A description of the cargo tank gauging equipment.

(4) A description and instruction manual for the calibration of the cargo leak detector equipment.

(5) A schematic plan that shows the locations of leak detectors and sampling points.

(6) If the vessel carries methane, a description of the systems for cargo temperature and pressure control. (See §§ 154.703 through 154.709).

[CGD 74-289, 44 FR 26009, May 3, 1979, as amended by CGD 81-052, 50 FR 8735, Mar. 5, 1985; CGD 77-069, 52 FR 31631, Aug. 21, 1987; CGD 90-008, 55 FR 30663, July 26, 1990]

**§ 154.1803 Expiration of Certificates of Compliance.**

(a) A Certificate of Compliance expires after a period not to exceed twenty-four months from the date of the examination under § 154.150.

(b) If a vessel's IMO Certificate of Fitness expires or otherwise becomes invalid, its Certificate of Compliance becomes invalid for the carriage of cargoes listed in Table 4 of this part or authorized by special approval under § 154.12. To maintain the validity of the Certificate of Compliance, the vessel's owner must submit a copy of any revised or reissued IMO Certificate to Commanding Officer, Marine Safety Center.

[CGD 81-052, 50 FR 8735, Mar. 5, 1985; CGD 95-072, 60 FR 50466, Sept. 29, 1995; 60 FR 54106, Oct. 19, 1995]

**§ 154.1804 Document posted in wheelhouse.**

No person may operate a U.S. flag vessel unless the documents under § 154.1801 are under glass in a conspicuous place in the wheelhouse.

**§ 154.1806 Regulations on board.**

No person may operate a U.S. flag vessel unless a copy of this part and a copy of Part 35 of this chapter are on board.

**§ 154.1808 Limitations in the endorsement.**

No person may operate a vessel unless that person complies with all limitations in the endorsement on the vessel's Certificate of Inspection or Certificate of Compliance.

[CGD 81-052, 50 FR 8735, Mar. 5, 1985]

**§ 154.1809 Loading and stability manual.**

(a) No person may operate a vessel unless that vessel has on board a loading and stability manual.

(b) The loading and stability manual must contain:

(1) Information that enables the master to load and ballast the vessel while keeping structural stresses within design limits; and

(2) The information required by § 170.110 of this chapter.

[CGD 74-289, 44 FR 26009, May 3, 1979, as amended by CGD 79-023, 49 FR 51010, Nov. 4, 1983]

**§ 154.1810 Cargo manual.**

(a) No person may operate a foreign flag vessel, whose flag administration does not issue IMO Certificates, on the navigable waters of the United States, or a U.S. flag vessel, unless the vessel has on board a cargo manual containing the following information:

(1) A description of each cargo carried, its handling hazards as a liquid or as a gas including frostbite or asphyxiation, its safety equipment and necessary first aid measures required by this part.

(2) A description of the dangers of asphyxiation from the inerting gases used on the vessel.

(3) The measures that mitigate embrittlement of steel structure in way of cargo leakage.

(4) The use of the firefighting systems on the vessel.

(5) The features of the cargo containment system that affect its operation and maintenance, including pressure

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and temperature ranges and relief valve settings.

(6) Pressures, temperatures, and liquid levels for all operations.

(7) General information derived from the first loading of the vessel.

(8) Alarm settings.

(9) Descriptions of the components of the cargo system, including the following:

(i) Liquid cargo system.

(ii) Liquid recirculating or condensate return system.

(iii) Cargo tank cool-down system.

(iv) Cargo tank warm-up or vaporization system.

(v) Gas main system.

(vi) Cargo tank or compressor relief system and blocked liquid or gas relief system.

(vii) Inerting system.

(viii) Boil-off gas compressor or reliquefaction system.

(ix) Gas detection systems.

(x) Alarm or safety indication systems.

(xi) Cargo jettisoning system.

(xii) The system for using boil-off gas as fuel.

(10) A description of cargo loading and discharge operations, including simultaneous handling of multigrades of cargo and ballast.

(11) A description of cargo operations during the voyage.

(12) A description of cargo tank cool-down and warm-up operations including purging with inert gas and air.

(13) A description of hull and cargo tank temperature monitoring systems.

(14) A description of gas detection systems and alarm or safety systems.

(15) A description of the following conditions and their symptoms, including emergency measures and corrective actions:

(i) Cargo or ballast valve malfunction.

(ii) Low cargo tank gas pressure.

(iii) High fill level shutdown.

(iv) Gas compressor shutdown.

(v) Hull cold spots.

(vi) Cargo piping leaks.

(vii) Primary or secondary barrier failure.

(viii) Hold boundary structural failure.

(ix) Fire in vent mast head.

(x) Reliquefaction plant failure.

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(xi) Vaporizer malfunction or failure.

(xii) Piping or cargo valve freeze-up.

(16) Any other matters relating to operation of the cargo systems.

(17) The operational means to maintain the vessel in a condition of positive stability in accordance with the loading and stability manual under § 154.1809 through all conditions of:

(i) Loading and deballasting; and

(ii) Unloading and ballasting.

(b) The master shall ensure that the cargo manual is kept up-to-date.

### § 154.1812 Operational information for terminal personnel.

The master shall ensure that terminal personnel are told the operational information required by § 154.1810(a)(17).

### § 154.1814 Cargo information cards.

(a) No person may operate a vessel unless a cargo information card for each cargo being transported is carried either in the wheelhouse, in the ship's office, or in another location easily accessible to the person in charge of the watch.

(b) When a vessel is moored at a terminal, the master shall ensure that a set of information cards is in the possession of the terminal's person in charge of cargo transfer operations.

(c) Each card must be at least 17 cm × 24 cm (6¾ in. × 9½ in.), have printing on one side only, and must contain the following information about the cargo:

(1) Name as listed in Table 4.

(2) Appearance.

(3) Odor.

(4) Safe handling procedures, including special handling instructions, and handling hazards.

(5) Procedures to follow in the event of spills, leaks, or uncontrolled cargo release.

(6) Procedures to be followed if a person is exposed to the cargo.

(7) Firefighting procedures and materials.

### § 154.1816 Cargo location plan.

The master shall ensure that:

(a) A cargo location plan is prepared that gives:

(1) The location and number of each cargo tank; and