

§ 98.33-13

(b) On the deck where the tank or IBC is stowed.

[CGD 84-043, 55 FR 37412, Sept. 11, 1990, as amended by USCG-2011-0088, 78 FR 54788, Sept. 6, 2013]

§ 98.33-13 Cargo-handling systems.

A cargo authorized under § 98.33-3 of this part may not be transferred to or from a portable tank or IBC authorized under § 98.33-5 of this part unless the cargo-handling system meets the requirements of subpart F of part 64 of this chapter.

[CGD 84-043, 55 FR 37412, Sept. 11, 1990, as amended by USCG-2011-0088, 78 FR 54788, Sept. 6, 2013]

§ 98.33-15 Transfers.

A cargo authorized under § 98.33-3 of this part may not be transferred to or from a portable tank or IBC authorized under § 98.33-5 of this part unless the following requirements are met:

(a) *Cargo pumps* comply with § 98.30-14 of this part;

(b) *Ground connection* complies with § 98.30-15 of this part;

(c) *Leakage containment* complies with § 98.30-17 of this part;

(d) *Qualification of person in charge* complies with § 98.30-18 of this part;

(e) *Supervision of person in charge* complies with § 98.30-19 of this part;

(f) *Transfers, general*, comply with § 98.30-23 of this part;

(g) *Connections* comply with § 98.30-27 of this part;

(h) Pumping of incompatible products complies with § 98.30-29 of this part;

(i) Conditions for pumping comply with § 98.30-31 of this part; and

(j) *Carriage of NLSs* complies with § 98.30-16 of this part.

[CGD 84-043, 55 FR 37412, Sept. 11, 1990; 55 FR 47477, Nov. 14, 1990; USCG-2011-0088, 78 FR 54788, Sept. 6, 2013]

PART 105—COMMERCIAL FISHING VESSELS DISPENSING PETROLEUM PRODUCTS

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AUTHORITY: 6 U.S.C. 468(b); 33 U.S.C. 1321(j); 46 U.S.C. 2103, 3306, 3703, 4502; 49 U.S.C. 5103; E.O. 12777, sec. 2(d)(2) and (f), 56 FR 54757, 3 CFR, 1991 Comp., p. 351; Department of Homeland Security Delegation No. 0170.1(II) (80), (92.a), (92.b).

SOURCE: 81 FR 13283, Mar. 14, 2016, unless otherwise noted.

§ 105.1 Purpose and applicability.

This part implements 46 U.S.C. 3702(d), concerning the applicability to fish processing vessels of statutes relating to the carriage of liquid bulk dangerous cargoes. This part applies to each vessel of not more than 5,000 gross tons, the primary use of which is as a commercial fish processing vessel, and that incidental to its primary use, carries and dispenses limited quantities of flammable or combustible liquid cargo in bulk. Certain provisions in §§ 105.12 and 105.13 apply only to vessels the construction of which was contracted for before May 31, 1976.

§ 105.3 Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the Coast Guard must publish a notice of change in the FEDERAL REGISTER and the material must be available to the public. All approved material is available for inspection at Coast Guard Headquarters. Contact Commandant (CG-CVC), Attn: Office of Commercial Vessel Compliance, U.S. Coast Guard Stop 7501, 2703 Martin Luther King Jr. Avenue SE., Washington, DC 20593-7501; telephone 202-372-1244. Also, it is available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030 or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(b) ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA

19428–2959, telephone: 610–832–9500, fax: 610–832–9555, <http://www.astm.org>.

(1) ASTM D 323–08, “Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method),” approved December 15, 2008, incorporation by reference approved for §105.5.

(2) [Reserved]

(c) UL (formerly Underwriters Laboratories, Inc.), 12 Laboratory Drive, Research Triangle Park, NC 27709–3995, 919–549–1400, <http://www.ul.com>.

(1) UL 19, Standard for Safety—Lined Fire Hose and Hose Assemblies, Twelfth edition, approved November 30, 2001, incorporation by reference approved for §105.14(d).

(2) [Reserved]

§ 105.5 Definitions.

As used in this part, the italicized terms have the meanings indicated in this section.

Approved means approved by the Commandant, U.S. Coast Guard, unless otherwise stated.

Bulk means a quantity of a commodity carried as a liquid cargo or liquid-cargo residue, without mark or count, in an integral, fixed, or portable tank. It does not include liquid cargo packaged in a portable tank that is loaded and discharged from a vessel with the contents intact.

Cargo means a combustible liquid or flammable liquid transported in commerce by a commercial fish processing vessel for delivery to a recipient inside or outside the fishing industry. It does not include combustible liquids or flammable liquids carried in a tank for use only by machinery and boats carried aboard the processing vessel, or for use only by vessels that are directly supporting the processing vessel’s primary operations.

Certificate of compliance means the document issued and displayed in accordance with §105.10.

Combustible liquid means any liquid having a flashpoint above 80 °F (as determined from an open cup tester, as used for testing of burning oils). A *Grade D* combustible liquid is one having a flashpoint above 80 °F and below 150 °F. A *Grade E* combustible liquid is one having a flashpoint of 150 °F or above.

Commercial fish processing vessel means a self-propelled manned vessel that commercially prepares fish or fish products other than by gutting, decapitating, gilling, skinning, shucking, icing, freezing, or brine chilling.

Dispensing means the unloading of any quantity of flammable or combustible liquids in bulk.

Dispensing tank means any tank from which a quantity of a flammable or combustible liquid is filled or emptied onboard the vessel by means of pumping, gravitation, or displacement.

Examination means a careful and critical assessment of the vessel and its appurtenances carried out by an authorized examiner or an organization designated by the Commandant, U.S. Coast Guard. This includes, where necessary, a visual assessment of the vessel’s hull, structures, electrical systems, and machinery, supplemented by other means such as measurement and/or nondestructive testing.

Flammable liquid means any liquid that gives off flammable vapors (as determined by flashpoint from an open cup tester, as used for testing of burning oils) at or below 80 °F. Flammable liquids are referred to by grades as follows:

(1) *Grade A*. Any flammable liquid having a Reid vapor pressure of 14 pounds or more, as measured in accordance with ASTM D 323 (incorporated by reference, see §105.3).

(2) *Grade B*. Any flammable liquid having a Reid vapor pressure of less than 14 pounds and more than 8½ pounds, as measured in accordance with ASTM D 323.

(3) *Grade C*. Any flammable liquid having a Reid vapor pressure of 8½ pounds or less and a flashpoint of 80 °F or below, as measured in accordance with ASTM D 323.

Fuel tank means a tank other than a dispensing tank used to transport flammable or combustible liquid for the purpose of supplying fuel for propulsion of the vessel to which it is attached.

Limited quantities means not more than 20 percent of a vessel’s deadweight tonnage as applied to bulk liquid cargoes or carried in permanent or temporary tanks.

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New vessel means a vessel whose construction is contracted for on or after May 31, 1976.

Pressure vacuum relief valve means any device or assembly of a mechanical, liquid, weight, or other type used for the automatic regulation of pressure or vacuum in enclosed places.

§ 105.10 Vessel examination.

(a) Each examination referred to in this section must be conducted by the Coast Guard to determine whether the examined vessel is in substantial compliance with this part. An examination may include any test or verification that the examiner deems necessary for determining the vessel's safety and seaworthiness.

(1) The owner or operator of each vessel subject to this part must apply, using Form CG-3752, available at http://www.uscg.mil/forms/cg/cg_3752.pdf, to the cognizant Officer in Charge, Marine Inspection, for the vessel to be examined in accordance with paragraph (b) of this section. In applying for a vessel's initial examination under this section, the application must be accompanied by a plan or sketch of each cargo tank and piping system for filling and dispensing bulk flammable or combustible cargoes, and a brief description of those systems, including their dimensions and materials used. If cargo tanks are located in enclosed compartments or below decks, the plans or sketches must show the ventilation system. Plans or sketches need not be submitted if the cargo tanks and piping systems have previously been accepted by the Coast Guard.

(2) Each vessel must be examined before its first use in loading, transporting, or dispensing combustible or flammable liquids in bulk, and at least annually thereafter if the vessel carries such liquids in temporarily installed cargo tanks or containers, or at least

biennially thereafter if the vessel carries such liquids in permanently installed cargo tanks.

(3) A vessel that is laid up, dismantled, or out of commission is exempt from the requirements of this section.

(b) After examining a vessel and finding it to be in substantial compliance with this part, the Coast Guard will issue, and the vessel's owner or operator must display on board, a certificate of compliance that describes the amounts of bulk liquid flammable or combustible cargoes that the vessel may carry, the number of crewmembers required to hold merchant mariner credentials and tankerman endorsements in accordance with 46 U.S.C. 8304 and 46 CFR part 13, and any conditions applicable to the carriage or dispensation of those cargoes. Each certificate of compliance is valid for not more than 2 years or until suspended or revoked. A letter of compliance may be issued as an alternative to a certificate of compliance.

§ 105.11 Prohibitions.

Each vessel to which this part applies is prohibited from transporting Grade A flammable liquids in bulk, or carrying bulk flammable or combustible liquids in portable or temporarily installed dispensing tanks or containers that are either below deck or in closed compartments on or above deck.

§ 105.12 Cargo tank and pumping system requirements.

(a) Cargo tanks for the carriage of bulk flammable or combustible liquids must be constructed of iron, steel, copper, nickel alloy, copper alloy, or aluminum. Tanks must be designed to withstand the maximum head to which they may be subjected, and tanks of more than 150 gallons capacity must have at least the thickness indicated in Table 1 of §105.12.

TABLE 1 TO § 105.12—TANK THICKNESS

Material	ASTM specification (latest edition)	Thickness in inches and gauge number ^{2 3}
Nickel copper	B127, hot rolled sheet or plate	0.107 (USSG 12).
Copper nickel ¹	B122, Alloy No. 5	0.128 (AWG 8).
Copper ¹	B152, Type ETP	0.182 (AWG 5).
Copper silicon ¹	B97, Alloys A, B, and C	0.144 (AWG 7).
Steel or iron	0.179 (MSG 7).
Aluminum ⁴	B209, Alloy ⁵	5086 0.250 (USSG 3).

¹ Tanks fabricated with these materials must not be utilized for the carriage of diesel oil.

²The gauge numbers used in this table may be found in many standard engineering reference books. The letters "USSG" stand for "U.S. Standard Gauge" which was established by the act of March 3, 1892 (15 U.S.C. 206) for sheet and plate iron and steel. The letters "AWG" stand for "American Wire Gauge" (or Brown and Sharpe Gauge) for nonferrous sheet thicknesses. The letters "MSG" stand for "Manufacturers' Standard Gauge" for sheet steel thicknesses.

³Tanks of more than 400 gallons capacity must be designed with a factor of safety of four on the ultimate strength of the tank material used with a design head of not less than 4 feet of liquid above the top of the tank.

⁴Anodic to most common metals. Avoid dissimilar-metal contact with tank body unless galvanically compatible.

⁵And other alloys acceptable to the Commandant.

(1) All tank joints, connections, and fittings must be welded or brazed, and tanks may not have flanged-up top edges.

(2) A tank exceeding 30 inches in any horizontal dimension must be fitted with vertical baffle plates of the same material as the tank, unless the tank has a greater thickness than minimum requirements and is reinforced with stiffeners. Limber holes at the bottom and air holes at the top of all baffles must be provided.

(3) An opening fitted with a threaded pipe plug may be used on the bottom of the tank for cleaning purposes.

(b) *Supports.* Tanks must be adequately supported and braced to prevent movement. Supports and braces must be insulated from contact with the tank surface using a nonabrasive and nonabsorbent material.

(c) *Fittings.* (1) Filling lines must be at least 1½ inches standard pipe size and extend to within 1½-pipe diameters of the bottom of the tank.

(2) Suction lines from diesel oil tanks may be taken from the bottom provided a shutoff valve is installed at the tank. Tanks for Grades B and C liquids must have top suction only.

(3) Vent lines must be at least equal in size to the filling lines.

(4) When a cargo tank contains Grades B or C liquids, the vent lines must be terminated with an approved pressure vacuum relief valve not less than 3 feet above the weather deck. When a cargo tank contains Grades D or E liquids, the vent line may be terminated with a gooseneck fitted with a flame screen at a reasonable height above the weather deck.

(d) *Hydrostatic tests.* Tanks vented to the atmosphere must be hydrostatically tested to a pressure of 5 pounds per square inch or 1½ times the maximum head to which they may be subjected in service. A standpipe of 1½ feet in length attached to the tanks may be filled with water to ac-

complish the 5 pounds per square inch test.

(e) *Piping systems.* (1) Piping must be copper, nickel copper, or copper nickel, with a minimum wall thickness of 0.035 inches; except that seamless steel piping or tubing providing equivalent safety may be used for diesel cargo systems.

(2) Valves must be of a suitable nonferrous metallic Union Bonnet type with ground seats, except that steel or nodular iron may be used in cargo systems that use steel pipe or tubing.

(3) Aluminum or aluminum alloy valves and fittings may not be used in cargo lines.

(f) *Pumps.* (1) Pumps for cargo dispensing must be of a type satisfactory for the purpose.

(2) A relief valve must be provided on the discharge side of the pump if the pressure under shutoff conditions exceeds 60 pounds. When a relief valve is installed, it must discharge back to the suction of the pump.

(3) Where electric motors are installed with dispensing pumps, they must be explosion-proof and so labeled by UL or another recognized laboratory, as suitable for Class I, Group D atmospheres.

(g) *Grounding.* (1) All tanks and associated lines must be electrically grounded to the vessel's common ground.

(2) A grounded type hose and nozzle must be used for dispensing fuels.

(h) *Cargo tanks installed below decks—additional requirements.* (1) Compartments or areas containing tanks or pumping systems must be closed off from the remainder of the vessel by gastight bulkheads. Such gastight bulkheads may be pierced for a drive shaft and pump engine control rods if the openings are fitted with stuffing boxes or other acceptable gland arrangements.

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(2) Each compartment must be provided with a mechanical exhaust system capable of ventilating the compartment with a complete change of air every 3 minutes. The intake duct or ducts must be of a sufficient size to permit the required air change. The exhaust duct or ducts must be located so as to remove vapors from the lower portion of the space or bilges.

(3) The ventilation outlets must terminate more than 10 feet from any opening to the interior of the vessel that normally contains sources of vapor ignition. The ventilation fan must be explosion-proof and unable to act as a source of ignition.

(4) Cargo pumps must not be installed in the cargo tank compartment unless the drive system is outside the compartment. Suction pipelines from cargo tanks must be run directly to the pump, but not through working or crew spaces of the vessel.

(5) Tanks must be located so as to provide at least 15 inches of space around the tank, including top and bottom, to permit external examination.

(6) Shutoff valves must be provided in the suction lines as close to the tanks as possible. Valves must be installed so as to shut off against the flow. Remote control of the shutoff valve must be provided where the examiner deems necessary.

(i) *Exemption for older vessels.* Tanks, containers, and associated piping systems in use prior to December 1, 1969, on a vessel the construction of which was contracted for before May 31, 1976, are exempt from the requirements of this section provided they are maintained in a condition that the Officer in Charge, Marine Inspection, finds satisfactory, and provided that major repairs or replacement of exempted equipment and systems is in accordance with this part.

§ 105.13 Electrical fittings and fixtures.

(a) In compartments or areas containing tanks or pumps handling petroleum products other than Grade E products, no electrical fittings, fixtures, or equipment may be installed or used unless approved for a Class I, Group D hazardous location and labeled as such by UL or another recognized laboratory.

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(b) All electrical equipment, fixtures, and fittings located within 10 feet of a vent outlet or a dispensing outlet must be explosion-proof and labeled as such by UL or another recognized laboratory, as suitable for Class I, Group D atmospheres.

(c) All electrical equipment must be grounded to the vessel's common ground.

(d) Tanks, containers, and associated piping systems in use prior to December 1, 1969, on a vessel the construction of which was contracted for before May 31, 1976, are exempt from the requirements of this section provided they are maintained in a condition that the Officer in Charge, Marine Inspection, finds satisfactory, and provided that major repairs or replacement of exempted equipment and systems is in accordance with this part.

§ 105.14 Fire extinguishing equipment.

(a) Each vessel must carry at least two B-II dry chemical or foam portable fire extinguishers that comply with 46 CFR 28.160 and bear the UL marine type label, and must be located at or near each dispensing area. This equipment must be examined prior to issuing a letter of compliance.

(b) Each vessel must be provided with a hand-operated portable fire pump having a capacity of at least 5 gallons per minute and equipped with a suction and discharge hose suitable for use in firefighting. The pump may also serve as a bilge pump.

(c) A self-priming power-driven fire pump must be installed on each vessel of more than 65 feet in length overall. The pump must be able to discharge an effective stream from a hose connected to the highest outlet, must be fitted with a pressure gauge, and must have a minimum capacity of 50 gallons per minute at a pressure of not less than 60 pounds per square inch at the pump outlet. The pump must be self-priming and connected to the fire main and may be driven off a propulsion engine or other source of power. The pump may also be connected to the bilge system so that it can serve as either a fire pump or a bilge pump.

(d) Each vessel that must have a power-driven fire pump must also have

a fire main system that includes a fire main, hydrants, hoses, and nozzles.

(1) Fire hydrants must be of sufficient number and located such that any part of the vessel may be reached with an effective stream of water from a single length of hose.

(2) All piping, valves, and fittings must be in accordance with good marine practice and suitable for the purpose intended.

(3) One length of the fire hose must be attached to each fire hydrant at all times. The fire hose may be a commercial fire hose or equivalent of not more than a 1½-inch diameter, or a garden hose of not less than a ⅝-inch nominal inside diameter. The hose must be in one piece, not less than 25 feet, and not more than 50 feet in length. If a 1½-inch diameter fire hose is used after January 1, 1980, each length of hose must be lined as a commercial fire hose that conforms to UL 19 (incorporated by reference; see §105.3). A hose that bears a UL label as a lined fire hose is accepted as conforming to this requirement. The hose must have a combination nozzle approved by the Commandant in accordance with 46 CFR subpart 162.027. If a garden hose is used, it must be of a good commercial grade constructed of an inner rubber tube, plies of braided cotton reinforcement, and an outer rubber cover, or of equivalent material, and must be fitted with a commercial garden hose nozzle of good-grade bronze or equivalent metal. All fittings on fire hoses must be of brass, copper, or other suitable corrosion-resistant metal.

§ 105.15 Cargo transfer operations.

During a transfer operation involving bulk liquid flammable or combustible cargoes—

(a) The operation must comply with any conditions listed in the vessel's certificate of compliance;

(b) The person in charge of the operation must ensure that—

(1) Any galley fire is safely maintained during the operation or immediately extinguished if it cannot be so maintained; and

(2) No smoking takes place in the vicinity of the operation.

(c) A red flag by day or a red electric lantern at night, visible on all sides,

must be used to signal a dockside transfer operation. For non-dockside transfer operations, a red flag must be used to signal the operation; and

(d) During a dockside transfer operation, a placard must be displayed to warn persons approaching the gangway. The placard must use letters at least 2 inches high, bear the heading "Warning," and prohibit open lights, smoking, or visitors.

(e) The vessel, personnel, and operation are subject to all applicable pollution prevention requirements set forth in 33 CFR parts 155 and 156.

PART 106—REQUIREMENTS FOR NONQUALIFIED VESSELS THAT PERFORM CERTAIN AQUACULTURE SUPPORT OPERATIONS

Sec.

106.100 Purpose.

106.105 Applicability.

106.110 Definitions.

106.115 Notification requirements.

106.120 Operational and geographic requirements.

106.125 Penalties.

AUTHORITY: Sec. 901(c)(2), Pub. L. 111-281, 124 Stat. 2905, Title IX; Department of Homeland Security Delegation No. 0170.1.

SOURCE: 81 FR 63426, Sept. 15, 2016, unless otherwise noted.

EFFECTIVE DATE NOTE: At 81 FR 63426, Sept. 15, 2016, Part 106 was added, effective Oct. 17, 2016.

§ 106.100 Purpose.

The regulations in this part implement 46 U.S.C. 12102(d).

§ 106.105 Applicability.

The regulations in this part apply to a documented vessel with only a registry endorsement or a foreign-flagged vessel that has been issued an Aquaculture Support Operations Waiver by the Department of Transportation (DOT) under 46 U.S.C. 12102(d)(1), for the purpose of conducting aquaculture support operations.

§ 106.110 Definitions.

Aquaculture support operations means activities that treat aquaculture fish for or protect aquaculture fish from disease, parasitic infestation, or other threats to their health.