

§ 39.40-3

46 CFR Ch. I (10-1-04 Edition)

must meet the requirements of this subpart in addition to the requirements of subparts 39.10, 39.20, and 39.30 of this part.

(b) An arrangement to control vapor emissions during a lightering or topping-off operation which does not use vapor balancing must receive approval from the Commandant (G-MSO).

(c) A vapor balancing operation must not use a compressor or blower to assist vapor transfer without approval from the Commandant (G-MSO).

(d) Vapor balancing is prohibited when the cargo tanks on a vessel discharging cargo are inerted and the cargo tanks on a vessel receiving cargo are not inerted.

(e) A vessel which intends to engage in a lightering or topping-off operation while collecting cargo vapor from other than crude oil, gasoline, or benzene must receive specific approval from the Commandant (G-MSO).

[CGD 88-102, 55 FR 25446, June 21, 1990; 55 FR 39270, Sept. 26, 1990, as amended by CGD 95-072, 60 FR 50462, Sept. 29, 1995; CGD 96-041, 61 FR 50727, Sept. 27, 1996]

§ 39.40-3 Design and equipment for vapor balancing—TB/ALL.

(a) If the cargo tanks on a vessel discharging cargo and a vessel receiving cargo are inerted, the service vessel must:

(1) Have a means to inert the vapor transfer hose prior to transferring cargo vapor; and

(2) Have an oxygen analyzer with a sensor or sampling connection fitted within 3 meters (9.74 ft.) of the vessel vapor connection which:

(i) Activates an audible and visible alarm at a location on the service vessel where cargo transfer is controlled when the oxygen content in the vapor collection system exceeds 8 percent by volume;

(ii) Has an oxygen concentration indicator located on the service vessel where the cargo transfer is controlled; and

(iii) Has a connection for injecting a span gas of known concentration for calibration and testing of the oxygen analyzer.

(b) If the cargo tanks on a vessel discharging cargo are not inerted, the vapor collection line on the service

vessel must be fitted with a detonation arrester that meets the requirements of 33 CFR 154.822(a) located within 3 meters (9.74 ft.) of the vessel vapor connection.

(c) An electrical insulating flange or one length of non-conductive hose must be provided between the vessel vapor connection on the service vessel and the vapor connection on the vessel being lightered or topped-off.

§ 39.40-5 Operational requirements for vapor balancing—TB/ALL.

(a) During a lightering or topping-off operation each cargo tank being loaded must be connected by the vapor collection system to a cargo tank which is being discharged.

(b) If the cargo tanks on both the vessel discharging cargo and the vessel receiving cargo are inerted, the following requirements must be met:

(1) Each tank on a vessel receiving cargo which is connected to the vapor collection system must be tested prior to cargo transfer to ensure that the oxygen content in the vapor space does not exceed 8 percent by volume. The oxygen content of each tank must be measured at a point one meter (3.28 feet) below the tanktop and at a point equal to one-half of the ullage. Where tanks have partial bulkheads, the oxygen content of each area of that tank formed by each partial bulkhead must be measured at a point one meter (3.28 feet) below the tanktop and at a point equal to one-half of the ullage;

(2) The oxygen analyzer required by § 39.40-3(a) must be tested for proper operation prior to the start of each transfer operation;

(3) The oxygen content of vapors being transferred must be continuously monitored during the transfer operation;

(4) Cargo transfer must be terminated if the oxygen content exceeds 8 percent by volume and must not be restarted until the oxygen content in the tanks of the vessel receiving cargo is reduced to 8 percent by volume or less; and

(5) The vapor transfer hose must be purged of air and inerted prior to starting vapor transfer.

(c) The isolation valve, required by § 39.20-1(c) of this part, located on the

Coast Guard, DHS

§ 39.40-5

service vessel must not be opened until the pressure in the vapor collection system on the vessel receiving cargo exceeds the pressure in the vapor collection system on the vessel discharging cargo.

(d) The cargo transfer rate must be controlled from the vessel discharging cargo, and must not exceed the maximum allowable transfer rate for the vessel receiving cargo.

(e) The pressure in the vapor space of any cargo tank connected to the vapor collection line on either the vessel receiving cargo or the vessel discharging

cargo must not exceed 80 percent of the lowest setting of any pressure relief valve during ballasting or cargo transfer.

(f) All impressed current cathodic protection systems must be deenergized during cargo transfer operations.

(g) Tank washing is prohibited unless the cargo tanks on both the vessel discharging cargo and the vessel receiving cargo are inerted or the tank is isolated from the vapor collection line.

[CGD 88-102, 55 FR 25446, June 21, 1990; 55 FR 39270, Sept. 26, 1990]

INDEX

SUBCHAPTER D—TANK VESSELS

EDITORIAL NOTE: This listing is provided for informational purposes only. It is compiled and kept current by the U.S. Coast Guard, Department of Homeland Security. This index is updated as of October 1, 2003.

Part, subpart, or section

A

Accident or casualty report	Subpart 35.15
Accommodations for crew	Subpart 32.40
Application	32.40-1
Construction	32.40-15
Heating and cooling	32.40-50
Hospital space	32.40-35
Insect screens	32.40-55
Location of Crew spaces	32.40-10
Messrooms	32.40-30
On tankships constructed before June 15, 1987	32.40-65
On tankships of less than 100 gross tons and manned tank barges	32.40-60
Other spaces	32.40-40
Sleeping Accommodations	32.40-20
Washrooms and toilet rooms	32.40-25
Aids to Navigation:	
Charts or information regarding	35.20-1
Coast pilots	35.20-1
Current tables	35.20-1
Light lists	35.20-1
Nautical publications	35.20-1
Notice to Mariners	35.20-1
Sailing directions	35.20-1
Tide tables	35.20-1
Air compressor	32.35-15, 35.35-85
Alarm bells	32.25
Marking required	35.40-5
Switches, markings of	35.40-1
Alarm systems	Subpart 32.25
Alcohol or drugs, used by crew	35.05-25
Alterations and repairs, regulations governing	30.01-10, 31.10-25
American Bureau of Shipping	31.10-1
Anniversary date	30.10-2a
Annual inspection:	
Application for:	31.01-15
Fire extinguishers	31.10-18
Anode installations, sacrificial	35.01-25
Appeal right of	30.20-50
Application for inspection	31.01-15, 31.1-20
Application, electrical installations Subpart	32.45
Application of regulations:	
Governing alterations and repairs	30.01-10

46 CFR Ch. I (10-1-04 Edition)

Vessels on an international voyage	30.01-6
Approved, definition.....	30.10-3
Arresters, flame.....	30.10-23, 32.20-10
Assignment of functions.....	31.01-10
Auto pilot	35.20-45
Auxiliary machinery:	
Construction	32.35-1
Design	32.35-1
Installation of internal combustion engine	32.35-5
Axes, fire	34.05-20, 34.60

B

Ballasting.....	31.10-32
Bell, alarm Subpart	32.25
Bell signals.....	32.30-5
Bilge injection valves	31.10-20
Bilge systems Subpart	32.52
Bills of lading required.....	35.01-10
Boilerroom, fire extinguishing systems for	34.05-5
Boilers:	
Accident report by chief engineer	35.25-5
Examination by engineer	35.25-1
Safety rules for fires	35.30-5
Breeches buoy, poster containing instruction regarding use of.....	Subpart 35.12
Breathing apparatus, fresh air	35.30-20, 35.40-20
Butterworth plates, safety rules regarding	35.30-10

C

Carbon dioxide extinguishing systems:	
Alarms.....	34.15-30
Amount of carbon dioxide required.....	34.15-5
Application	34.15-1
Controls.....	34.15-10
Discharge outlets.....	34.15-25
Dry cargo spaces	34.15-5
Enclosed ventilation systems for rotating electrical propulsion equip- ment.....	34.15-5
Enclosure openings.....	34.15-35
Installation contracted for prior to January 1, 1962	34.15-90
Machinery spaces pumprooms paint lockers and similar spaces	34.15-5
Piping	34.15-15
Pressure relief	34.15-40
Quantity, pipe sizes, and discharge rates	34.15-5
Storage	34.15-20
Total available supply	34.15-5
Cargo definition	30.10-5
Cargo discharge	32.5-3
Cargoes elevated temperatures.....	Part 36
Cargoes regulated.....	Subpart 30.25
Cargo gear certificates or registers	31.10-16, Subpart 31.37
Cargo gear inspection	31.10-16, 31.37
Cargo handling:	
Equipment maintenance.....	35.35-70
General	35.35
Liquefied petroleum gases	Subpart 38.15
Loading information.....	35.35
Safety requirements	35.30

Subchapter D Index

Unmanned tank barges	35.35-1
Cargo handling room, definitions.....	30.10-6
Cargo hose	35.35-15, 35.35-70, 38.15-5
Cargo piping.....	40.15-1,38.10-10
Cargo pumps.....	Subpart 32.50
Cargo pump relief valves.....	36.10-1
Cargo pump, testing of	35.35-70
Cargo tank hatches, ullage holes and Butterworth plates, safety rules re- garding	35.30-10
Cargo tanks:	
Construction and testing of	32.60-40, 32.65-40, 32.70-25, 32.75-10
Design and installation of.....	38.05
Electric bonding and grounding of	32.75-15
Filling densities	38.15-1
Fire extinguishing systems for	34.05-5
Hydrostatic test of.....	38.25-1
Installation for carrying liquids at elevated temperatures	36.05-1
Independent.....	32.60-30, 32.65-30, 32.70-25, 32.75-10
Lagging.....	38.05-20
Liquefied petroleum gases.....	Part 38
Liquid level gauging devices	38.10-20, 32.20-20
Marking of	38.05-5
Periodic test.....	38.25-1
Piping	38.10-10
Refrigeration system used with.....	38.05-25
Removal from service	38.25-5
Venting of.....	Subpart 32.55, 38.20-1, 38.20-5
Cargo transfer:	
Approval of	35.35-25
Conditions affecting	35.35-40
Connecting of cargo hose.....	35.35-15
Declaration of inspection	35.35-30
Duties of senior deck officer.....	35.35-35
Electric bonding.....	35.35-5
Filling densities	38.15-1
Handling of packaged goods, etc.....	35.35-55
Inspection prior to.....	35.35-2 0
Liquefied flammable gases.....	38.15-5
Maintenance of equipment	35.35-70
Men on duty	35.35-1
Tank barges	35.35-60
Termination of	35.35-50
Towing vessels furnishing steam, air or electricity	35.35-45
Vapor control systems.....	Part 39
Vessels coming alongside during	35.35-42
Carriage of person other than crew	35.01-15
Casualty or accident report	Subpart 35.15
Certificate of class	31.10-5
Certificate of inspection:	
Application for	31.01-15, 31.01-20
Cargoes of elevated temperatures, carriage of.....	36.01-5
Delivery of	31.05-1
Endorsed for liquefied flammable gas	38.01-5
Indication of water traveled on.....	31.20-1
Ocean or unlimited coastwise vessels on inland and Great Lakes Routes-TB/OC.....	30.01-7
Posting of.....	31.05-5
Terms, endorsements.....	31.05-15

46 CFR Ch. I (10–1–04 Edition)

Validity	31.10-17a
Certificates regarding shipboard cargo gear.....	31.10-16, 31.37
Certificates under International Convention for Safety of Life at Sea.....	31.10-16, 31.37
1960 American Bureau of Shipping.....	31.40-45
Application	31.40-1
Cargo Ship Safety Construction Certificate	31.40-5
Cargo Ship Safety Equipment Certificate	31.40-10
Cargo Ship Safety Radiotelegraphy Certificate	31.40-15
Cargo Ship Safety Radiotelephony Certificate.....	31.40-20
Duration of Convention Certificate	31.40-40
Exemption Certificate	31.40-25
Posting of Convention Certificates.....	31.40-35
Certified crewmembers	31.15-1
Certified definition	30.10-7
Charts of navigable waters required	35.20-1
Chief Engineer:	
Repairs of boilers and unfired pressure vessels and reports or acci- dents.....	35.25-5
Class, certificate of	31.10-5
Classification requirements, definition	30.10-9
CO ₂ fire apparatus, marking required.....	35.40-10
Coast Guard District Commander	30.10-19
Coast pilots	35.20-1
Coastwise, definition	30.10-11
Cofferdam:	
Definition of	30.10-13
Location of.....	32.60-10, 32.65-15, 32.70-10
Requirements of	32.70-10
Venting of.....	32.55-45
Combustible gas indicator.....	35.30-15
Combustible liquids, definition	30.10-15
Commandant, definition.....	30.10-17
Commodities regulated.....	Subpart 30.25
Communication, interior system	Subpart 32.30
Construction and testing of cargo tanks and bulkheads on tank ves- sels	32.65-40, 32.60-40, 32.75-10
Construction of tank barges of materials other than steel or iron, re- quirements	32.80-1
Construction of tank vessels:	
Cargo spaces segregated from cargo tanks	32.57-10, 32.60
Ceilings	32.57-1
Deck	32.57-10
Enclosed spaces	32.60-10
General cargo spaces	32.60-15
Hatch covers.....	32.57-10
Hull requirements.....	32.60, 32.65, 32.70, 32.75
Lamp Lockers.....	32.57-10
Living quarters.....	32.60-25, 32.65-25
Location of cargo tank spaces.....	32.60-10
Location of independent	tanks32.60-30
Machinery	32.35-1
Paint lockers	32.57-10
Requirements for scantlings, material and workmanship	32.60-1, 32.65-1, 32.70- 5, 32.75-5
Segregation of cargo.....	32.60-10
Stowage spaces	32.60-10
Subdivision of cargo space.....	32.60-5, 32.65-10

Subchapter D Index

Testing of cargo tanks and bulkheads	32.60-40, 32.65-40, 32.70-25, 32.75-10
Construction of vessels for liquefied gases.....	38.05-1
Construction of wood hull tank vessels:	
Application of regulations	32.75-1
Electric bonding and grounding of cargo tanks.....	32.75-15
Hold spaces	32.75-20
Independent cargo tanks	32.75-10
Convention certificates.....	Subpart 31.40
Conversion of vessels to tank vessels	31.10-10
Crew:	
Certified members of.....	31.15-1
Illness of	35.05-25
Licensed officers	31.15-1
Physical condition of.....	35.05-20
Required for cargo handling.....	35.35-1
Crew accommodations:	
Inspection of.....	31.10-45
Requirements for	Subpart 32.40
Sanitary condition of.....	35.01-5
Current tables	35.20-1

D

Deck foam system.....	Subpart 34.20
Declaration of inspection prior to bulk cargo transfer	35.35-30
Definition of terms	Subpart 30.10
Delivery of certificate of inspection	31.05-1
Design:	
Cargo tanks.....	38.05-2
Main and auxiliary machinery.....	32.35-1
Vapor control system.....	Subpart 39.20
Devices, spark producing.....	35.30-35
Display of Plans	35.10-3
Draft marks.....	32.05-1, 35.20-5
Drills:	
Boat.....	35.10-5
Fire	35.10-5
Line throwing appliance	35.10-1
Drydock or hauling out	31.10-20

E

Effective date of regulation.....	30.01-15
Electric bonding and grounding.....	32.75-15, 35.35-5
Electrical installations.....	31.35, 32.45
Elevated temperature cargoes:	
Cargo pump relief valves.....	36.10-1
Certificate of inspection	36.01-5
Flame Screens, vents and ventilations	36.20-1
Installation of cargo tanks	36.05-1
Lagged tanks, periodic inspections.....	36.30-1
Protection of personnel	36.05-10
Ventilation of pumproom.....	36.20-5
Emergency:	
Authority of senior officer	35.35-75
Breathing equipment, marking	35.40-20
Lighting and power systems.....	35.10-15
Outfit.....	35.30-20
Repairs to firefighting equipment	35.01-35

46 CFR Ch. I (10-1-04 Edition)

Signals	35.10-5
Training	35.10-1
Enclosed ventilating system, fire extinguishing system	34.05-5
Enforcement.....	30.20-1
Engineering, electrical	31.35, 32.45
Engineering, marine Subpart	31.30
Equipment:	
Cargo handling.....	Subpart 32.50
Emergency.....	35.30-20
Fire and emergency, marking.....	Subpart 35.40, 35.40-40
Installed but not required.....	34.01-5
Portable electrical.....	35.30-30
Previously approved	30.01-15
Equipment installations	Subpart 32.20
Equipment installations on vessels during World War II.....	32.20-1
Equipment, navigation	Subpart 32.15
Equivalentents	30.15-1
Escape, means of.....	32.02-1
Examination of tail shaft	61.15-15
Examination of sea chests, sea valves, sea strainers, and bilge injection valves.....	31.10-20
Exemption certificate.....	31.40-25
Explosives, transportation of	35.30-25

F

Fire axes.....	34.05-20, 34.60
Location of	34.60-10
Number required	34.60-5
Fire drills.....	35.10-5
Fire extinguishers, portable and semiportable:	
Application	34.50-1
Classification.....	34.50-5
Location	34.50-10
Spare charges	34.50-15
Vessels contracted for prior to January 1, 1962	34.50-90
Fire extinguishing deck foam system:	
Application	34.20-1
Area protected	34.20-5
Cargo area definitions.....	34.20-3
Controls.....	34.20-10
Discharge outlets.....	34.20-20
Installations contracted for prior to January 1, 1970.....	34.20-90
Marking.....	35.40-10
Piping	34.20-15
Quantity of foam required	34.20-5
Rate of application.....	34.20-5
Separate supply of foam-producing material	34.20-5
Supply of foam producing material.....	34.20-5
Water supply	34.20-5
Fire extinguishing fixed foam systems:	
Additional protection required.....	34.17-25
Application	34.17-1
Area protected	34.17-5
Controls.....	34.17-10
Discharge outlets.....	34.17-20
Installations contracted for prior to January 1, 1962.....	34.17-90
Piping	34.17-15

Subchapter D Index

Rate of Application	34.17-5
Separate supply of foam-producing material	34.17-5
Supply of foam producing material	34.17-5
Water supply for required pumps	34.17-5
Fire extinguishing systems:	
Boilerrooms	34.05-5
Carbon dioxide	34.15
Cargo tanks	34.05-5
Dry cargo compartments	34.05-5
Enclosed ventilating systems	34.05-5
Foam, deck	Subpart 34.20
Foam, fixed	Subpart 34.17
Installations contracted for prior to January 1, 1962	34.10-90
Lamp, paint lockers and similar pages	34.05-5
Machinery spaces	34.05-5
Marking	35.40-10
Piping	34.10-15
Pumprooms	34.05-5
Fire extinguishing system, steam smothering:	
Application	34.13-1
Installations contracted for prior to January 1, 1962	34.17-90
Firefighting equipment:	
Application	34.01-1
Fire axes	34.05-20, 34.60
Fire main system	34.05-1
Hose	34.10-10
Nozzles	35.40-10
Hydrants	35.40-15
Installed but not required	34.01-5
Portable, vessel's name on	35.40-40
Protection for unusual arrangements or special products	34.01-10
Testing and inspection	31.10-18, 31.10-19
Fire main system:	
Application	34.10-1
Fire pumps	34.10-5
Fire station hydrants hose and nozzles	34.10-10
Fire, matches and smoking safety rules	35.30-5
Fire protection, structural, for tank vessels contracted for on or after	
January 1, 1963	Subpart 32.57
Fire protection, structural for ships with a keel laying date on or after	
January 1, 1975	Subpart 32.56
Fire station	34.10-10
Fitting and piping for liquefied petroleum gases	38.10-10
Fittings, cargo	Subpart 32.50
Flame arresters	30.10-23, 32.20-10
Flame screen	30.10-25, 36.20-1
Flammable liquid, definition	30.10-22
Flammable liquid and gas fuels as ships' stores	35.30-40
Flammable or inflammable, definition	30.10.21
Flashpoint, definition	30.10-27
Foam hose/monitor stations	35.40-17
Fresh air breathing apparatus	35.30-20, 35.40-20
Fuel oil, requirements	35.25-10
Fuels, flammable liquid and gas	35.30-40
Functions, assignment of	30.01-3

G

Galley fires, safety rules	35.30-5
----------------------------------	---------

46 CFR Ch. I (10–1–04 Edition)

Gangway signs	35.30-1
Gas chemist certified by American Bureau of Shipping	35.01-1
Gas free, definition	30.10-29
Gauge, liquid level	32.20-20, 38.10-20, 39.20-3
Gear, shipboard cargo, certificates or registers	31.10-16, 31.37
General alarm switch, marking of	35.40-1
General alarm systems:	
Alarm bells for tankships constructed on or after September 15, 1943	32.25-1
Alarm bells for tankships constructed prior to September 15, 1943	32.25
Alarm bells for manned barges	32.25
General rules and regulations	30.10-31
Grade D, combustible liquid	30.10-15
Grade E, combustible liquid	30.10-15
Great Lakes	30.10-33

H

Hauling out or drydocking	31.10-20
Headquarters	30.10-35
Hose, cargo	32.50-30
Hospital accommodations	32.40-1
Hull and cargo tank requirements:	
Alternative arrangements	32.63-8
Application	32.63-1
Barge hull classifications	32.63-5
Cargo tanks and supports	32.63-25
Hull structure	32.63-20
Rakes and coamings	32.63-10
Hull requirements	32.60, 32.63, 32.65, 32.70, 32.75, 32.80
Hydrostatic test for cargo tanks	38.25-1

I

Independent cargo tanks	32.60-30, 32.60-35, 32.65-30, 32.70-25 32.75-10
Inert gas system	Subpart 32.53
Inspection:	
Alternations and repairs	31.10-25
Bilges	31.10-50
Certificate of	Subpart 31.05
Conversion of a vessel to a tank vessel, application for	31.01-20
Crew accommodations	31.10-45
During trial trip	31.10-40
General requirements	Subpart 31.01
Initial, scope of	31.01-5
Lagged tanks	36.30-1
New tank vessel	31.01-20, 31.10-5
Plans and specifications	31.10-5
Recognized classification society	31.10-1
Required	31.01-1
Required before making repairs	35.01-1
Required, liquefied, petroleum gas tanks	38.25-1
Required on new tank vessels	31.01-1
Safety valves	38.25-10
Two years	31.10-15, 31.10-17
Inspection and certification of cargo gear	31.10-16
Inspection and test, periodic, of independent cargo tanks	38.25
Inspection of cargo gear:	
Additions to gear	31.37-60

Subchapter D Index

Advance notice that cargo gear testing is desired.....	31.37-80
Alterations, renewals, or repairs of cargo gear	31.37-65
Annealing	31.37-55
Cargo gear plans	31.37-15
Certification	31.10-16
Definitions of terms	31.37-3
Dismantling or disassembling.....	31.37-3
Factors of safety.....	31.37-25
Loose gear certificates and tests.....	31.37-30
Marking of booms and cranes.....	31.37-45
Proof test of cargo gear as a unit	31.37-40
Records	31.37-75
Responsibility for conducting required tests and examinations	31.37-85
Responsibility of ship's officer for inspection of cargo gear.....	31.37-70
Safe working load	31.37-3
Tests and examinations of shipboard cargo gear	31.37-5
Thorough examination.....	31.37-3
Ton.....	31.37-3
When made.....	31.37-1
Installation of cargo tanks.....	38.05-10
Installation of internal combustion engines.....	32.35-5
Installations made during the Unlimited National Emergency.....	32.20-1
Internal combustion installations, fire extinguishing systems	34.05-5
International voyage.....	30.01-6
Interior communications system:	
Bell signals between engine room and pilothouse.....	32.30-5
Inspection of	32.30
Telegraph systems	32.30
Telephone equipment	32.30-1
Voice tubes.....	32.30-1
Issuance of certificates of inspection.....	31.05-1

L

Lagging for independent cargo tanks.....	38.05-20
Lakes, bays and sounds	30.10-41
Lamp and paintrooms:	
Fire extinguishing system for.....	34.05-5
Fireproofing of.....	32.85-1
Licensed officers required	31.15-1
Lifeboat drills	35.10-5
Lifesaving Appliances and Approaches	Subpart 31.36
Actions to be required	35.07-10
Certificate of inspection regulation.....	31.05-1
Drills.....	35.10-1
Inspections required.....	31.01-1
Musters	35.10-5
Lights, flashing the ray of.....	35.20-30
Light List.....	35.20-1
Liquid, flammable	30.10-22
Liquid level gauging devices	32.20-20, 38.10-1, 38.10-20 39.20-3
Liquefied flammable gas.....	30.10-39
Cargo hose.....	38.15-5
Cargo piping	38.10-10
Certificate of inspection	38.01-5
Design and construction of cargo tanks.....	38.05-2
Design and construction of nonpressure vessel type cargo tanks	38.05-4
Design and construction of pressure vessel type cargo tanks.....	38.05-3

46 CFR Ch. I (10-1-04 Edition)

Design and construction of vessels, general.....	38.05-1
Electrical installations	38.15-15
Filling and discharge pipes	38.10-5
Filling of tanks	38.15-1
Installation of cargo tanks.....	38.05-10
Insulation	38.05-20
Leak detection systems.....	38.15-10
Liquid level gauging devices.....	38.10-20
Markings.....	38.05-5
Refrigerated systems.....	38.05-25
Remote shutdowns.....	38.15-20
Removal of defective tanks.....	38.25-5
Safety relief valves.....	38.25-10
Safety relief valves for pressure vessel type tanks.....	38.10-15
Scope of regulations.....	38.01-1
Tests and inspections.....	38.25-1
Transportation of.....	Part 38
Transportation of portable cylinders or portable tanks containing or having previously contained liquefied flammable gases in dry cargo spaces.....	38.01-2
Valves, fittings, and accessories	38.10-1
Vapor control system	Part 39
Ventilation	38.20-10
Venting.....	38.20-1, 38.20-5
Living quarters.....	32.60-25, 32.65-25
Load lines.....	Subpart 31.25
Loading information.....	31.10-32
Logbook entries:	
Actions required to be logged.....	35.07-10
Application	35.07-1
Draft of tank ship	35.20-5
Fire and lifeboat drills.....	35.10-5
Fuel oil requirements	35.25-10
Logbooks and records.....	35.07-5
Steering gear tests	35.20-10

M

Machinery spaces, fire extinguishing systems for	34.05-5
Machinery, main and auxiliary:	
Accident report by chief engineer.....	35.25-5
Air compressors	32.35-15
Construction	32.35-1
Design	32.35-1
Examination by engineer	32.25-1
Installation of internal combustion engines.....	32.35-5
Steering apparatus	32.35-10
Maneuvering characteristics, display of.....	35.20-40
Manning:	
Tank vessels.....	31.15, 35.35-1
Marine engineering and material specifications.....	Subpart 31.30
Marine inspector, authority of	31.01-10
Markings:	
Booms and cranes	31.37-45
CO ₂ alarm.....	35.40-7
Draft marks	32.05-1
Emergency breathing apparatus.....	35.40-20
Emergency lights.....	35.40-6

Subchapter D Index

Fire and emergency equipment.....	Subpart 35.40
Firehose stations.....	35.40-15
General alarm bell.....	35.40-5
General alarm bell switch.....	35.40-1
Lifesaving equipment.....	35.40-40
Portable fire extinguishers.....	35.40-25
Steam, foam or CO ₂ apparatus.....	35.40-10
Steering station.....	35.40-35
Tanks for liquefied flammable gas, marking of.....	38.05-5
Vapor control system piping.....	39.20-1
Vessel's name.....	32.05-10, 32.05-15
Vessel's name on equipment.....	32.05-5
Master:	
Casualty or accident report.....	35.15-1
Licensed officer.....	35.05-1
Station bills and muster list.....	35.10-1, 35.10-5
Master's and officer's responsibility.....	35.20-20
Matches:	
Use of.....	35.30-5
Materials specification.....	Subpart 31.30
Material, scantlings and workmanship.....	32.60-1, 32.65-1
Means of escape.....	32.02-1
Muster list.....	35.10-1, 35.10-5

N

Nautical publications.....	35.20-1
Navigation, use of Auto Pilot.....	35.20-45
Navigation equipment:	
Anchors for seagoing barges.....	32.15-15
Magnetic compass and gyro compass.....	32.15-35
Radar.....	32.15-30
Sounding machines.....	32.15-10
Whistles.....	32.15-5
New tank vessels, inspection of.....	31.10-5
New tank vessels, plans for inspection of.....	31.10-5(a)
Notice to mariners.....	35.20-1

O

Ocean, definition.....	30.10-45
Officer in Charge, Marine Inspection.....	30.10-47
Officers required on tank vessels.....	Subpart 35.05
Open hopper type barges.....	35.01-45
Overfill protection, liquid, tank barge.....	39.20-9
Overfill protection, liquid, tank ship.....	39.20-7
Overpressure and vacuum protection, vapor, tank barge and ship.....	39.20-11
Oxygen breathing apparatus, marking of.....	35.40-20

P

Paintrooms.....	Subparts 32.85, 34.05-05
Penalties for violations of regulations.....	30.20-10
Period covered by certificate of inspection.....	31.05-10
Permit definition.....	30.10-49
Permit to proceed to another port for repairs.....	31.10-35
Piping:	
Fire extinguishing systems.....	34.10-10, 34.10-15, 34.10-90, 34.15-15, 34.17-15, 34.20-15, 34.25-15

46 CFR Ch. I (10–1–04 Edition)

Piping, bilge.....	32.52-5
Piping, cargo.....	Subpart 32.50
Cargo tanks.....	38.10-10
Steering apparatus.....	32.35-10
Placard of lifesaving signals and breeches buoy instructions.....	Subpart 35.12
Application.....	35.12-1
Availability.....	35.12-5
Plans, Display of.....	35.10-3
Plans for inspection of new tank vessels.....	31.10-5(a)
Portable and semiportable extinguishers.....	34.05-10, 34.50
Portable tanks-interpretive rulings.....	30.01-20
Portable electrical equipment.....	35.30-30
Posting of certificate of inspection.....	31.05-5
Pressure-vacuum relief valve.....	30.10-55, 32.20-5
Prevention of oil pollution.....	35.01-40
Proof test of cargo gear as a unit.....	31.37-40
Protection for personnel.....	36.05-10
Pumprooms:	
Electrical installations.....	32.60-20
Fire extinguishing systems for.....	34.05-5
Lighting.....	32.60-20
Location of.....	32.60-20, 32.65-20
Requirements for.....	32.70-15, 32.70-20
Ventilation.....	32.60-20, 36.20-5
Pumps, bilge.....	32.60-20, 36.20-5
Pumps, cargo.....	32.52-1

Q

Quarters, living.....	32.60-25, 32.65-25
-----------------------	--------------------

R

Radar.....	32.15-30
Radio room warning signs.....	35.30-1
Recognized classification society, definition.....	30.10-57
Refrigerated systems.....	38.05-25
Registers regarding shipboard cargo gear.....	31.10-16, Subpart 31-37
Regulations:	
Application of.....	30.01-5
Authority vested in Commandant.....	30.01-1
Effective date.....	30.01-15
Explanation of vessel description.....	30.01-5
Governing alterations and repairs.....	30.01-10
Liquefied flammable gas.....	Part 38
Scope of.....	36.01-1
Vapor control system.....	Part 39
Reid vapor pressure, definition.....	30.10-59
Reinspection.....	31.10-17
Relief valves:	
Cargo pump.....	36.10-1
Cargo pump, testing of.....	35.35-70
Cargo tanks.....	38.10-15
Repairs:	
Application of regulations.....	30.01-10
Firefighting equipment.....	35.01-35
Inspection before making.....	35.01-1
Involving hot work.....	35.01-1
Permit to proceed to another port.....	31.10-35

Subchapter D Index

Reports of engineers.....	35.25-5
Right of appeal	30.20-50
Rivers, definition.....	30.10-61
Rudder:	
Indicators	35.40-35

S

Safety radio certificate	31.40-15
Safety requirements:	
Means of escape.....	32.02-1
Safety relief valves for cargo tanks.....	38.10-15
Safety rules.....	Subpart 35.30
Safety valve seal, breaking of	35.25-20
Sailing directions.....	35.20-1
Sanitary inspection by master and chief engineer.....	35.01-5
Scantlings, material and workmanship.....	32.60-1, 32.65-5
Scuppers, closing of.....	35.35-10
Sea chests, examination of.....	31.10-20
Sea strainers, examination of.....	31.10-20
Sea valves, closing of.....	35.35-10
Segregation of spaces containing the emergency source of electric power	32.60-45
Shipboard cargo gear, certificates or registers.....	31.10-16, Subpart 31.37
Shipping papers required.....	35.01-10
Sleeping quarters.....	Subpart 32.40
Smoking safety rules	35.30-5
Sounding machines.....	32.15-10
Spark arrester	30.10-63
Spark producing devices.....	35.30-35
Spray nozzles.....	34.10-10
Specifications, material.....	Subpart 31.30
Special operating requirements.....	Subpart 35.01
Special operating requirements for tank barges carrying certain dangerous bulk cargoes	35.01-50
Stability requirements	31.10-30
Station bills required.....	35.10-1
Steam fire extinguishing systems, marking of.....	35.40-10
Steam, carrying of excess.....	35.25-15
Steam smothering system	Subpart 34.13
Steel hull tank vessels	Subparts 32.70, 32.60, 32.63, 32.65
Steering apparatus on tank vessel	32.35-10
Steering gear, instruction for changing	35.40-30
Steering gear test.....	35.20-10
Steering orders, marking	35.40-35
Stowage of package and general cargo	35.35-55
Subdivision of cargo spaces	32.60-5, 32.65-10

T

Tank barge:	
Carrying bulk cargoes having dangerous characteristics in addition to flammability and combustibility	35.01-50
Definition	30.10-65
Watchman for	35.05-15
Tankerman, definition	30.10-71
Tankship:	
Definition	30.10-67
Licensed officers and crew	35.05-1

46 CFR Ch. I (10–1–04 Edition)

Tanks, portable-interpretive rulings.....	30.01-20
Tank vessel:	
Definition	30.10-69
Laid up or dismantled	31.01-1
Telegraph equipment, engine order	Subpart 32.30
Telephone equipment, sound powered	Subpart 32.30
Testing of firefighting equipment	31.10-19
Tide tables	35.20-1
Toilet facilities.....	32.40-25
Towing vessels.....	31.15-10, 35.35-45
Trial trip inspection.....	31.10-40

U

Ullage holes, safety rules regarding	35.30-10
--	----------

V

Valves:	
Back pressure check type.....	38.10-1, 38.10-5
Excess flow	38.10-1, 38.10-5
Liquefied flammable gas	38.10-1, 38.10-5
Pressure vacuum relief.....	30.10.55, 32.20.5
Relief	35.35-70, 38.10-1, 38.10-10, 38.10-15
Shutoff	38.10-1
Vapor balancing:	
Design and equipment for	39.40-3
General requirements for	39.40-1
Operational requirements for.....	39.40-5
Vapor collection system	39.20-1
Vapor control systems.....	Part 39
Applicability	39.10-1
Cargo gauging system	39.20-3
Definitions	39.10-3
Design and equipment.....	Subpart 39.20
General requirements	Subpart 39.10
Lightering and topping-off operations with vapor balancing	Subpart 39.40
Operational requirements	39.30-1
Operations.....	Subpart 39.30
Personnel training.....	39.10-11
Submission of vapor control system designs	39.10-13
Tank barge and ship vapor overpressure and vacuum protection.....	39.20-11
Tank barge liquid overfill protection	39.20-9
Tankship high and low vapor pressure protection.....	39.20-13
Vessel vapor processing units	39.10-9
Ventilation and venting:	
Cargo tanks.....	Subpart 32.55
Cargo tanks, independent	Subpart 38.20
Cofferdams	Subpart 32.55
Flame screen.....	36.20-1
Hold spaces	32.55-15
Pumproom.....	36.20-5
Tank ships with a keel laying date on or after January 1, 1975	32.55-50
Vessels coming alongside	35.35-42
Vessels converted to tank vessels.....	31.10-10
Vessel's name on equipment.....	35.40-40
Vessel's name	32.05-10, 32.05-15
Voice tubes.....	32.30-1

Subchapter D Index

W

Warning signals and signs	35.30-1
Warning signs	35.30-1
Washing facilities	32.40-25
Watchman for tank barge	35.05-15
Water spray extinguishing systems, details	Subpart 34-25
Application	34.25-1
Capacity and arrangement	34.25-5
Controls	34.25-10
Installations contracted for prior to January 1, 1964	34.25-90
Piping	34.25-15
Spray nozzles	34.25-20
Water spray systems, marking of	35.40-18
Waters, travel permitted on	Subpart 31.20
Welding repairs	35.01-1
Whistles	32.15-5
Whistle signals for drills	35.10-5
Whistling, unnecessary	35.20-35
Wire rope	31.37-35, 31.37-50
Work vests:	
Application of	35.03-1
Approved unicellular plastic foam	35.03-5
Shipboard inspection	35.03-20
Shipboard stowage	35.03-15
Use	35.03-10
Workmanship, material, and scantlings	132.60-1, 32.65-5