

Charge, Marine Inspection. Minor repairs and alterations may be made to the same standards as the original construction. However, in no case will greater departure from the standards of §§ 92.25-5 through 92.25-15 be permitted than presently exists.

[CGFR 69-72, 34 FR 17484, Oct. 29, 1969, as amended by CGD 80-120, 47 FR 5723, Feb. 8, 1982]

**PART 93—STABILITY**

**Subpart 93.01—Application**

Sec.

93.01-1 General.

**Subpart 93.20—Bulk Grain Cargoes**

- 93.20-01 Application.
- 93.20-05 General.
- 93.20-10 Document of authorization.
- 93.20-15 Certificate of loading.
- 93.20-20 Exemptions for certain voyages.

AUTHORITY: 46 U.S.C. 3306; 5115; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46.

SOURCE: CGFR 65-50, 30 FR 16988, Dec. 30, 1965, unless otherwise noted.

**Subpart 93.01—Application**

**§ 93.01-1 General.**

Each vessel must meet the applicable requirements in subchapter S of this chapter.

[CGD 79-023, 48 FR 51008, Nov. 4, 1983]

**Subpart 93.20—Bulk Grain Cargoes**

SOURCES: CGD 74-182, 40 FR 36343, Aug. 20, 1975, unless otherwise noted.

**§ 93.20-01 Application.**

The provisions of this subpart apply to all vessels that load grain in bulk after September 19, 1975 except:

- (a) U.S. tank vessels which meet the requirements of 46 CFR 31.10-33.
- (b) Vessels engaged on voyages solely between ports within the limits of the Great Lakes and the St. Lawrence River as far east as a straight line drawn from Cap de Rosiers to West Point, Anticosti Island, and east of line along the 63rd meridian from Anticosti

Island to the north shore of St. Lawrence River.

**§ 93.20-05 General.**

(a) Each cargo vessel or barge that carries grain in bulk must comply with the Annex to International Maritime Organization (IMO, formerly Inter-Governmental Maritime Consultative Organization or IMCO) Resolution A.264(VIII). As used in Resolution A.264(VIII), the term "Administration" means "U.S. Coast Guard." Copies of Resolution A.264 (VIII) may be obtained from the National Cargo Bureau, Inc., 30 Vesey Street, New York, NY 10007-2914; the Commandant (G-M), U.S. Coast Guard, Washington, DC 20593-0001 or the office of any Coast Guard District Commander or Officer in Charge, Marine Inspection. The provisions of IMO Resolution A.264(VIII) are published separately in U.S. Coast Guard Navigation and Inspection Circular No. 3-75 dated August 20, 1975.

(b) Notwithstanding the provisions of 46 CFR 56.50-50, bilges must be properly prepared and sounding pipes in place, clear and operable. If bilges are not present, suction must be boxed.

(c) When calculating the minimum required metacentric height (GM), a free surface allowance must be made for slack liquids. The free surface allowance used must be equal to or greater than the free surface allowance for the following combination of tanks:

- (1) The maximum free surface for the pair of tanks, port and starboard, of each type of consumable liquid, having the largest free surface.
- (2) The maximum free surface of the fuel oil settlers.
- (3) The free surface at 5 degrees heel for all fuel tanks assumed 98% full except for the pair considered in paragraph (c)(1), of this section.

[CGD 74-182, 40 FR 36343, Aug. 20, 1975, as amended by CGD 88-070, 53 FR 34534, Sept. 7, 1988; CGD 96-041, 61 FR 50729, Sept. 27, 1996]

**§ 93.20-10 Document of authorization.**

(a) Before it can load grain, each vessel that carries grain in bulk must have a document of authorization issued in accordance with one of the following:

- (1) If the document of authorization is issued on or after September 19, 1975,

Regulation 10, part A of the Annex to IMO Resolution A.264(VIII).

(2) If the document of authorization is issued before September 19, 1975, 46 CFR 144.20–32 or Navigation and Vessel Inspection Circular No. 10–69 dated November 20, 1969.

(b) The Commandant recognizes the National Cargo Bureau, Inc., 30 Vesey Street, New York, NY 10007-2914, for the purpose of issuing documents of authorization in accordance with paragraph (a)(1) of this section.

[CGD 74–182, 40 FR 36343, Aug. 20, 1975, as amended by CGD 96–041, 61 FR 50729, Sept. 27, 1996]

**§ 93.20–15 Certificate of loading.**

(a) Before it can sail, each vessel that carries grain in bulk must have a certificate of loading issued by an organization recognized by the Commandant for that purpose. The certificate of loading may be accepted as prima facie evidence of compliance with these regulations.

(b) The Commandant recognizes the National Cargo Bureau, Inc., 30 Vesey Street, New York, NY 10007-2914, for the purpose of issuing certificates of loading.

[CGD 74–182, 40 FR 36343, Aug. 20, 1975, as amended by CGD 95–072, 60 FR 50464, Sept. 29, 1995]

**§ 93.20–20 Exemptions for certain voyages.**

(a) Vessels on a voyage that is within the inland waters of the United States

are exempt from the regulations in this subpart.

(b) Vessels on a voyage between (1) United States ports along the East Coast as far south as Cape Henry;

(2) Wilmington, N.C. and Miami, Fla.;

(3) United States ports in the Gulf of Mexico;

(4) Puget Sound ports and Canadian West Coast ports or Columbia River ports, or both;

(5) San Francisco, Los Angeles, and San Diego; or

(6) Great Lakes ports and St. Lawrence River ports as far east as a straight line drawn from Cape de Rosiers to West Point, Anticosti Island, and east of a line drawn along the 63rd meridian from Anticosti Island to the north shore of the St. Lawrence River; are exempt from 46 CFR 93.20–05(a) if—

(i) The master is satisfied that the longitudinal strength of his vessel is not impaired;

(ii) The master ascertains the weather to be encountered on the voyage;

(iii) Potential heeling moments are reduced to a minimum value by carrying as few slack holds as possible;

(iv) Slack surfaces are leveled; and

(v) The metacentric height (GM) in feet on the vessel throughout the voyage after correction for liquid free surface, is in excess of the required metacentric height (GM), in feet as obtained from Table 93.17–15(b).

TABLE 93.17-15—Calculation of GM  
GM=L×tabular value

[Tabular value: If the ratio of available freeboard to beam is more than 0.268 the required GM in order to shift the vessel shall be calculated by multiplying the applicable figure below by the total length of slack surface. If the ratio found above is less than 0.268 the tabular values shall be adjusted by multiplying by 0.268 and dividing by the actual ratio found]

Displacement of vessel (in 1,000 long tons)	Breadth (feet)												
	40	45	50	55	60	65	70	75	80	85	90	95	100
10	0.0094	0.0134	0.0184	0.0244	0.0317	0.0403	0.0504	0.0619	0.0752	0.0902	0.1070	0.129	0.1468
20	.0047	.0067	.0092	.0122	.0159	.0202	.0252	.0310	.0376	.0451	.0535	.062	.0739
30	.0031	.0045	.0061	.0081	.0106	.0134	.0168	.0206	.0251	.0301	.0357	.042	.0489
40	.0023	.0033	.0046	.0061	.0079	.0101	.0126	.0155	.0188	.0225	.0268	.031	.0367
50	.0019	.0027	.0038	.0049	.0063	.0081	.0101	.0124	.0150	.0180	.0214	.025	.0294
60	.0016	.0022	.0031	.0041	.0053	.0067	.0084	.0103	.0125	.0150	.0178	.021	.0245
70	.0013	.0019	.0026	.0035	.0045	.0058	.0072	.0088	.0107	.0129	.0153	.018	.0210
80	.0012	.0017	.0023	.0031	.0040	.0050	.0063	.0077	.0094	.0113	.0134	.015	.0184
90	.0010	.0015	.0020	.0027	.0035	.0045	.0056	.0069	.0084	.0100	.0119	.014	.0163
100	.0009	.0013	.0018	.0024	.0032	.0040	.0050	.0062	.0075	.0090	.0107	.012	.0147

where:

L=Total length of slack surfaces

B=Maximum breadth of slack surfaces

Δ=Displacement of vessel in 1,000 long tons

NOTES: In those portions of length which are divided by a centerline bulkhead ¼ of the tabular value may be used. The table is calculated for wheat. If necessary the GM may be adjusted for other grains by multiplying by the following factors.

- Stowage Factor approximately 50 corn, rye, soybeans ..... 0.9
- Stowage Factor approximately 56 barley ..... .8
- Stowage Factor approximately 70 oats ..... .6

[CGD 74-182, 40 FR 36343, Aug. 20, 1975; 40 FR 42195, Sept. 11, 1975]

## PART 95—FIRE PROTECTION EQUIPMENT

### Subpart 95.01—Application

#### Sec.

- 95.01-1 General.
- 95.01-2 Incorporation by reference.
- 95.01-5 Equipment installed but not required.

### Subpart 95.05—Fire Detecting and Extinguishing Equipment, Where Required

- 95.05-1 Fire detecting, manual alarm, and supervised patrol systems.
- 95.05-5 Fire main system.
- 95.05-10 Fixed fire extinguishing systems.
- 95.05-15 Hand portable fire extinguishers and semiportable fire extinguishing systems.

### Subpart 95.10—Fire Main System, Details

- 95.10-1 Application.
- 95.10-5 Fire pumps.
- 95.10-10 Fire hydrants and hose.
- 95.10-15 Piping.
- 95.10-90 Installations contracted for prior to May 26, 1965.

### Subpart 95.13—Steam Smothering Systems

- 95.13-1 Application.

### Subpart 95.15—Carbon Dioxide Extinguishing Systems, Details

- 95.15-1 Application.
- 95.15-5 Quantity, pipe sizes, and discharge rates.
- 95.15-10 Controls.
- 95.15-15 Piping.
- 95.15-20 Carbon dioxide storage.
- 95.15-25 Discharge outlets.
- 95.15-30 Alarms.
- 95.15-35 Enclosure openings.
- 95.15-40 Pressure relief.
- 95.15-90 Installations contracted for prior to November 19, 1952.

### Subpart 95.17—Foam Extinguishing Systems, Details

- 95.17-1 Application.
- 95.17-5 Quantity of foam required.
- 95.17-10 Controls.
- 95.17-15 Piping.
- 95.17-20 Discharge outlets.
- 95.17-25 Additional protection required.
- 95.17-90 Installations contracted for prior to November 19, 1952.

### Subpart 95.50—Hand Portable Fire Extinguishers and Semiportable Fire Extinguishing Systems, Arrangements and Details

- 95.50-1 Application.
- 95.50-5 Classification.
- 95.50-10 Location.
- 95.50-15 Spare charges.
- 95.50-20 Semiportable fire extinguishers.
- 95.50-90 Vessels contracted for prior to November 19, 1952.

### Subpart 95.60—Fire Axes

- 95.60-1 Application.
- 95.60-5 Number required.
- 95.60-10 Location.

AUTHORITY: 46 U.S.C. 3306; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46.

SOURCE: CGFR 65-50, 30 FR 17001, Dec. 30, 1965, unless otherwise noted.

### Subpart 95.01—Application

#### § 95.01-1 General.

(a) The provisions of this part shall apply to all vessels except as specifically noted in this part.

#### § 95.01-2 Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a). To enforce any edition other than that specified in paragraph (b) of this section, the Coast Guard must publish notice of change in the FEDERAL REGISTER and make the material available to the public. All approved material is on file at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC, and at the U.S. Coast Guard, Office of Design and Engineering Standards (G-MSE), 2100 Second Street SW., Washington, DC 20593-0001 and is available from the sources indicated in paragraph (b) of this section.

(b) The material approved for incorporation by reference in this part and the sections affected are:

*American Society for Testing and Materials (ASTM)*

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