

■ 162. In § 179.100–12, paragraph (a) is revised to read as follows:

§ 179.100–12 Manway nozzle, cover and protective housing.

(a) Manway nozzles must be of approved design of forged or rolled steel for steel tanks or of fabricated aluminum alloy for aluminum tanks, with an access opening of at least 18 inches inside diameter, or at least 14 inches by 18 inches around or oval. Each nozzle must be welded to the tank and the opening reinforced in an approved manner in compliance with the requirements of AAR Specifications for Tank Cars, appendix E, Figure E10 (IBR, see § 171.7 of this subchapter).

* * * * *

■ 163. In § 179.100–13, paragraph (e) is revised to read as follows:

§ 179.100–13 Venting, loading and unloading valves, measuring and sampling devices.

* * * * *

(e) Bottom of tank shell may be equipped with a sump or siphon bowl, or both, welded or pressed into the shell. Such sumps or siphon bowls, if applied, are not limited in size and must be made of cast, forged or fabricated metal. Each sump or siphon bowl must be of good welding quality in conjunction with the metal of the tank shell. When the sump or siphon bowl is pressed in the bottom of the tank shell, the wall thickness of the pressed section must not be less than that specified for the shell. The section of a circular cross section tank to which a sump or siphon bowl is attached need not comply with the out-of-roundness requirement specified in AAR Specifications for Tank Cars, appendix W, W14.06 (IBR, see § 171.7 of this subchapter). Any portion of a sump or siphon bowl not forming a part of cylinder of revolution must have walls of such thickness and be so reinforced that the stresses in the walls caused by a given internal pressure are no greater than the circumferential stress that would exist under the same internal pressure in the wall of a tank of circular cross section designed in accordance with § 179.100–6(a), but in no case shall the wall thickness be less than that specified in § 179.101–1.

■ 164. In § 179.100–14, paragraph (a)(1) is revised to read as follows:

§ 179.100–14 Bottom outlets.

(a) * * *

(1) The extreme projection of the bottom washout equipment may not be more than that allowed by appendix E

of the AAR Specifications for Tank Cars (IBR, see § 171.7 of this subchapter).

* * * * *

§ 179.100–18 [Amended]

■ 165. In § 179.100–18, amend paragraph (c) by removing the parenthetical phrase “(see § 171.7 of this subchapter)” and adding the parenthetical phrase “(IBR, see § 171.7 of this subchapter)” in its place.

■ 166. In § 179.101–1, footnote 6 following the table is revised to read as follows:

§ 179.101–1 Individual specification requirements.

* * * * *

⁶ See AAR Specifications for Tank Cars, appendix E, E4.01 (IBR, see § 171.7 of this subchapter), and § 179.103–2.

* * * * *

■ 167. In § 179.102–1, paragraph (a)(1) is revised to read as follows:

§ 179.102–1 Carbon dioxide, refrigerated liquid.

(a) * * *

(1) All plates for tank, manway nozzle and anchorage of tanks must be made of carbon steel conforming to ASTM A 516/A 516M (IBR, see § 171.7 of this subchapter), Grades 55, 60, 65, or 70, or AAR Specification TC 128–78, Grade B. The ASTM A 516/A 516M plate must also meet the Charpy V-Notch test requirements of ASTM A 20/A 20M (see table 16) (IBR, see § 171.7 of this subchapter) in the longitudinal direction of rolling. The TC 128 plate must also meet the Charpy V-Notch energy absorption requirements of 15 ft.-lb. minimum average for 3 specimens, and 10 ft.-lb. minimum for one specimen, at minus 50 °F in the longitudinal direction of rolling in accord with ASTM A 370 (IBR, see § 171.7 of this subchapter). Production-welded test plates prepared as required by W4.00 of AAR Specifications for Tank Cars, appendix W (IBR, see § 171.7 of this subchapter), must include impact test specimens of weld metal and heat-affected zone. As an alternate, anchor legs may be fabricated of stainless steel, ASTM A 240/A 240M Types 304, 304L, 316 or 316L, for which impact tests are not required.

* * * * *

■ 168. In § 179.102–2, paragraph (a)(1) is revised to read as follows:

§ 179.102–2 Chlorine.

(a) * * *

(1) Tanks must be fabricated from carbon steel complying with ASTM Specification A 516 (IBR, see § 171.7 of this subchapter), Grade 70, or AAR

Specification TC 128, Grade A or B.

* * *

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■ 169. In § 179.102–4, paragraphs (a)(2) introductory text, (a)(2)(i), (a)(2)(ii), and (a)(2)(iii)(A) are revised to read as follows:

§ 179.102–4 Vinyl fluoride, stabilized.

(a) * * *

(2) Steel complying with ASTM Specification A 516 (IBR, see § 171.7 of this subchapter); Grade 70; ASTM Specification A 537 (IBR, see § 171.7 of this subchapter), Class 1; or AAR Specification TC 128, Grade B, in which case impact tests must be performed as follows:

(i) ASTM A 516/A 516M and A 537/A 537M material must meet the Charpy V-Notch test requirements, in longitudinal direction of rolling, of ASTM A 20/A 20M (IBR, see § 171.7 of this subchapter).

(ii) AAR Specification TC 128 material must meet the Charpy V-Notch test requirements, in longitudinal direction of rolling, of 15 ft.-lb. minimum average for 3 specimens, with a 10 ft.-lb. minimum for any one specimen, at minus 50 °F or colder, in accordance with ASTM A 370 (IBR, see § 171.7 of this subchapter).

(iii) * * *

(A) Be prepared in accordance with AAR Specifications for Tank Cars, appendix W, W4.00 (IBR, see § 171.7 of this subchapter);

* * * * *

■ 170. In § 179.102–17, paragraphs (b)(2) introductory text, (b)(2)(i), (b)(2)(ii), and (b)(2)(iii)(A) are revised to read as follows:

§ 179.102–17 Hydrogen chloride, refrigerated liquid.

* * * * *

(b) * * *

(2) Steel conforming to ASTM A 516/A 516M (IBR, see § 171.7 of this subchapter), Grade 70; ASTM A 537/A 537M, (IBR, see § 171.7 of this subchapter) Class 1; or AAR Specification TC 128, Grade B in which case impact tests must be performed as follows:

(i) ASTM A 516/A 516M and A 537/A 537M material must meet the Charpy V-notch test requirements, in longitudinal direction of rolling, of ASTM A 20/A 20M (IBR, see § 171.7 of this subchapter).

(ii) AAR Specification TC 128 material must meet the Charpy V-notch test requirements, in longitudinal direction of rolling of 15 ft.-lb. minimum average for 3 specimens, with a 10 ft.-lb. minimum for any one