

be not less than the vapor pressure of the commodity contained therein at 46 °C (115 °F), or as prescribed for a particular commodity by part 173 of this chapter, except that in no case shall the design pressure of any container be less than 100 psig or more than 500 psig. When corrosion factor is prescribed by these regulations, the wall thickness of the tank calculated in accordance with Section VIII of the ASME Code (IBR, see § 171.7 of this subchapter) shall be increased by 20 percent or 2.54 mm (0.10 inch), whichever is less.

**Note 1:** The term design pressure as used in this specification is identical to the term "MAWP" as used in the ASME Code.

\* \* \* \* \*

■ 83. In § 178.245–4, paragraph (b) is revised to read as follows:

**§ 178.245–4 Tank mountings.**

\* \* \* \* \*

(b) All tank mountings such as skids, fastenings, brackets, cradles, lifting lugs, etc., intended to carry loadings shall be permanently secured to tanks in accordance with the requirements in Section VIII of the ASME Code (IBR, see § 171.7 of this subchapter) under which the tanks were fabricated, and shall be designed to withstand static loadings in any direction equal to twice the weight of the tank and attachments when filled with the lading using a safety factor of not less than four, based on the ultimate strength of the material to be used. The specific gravity used in determining the static loadings shall be shown on the marking required by § 178.245–6(a) and on the report required by § 178.245–7(a).

\* \* \* \* \*

■ 84. In § 178.245–6, the first sentence in paragraph (a) is revised to read as follows:

**§ 178.245–6 Name plate.**

(a) In addition to the markings required by Section VIII of the ASME Code (IBR, see § 171.7 of this subchapter) under which tanks were constructed, they shall have permanently affixed, in close proximity to the ASME "U" stamp certification, a metal plate.\* \* \*

\* \* \* \* \*

■ 85. In § 178.245–7, paragraph (a) is revised to read as follows:

**§ 178.245–7 Report.**

(a) A copy of the manufacturer's data report required by Section VIII of the ASME Code (IBR, see § 171.7 of this subchapter) under which the tank is fabricated shall be furnished to the owner for each new tank.

\* \* \* \* \*

■ 86. In § 178.255–1, paragraph (b) is revised to read as follows:

**§ 178.255–1 General requirements.**

\* \* \* \* \*

(b) Tanks must be designed, constructed, certified, and stamped in accordance with Section VIII of the ASME Code (IBR, see § 171.7 of this subchapter).

\* \* \* \* \*

■ 87. In § 178.255–2, paragraph (a) is revised to read as follows:

**§ 178.255–2 Material.**

(a) Material used in the tank must be steel of good weldable quality and conform with the requirements in Sections V, VIII, and IX of the ASME Code (IBR, see § 171.7 of this subchapter).

\* \* \* \* \*

■ 88. In § 178.255–14, paragraph (a) is revised to read as follows:

**§ 178.255–14 Marking.**

(a) In addition to markings required by Section VIII of the ASME Code (IBR, see § 171.7 of this subchapter), every tank shall bear permanent marks at least 1/8-inch high stamped into the metal near the center of one of the tank heads or stamped into a plate permanently attached to the tank by means of brazing or welding or other suitable means as follows: \* \* \*

\* \* \* \* \*

■ 89. In § 178.255–15, the first sentence in paragraph (a) is revised to read as follows:

**§ 178.255–15 Report.**

(a) A copy of the manufacturer's data report required by Section VIII of the ASME Code (IBR, see § 171.7 of this subchapter) under which the tank is fabricated must be furnished to the owner for each new tank. \* \* \*

\* \* \* \* \*

■ 90. In § 178.270–2, paragraph (c) is revised to read as follows:

**§ 178.270–2 General.**

\* \* \* \* \*

(c) Each portable tank must have a cross-sectional design that is capable of being stress analyzed either mathematically or by the experimental method contained in UG–101 in Section VIII of the ASME Code (IBR, see § 171.7 of this subchapter), or other method acceptable to the Associate Administrator.

\* \* \* \* \*

■ 91. In § 178.270–3, paragraphs (a), (b)(1), and the last three sentences of

paragraph (e) are revised to read as follows:

**§ 178.270–3 Materials of construction.**

(a) Each portable tank must be constructed of carbon or alloy steels. Materials included in part UHT in Section VIII of the ASME Code (IBR, see § 171.7 of this subchapter) or equivalent materials are not authorized. Any materials used in the tank shell must conform to a recognized national standard and must be suitable for the external environments in which the tank will be carried. The minimum elongation for any material must be 20 percent or greater.

(b) \* \* \*

(1) 1.5 times the specified values for the material at 93 °C (200 °F) in Section VIII of the ASME Code;

\* \* \* \* \*

(e) \* \* \* Tensile tests and analysis of results must be in accordance with ISO 82, "Steels-Tensile Testing" (IBR, see § 171.7 of this subchapter). The yield strength in tension shall be the stress corresponding to a permanent strain of 0.2 percent of the gauge length, except that for high alloy austenitic steels the yield strength shall be the stress corresponding to a permanent strain of 0.2 or 1.0 percent of the gauge length as appropriate. The elongation must be at least 20 percent.

\* \* \* \* \*

■ 92. Section 178.270–7 is revised to read as follows:

**§ 178.270–7 Joints in tank shells.**

Joints in tank shells must be made by fusion welding. Such joints and their efficiencies must be as required by Section VIII of the ASME Code (IBR, see § 171.7 of this subchapter). Weld procedures and welder performance must be ASME Code qualified or must be qualified by the approval agency in accordance with the procedures in the ASME Code, Section IX, Welding and Brazing Qualifications. A record of each qualification must be retained by the manufacturer for the period prescribed in Section VIII of the ASME Code, and must be made available to any duly identified representative of the Department and the owner of the tank.

■ 93. Section 178.270–9 is revised to read as follows:

**§ 178.270–9 Inspection openings.**

Each portable tank must be fitted with a manhole or other inspection opening sited above the maximum liquid level to allow for complete internal inspection and adequate access for maintenance and repair of the interior. Each portable tank with a capacity of more than 1,894