

marked pressure or stamp “CON-DEMNNED” on the shoulder, top head, or neck using a steel stamp;

(B) For composite cylinders, securely affix to the cylinder a label with the word “CONDEMNED” overcoated with epoxy near, but not obscuring, the original cylinder manufacturer’s label; or

(C) As an alternative to the stamping or labeling as described in this paragraph (i)(2), at the direction of the owner, the requalifier may render the cylinder incapable of holding pressure; and

(ii) Notify the cylinder owner, in writing, that the cylinder is condemned and may not be filled with hazardous material and offered for transportation in commerce where use of a specification packaging is required.

(3) No person may remove, obliterate, or alter the required condemnation communication of paragraph (i)(2) of this section.

(j) *Training materials.* Training materials may be used for training persons who requalify cylinders using the volumetric expansion test method.

[67 FR 51660, Aug. 8, 2002, as amended at 68 FR 24662, May 8, 2003; 68 FR 75764, Dec. 31, 2003; 70 FR 34077, June 13, 2005; 70 FR 73166, Dec. 9, 2005; 71 FR 51128, Aug. 29, 2006; 73 FR 4720, Jan. 28, 2008; 75 FR 53597, Sept. 1, 2010; 82 FR 15896, Mar. 30, 2017; 85 FR 85433, Dec. 28, 2020]

§ 180.207 Requirements for requalification of UN pressure receptacles.

(a) *General.* (1) Each UN pressure receptacle used for the transportation of hazardous materials must conform to the requirements prescribed in paragraphs (a), (b) and (d) in § 180.205.

(2) No pressure receptacle due for requalification may be filled with a hazardous material and offered for transportation in commerce unless that

pressure receptacle has been successfully requalified and marked in accordance with this subpart or requalified and marked by a facility registered by Transport Canada in accordance with the Transport Canada TDG Regulations (IBR, *see* § 171.7 of this subchapter). A pressure receptacle may be requalified at any time during or before the month and year that the requalification is due. However, a pressure receptacle filled before the requalification becomes due may remain in service until it is emptied. In accordance with the Transport Canada TDG Regulations a CAN marked UN cylinder may be requalified in the United States by a domestic requalifier, provided the requirements in §§ 178.69, 178.70, and 178.71, as applicable, are met.

(3) A pressure receptacle with a specified service life may not be requalified after its authorized service life has expired. A pressure receptacle with a specified service life may not be refilled and offered for transportation after its authorized service life has expired unless approval has been obtained in writing from the Associate Administrator.

(b) *Periodic requalification of UN pressure receptacles.* (1) Each pressure receptacle that is successfully requalified in accordance with the requirements specified in this section must be marked in accordance with § 180.213. The requalification results must be recorded in accordance § 180.215.

(2) Each pressure receptacle that fails requalification must be rejected or condemned in accordance with the applicable ISO requalification standard.

(c) *Requalification interval.* Each UN pressure receptacle that becomes due for periodic requalification must be requalified at the interval specified in the following table before it is filled:

TABLE 1—REQUALIFICATION INTERVALS OF UN PRESSURE RECEPTACLES

Interval (years)	UN pressure receptacles/hazardous materials
10	Pressure receptacles for all hazardous materials except as noted below (also for dissolved acetylene, see paragraph (d)(3) of this section):
5	Composite pressure receptacles.
5	Metal hydride storage systems
5	Pressure receptacles used for: All Division 2.3 materials. UN1013, Carbon dioxide.

TABLE 1—REQUALIFICATION INTERVALS OF UN PRESSURE RECEPTACLES—Continued

Interval (years)	UN pressure receptacles/hazardous materials
	UN1043, Fertilizer ammoniating solution with free ammonia. UN1051, Hydrogen cyanide, stabilized containing less than 3% water. UN1052, Hydrogen fluoride, anhydrous. UN1745, Bromine pentafluoride. UN1746, Bromine trifluoride. UN2073, Ammonia solution. UN2495, Iodine pentafluoride. UN2983, Ethylene Oxide and Propylene oxide mixture, not more than 30% ethylene oxide.
5	Pressure receptacles used for adsorbed gases.

(d) *Requalification procedures.* Each UN pressure receptacle must be requalified in conformance with the procedures contained in the following standards, as applicable. Furthermore, when a pressure test is performed on a UN pressure receptacle, the test must be a water jacket volumetric expansion test suitable for the determination of the cylinder expansion or a hydraulic proof pressure test. The test equipment must conform to the accuracy requirements in § 180.205(g). Alternative methods (*e.g.*, acoustic emission) or requalification procedures may be performed if prior approval has been obtained in writing from the Associate Administrator.

(1) *Seamless steel:* Each seamless steel UN pressure receptacle, including pressure receptacles exceeding 150 L capacity installed in MEGCs or in other service, must be requalified in accordance with ISO 6406:2005(E) (IBR, *see* § 171.7 of this subchapter). However, UN cylinders with a tensile strength greater than or equal to 950 MPa must be requalified by ultrasonic examination in accordance with ISO 6406:2005(E). For seamless steel cylinders and tubes, the internal inspection and hydraulic pressure test may be replaced by a procedure conforming to ISO 16148:2016(E) (IBR, *see* § 171.1).

(2) *Seamless UN aluminum:* Each seamless aluminum UN pressure receptacle must be requalified in accordance with ISO 10461 (IBR, *see* § 171.7 of this subchapter).

(3) *Dissolved acetylene UN cylinders:* Each dissolved acetylene cylinder must be requalified in accordance with ISO 10462:2013(E) (IBR, *see* § 171.7 of this subchapter). A cylinder previously requalified in accordance with the second edition of ISO 10462(E) up until December

31, 2018, may continue to be used until the next required requalification. The porous mass and the shell must be requalified no sooner than 3 years, 6 months, from the date of manufacture. Thereafter, subsequent requalifications of the porous mass and shell must be performed at least once every ten years.

(4) *Composite UN cylinders:* Each composite cylinder must be inspected and tested in accordance with ISO 11623:2015(E) (IBR, *see* § 171.7 of this subchapter). Until December 31, 2020, ISO 11623:2002(E) (IBR, *see* § 171.7 of this subchapter) may be used.

(5) *UN cylinders for adsorbed gases:* Each UN cylinder for adsorbed gases must be inspected and tested in accordance with § 173.302c and ISO 11513:2011 (IBR, *see* § 171.7 of this subchapter).

(6) *Valves:* Inspection and maintenance of cylinder valves must be carried out in accordance with ISO 22434:2006 Transportable gas cylinders—Inspection and maintenance of cylinder valves (IBR, *see* § 171.7 of this subchapter).

(7) *UN cylinder bundles:* UN cylinder bundles containing compressed, liquefied, and dissolved gas must be inspected and tested in accordance with ISO 20475:2018(E) (IBR, *see* § 171.7 of this subchapter).

[71 FR 33894, June 12, 2006, as amended at 71 FR 54397, Sept. 14, 2006; 76 FR 3389, Jan. 19, 2011; 80 FR 1168, Jan. 8, 2015; 82 FR 15897, Mar. 30, 2017; 85 FR 27901, May 11, 2020; 85 FR 85434, Dec. 28, 2020; 86 FR 45000, July 26, 2022]

§ 180.209 Requirements for requalification of specification cylinders.

(a) *Periodic qualification of cylinders.* Each specification cylinder that becomes due for periodic requalification, as specified in the following table,