COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS

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WORK OF THE SUB-COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS

Development of provisions for the transport of gases

Comments on the work of the Working Group on Gas Receptacles and Multiple-Element Gas Containers (MEGCs)

Transmitted by the expert from Canada

The expert from Canada respectfully submits the following comments for consideration with regard to the development of provisions for the transport of gases. Specific comments are given with reference to the proposed text contained in the “Annex to the Report of the Working Group on Gas Receptacles and Multiple-Element Gas Containers (MEGCs)” from the July 2000 meeting (ST/SG/AC.10/2000/22), as well as documents ST/SG/AC.10/2000/30 transmitted by the Compressed Gas Association and ST/SG/AC.10/2000/38 transmitted by the Government of France.

Comments on ST/SG/AC.10/2000/22, Proposal 3

1. (p. 4) **4.1.6.1.1**

   This text is new and has not yet been reviewed or discussed by the Working Group.

   This section has three sentences which appear to say similar things. Furthermore, it is not written in a good legislative drafting style. It is recommended that an editor review the entire proposed text, before publication in the Model Regulations.

2. (p. 4) **4.1.6.1.2**

   This text is new. In the first sentence, the word “significantly” should be deleted.
3. (p. 4) 4.1.6.1.5

This text is new. In the first sentence, the words “and shipper” should be deleted. Only the filler, not the shipper, should be expected to perform a pre-fill inspection.

4. (pp. 4-5) 4.1.6.1.6

This text is new. In the first sentence, it should read as follows: “Pressure receptacles shall be filled according to the working pressures, filling ratios, and provisions...”. “Working pressures” should be added, since “filling ratios” only apply to liquefied gases.

In the third sentence, it should read as follows: “Bundles of pressure receptacles shall not be filled in excess of the lowest working pressure of any given pressure receptacle cylinder in the bundle.” Only “bundles of cylinders”, not “bundles of pressure receptacles”, are defined.

5. (p. 5) 4.1.6.1.6

The last sentence should read “...annex B of ISO 10297:1999...”. The correct reference is to Annex B, “Valve impact test”. Annex A is the “Example of test sequence”.

6. (pp. 19-20) P200, graph, Test pressures and filling ratios for UN 1075 and UN 1965

This graph is new. The labels for “Commercial propane” and “Commercial butane” should only be indicated if they are representative of world-wide values. In North America, commercial propane has a specific gravity of 0.504 to 0.510 at 15°C.

The labels on each column, A, A01, A02, etc. should be deleted, since they are not international designations and have no meaning in the Model Regulations.

Comments on ST/SG/AC.10/2000/30

7. P203 and 6.2.1.3.5 are currently reserved for cryogenic receptacles (see ST/SG/AC.10/2000/22, Proposal 3, page 21 and Proposal 4, page 23). The Working Group has highlighted the need for including standards and requirements for cryogenic receptacles in the Model Regulations in the future (see ST/SG/AC.10/C.3/36, Annex 1, paragraph 5).

The expert from Canada requests that previously submitted comments on requirements for cryogenic receptacles (see ST/SG/AC.10/C.3/2000/31, paragraphs 34-49 and 63-64) be considered, when ST/SG/AC.10/2000/30 is discussed. Further comments will also be submitted, if provisions for cryogenic receptacles are considered in the next biennium.
Comments on ST/SG/AC.10/2000/22, Proposal 4

8. (p. 23) **6.2.1.2.1**

This text is new. The word “significantly” should be deleted.

9. (p. 23) **6.2.1.2.3**

This text has been newly revised. The following is suggested: “Aluminium alloys shall meet the requirements of intercrystalline and stress corrosion tests specified in ISO 7866:1999.” The specific reference to ISO 7866 should be deleted, since this requirement is in the general section.

10. (p. 25) **6.2.1.5.2**

Change “needs to be examined” to “shall be required to be examined”.

11. (p. 25) **6.2.1.5.4**

Amend as follows: “Refillable pressure receptacles with a water capacity less than or equal to one litre and non-refillable pressure receptacles shall not be subject to periodic inspection requirements.” This was discussed and agreed to at the December 1999 meeting.

12. (p. 26) **6.2.2.1.1**

For ISO 7866:1999, in the last sentence of the note, change “is not authorized” to “shall not be authorised”.

13. (p. 27) **6.2.2.4**

For ISO 10462, “1993” should be changed to “1994”. This is the correct publication date.

14. (p. 37) **6.2.2.6.2(p)**

In ISO/DIS 13769 and EN 1089-1:1996, the stamp marking for non-destructive testing has a different meaning from that described in 6.2.2.6.2(p) of the draft text. In the ISO and EN standards, the mark indicates that a cylinder has been tested by and meets all of the requirements of a NDT according to a manufacturing standard.

This mark should be deleted from the UN draft text. The mark is not necessary. Since the NDT is a requirement of an ISO construction standard, a person knows what NDT was performed by identifying the standard to which the cylinder was manufactured. Also, the application of this mark does not have an effect on how the cylinder may be used or filled.
It should be noted that this mark is not mandatory in the ISO draft standard.

Comments on ST/SG/AC.10/2000/38

15. In ST/SG/AC.10/2000/38, the Government of France has proposed that, for marking requirements in the draft text, only a reference to the ISO standard on cylinder stamp marking be included. While this may be ideal, it should be noted that ISO 13769 is still a draft document and will not be published by the end of 2000. It was agreed that only published and dated standards would be considered for adoption in the Model Regulations (see ST/SG/AC.10/C.3/36, Annex 1, paragraph 4).

Comments on ST/SG/AC.10/2000/22, Proposal 6

16. (p. 41) two sections between 4.2.4.3 and 4.2.4.4

Two sections, previously numbered 4.2.4.4 and 4.2.4.5, seem to be missing; they were not intentionally deleted by the Working Group. They should read as follows:

4.2.4.4 Toxic gases with an LC₅₀ less than or equal to 200 mL/m³ shall not be authorised for transport in MEGCs.

4.2.4.5 Empty MEGCs that have not been cleaned and purged shall comply with the same requirements as MEGCs filled with the previous gas.

17. (p. 41) 4.2.4.5.2

It should read as follows: “Elements of MEGCs shall be filled according to the working pressures, filling ratios, and filling provisions....”. “Working pressures” should be added, since “filling ratios” only apply to liquefied gases.

Comments on ST/SG/AC.10/2000/22, Proposal 7

18. (p. 46) 6.7.5.6.3

“ISO 4126-1:1996” should be changed to “ISO 4126-1:1991”. This is the correct publication date.