Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

Sub-Committee of Experts on the Transport of Dangerous Goods

19 June 2014

Forty-fifth session

Geneva, 23 June – 2 July 2014 Item 6 (b) of the provisional agenda **Transport of gases: miscellaneous**

Comments on ST/SG/AC.10/C.3/2014/28 – Insertion of new and replacement ISO standards in 6.2.2

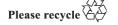
Transmitted by the Compressed Gas Association (CGA)

Introduction

- 1. In ST/SG/AC.10/C.3/2014/28, the International Organisation for Standardisation (ISO) proposes three amendments based on ISO standards work on gas cylinders.
- 2. CGA supports proposal 1 in ST/SG/AC.10/C.3/2014/28, which adds a new reference to ISO 11515:2013.
- 3. CGA supports proposal 2 in ST/SG/AC.10/C.3/2014/28, which updates the reference from ISO 10462:2005 to ISO 10462:2013 and specifies a transition period.
- 4. CGA does not support proposal 3 in ST/SG/AC.10/C.3/2014/28. This is discussed below.

Discussion

- 5. In paragraph 7 of ST/SG/AC.10/C.3/2014/28, ISO proposes to add the following new requirement at the end of packing instruction P200 (4), special packing provision "p":
 - "For UN 1001 acetylene, dissolved, and UN 3374 acetylene, solvent free, the first periodic inspection *shall be no later than three years* after the porous material was installed in the cylinder."
- 6. As mentioned in paragraph 4 of ST/SG/AC.10/C.3/2014/28, clause 4.1 of ISO 10462:2013 contains a new recommendation as follows:
 - "...for acetylene cylinders that are newly filled with porous material, it is recommended to carry out the first periodic inspection earlier. This first periodic inspection interval is *recommended* as follows:
 - a) ...;
 - b) monolithic porous material: three years."
- 7. ISO 10462:2013 combined the requirements that were previously in ISO 10462:2005 and in European standard EN 12863:2002 (as amended in 2005). EN 12863:2002 contained a requirement for acetylene cylinders with new monolithic porous material to have the first periodic inspection performed before 3 years in service. ISO 10462:2005 was silent on the issue. The exact timing of the first periodic inspection of new



porous material is not agreed internationally. In ISO 10462:2013, it was agreed to recommend, not mandate, that the first periodic inspection of the porous material be carried out at 3 years after manufacture.

- 8. U.S. regulations specify that the first requalification (periodic inspection) of UN cylinders for dissolved acetylene must performed be *no sooner than 3.5 years* from the date of manufacture.
- 9. For U.S. and Canadian specification acetylene cylinders, the current 2009 edition of CGA's publication C-13, *Guidelines for Periodic Visual Inspection and Requalification of Acetylene Cylinders*, requires that the first periodic inspection of the porous material be performed *no sooner than 5 years* (and no later than 10 years) after the date of manufacture.
- 10. The 2000 edition of CGA C-13 is currently adopted in U.S. and Canadian regulations for U.S. and Canadian specification acetylene cylinders.
- 11. The requirement in CGA C-13 was changed from "no sooner than 3 years", in its 1992 edition, to "no sooner than 5 years", in its 2000 edition, after studies performed by industry suggested that a first periodic inspection at 3 years was too early to detect unsafe deterioration (e.g. disintegration, crumbling, powdering) of new porous material, resulting from normal conditions of transport and use.

Proposal

12. CGA proposes that proposal 3 in ST/SG/AC.10/C.3/2014/28 not be adopted. Since there are differences in practices and regulatory requirements internationally, it is proposed to leave this issue as addressed in ISO 10462:2013.

2