

## 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

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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 be performed *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.

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