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INLAND TRANSPORT COMMITTEE

Working Party on the Transport of Dangerous Goods

Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods

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PROPOSALS FOR AMENDMENTS TO RID/ADR/ADN

Comments on ECE/TRANS/WP.15/AC.1/2009/31 from EIGA - Test Period for P200

Transmitted by the European Cylinder Makers Association (ECMA)

Introduction

- 1. Document ECE/TRANS/WP.15/AC.1/2009/31 submitted by EIGA is a request to the Joint Meeting to create a new informal working group to look at the subject of extending the retest periods for pressure receptacles containing gases in P200 or alternatively extend the scope of the existing informal working group looking at the retest period of cylinders containing LPG.
- 2. High pressure seamless gas cylinders made from aluminium alloy or steel are tested at intervals of 5 or 10 years under RID/ADR/ADN and the Transportable gas cylinders Periodic inspection and testing standards e.g. EN1802:2002 and EN 1968:2002. There is a belief within the gases producers that since this regime have proven to be safe, a proposal can be made for extending the period to 15 years.
- 3. The European Cylinder Makers Association (ECMA) is not in favor and would like to draw the attention of the Joint Meeting to several aspects in conjunction with this request which should be considered before that decision is taken and the working group starts the detailed technical discussions.

Aspects for consideration by the Joint Meeting

4. Comparisons between welded LPG cylinders and high pressure seamless gas cylinders have been made by the gas manufacturers to support their request, because the retest periods for LPG cylinders in some countries, have already been extended from 10 to 15 years. It has now been suggested that it may also be possible to extend retest periods for high pressure gas cylinders. However, ECMA believe that this is a simplistic rationale and that an increase in the retest periods for high pressure gas cylinders is not appropriate.

The use and storage of LPG cylinders differs totally to high pressure cylinders. LPG cylinders are used more regularly in benign environmental situations, service pressures are significantly lower and they are over-designed i.e. actual wall thicknesses are greater than those required from stress calculations. The materials typically used for LPG cylinders differ to materials used for high pressure cylinders. In addition, LPG cylinders are fitted with a substantial foot ring that provides protection from corrosion when stored on wet surfaces.

- 5. The document submitted by EIGA does not contain any rationale to support their request.
- 6. The standards for existing pressure receptacles like seamless high pressure gas cylinders have been partly developed considering a maximum retest period of 10 years.
- 7. Feedback from accredited cylinder retesting facilities dealing with periodic inspection and testing report that rejectable levels of corrosion have been observed even in cylinders where residual pressure valves have been fitted.
- 8. The current periodic inspection and testing standards (e.g. EN 1968, EN1802, ISO 6406, etc.) are based on a maximum periodicity of 10 years. Existing acceptance criteria may not be suitable for extended periods.

Recommendation

- 9. ECMA does not support the creation of the informal working group as described in para.1 above.
- 10. However, if it is decided to create the working group, ECMA is interested in actively participating. There are several other reasons and arguments against increasing the retest periods of high pressure gas cylinders which would need to be addressed within the informal working group if the Joint Meeting decides to go ahead with the EIGA request.