

**ECONOMIC COMMISSION FOR EUROPE**

**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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Item 6 b) of the provisional agenda

**PROPOSALS FOR AMENDMENTS TO RID/ADR/ADN**

**Packing instruction P 200**

**Transmitted by the European Liquefied Petroleum Gas Association (AEGPL)**

**SUMMARY**

Executive summary: The Government of Germany has proposed to simplify the extension to 15 years for periodic inspection of LPG cylinders in the context of the packing instruction P200 recognising the excellent service history in the countries that have adopted this approach. AEGPL is fully supportive of the principle of harmonising the 15 year periodic inspection across Europe but wishes to point out that it is not possible to apply the requirements suggested in this paper to the periodic inspection of LPG cylinders.

Action to be taken: None – Leave the P200 packing instruction unchanged.

Related documents: ECE/TRANS/WP.15/AC.1/2007/59.

## Comments

The application of the 15 year periodic inspection period across European states was dealt with in a report to the joint meeting in 2003 -TRANS-WP15-AC1-2003-GE-inf23Be-establishing that many states (Belgium, France, Finland, Germany, Ireland, Portugal, Switzerland, UK,...) already implement a 15 years period based on standard EN 1440 under the framework of the packing instruction P200 10) v.

For LPG, the P200 packing instruction refers to EN 1440 "*Transportable refillable welded cylinders for liquefied petroleum gas (LPG) – Periodic requalification*" and the German proposal specifically references the requirements of the design type approval test in EN 1442: 1998, a standard that has been withdrawn as it has been superseded by EN 1442: 2006. This standard proposes a number of type approval tests which have proven successful in ensuring an excellent service history for these cylinders.

None of the current standards for cylinder manufacturing or testing extend the stringent type approval weld radiography requirements to either manufacturing or periodic inspection. The German paper proposes that for old cylinders not radiographed in this way, that the radiography is applied at periodic inspection on a 1-in-100 sampling frequency. In the light of the service history and failure modes of LPG cylinders at periodic inspection, this is not justified. With over 10 million cylinders requalified in Europe each year, the risks from the radiography far outweigh any benefit achieved, as the cylinders normally fail from external damage or external corrosion, the weld being the strongest part of the cylinder. The periodic inspection process is often semi-automated and to add radiography to this process would be extremely costly with no benefit. The 1:100 sampling frequency will not be representative of production batches, as the cylinders are not presented for periodic inspection in this manner, but it random types and manufacturers' batches. EN1439 requires stringent cylinder inspection before during and after filling, which would detect the normal failure modes. Each year the European LPG Industry requalifies more than 10 millions cylinders and the periodic inspection process is often semi-automated to deal with this volume. Also the filling process is very automated and, according to EN 1439, stringent procedures for checking the cylinders before, during and after filling are followed in the plant, to assess safety of each cylinder sent to the customer.

AEGPL proposes to leave the requirements for periodic inspection unaltered, as while it may be possible to say that EN 1442 cylinders are permitted in ADR to have periodic inspections at 15 years, there are so many millions of cylinders in circulation in each country that were manufactured to national standards, that extending the process of harmonization to these would be impossible. Many European Competent Authorities have permitted 15-year periodic inspection and had successful results from simply applying the requirements of EN 1440 to cylinders built to national standards. International carriage of these cylinders is limited to movement around border areas and imposition of further inspection requirements is not justified.

## Proposal

Do not change special packing P200 provision 10) v.

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