

Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

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

Bern, 20-24 March 2023

Item 5 (b) of the provisional agenda:

**Proposals for amendments to RID/ADR/ADN:
new proposals**

Chemical compatibility for plastic packaging containing liquid waste

**Transmitted by the European Federation of Waste Management and
Environmental Services (FEAD)**

Summary

Executive summary:	The present document considers the need to introduce rules for plastic packaging of liquid waste when the exact composition of such waste is not known.
Action to be taken:	Introduce a new paragraph under 4.1.1.21.7

Introduction

As determined by paragraph 4.1.1.21.1, for polyethylene packagings as specified in 6.1.5.2.6, and for polyethylene IBCs as specified in 6.5.6.3.5, the chemical compatibility with filling substances may be verified by assimilation to standard liquids following the procedures, as set out in 4.1.1.21.3 to 4.1.1.21.5 and using the list in table 4.1.1.21.6, provided that the particular design types have been tested with these standard liquids in accordance with 6.1.5 or 6.5.6, taking into account 6.1.6 and that the conditions in 4.1.1.21.2 are met.

When assimilation in accordance with this sub-section is not possible, the chemical compatibility needs to be verified by design type testing in accordance with 6.1.5.2.5 or by laboratory tests in accordance with 6.1.5.2.7 for packagings, and in accordance with 6.5.6.3.3 or 6.5.6.3.6 for IBCs, respectively.

The rule for collective entries (figure ADR 4.1.1.21.2) requires the exact composition of the dangerous goods. In most cases, it leads to a declaration of “further testing requested” because a lot of chemical compounds are not linked to a standard liquid. This is especially relevant for waste as the composition may not be exactly defined and could vary from day to day in function of the corresponding production process (e.g. liquid waste generated by laboratory analysis, used solvents generated by mechanical processes or cleaning activities, etc.).

“Further testing” means e.g. the dangerous goods has to be stored at room temperature for 6 months or on test pieces for 3 weeks under conditions. From a practical point of view, such process cannot be applied to each batch of generated waste, nor does it allow an efficient waste management.

To ensure the highest level of safety possible, we propose that the material of the packaging has been tested with all the six standard liquids for the verification of the chemical compatibility of plastic packaging, and that the packaging itself conforms to the packaging group I performance level.

Proposal

Following discussions within the Informal Working Group on the Transport of Hazardous Waste at the meeting held on 15 and 16 June 2022 in The Hague (and online), FEAD suggests adding:

Under 4.1.1.21.7 the following paragraph:

Option 1: “In derogation of 4.1.1.21.1, liquid waste classified under 2.1.3.5.5 shall be filled into plastic packaging only provided that the packaging passes the tests with all the standard liquids described in 6.1.6.1. Packaging shall conform to the packing group performance level as assigned by 2.1.3.5.5.”

Option 2: “In derogation of 4.1.1.21.1, liquid waste classified under 2.1.3.5.5 shall be filled into plastic packaging only provided that the packaging passes the tests with all the standard liquids described in 6.1.6.1 for packing group II. If the liquid waste is classified as packing group I, the packaging shall additionally pass the test for performance level packing group I with water.”

Justification

This proposal clarifies the situation faced in waste management and does not increase the current risk level.
