Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

113th session
Geneva, 15-17 May 2023

Item 9 of the provisional agenda

Any other business

Carriage of empty uncleaned packaging waste

Transmitted by the Government of Ireland

Introduction

- 1. In Ireland, we currently have a competent authority exemption in place with respect to the carriage of specific empty uncleaned (waste) single packagings, composite packagings and composite IBCs.
- 2. The exemption permits the carriage of certain specific empty uncleaned (waste) single packagings, composite packagings and composite IBCs from the provisions of ADR 4.1.1.1, 4.1.1.3, 4.1.1.11, 6.1.1.5, 6.1.5.8.2, 6.5.1.1.4 and 6.5.6.14.2 with respect to the sourcing of certain packaging documentation (UN certificate of approval, associated test report and instructions on use) without disproportionate cost or effort.
- 3. The exemption applies to packaging for wastes of dangerous goods of Classes 3, 4.1, 6.1, 8 and 9 with packing instructions P001, P002, IBC02, IBC03 and IBC08.
- 4. It was deemed necessary because in many circumstances the provisions of UN 3509, PACKAGINGS, DISCARDED, EMPTY, UNCLEANED, cannot be utilised under the specific carriage conditions required under this entry.
- 5. The purpose of the exemption is to provide participants that generate empty uncleaned packaging containing waste residues of dangerous goods with certain exemptions from the current ADR provisions. It applies to the carriage of residues of dangerous substances of Classes 3, 4.1, 6.1, 8 and 9 in empty uncleaned packaging waste in:
 - Single packagings listed in P001 and P002, removable head drums,
 - Single packagings listed in P001 and P002, non-removable head drums and jerricans,
 - Composite packagings listed in P001 and P002 of packaging code UN 6HA1,
 - Composite IBCs listed in IBC02, IBC03 and IBC08 of packaging code UN 31HA1.
- 6. The exemption does not apply to
 - dangerous goods with packing instructions that specify the packaging to be hermetically sealed or vented;
 - substances classified as desensitized explosives of class 3 or 4.1, self-reactive substances of class 4.1, asbestos (UN 2212, UN 2590), polychlorinated biphenyls (UN 2315, UN 3432) and polyhalogenated biphenyls, halogenated monomethyldiphenylmethanes or polyhalogenated terphenyls (UN 3151, UN 3152);
 - · Large Packagings.

Justification

- The relevant ADR requirements for packagings for this discussion are listed in Annex I.
- 8. The applicant for the competent authority exemption in Ireland informed us that pharmaceutical companies in particular routinely generate waste empty uncleaned drums and IBCs with residues of dangerous goods as a by-product of the manufacturing process, which are referred to as 'vendor packaging'.
- 9. The companies source raw material from suppliers across the globe. The waste empty uncleaned packagings are a result of using the raw materials contained in the drums and IBCs. In many cases these raw materials are not sourced directly from the manufacturers and there are many agents / distributors in the supply chain. There are difficulties sourcing the packaging documentation (UN certificate of approval, associated test report and instructions on use). In many cases this information is not readily available. Reasons include:
 - Number of parties in the supply chain
 - Resources required to source such documentation
 - · Language barriers
 - Lack of understanding from suppliers as to why these documents are required.
- 10. In addition, subsequent to sourcing the packaging documentation, the raw material supplier may without consultation to the end user use an alternative packaging, with different packaging documentation associated with it.
- 11. Without having sourced the documentation listed above, Ireland's competent authority exemption permits the carriage of empty uncleaned packagings listed above which contained substances of Classes 3, 4.1, 6.1, 8 and 9 to be carried by road nationally on condition that the carriage complies with the following supplementary provisions:
 - (1) Consignor or packer to develop written procedures and provide training on alternative packaging closure methods.
 - (2) Packagings empty, uncleaned, with minimal residue of free liquid or solids.
 - (3) Alternative packaging closure methods to address the requirements for:
 - (a) All packaging original component parts to be used including the packaging closure devices;
 - (b) All removable head drums, with original drum body to have the lid clamp band correctly and securely fitted;
 - (c) All non-removable head packaging secured to a recommended appropriate tightness using a calibrated torque wrench so it remains firmly closed and the packaging remains leakproof during the normal conditions of carriage (appropriate closing torques for the different types of packaging are provided in Annex II);
 - (d) Damaged packaging and packaging missing original component parts not to be permitted for transport.

Request

- 12. The Irish delegation considered the option of making a request in relation to this issue for a national derogation under Directive 2008/68/EC to the EU Committee on the Transport of Dangerous Goods.
- 13. However, we expect this issue may also be experienced in other Contracting Parties to the ADR, and potentially other modes of dangerous goods carriage, and it would therefore be preferable if a regulatory solution could be found that is available to all.

14. The Irish delegation would thus be interested to hear the opinions of other delegations in relation to this difficulty and to hear initial suggestions for a possible long-term solution in the regulations.

Annex I

- ADR 4.1.1.1: 'Packagings, including IBCs and large packagings, shall be closed in accordance with the information provided by the manufacturer.'
- ADR 4.1.1.3: 'Unless otherwise provided elsewhere in ADR, each packaging, including IBCs and large packagings, except inner packagings, shall conform to a design type successfully tested in accordance with the requirements of 6.1.5, 6.3.5, 6.5.6 or 6.6.5, as applicable.'
- ADR 4.1.1.11: Empty packagings, including IBCs and large packagings, that have contained a dangerous substance are subject to the same requirements as those for a filled packaging, unless adequate measures have been taken to nullify any hazard.
- **NOTE:** When such packagings are carried for disposal, recycling or recovery of their material, they may also be carried under UN 3509 provided the conditions of special provision 663 of Chapter 3.3 are met.
- ADR 6.1.1.5: 'Manufacturers and subsequent distributors of packagings shall provide information regarding procedures to be followed and a description of the types and dimensions of closures (including required gaskets) and any other components needed to ensure that packages as presented for carriage are capable of passing the applicable performance tests of this chapter.'
- 6.1.5.8.2 'The test report shall contain statements that the packaging prepared as for carriage was tested in accordance with the appropriate requirements of this section and that the use of other packaging methods or components may render it invalid. A copy of the test report shall be available to the competent authority.'
- ADR 6.5.1.1.4: 'Manufacturers and subsequent distributors of IBCs shall provide information regarding procedures to be followed and a description of the types and dimensions of closures (including required gaskets) and any other components needed to ensure that IBCs as presented for carriage are capable of passing the applicable performance tests of this chapter.'
- 6.5.6.14.2 The test report shall contain statements that the IBC prepared as for carriage was tested in accordance with the appropriate requirements of this Chapter and that the use of other packaging methods or components may render it invalid. A copy of the test report shall be available to the competent authority.

Annex II

The closing torque to be used for closures of different sizes are provided by manufacturers of new packagings (drums, jerricans and IBCs).

If such closing torques are not available, the tables below provide reference examples of the torques available in the instructions from manufacturers provided with new UN approved packagings.

Appropriate tightness for non-removable head single and composite packaging:

Steel and plastic drums and jerricans, and composite packaging (UN 6HA1)	3/4" Closure	2" Closure
Closing torque for steel drums and jerricans	15Nm	20Nm
Closing torque for plastic drums and jerricans and composite UN 6HA1 drums	10Nm	12Nm

Appropriate tightness for IBCs:

IBCs	6" Closure	2" Closure
Closing torque for IBCs (UN 31HA1)	75Nm	14Nm
Bottom openings	Hand tight closure	