## **Economic Commission for Europe**

### **Inland Transport Committee**

Working Party on the Transport of Dangerous Goods

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Geneva, 19–23 September 2016 Item 5 (b) of the provisional agenda **Proposals for amendments to RID/ADR/ADN:** new proposals

## FEAD recommendations on transport of low pressure TLlamps under ADR regime September 2016

#### **ADR 2015**

1.1.3.10 Exemptions related to the carriage of lamps containing dangerous goods

The following lamps are not subject to ADR provided that they do not contain radioactive material and do not contain mercury in quantities above those specified in special provision 366 of Chapter 3.3:

(a) Lamps that are collected directly from individuals and households when carried to a collection or recycling facility;

**NOTE**: This also includes lamps brought by individuals to a first collection point, and then carried to another collection point, intermediate processing or recycling facility.

- (b) Lamps each containing not more than 1 g of dangerous goods and packaged so that there is not more than 30 g of dangerous goods per package provided that:
  - (i) The lamps are manufactured according to a certified quality management system;

NOTE: ISO 9001:2008 may be used for this purpose

and

- (ii) Each lamp is either individually packed in inner packagings separated by dividers, or surrounded with cushioning material to protect the lamps and packed into strong outer packagings meeting the general provisions of 4.1.1.1 and capable of passing a 1.2 m drop test;
- (c) Used damaged or defective lamps each containing not more than 1 g of dangerous goods with not more than 30 g of dangerous goods per package when carried from a collection or recycling facility. The lamps shall be packed in strong outer packagings sufficient for preventing release of the contents under normal conditions of carriage meeting the general provisions of 4.1.1.1. and that are capable of passing a drop test of not less than 1.2 m;
- (d) Lamps containing only gases of Groups A and O (according to 2.2.2.1) provided they are packaged so that the projectile effects of any rupture of the lamp will be contained within the package.

NOTE: Lamps containing radioactive material are addressed in 2.2.7.2.2.2(b).

## **Special Provisions**

Manufactured instruments and articles containing not more than 1 kg of mercury are not subject to ADR

### **General Provisions**

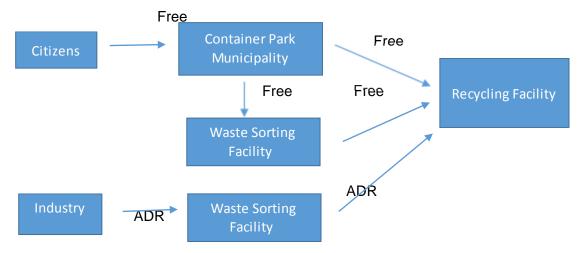
4.1.1.1 Dangerous goods shall be packed in good quality packagings, including IBC's and large packagings, which shall be strong enough to withstand the shocks and loadings normally encountered during carriage, including transshipment between transport units and between transport units and warehouses as well as any removal from a pallet or overpack for subsequent manual or mechanical handling. Packagings, including IBC's and large packagings shall be constructed and closed so as to prevent any loss of contents when prepared for transport which might be caused, under normal conditions of transport, by vibration, or by changes of temperature, humidity or pressure (resulting from altitude, for example). Packagings, including IBC's and large packagings shall be closed in accordance with the information provided by the manufacturer. No dangerous residue shall adhere to the outside of the packagings, IBC's and large packagings during carriage. These provisions apply, as appropriate, to new, reused, reconditioned or remanufactured packagings and to new, reused, repaired or remanufactured IBC's and to new, reused or remanufactured large packagings.

## **Present Transport of waste TL-lamps**

Spent TL-lamps are collected by waste collectors and treatment facilities using 2 provisions of the ADR:

- 1. 1.1.3.10. (a): collection of lamps from citizens and household, from door to door, or kerbside collection or from waste islands/container parks where citizens bring themselves their waste lamps.
- 2. 1.1.3.10. (c): collection of lamps from SME's and industries.

Conform the content of the above mentioned ADR rules, the transports of such TL-lamps are or are not subject to ADR:



## Analysis of the present situation

- 1. There is an inadequacy between the rules applied to the same type of waste, depending on of the origin: lamps from citizens are exempted, other lamps not. The experience shows that waste delivered by citizens are often of a poor quality, difficult to identify, unclean, ... With regards to lamps, we can certainly assume that the waste streams delivered by the industry are more homogeneous and standardized, as they are often the results of a regular maintenance of the buildings.
- 2. The TL-lamps are lamps under low pressure (even lower than the atmospheric pressure, so that in case of breaking, there is an implosion instead of an explosion).
- 3. The content of mercury is largely below the threshold limit of 1 g. of mercury: according to the RoHS Directive 2011/65/EU, the content of mercury is limited to 5 mg/lamp until 2011, to 3,5 mg/lamp until 2012 and to 2,5 mg/lamp as from 2013. That means that even in a large packaging containing up to 1 400 lamps, the total content of mercury is limited to 7 g. which is clearly below the limit value of 30 g.
- 4. Considering the above (mercury content) including special provision 366 (exemption of manufactured instruments and articles containing less than 1 kg of mercury), it is very strange to understand why the waste TL-lamps from industrial origin have to be transported under ADR regime while e.g. glass barometers containing up to 999 g. of mercury are exempted. Moreover, as soon as a TL-lamp is used, the metallic mercury is only present in the form of vapour, form for which there is no UN-number available.
- 5. When transporting spent TL-lamps under ADR regime, which UN-number has to be used on the packagings and on the transport documents? There is no UN number covering (broken) glass.

## **FEAD** proposal

Considering (1) the previous ADR-versions, (2) the existing exemption valid for household TL-lamps, (3) the total absence of accidents reported on the transport of such waste, with damage to drivers and/or the environment, (4) the higher guarantees of conformity, identification and packaging for TL lamps from industrial origin in comparison with the TL-lamps of citizens, (5) the additional handling required by the present rules for industrial TL-lamps increasing the risk of injury for the operational staff of collectors sorting and treatment facilities, (6) the reduced visibility of the waste at the entrance of the treatment facility, making the conformity acceptance procedure more complex and (7) the fact that such type of waste is never transported by flight, but almost always by truck, possibly by boat or train,

FEAD proposes to exempt the transport of low mercury-pressure TL-lamps both of household origin and of industrial/commercial origin, provided the latter is subject to a quantity restriction to prevent abuse.

# **Proposal of modification of the ADR:**

Deletion of 1.1.3.10 (c) and modification of 1.1.3.1. (a) as follows:

 (a) Used, damaged or defective low pressure TL-lamps that are collected directly from individuals, households, SME's and industries when carried to a collection or recycling facility; Note: This also includes lamps brought by individuals to a first collection point, and then earried to another collection point, an intermediate processing or a recycling facility.