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

Geneva, 11-21 September 2007 Item 6 (b) of the provisional agenda

PROPOSALS OF AMENDMENTS TO RID/ADR/ADN */

New proposals

Section 5.3.2.1.5: orange coloured plate marking of vehicles

Transmitted by the European Chemical Industry Council (CEFIC)

Background

- 1. Pressure receptacles for liquid substances, approved as tank containers and with a filling capacity in the range of 500 to 5 000 litres, are increasingly being used in the industry particularly for critical and high-value products. These receptacles may well be considered as one of the safest types of containment for the transport of dangerous goods. See Annex, Picture 1.
- 2. Especially the smaller types, with a filling capacity of up to 1 000 litres, and looking very similar to metal IBC's, are used very frequently.

^{*/} Circulated by the Intergovernmental Organisation for International Carriage by Rail (OTIF) under the symbol OCTI/RID/RC/2007/47.

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3. The adoption of proposal TRANS/WP.15/AC.1/2005/31 of Belgium by the Joint Meeting in September 2005, resulted in the new placarding provision 5.3.2.1.5: "If the orange-coloured plates, described in 5.3.2.1.2 and 5.3.2.1.4 affixed to the containers, tank-containers, MEGCs or portable tanks are not clearly visible from outside the carrying vehicle, the same plates shall also be affixed to both sides of the vehicle".

Discussion

- 4. There is no doubt that this proposal was sensible in relation to large tank-containers as shown in Picture 2 in the Annex, which illustrated the problem put forward in the Belgian proposal.
- 5. However the impact on the transport of smaller tank-containers (as mentioned above) may not have been taken fully into account. The new provision 5.3.2.1.5 may indeed lead to a dangerous situation in case of closed or sheeted vehicles/wagons.
- 6. In case several of these containers with different substances are loaded in such a closed or sheeted vehicle/wagon, orange plates with different UN numbers and hazard identification numbers would be displayed on the outside: this would certainly lead to confusion with the emergency responders.
- 7. Even if all small tank-containers had the same UN and Hazard Identification (HI) numbers, the single UN and HI numbers displayed on the outside may lead emergency servives taking fire fighting measures, which may conflict with measures required for other dangerous goods, carried on the same vehicle/wagon in IBC's or drums.
- 8. An example taken from daily practice: a closed vehicle, carrying a 500 litre tank-container of UN 1818 (Silicon tetrachloride, 8, II), and 100 drums of UN 2606 (Methyl orthosilicate, 6.1 (3), I) will have an orange plate displaying X80/1818. Based upon this information fire brigades may decide not to use water because of the X in the HIN. Whereas the robust container will have remained intact, leaking drums of Methyl orthosilicate may release highly toxic vapours. These should normally be knocked down with water spray but this will now not be done, resulting in a risk of intoxication.
- 9. Additionally as small tank-containers are much more robust than IBC's and drums, it does not seem logical that vehicles/wagons carrying such tanks should be marked more strictly than those carrying weaker types of packagings. Therefore at least tank-containers with a capacity of maximum 3 000 litres (same maximum capacity as IBC's) should not be subject to 5.3.2.1.5.
- 10. It should be noted that, as each individual tank will continue to bear the orange plate, showing the Hazard Identification Number for the product involved, more information will be available to emergency services than IBC's which do not have this marking.
- 11. Furthermore paragraph .2 of subsection 5.3.2.1.1 of the IMDG Code limits the need for the display of UN numbers on cargo transport units to "packed goods loaded in excess of 4 000 kg gross mass, to which only one UN number has been assigned and which are the only

dangerous goods in the cargo transport unit. This result in different modal requirements, hampering intermodal transport e.g. ferry operations.

Proposal

12. CEFIC therefore proposes to add a NOTE to 5.3.2.1.5 to read as follows:

"NOTE: This subsection does not apply to the marking with orange coloured plates of closed and sheeted wagons/vehicles, carrying tanks with a maximum capacity of 3 000 litres."

Justification

- 13. In case of accidents involving closed and sheeted wagons/vehicles this proposal:
 - (a) Will not only avoid confusion with emergency responders confronted with orange placards displaying different hazard identification numbers; but
 - (b) Will also prevent them from taking wrong fire fighting measures based upon the display of a single hazard identification number, which may conflict with that of goods on board packed in IBCs or drums.
- 14. Similar mixed loads of IBCs in closed or sheeted vehicles/wagons do not require the vehicle/wagon to be marked with orange plates displaying UN number and hazard identification number, although these types of packagings are less robust than small tank containers. Therefore the transport of such robust tanks without the display of UN and hazard identification number on the vehicle/wagon will not reduce the level of safety.

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Annex

Picture 1



Picture 2 (taken from TRANS/WP.15/AC.1/2005/31)

