

## COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS AND ON THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS

### Sub-Committee of Experts on the Transport of Dangerous Goods

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Item 4 (c) of the provisional agenda

### PACKAGINGS (INCLUDING IBCs AND LARGE PACKAGINGS)

#### Comments on document ~ST/SG/AC.10/C.3/2005/4, "Approval of Intermediate Bulk Containers"

#### Transmitted by the International Confederation of Plastics Packaging Manufacturers (ICPP)

1. ICPP notes with concern the paper from Australia which introduces the terms "single-trip IBC" and "light-weight IBC" implying that their use is unsafe in the transport of dangerous goods. ICPP as the representative of the manufacturers of composite IBCs underlines that these terms do not exist in the UN Recommendations. The introduction of such new terms is in contradiction to the design type approach adoptable for both packaging and IBCs. Moreover the Model Regulations include a number of requirements for users and reconditioners (1.2.1; 4.1.1.9; 4.1.1.12; 6.5.1.6.4 (b); 6.5.1.6.5; 6.5.1.6.6) to ensure the safety during transport with the repeated use of IBCs. In 2004 the world-wide production of composite IBCs amounted to more than 6 million. More than 15 million are currently in service. ICPP is unaware of any reports of dangerous goods container failures indicating that the use of composite IBCs is unsafe in transportation.
2. Moreover the expert from Australia proposes to change the stack test criteria and to introduce a new test to assess "normal handling ability". The objections by ICPP are outlined briefly as follows.
  - The stacking test for IBCs which are designed to be stacked require according to 6.5.4.6.4 a safety factor of 1.8, which relates to a relative density of 1900 kg/m<sup>3</sup> of the filling liquid to a stacking load of 4 tonnes.

The proposal in paragraph 7 of the document ST/SG/AC.10/C.3/2005/4 to amend the stack test criteria replaces the current performance standards with an inadequate prescriptive standard. This is considered to be a retrograde step.

The current wording in 6.5.4.6.5 (a) currently includes the performance criterion: "...no permanent deformation which renders the IBC ... unsafe for transport". Deletion of this criterion leaves industry with no guidance as to what may be acceptable deformation in the stack test. Even if it did not materially affect the ability of the IBC to safely transport dangerous goods? There will always be some deformation in a stack test and the absence of any engineering tolerances for deformation in the stack test makes it impossible to know what level of distortion might be acceptable.

ICPP has many members who manufacture composite IBCs which experience minor deformations in the stack test, but which subsequently have been shown to be quite safe for transport. Furthermore, many IBCs are slightly deformed in use and then are satisfactorily subjected to routine maintenance (not repair) and reused. The IBCs have been demonstrated over many years to be safe for transport.

- The proposal in paragraph 8 to amend 6.5.1.5.6 is based on inappropriate and misleading field observations associated with a single incident.

The accident referred to in the paper occurred as a result of illegal stowage by the loader, who loaded the IBCs contrary to the manufacturer's recommendations and contrary to the national loading laws in effect at the time. The picture shows IBCs stored in longitudinal position in an ISO-container requiring a width of 2.4 m whereas the given width was only 2.32 m. These IBCs were damaged by misuse. They are of a type that are routinely maintained and reused. Some have been recorded as having been reused more than 20 times across Australia and New Zealand over several years. The fact that some of the same type failed when illegally and improperly loaded is hardly justification for a new series of tests.

Amendments as proposed in paragraph 8 would do nothing to improve safety where any packagings are illegally or improperly loaded or stowed and document ST/SG/AC.10/C.3/2005/4 contains no evidence that IBCs are failing when they are properly stowed.

For the above reasons ICPP opposes the proposals in document ST/SG/AC.10/C.3/2005/4.

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