

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

Twenty-eighth session
Geneva, 28 November – 7 December 2005
Item 3 (a) of the provisional agenda

PACKAGINGS (INCLUDING IBCs AND LARGE PACKAGINGS)

Protection and strength of bottom discharge valves on IBC's

Transmitted by the expert from Australia

SCOPE

This proposal aims to recommend changes to section 6.5.3.1.5 to improve requirements in respect of the protection and strength of bottom closures on IBCs.

RELATED DOCUMENTS

ST/SCETDG/28/INF xx – Report of the IBC Working Group.

Introduction.

1. As noted, in the IBC Working Group report, issues related to the level of protection and strength of the bottom closures were identified as a contributing cause of some incidents involving the leakage of dangerous goods. The two major concerns identified were:

- (i) **Insufficient protection;** where valves and secondary closures, where fitted, are exposed to damage from forklift tines or other contact damage; and
- (ii) **Insufficient valve bracing:** where the valve and discharge elbow or pipe work are unsupported. When transported on rough unpaved roads, or in other transport situations that result in vibration, this can cause cracking in elbows, pipe work or stub connections.

It was agreed at the Paris IBC Working Group meeting that some measures are needed to address this issue and provide clarity in respect of ensuring the bottom closure has adequate strength and is adequately protected.

Proposal.

2. In order to address these matters Australia proposes that section 6.5.3.1.5 be amended with the following added at the end of the current text:

“Bottom discharge valves are to be so arranged that the valve and any secondary closure does not protrude beyond the side of the IBC and shall be protected against the risk of being wrenched off or damaged during handling and transport. The bottom discharge valve, and its connection to the IBC, is to be braced in such a way that it is resistant to damage that may result from shock or vibration during the handling and carriage of the package. In composite IBCs where the connection between the outer casing and inner receptacle allows relative movement between the sub-assemblies, the equipment shall be so fastened as to permit such movement without risk of damage to working parts.”
