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
Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals

Thirty-first session
Geneva, 2-6 July 2007
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Geneva, 9-11 July 2007
Item 2(a) of the provisional agenda

UPDATING OF THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS)

Physical hazards

Amendments to Chapter 2.1 of the GHS (Explosives)

Transmitted by the Sporting Arms and Ammunition Manufacturers Institute (SAAMI)

Introduction

1. During the eleventh session, the Sporting Arms and Ammunition Manufacturers Institute (SAAMI) asked that the Sub-Committee of Experts on the GHS reconsiders its decision of the eighth session where the GHS pictogram for 1.4 explosives was changed to an exploding bomb on the basis of proposal ST/SG/AC.10/C.4/2004/12. SAAMI’s proposal was submitted to the GHS Subcommittee as ST/SG/AC.10/C.4/2006/7 and, since it involves physical hazards, also to the TDG Subcommittee as ST/SG/AC.10/C.3/2006/61.

2. The proposal asserted that, for many reasons, an exploding bomb pictogram hazard is not appropriate for 1.4S sporting ammunition. In this regard, the pictogram constitutes an excessive warning, and is hence detrimental to safety. Therefore, the proposal asked that the 1.4 symbol be
realigned with the transport label to remove the exploding bomb, or alternatively, that certain sporting ammunition products be labelled without the exploding bomb pictogram.

3. However, some experts in the explosives working group were concerned about 1.4S products which may be more dangerous than sporting ammunition. They believed that the exploding bomb pictogram was appropriate for certain other 1.4S products. Therefore they opposed a return for Division 1.4 to the transport label with no exploding bomb pictogram. Other experts supported the removal of the exploding bomb for 1.4S, but wanted a more general solution, and not one specific to certain sporting ammunition products. Therefore, SAAMI was invited to submit a revised proposal to address these concerns in July 2007.

4. Regarding products which warrant an exploding bomb pictogram, it is a matter of debate of whether they should be in 1.4S. The explosives working group is studying this issue separately, and if a tool is implemented to remove these products from 1.4S, such as the proposed 6(d) test, then there is no reason to keep an exploding bomb pictogram on the remaining products.

5. 1.4S products are recognizably different in hazard than other 1.4 divisions, part of the criteria being that fire fighters and emergency responders are not significantly endangered in the immediate vicinity of a fire. In many different instances in the UN Model Regulations, 1.4S products are singled out for exceptions. Therefore there is justification to continue this trend and assign a less stringent GHS pictogram to 1.4S products than other 1.4 divisions.

6. A separate pictogram for 1.4S could be implemented by amending the GHS Explosives Table in Annex 1 of the GHS as follows. This is very similar to Table 2.1.2, which could be similarly amended. Changes are highlighted:
### Annex 1

**ALLOCATION OF LABEL ELEMENTS**

For the GHS, the assigned pictogram, signal word and hazard statement are given in that order for each hazard category of the hazard class. Where the hazard class and or categories are covered under the *UN Recommendations on the Transport of Dangerous Goods, Model Regulations*, the assigned corresponding pictogram is given for each category below the GHS requirements.

<table>
<thead>
<tr>
<th>EXPLOSIVES</th>
<th>Division 1.1</th>
<th>Division 1.2</th>
<th>Division 1.3</th>
<th>Division 1.4 other than 1.4S</th>
<th>Division 1.4S</th>
<th>Division 1.5</th>
<th>Division 1.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unstable Explosives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Danger</td>
<td>Explosive; mass explosion hazard</td>
<td>Explosive; severe projection hazard</td>
<td>Explosive; fire, blast or projection hazard</td>
<td>Warning</td>
<td>Fire or projection hazard</td>
<td>Warning</td>
<td>Danger</td>
</tr>
<tr>
<td>Unstable explosive assigned in the UN Model Regulations (Transport not allowed)</td>
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</table>

**Notes on the colours of the UN Recommendations on the Transport of Dangerous Goods, Model Regulations, pictogram elements:**

1. For Divisions 1.1, 1.2 and 1.3: Symbol exploding bomb: black; background: orange; Division number (1.1, 1.2 or 1.3, as appropriate) and compatibility group (* in bottom half and figure “1” in bottom corner; black.

2. For Divisions 1.4, 1.5, 1.6: Background: orange; Figures: black. Compatibility group (* in bottom corner; black.

3. The pictogram for Divisions 1.1, 1.2 and 1.3 is also assigned to substances which have an explosive subsidiary risk, but without the indication of the division number and the compatibility group (see also “Self-reactive substances” and “Organic peroxides”).

**Proposal**

7. Implement the changes to the GHS Explosives Table in Annex 1 as shown above.

8. Implement the same changes to Table 2.1.2, i.e. a new column for 1.4S indicating a 1.4S transport pictogram as the GHS pictogram for 1.4S materials.