

## **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 Globally Harmonized  
System of Classification and Labelling of Chemicals**

**2 December 2011**

**Twenty-second session**

Geneva, 7 (p.m) – 9 December 2011

Item 2 (a) of the provisional agenda

**Updating of the Globally Harmonized System of  
Classification and Labelling of Chemicals (GHS):**

**Physical hazards**

### **Testing and classification of water-reactive substances: Update on research to be undertaken in the United States of America**

**Transmitted by the expert from the United States of America**

Reference is made to informal document INF.38 (reproduced hereafter) which was submitted to the 40<sup>th</sup> session of the Sub-Committee of Experts on the Transport of Dangerous Goods.

**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

28 November 2011

**Fortieth session**

Geneva, 28 November – 7 December 2011

Item 9 (b) of the provisional agenda

**Issues relating to the Globally Harmonized System of**

**Classification and Labelling of Chemicals: Criteria for water-reactivity**

**Testing and classification of water-reactive substances –  
Update on research to be undertaken in the United States of  
America**

**Transmitted by the expert from the United States of America**

1. During the Sub-Committee's 38<sup>th</sup> session, the United States submitted an informal document (see UN/SCETDG/38/INF.32) highlighting the importance of continued development of improved measures for testing and classification of substances that in contact with water produce toxic gases. The United States wishes to thank those countries that have contributed to this work to date and, in particular, thank Germany for the information contained UN/SCETDG/40/INF.8 - UN/SCEGHS/22/INF.11.

2. Shortly after the 38<sup>th</sup> session on December 15<sup>th</sup>, 2010, the importance of working to develop internationally recognized testing and classification criteria for such substances was considered by the United States Transportation Research Board (US TRB) and funding (300,000.00 USD) was secured to conduct additional research. The objective of the research will be to review existing procedures and classification criteria for water-reactive substances and to consider development of improved testing methodologies for transport classification so that appropriate regulatory provisions may be applied. The research will consider both solid and liquid substances that emit toxic gases when in contact with water and will include a review of substances presently listed in Division 4.3 within the Dangerous Goods List as well as substances otherwise listed or not listed but which may possess water-reactive properties. A full description of the research may be found here: <http://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=3138>

3. It is recognized that there is a need for experts of this Sub-Committee, researchers and industry experts to collaborate on the development of new or enhanced tests and criteria for water reactive substances so that an internationally agreed test methodology and classification criteria may be established. As a condition of the research to be carried out in the United States, a review of all research to date will be conducted and coordination with other interested parties, such as BAM, will be encouraged.

4. The closing date for the request for proposal developed by the US TRB is December 8<sup>th</sup>, 2011. Shortly thereafter research proposals will be reviewed and a contractor will be selected. The work will likely begin in May 2012 and the contact period will be for 18 months with an anticipated completion date of November/December 2013. The United States will continue to update the Sub-Committee as this work progresses, and invites the collaboration of all interested parties.