2011-2012 Work Program: Water-Reactive Materials

Transmitted by the Expert from the United States of America

1. During the fifth and sixth sessions of the Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals (GHS Sub-Committee), initial proposals from the Organization for Economic Co-operation and Development (OECD) were made regarding substances/mixtures, which in contact with water will release toxic gases (See ST/SG/AC.10/C.4/2003/9). Subsequent informal papers that followed and addressed the same concerns were UN/SCEGHS/7/INF.11 (Sweden), INF.22 (France), and INF.27 (France). At the conclusion of the eighth session the GHS Sub-Committee decided not to adopt the proposal presented by OECD from the sixth session. Further work was continued on this question within the framework of a working group, led by the Expert from France (see ST/SG/AC.10/C.4/2008/10). However, the GHS Sub-Committee, during the fifteenth session, deferred this work to the Transport of Dangerous Goods (TDG) Sub-Committee.

2. During the Thirty-sixth session of the TDG Sub-Committee, the issue was discussed in detail (See ST/SG/AC.10/C.3/72 paragraphs 108-112). Though some experts supported the harmonization of the criteria in the Model Regulations with the GHS criteria, others felt further work was needed relative to the classification criteria for such gases in transport; specifically in relation to the gas’ toxicity and evolution rate.

3. It is believed that there is a continuing need to adequately address the classification of water-reactive materials within the Model Regulations. As an example of the practical implications of this work, the United States has been made aware of incidents that have occurred in the vessel mode during the carriage of solid bulk cargoes of certain water-reactive materials. Gases generated by such cargoes can lead to a dangerous accumulation in cargo holds and can lead to loss of life. In addition, water-reactive materials capable of generating toxic gases pose a risk to transport workers and emergency responders. Transport safety would be enhanced if appropriate hazard communication, packaging, and emergency response information were required for such materials.

4. In light of the past work and discussions on this matter, and the need for continued work to satisfactorily resolve the issue, the expert from the United States proposes that this matter be included in the Sub-Committee’s 2011-2012 work program.