

Interspill 2012 Science Workshops

Understanding Chemicals (SW2)

The workshop was chaired by Kevin Colcomb from UK MCA and two additional presentations were provided by Stéphane Le Floch from *Cedre* and Deborah French-McCay from RPS ASA.

The biographies of the speakers and their presentations are provided in PDF version.

The workshop was held on Tuesday 13th March at 14:15. The participation was good with approximately 50 people attending.

During the debate with the attendance, several interesting issues were raised and in particular the following ones:

- Several data bases giving various figures for chemicals exist. Their completeness and accuracy varies a lot;
- A question was raised about accuracy of modeling results. The answer is not easy to give as accuracy of drift models depends mainly on the accuracy of input data in the form of current and wind fields. Accuracy of behavior modeling depends on accuracy and completeness of the data base containing figures characterizing the properties of the substance concerned. All in all when an accuracy of 20 % is obtained between the models results and the reality, it is considered as a good situation;
- Model results shall be taken with caution. Results depend very much on input data and they shall therefore be carefully considered before formulating recommendations to the authorities. Models shall be operated by experts and their results shall be interpreted by the experts before being used to support operational decisions. As part of the interpretation, comparison with other sources of information in a comprehensive scientific study of the problem is essential;
- The possibility to prepare emergency plans in advance of an accident to improve response efficiency when the accident happens is raised. This is in fact extremely difficult to do as chemicals have a wide variety of possible behavior, and for a given substance, the behavior may vary significantly with the weather conditions (temperature, wind, sea state, salinity, ...). This is the reason why for chemical spills, the trend is to carry out a thorough and rapid analysis of the situation based on the substance or substances involved and the local conditions instead of preparing emergency plans to be used in most situations.