

## **Interspill 2015 Science Workshops**

### **Dispersant breakthrough (SW1)**

The workshop was chaired by Thomas Coolbaugh from Exxon Mobil and two additional presentations were provided by Per S Daling from Sintef and François Merlin from Cedre.

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

The workshop was held on Tuesday 24<sup>th</sup> March at 13:30. The participation was good with more than 50 people attending.

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

- The potential impact of dispersant and dispersed oil despite the fact that Corexit 9500 is composed of FDA approved surfactants and solvents. The answer was that there is currently no evidence of such impact but studies are ongoing on communities in the neighborhood of areas impacted by Deepwater Horizon oil. There is currently no indication of impact to human health, but these studies may last for decades;
- The NEBA process can be as simple or complicated as desired. It will however never be perfect due to a lack of knowledge of all the implications of the decisions to be made. It will always rely on a mix of scientific knowledge and common sense;
- The question of a potential replacement to Corexit 9500 widely used during Deepwater Horizon incident was asked. Corexit 9500 is a well-known product, with its strengths and weaknesses, and its potential impacts have been widely studied. The benefit of changing for another mixture potentially more efficient does not seem evident because we would lose all the information we have on Corexit performance and impacts. To reduce the environmental impact of Corexit when used, it seems more appropriate to work on the Dispersant to Oil Ratio to limit the quantities injected in the environment. Similar effect would have been obtained during Deepwater Horizon with less dispersant, but that information was not known at the time of the incident;
- Concerning the need to revise permanently the dispersant use policy during an incident, it is obvious that changing conditions (weather conditions, sea state, oil weathering state, ...) have an influence on the selection of the most adequate response method. The NEBA process inputs shall therefore be constantly updated

with evolving conditions and the outcome results in corresponding evolutions in response operations;

- Concerning the need for alternative response methods while it is recognized that dispersion is an effective approach for large offshore spills, it was however considered that recovery and in situ burning also had there conditions of applications. Studies of the weathering of the spilled oil help to select the most appropriate method.