REGIONAL ASSESSMENT OF OFFSHORE OIL AND GAS EXPLORATORY DRILLING EAST OF NEWFOUNDLAND AND LABRADOR
Technical Advisory Group (TAG) Session
Oil Spills, Unauthorized Discharges and Other Unplanned Events
September 12, 2019
QUESTIONS AND ITEMS FOR DISCUSSION
PARTICIPANT INPUT FORM

Name and Affiliation: Dr. Heather Dettman, Natural Resources Canada

1) If a completed Regional Assessment will obviate the need for activity specific assessments, is there a need to move the conduct of spill fate and behavior modeling to the operations authorization application process?

1. We think that fate and behavior models should be conducted on a project-by-project basis. However, the important caveat is that the compositional analyses and oil behavior descriptions being used by current models do not fully describe the processes that occur once oil enters the water. Residual oil in the water column that will eventually deposit on the sea bottom is not currently being considered for assessments for either specific sites or regional areas for specific projects.

2. After models have been developed for a project, those model results should be validated against spills of opportunity during operations. That is, companies should be encouraged to use validation results to redesign and improve model logic and inputs. (NRCan can assist with analyses of weathered oils; note that submerged oil components will travel from the spill site by the current and so may deposit in a totally different direction from the surface oil that travels by the wind.)

3. Understanding of cumulative effects of oil spills on the environment and biota for the region is continuously improving. Better understanding of the potential consequences of a spill can also help focus model development / reinforce the need to address impacts of residual oil in the water column/on the sea bottom and encourage development of improved mitigation strategies.

2) Do you have any suggestions or comments on the list of mitigation measures and their implementation for future exploratory drilling activities in the Study Area?

Floating buoys are used to track oil travel on water surface; submerged buoys with radio-transmitters should also be deployed to track where heavier oil components will be moving.

3) Are current physical/environment monitoring programs of drilling programs, and the results obtained, transparent and accessible to facilitate continuous improvement of our understanding of the effects of oil?

Analytical methods being used to describe the oil do not keep track of the heavier components in crude oils. As these are the components that are most likely to be stripped away from the bulk oil and sink in the cold water, this is an important gap. NRCan could assist with analyses of these if samples could be shared.

4) Do you have any other input or recommendations that you would like to provide to the Committee on this topic?

Not at the moment.

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