Summary Outcomes of the Health Safety and Environmental Management Systems Workshop in Keflavik, Iceland June 10-12, 2012

The HSE workshop was held 10-12 June at the meeting facilities at Hotel Keflavik in coordination with the related Arctic Council EPPR workshop on Recommended Practices for Prevention of Pollution (RP3), which took place from 11-12 June. The HSE workshop started at 10:00 am on Sunday the 10th of June with presentations and group discussions as per the HSE workshop agenda and below.

The HSE Workshop agenda was coordinated with the related EPPR RP3 workshop agenda on 11-12 June with the aim to ensure that oil and gas experts had an opportunity to attend and contribute as relevant to both projects.

Presentations on Sunday June 10

- ✓ Deepwater Horizon Investigation by the National Academy of Engineering;
- ✓ Deepwater Horizon Assessment and Recommendations by the Petroleum Safety Authority Norway;
- ✓ State of Alaska Hearings on Safety and Environmental Regulation by the Alaska Oil and Gas Conservation Commission;
- ✓ Arctic Offshore Drilling Review by the National Energy Board of Canada;
- ✓ U.S. Safety and Environmental Management Systems—SEMS by the Bureau of Safety and Environmental Enforcement;
- ✓ Norwegian HSE Management Systems by the Norwegian Petroleum Safety Authority;
- ✓ Greenland's HSE Management Systems by the Bureau of Minerals and Petroleum;
- ✓ Arctic Offshore Canada HSE Management Systems by National Energy Board, Canada;
- ✓ The Arctic Offshore Oil and Gas Guidelines (AOOGG)—HSE Management Systems by PAME

Discussions

Discussions after the June 10 presentations and during the Offshore Oil and gas Breakout Sessions associated with the RP3 workshop produced insight into the differences and similarities of existing (onshore and offshore) HSE Management Systems (HSEMS) and highlighted some of the main elements found to be critical to prevention of major accidents

and pollution incidents. The main themes were keeping recommendations limited to the most important issues identified yet useful for regulators and other stakeholders.

Findings

The preliminary findings from the workshop is to develop a three–tiered nonbinding Guidance/Recommendations approach with a single top priority and successive tiers including more, but generalized, guidance.

Preliminary Outline for the HSEMS Report

I. Updated HSE Sections of the AOOGG 2009

II. Guidelines/Recommendations on Safety Culture (what is it, how to implement it from corporate level to the rig floor, and how to measure and improve it)

III. Guidelines/Recommendations on Major HSE Management Systems Elements found to be contributing causes in many accidents (major and minor) and pollution incidents (i.e. Mechanical Integrity, Management of Change, Operational Procedures, Training, Hazards (Risk) Analysis)

IV. Specific Recommendations such as:

1) Establishing near-miss reporting for those regulatory bodies who do not currently require them and a common set of near miss definitions for all Arctic regulatory bodies to follow when overseeing oil and gas operations within their Arctic jurisdiction.

2) The need to develop a system for Arctic operations which promotes the intelligent use of indicators, measures and implementation practices which aggressively incorporates a true Safety Culture into offshore Arctic operations and HSEMS.

V. Hold Workshop on "Safety Culture" possibly with the PAME II 2012 Halifax meeting September 17. Representative from both the operational and regulatory communities can provide meaningful insights into how a Safety Culture is used and/or developed by industries, governments or the military.

VI. Appendices

1) Comparison Table of HSE Management Systems used in the Arctic

2) Table of HSE Management Systems Elements

3) Table of HSE Management Systems Elements with specific Arctic considerations.

4) Referenced list of Offshore Accident Investigations and Recommendations

5) Referenced List of HSE Management Systems Guidance available

6) Web-based information via the MRE WIR Page