



Process Safety Offshore: The Happening Place

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ABSTRACT

The development and application of process safety systems offshore pose many living challenges, some of which include the following:

- As exploration and production move into ultra deepwater, not only in the Gulf of Mexico but other locations such as offshore Brazil, the industry's technical and process safety systems are tested by extreme conditions of temperature, pressure and inaccessibility.
- The Deepwater Horizon and Montara blowouts have challenged the offshore industry to evaluate the effectiveness of their current Safety Management Systems.
- The BSSE's Safety and Environmental Management System (SEMS) program which becomes effective November 15th 2011, require companies to apply the principles of Process Safety Management offshore. There is considerable discussion within the industry as to whether such a move would actually have helped avert events such as Deepwater Horizon and Montara. Moreover, the regulator is challenged to find enough qualified auditors in a short period of time.
- The vexed topic of contractor management.
- The moneys involved are substantial. The Deepwater Horizon rig cost about \$0.75 billion, and other near miss events have had a much greater financial loss potential.

This paper will start with a very brief overview of the Piper Alpha event — arguably the most significant process event that has ever occurred — either offshore or onshore. The development of two process safety tracks will be discussed (Safety Cases in Europe, Australasia and Southeast Asia) and SEMP in United States waters.

The paper will then discuss the new SEMS rule and the challenges that companies face to meet its requirements in a very short period of time.