

Making Barriers Real in Drilling and Marine Operations

Background

Evidence from a wide range of serious incidents including serious accidents in offshore petroleum strongly suggests that the biggest problem we face is reliable *implementation* of well-known barriers (or risk controls) as opposed to not *knowing* what should be done.

As a result this particular workshop summary is aimed at operational management from rig managers to the OIM, Barge master and offshore supervisors. However, this program is readily adapted to senior managers and Boards.

Aim

To develop delegates' knowledge of how fatal and Major Accident Events MAEs occur and how they can be prevented in practice.

Workshop Outcomes:

By the end of the workshop delegates will:

- + be able to describe how major accident events occur (with specific reference to Drilling and marine operations)
- + have had practice in developing and using bow tie diagrams to explain to their teams how different roles on and offshore need to work as a team to prevent serious events
- + have taken part in at least two practical exercises using offshore petroleum incidents (of which a minimum of one will be drilling specific and another marine specific to illustrate the typical causation pattern of MAEs and fatal accidents)
- + be able to identify those tasks and activities from the wide range of activities which take place on the rig which present a special risk of leading to a serious event.
- + Be able to practise (by simulation) the managerial and supervisory techniques appropriate for managing the risk including:
 - o Successful delegation techniques and why some delegation methods do not work
 - o appropriate approaches to "active monitoring" to check that work is being done as intended
- + have a working knowledge of the different types of human error and be able to identify appropriate barriers or "defences" for different types of human error (using tasks typically carried out on the rig as examples).
- + be able to identify the "weak signals" (as used in organisations aspiring to be High Reliability Organisations, HROs) which make the risk of a MAE occurring more likely

Method

Peter Wilkinson, with our support will prepare a highly practical course which will engage, inform and challenge where appropriate. He will use practical case studies, some of the Hopkins material from Deepwater Horizon on cognitive bias such as “Group Think” as well as using the material you supply (for example some recent incidents) to gain insights into incident causation with particular relevance to MAEs/Fatal Accidents.

Materials

Peter has run these sorts of courses for individual companies, regulators and as public courses and received very positive feedback. An important aspect of success is to ensure access to relevant material from the rigs to customise the offering. In particular, Peter suggests provision of the following information will aid preparation and ensure the material is focussed on relevant issues:

- + Copies of incident reports
- + Copies of any rig incidents globally of which you are aware but not otherwise publically available
- + Relevant parts of the safety case eg MAEs, SCEs, other critical controls/barriers, accountability for them and how they are monitored
- + Audit or inspection reports that relate to controls/barriers for MAEs
- + Any other materials you think will be of use.

FutureMedia and Noetic are of course happy to sign a non-disclosure agreement to cover this sort of information.

Why FutureMedia and Noetic?

FutureMedia has a well-known reputation for its DVDs and training materials developed in conjunction Professor Andrew Hopkins. Futuremedia has provided a wealth of video content in the past to many similar organisations as yours, After operating in this industry, worldwide, for over 40 years we can provide quality produced video content for integration into an organisation training programs. Our Professor Hopkins DVDs use case studies of real process safety incidents to illustrate the key concepts and delegates will be encouraged to share their knowledge of incidents for the benefit of the course including near misses- Peter will also use real examples from industry.

Peter Wilkinson is a well-known and respected safety professional who has regulated, managed and consulted around the world in offshore petroleum safety. This includes the North Sea where he was a founder member of the UK’s HSE formed after the Piper Alpha disaster and had responsibility for regulating a variety of drilling companies including Santa Fe, EnSCO and Rowan Drilling. Peter has since worked for BHP Billiton carrying out corporate audits of their drilling operations, worked on the Montara blow out for the Australian Government and for the US Chemical Safety Board on the BP Macondo investigation.

tel: 61 2 9279 4499
fax. 61 2 9279 4488
Email. info@futuremedia.com.au
www.futuremedia.com.au

FutureMedia Pty Ltd

A.B.N. 91 002 025 050
Level 3, 75 King St, Sydney NSW 2000
Australia