

OBSERVATIONS ON THE 2010 MACONDO/ DEEPWATER HORIZON DISASTER

By Peter Wilkinson-Managing director Noetic Risk Consultants

Consultant to the US Chem Board

Board members and safety managers may find it time consuming to read in depth the first report into the 2010 BP Macondo/Deepwater Horizon disaster in the Gulf of Mexico released this week. Yet the lessons it contains on managing risk are as relevant for board members and safety managers in all industries.

The first report of the United States Chemical Safety Board inquiry into the disaster is a timely reminder that how we think about risk and how it is implemented on the ground may be vastly different to our perception. In the worst case we may be focusing on the wrong risk entirely or the wrong measures of risk.

The Macondo disaster is a spill, a fatal accident, a financial disaster depending on your point of view or interest, but all are the foreseeable consequences of a failure to manage the well-known risks of drilling an oil well. The incident illustrates BPs view of 'safety' was focussed on "personal" safety - the sorts of incidents that can hurt one or two people at most. They measured and had controls in place, for personal safety issues with less focus on the innate risks of drilling for oil like a catastrophic oil or gas fire. Blowouts are a recognised risk, can cause death, and certainly result in massive financial and environmental loss. In the case of Macondo, BP seemed to be more focussed on slips and trips than blowouts.

Macondo was not just an environmental and human disaster it was a business disaster as well. It bought BP to its knees and saddled them with eye watering liabilities measured in the billions of dollars. A well blowout is an example of a low probability but high consequence risk. These exist not just in oil and gas but in a wide range of other industries including mining, energy, electricity generation and transmission, and transport amongst others.

Noetic's experience of low probability but high consequence disasters such as Macondo and other business disasters is that they share some common features. These are an absence of any warning of disaster although subsequent investigation reveals a failure to implement well known risk controls for well know risks; a tendency for leaders to want to hear only good news and in the case of safety risks, a tendency to measure safety solely by using lagging measures such as the lost time injury frequency rate (LTIFR). There is no one "magic bullet" that will solve these problems. But just as there are common features in disasters, there are some common signs that board managers and safety managers can watch out for and question.

First, disasters come as a big surprise to organisations, but there are always warning signs. Risk management traffic light reports that only show "green" are a classic symptom that should prompt concern. As perfection is a rare commodity, reporting on risk controls should routinely identify weaknesses and improvements. A key role for management is to create an atmosphere that permits bad news to be reported. It is said that bad news does not travel upwards well. But you cannot manage what you don't know about. An important distinction here is that management needs to encourage the reporting of bad news but equally, are also entitled to expect a good plan to address the issues identified.

A second and related risk management issue which Directors should question is "what is the basis for the reporting on risk?" Do risk controls have an "owner" close enough to the scene of the action to know what is happening in practice? In other words are senior management just putting their gloss on the risks or is there evidence from those who really know, to back up what is reported?

A third issue relates to metrics. We need KPI's but how relevant are they? For example in the case of safety, if you have risks related to transporting hazardous materials by road or fires and explosions, then the classic but over used safety measure of lost time injury frequency rate (LTIFR) is not going to be much use. This is because there is no correlation between having a good LTIFR and avoiding a major incident. This point was made dramatically in the case of BP Macondo. Executives were on the Deepwater Horizon drilling rig when the Macondo well blew out. Ironically, they were there to celebrate the accident free performance of the rig and to transfer learnings about a trip hazard from one rig to another. The problem with LTIFR is that it does not focus on the risk control measure. For example, if we slip on some spilt yoghurt in a supermarket, it is purely a matter of chance whether or not we break a leg or just hurt our dignity. The broken leg will be reported but the damage to our dignity from falling over is unlikely to be. However, the hazard namely the spilt yoghurt is the same in both cases.

This teaches us that we need to focus on the things that can cause us problems and not just if they actually did. This is because it is only chance whether or not anybody actually gets hurt. So we need to make sure that the risks are properly characterised and measure the effectiveness of our controls and not rely on lagging measures such as LTIFR. This is a bit like driving down the highway looking in your rear view mirror.

Disasters on the scale of Macondo are rare but there are many more very serious and preventable incidents that cause death, injury and affect shareholder value. As the Chemical Safety Board releases its final two stages of the reports we will learn more about their recommendations.

In the meantime, there is plenty for all industries to take on board regarding how we view, manage and report on risk. Culture is always a factor and if you want to do just one thing that can make a difference to your risk management then it would be to create an environment that permits the reporting of bad news.

<http://noeticgroup.com/nrs/>

peter.wilkinson@noeticgroup.com

[http://www.csb.gov/assets/1/7/Overview - Final.pdf](http://www.csb.gov/assets/1/7/Overview_-_Final.pdf)

Peter Wilkinson
Noetic Risk Solutions Pty Limited
Locked bag 3001
Deakin West ACT 2600
<http://www.noeticgroup.com/>

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