

PROFESSOR ANDREW HOPKINS' PRESENTATIONS

Professor Andrew Hopkins (ANU) is a world-renowned expert in the analysis of the causes of major industrial accidents and he has assisted many organisations in improving and developing systems of prevention.

- Expert witness at the Royal Commission into the Longford Gas plant fire in 1998
- Consultant to the US Chemical Safety Board investigation of the Texas City accident
- Recipient of the 2008 EPSC Process Safety Award
- Consultant to the Australian Defence Forces on organisational culture



Risk management and rule compliance: Decision making in hazardous industries

Risk management and rule compliance are inter-related strategies for promoting safety in hazardous industries. However, risk management offers very little guidance to end-point decision makers – they need rules to guide their decisions. Accordingly, it is important, even within a risk management framework, that risk management be translated into rule compliance for end-point decision makers, where possible. This is what, in fact, happens for a wide range of operational decision making.

For non-operational decisions, such as investment and design decisions, the need to convert risk management into rule compliance is equally important, although more controversial. Nevertheless, the authorities have shown that they are willing to impose prescriptive technical rules on duty holders in relation to non-operational decisions, in the interests of safety.

These points are illustrated using a variety of empirical examples and materials, including the UK Buncefield accident and the Australian Pipeline Standard. 40 MINUTES.

NEW!

Why BP failed to learn the lessons from elsewhere: the Texas City Refinery fire.

An explosion at BP's Texas City Refinery in March 2005 cost the lives of 15 people and injured nearly 200 more. BP had failed to learn the lessons of earlier incidents, such as the Esso Longford Gas Plant explosion, that major hazards are quite distinct from the hazards that give rise to most occupational injuries and must be managed quite differently. This presentation explores the reasons for this failure to learn, focusing on the company's organisational structure and its incentive systems. 50 MINUTES.

Lessons from Longford

The Esso Longford Gas Plant explosion killed two men and injured others. The company attributed the accident to errors by operators, but this presentation shows how those errors were induced by a series of organisational factors, among them, inadequate hazard identification by the company, the failure of the incident reporting system, which was focused exclusively on lost time injuries, poor auditing, chronic alarm flooding in the control room, inadequate change management, cost cutting, and the absence of engineers on site. The presentation builds a causal diagram (an accimap), step by step, showing how these various factors inter-related. 60 MINUTES.

Becoming a mindful organisation

This presentation discusses “cultures of denial” and ways they prevent organisations from picking up the warning signs that are always present prior to accidents. It proposes that such cultures must be overcome if organisations are to become truly “mindful”.

It emphasises the need for reporting systems that will pick up indicators of danger and it stresses that management must carefully consider the sorts of things that need to be reported and find ways to encourage such reports. It discusses ways in which management can be made more effectively accountable for the way they respond to reports. 40 MINUTES.

Mindful leadership

This presentation pinpoints the role of leaders in ensuring safety. It argues that they must be mindful of the ways in which things can go wrong, and it describes what mindful leaders do to encourage safe operation. Mindful leaders have chronic unease about how well systems are working, and hence they try to find out for themselves. They speak to front-line workers and ask questions that are carefully designed to find out what is really going on. They also promote: sceptical auditing, reporting systems that pick up warning signs, accident analysis that asks “why” many times, organisational structures that empower voices for safety, proper risk assessment of cost cuts and bonus systems that focus attention on safety. 50 MINUTES.

What are we to make of Safe Behaviour programs?

This presentation provides a critical look at the assumptions which underlie safe behaviour programs and identifies some of their limitations. Unsafe behaviour is merely the last link in a causal chain and not necessarily the most effective link to focus on, for the purposes of accident prevention. They also miss critically important unsafe behaviour, such as attempts by workers to re-start processes that have been temporarily interrupted. Conventional safe behaviour programs aimed at front-line workers are also of no use in preventing accidents in which the behaviour of front-line workers is not involved. Given that it is the behaviour of management which is most critical in creating a culture of safety in any organisation, behavioural safety observations are likely to have their greatest impact if directed upwards, at managers. 50 MINUTES.

For more information on Professor Hopkins' consulting services and presentations, please contact FutureMedia Pty Ltd.

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