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‘From downtown to boomtown’ was the theme of the recent Perth Safety Conference

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SEPTEMBER 2012 OHS Professional

Under pressure: safety in the oil & gas industry
How organisations can lift their OHS game in the oil and gas industry
My friends long ago gave up trying to have conversations with me about sport. I just don’t get it. Why expend the mental energy and devote valuable memory space to the names of the players in the current Australian cricket team, the scores in the 2009 AFL Grand Final and the number of medals we (should have) won in the pool at the Olympics?

That's not to say that I do not enjoy watching the odd game of something and of course I do enjoy a bit of exercise myself, but where is the return on the investment in memorising all those names and statistics?

Return on investment is of course a hot topic for any OHS professional. How many times have you been asked to justify why we should expend a sum on a machine guard when we have never had an injury? Why spend the money on a roof edge rail when no one has ever fallen and work up there is very rare anyway? Most of us have a pool of answers we can dip into to mount a persuasive argument.

The question becomes more challenging when we start to look at occupational health and diseases of long latency and even justify our own existence; how does the OHS function pay its way? Once again we can generally call up some persuasive arguments but finding good examples to point to in print to add weight to the argument is not always easy.

Hence there was one Olympic statistic that caught my interest and that was to do with the return on the investment in the occupational health service provided during the construction of the London 2012 Olympic Park. A priority for the Olympic Delivery Authority (ODA) was to achieve excellence in health and safety management.

To accomplish this, a comprehensive occupational health service was established offering free support to all contractors from a multi-disciplinary team of nurses, physicians, physiotherapists and occupational hygienists.

The park site extended over 500 acres of formerly mixed-use and brown field sites and during the build the peak workforce was estimated to be around 12,000 people with around 30,000 people working on the site over the lifetime of the project.

The build was completed with 125 reportable (RIDDOR) injuries and on analysis of the occupational health service delivery, a simple return on investment figure shows that for every one pound invested by the ODA the return was £3.46 ($5.21) in reduced wages and £5.96 ($8.98) in reduced production costs.

Other estimates have factored in longer term benefits such as ongoing healthy lifestyle changes as a result of the program and suggest far greater returns. There are, naturally, a number of qualifiers and there is devil in the detail. However, there is no question that the program paid dividends.

Around the same time as reading about the achievements at the Olympic Park, I was sitting in an office with an engineer who had been commissioned to devise a new piece of equipment to be at the centre of a revised materials handling process.

With an organisation-wide rollout as the aim, the cost-benefit analysis showed highly significant gains, and consequently, implementation had commenced.

However, I was concerned about the dramatic increase in hazardous manual handling that would result from the new process. “Oh, no, OHS was not included in the cost-benefit figures because that's in a different area,” was the response to my obvious question.

Clearly, the project was a long way down the track before there was an opportunity to question the health and safety implications, and management commitment to implementation was driving the project forward at great speed. Meanwhile, on the wall sat the framed policy statement espousing the values that made health and safety paramount.

The ODA’s aspirational OHS objective that delivered a return on investment provided a stark contrast for me when I sat discussing the materials handling project in an environment where the push for productivity gains had blinkered management against the potential human and injury management costs.

Therefore, it is reassuring that although it sometimes feels like we are facing challenges of an Olympic scale, if we can secure a genuine commitment to the right goals and provide some solid evidence of the benefits we can have some wins.

Dr Steve Cowley, FSIA, SIA National Publications, Editor

See page 10 for more information on the five key OHS lessons from the construction of London’s Olympic Park.
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Two of Australia's biggest construction companies have entered into a $225,000 enforceable undertaking after two concrete panels, each weighting 11.3 tons, fell from a contractor's truck in October 2006. No one was hurt in the incident near the Eastlink tollway project at Ringwood, Victoria. The tollway was being built by the companies which were in a joint venture, and John Holland and Thiess subcontracted other companies to transport the concrete panels which were used as sound barriers. In lieu of prosecution by WorkSafe Victoria, John Holland and Thiess will spend up to $225,000 to research best-practice for contractor engagement and management. Under the terms of the enforceable undertaking, the companies will engage a WorkSafe-approved independent health and safety expert to report back to WorkSafe on their findings within six months.

Communication key for mining OHS professionals

Communication is vital for OHS professionals to ensure effective operational safety 'at the coalface' and in working with management in the resources sector, according to managing director of DTF Consulting, Darren Flanagan, otherwise known as 'The Beaconsfield Gun'.'The safety and training professionals at our mine sites really need to be on their toes at the moment and make sure that they are effectively communicating to senior management what they think the mine should be doing in terms of improving both training and supervision before a problem evolves. Our mine managers are busier than ever at the moment so they need strong support and clear communication from all of their departments to ensure that they get through this extremely busy time without a major incident,” said Flanagan, who was speaking at the SIA Perth Safety Conference 2012.

John Holland and Thiess enter enforceable undertakings

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Tackling workplace stress and burnout

Workers in the finance, ICT and retail sectors are at higher risk of stress and burnout than other employees, while fly-in fly-out employees and contractors in the resources sector are particularly at risk, according to an expert in stress and burnout management. There has been an increase in organisational change across the board, with downsizing, restructures and an increase in deliverables and changing deadlines, said Robyn McNeill, director of Beating Burnout. Speaking at the SIA Visions Conference 2012, McNeill said this increase in organisational change can lead employees to feel overwhelmed by workplace demands being placed on them. This could also be compounded by technology which has brought about a new paradigm in relation to "how long and often we work", said McNeill.

Employers urged to take action against bullying

Employers should remain vigilant and take action against bullying in the workplace, according to Mark Stone, chief executive of the Victorian Employers’ Chamber of Commerce and Industry (VECCI). Employers and employees can play their part by reporting and responding to any known instances of bullying in workplaces, Stone said. "Most businesses are very aware of the obligation to provide a safe workplace. Employers can play a valuable role in increasing awareness of the harmful effects of bullying, and the steps that can be taken to eradicate it." Bullying should not be condoned in any workplace, according to Stone, who recently endorsed a new Victorian Government anti-bullying campaign. One year since the implementation of ‘Brodie’s Law’, which made serious bullying a criminal offence, the campaign aims to further inform Victorian workplaces about the law and the consequences of bullying.

Do Australians work too hard?

Overwork is significantly impacting the mental health and wellbeing of Australians, according to Professor Sue Richardson, a principal research fellow at the Flinders-based National Institute of Labour Studies. Overwork is an issue that must be taken “much more seriously”, she said. “We hear a lot about unemployment and underemployment but we don’t hear nearly enough about over-employment. There’s a strong language about how hard work and long hours are somehow morally superior but I think that conversation needs to be reconsidered.” Her comments came on the back of a four-year research project, funded through a $1.3 million National Health and Medical Research Council grant, which has revealed the impact of overwork on the mental health of Australia’s workforce.

OHS specialists hired for harmonisation

Many large organisations have conducted external audits of their safety processes and subsequently hired OHS specialists to assist with fixing policy gaps to comply with harmonised Work, Health and Safety laws, according to a recent report. Smaller businesses have also conducted internal reviews utilising specialists already employed in the business, and for many such organisations, the report found this process “has not been undertaken in some time”. Harmonisation has placed OHS high on the agenda for many organisations, the 2012 Hays Salary Guide found. In addition, the introduction of harmonised OHS laws has led to increased demand for OHS lawyers. “Workplace relations lawyers with recent experience and an understanding of the Fair Work Act also remain in demand,” said the report, which noted that salaries for employment lawyers at any level are on the rise.

Improvement needed in safety-related risk controls

Companies can improve both the monitoring and effectiveness of their risk controls in developing robust safety performance standards, according to Simon Casey, manager – risk, GHD Service Group. The variation within most companies’ safety-related risk controls is “very high” and is mostly a reflection of the level of maturity with their disciplines, he said. “One company could be very strong in relation to asset integrity but not in terms of electrical safety. However, in another company the opposite might be true. Companies also differ in how well they monitor controls for different types of risks, either focusing on process safety risks or on personal safety risks.” Speaking at the SIA Perth Safety Conference, Casey said that the main area for improvement is generally in the visibility and governance of control effectiveness.

Harmonisation to benefit SA economy

In adopting the model Work Health Safety laws, South Australia would benefit by $15.9 million per year over the next 10 years following one-off implementation costs of $41.66 million, according to a recently released Regulatory Impact Statement: Model Work Health and Safety Regulations in South Australia. Conducted by Deloitte Access Economics for SafeWork SA, the report found that multi-state businesses would benefit from harmonisation by approximately $4.85 million per annum. Furthermore, single-state firms and small businesses in South Australia would reap a net benefit of about $1.76 million per annum (or $3.10 per worker per annum).

Study from home to gain your qualification

If you’re keen to have a recognised OHS or Environmental Health qualification to expand your career opportunities, you should consider these nationally recognised courses available from Queensland University of Technology (QUT):

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To learn more about advancing your knowledge and register for QUT’s online Postgraduate Options Evening on Tuesday, 9 October 2012 please visit www.qut.edu.au/public-health
Delivering for the profession

This issue we report on some key initiatives designed to support delivery of a superior range and level of services to you and to underpin the further development of the profession in Australia.

Certification of OHS professionals has been a hot topic of discussion following on from the Body of Knowledge (BOK) project. The newly appointed Chair of the College of Fellows will lead SIA’s development of a pilot program to test proposed certification models. This project will now include the redevelopment of a challenge examination – aligned to the BOK. Many of you will be aware that we have been without a challenge exam for several years – expect to see this one in January, 2013.

Accessibility of conferences, seminars and technical presentations for members in regional areas is also under review. We are currently looking at how technology might assist us to make the content of these events available to members living or working in areas which prevent them attending in person.

Our international peers have begun offering their members on-demand virtual packages and webinars; we are investigating how we might replicate that here.

We have also been working for the last twelve months on the feasibility of establishing a services/products section of SIA to provide an additional revenue stream to support a broader range of member services. This project will now move on to the next phase of planning; more details in the next few months.

These are just a few of the initiatives currently underway and each reflects a major step forward for our organisation. In the 12 months to 30 June we have experienced a period of significant growth in membership, demonstrating the profession’s increasing level of support for our activities.

In the same period membership in WA increased by 20 per cent. I recently attended the Perth Safety Conference and the feedback I received from delegates confirms the strength and quality of our activities in WA. Congratulations to Branch Chair Alan Meagher and the WA Committee for their support of our members and to the conference organising committee for delivering an outstanding event. You’ll read more about this excellent conference on page 28.

As always, I would like to thank the many members who support our activities, those who give freely of their time and expertise at branch and national level, and, our CEO and the staff of the National office for their work for the members.

Sue Pilkington, FSIA, FRMIA, Chair, Board of Directors

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TAFE programs are delivered with Victorian and Commonwealth Government funding for eligible students.
The essentials of networking

In this series we are exploring topics and issues relating to establishing a work health and safety (WHS) business. Amanda Day considers the value of networks and tips on provide building and maintaining them.

The value of effective networks as a WHS consultant cannot be overstated. Work is often not advertised, with much depending on effective working relationships and ‘word of mouth.’ As a WHS consultant it is vital to keep up to date with technical knowledge and any relevant industry changes. Networks can help with this. A strong network of fellow WHS professionals/practitioners is also highly beneficial when working on complex matters, as it enables discussion of ideas with other experienced WHS people.

Given the importance of networks, the question of how to build and maintain these networks arises. Membership of professional organisations and attending events encouraging networking with fellow WHS professionals/practitioners is an excellent start. Another key is participating in working groups. Participation in working groups may not pay well (or may even be entirely voluntary) but they present invaluable opportunities to meet others and build a positive reputation.

Amanda Day, WHS Consultant

A key characteristic of effective networks is collaboration based on trust, superior interpersonal skills, integrity and ethical behaviour. There are professional courses to improve interpersonal skills, and reflection on one’s practice and engaging with a mentor can be very helpful. It is important to note, that people generally learn the most from negative experiences, so although they may be unpleasant, a negative experience can provide a valuable learning opportunity, if approached the right way.

In the current environment, social media presents both an opportunity as an effective way to communicate, but also presents challenges. It is important to remember that your professional conduct will be judged and that there can be long lasting ramifications of any ‘spur of the moment’ social media communications.

Overall, networks are essential for working in WHS, particularly if working independently as a consultant. So making the most of any networking opportunities is important. They are generally a lot of fun too!

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Innovative communication techniques that helped to prevent worker deaths during the construction of Olympic Park can be harnessed to benefit other construction projects, according to a UK research project.

Building the 2012 London Olympics venues, athletes' village and infrastructure was one of the largest construction projects in Europe. The main construction project was completed in July 2011, on time, within budget and with an exemplary health and safety record. Safe and healthy behaviour was encouraged across the Olympic Park, leading to an unprecedented zero fatalities during the construction phase of the games.

The UK’s Institution of Occupational Safety and Health (IOSH) and Health and Safety Executive (HSE) jointly commissioned Loughborough University to investigate the communication and impact of safety techniques on multiple contractors during the Olympic build. Looking at how positive worker attitudes and behaviour in health and safety were fostered by the Olympic Delivery Authority (ODA), researchers assessed knowledge transfer in, out of, and around the park.

Researchers collected information from interviews with managers and supervisors, focus groups with workers and document analysis of campaigns. They found that workers really appreciated feedback and liked that site managers were accessible, listened to concerns and, where possible, acted on them.

“The techniques used were often low-cost and had cross-company impact, showing that a good health and safety record isn’t out of any company’s grasp,” said IOSH executive director of policy Luise Vassie.

“Last year there were 50 fatalities and 2,298 reported major injuries in this sector, so IOSH would strongly encourage managers of small, medium and multi-contractor projects to take a good look at how these results were achieved and implement some of those principles into their own health and safety strategies.”

Leader of the research team, Alistair Cheyne, said strong leadership, accessible supervisors, worker engagement and reviewing practice are common tools for managers in any sector and can be easily adopted by other organisations. “Perhaps the biggest success was the way in which organisations, big and small, showed how easy it was to work so closely together to tackle health and safety issues,” he said.

As a result of the research, IOSH highlighted five key areas which can be used in construction companies and projects of all sizes. These are:

1. Lead from the top. The ODA set standards and also visibly engaged with the workforce to direct, motivate and change behaviour by focusing on its long-term goals.
2. Develop competent supervisors. The positive impact of technically knowledgeable supervisors upon health and safety was understood, as well as softer communication skills to influence understanding and behaviour.
3. Foster an open, positive safety culture. Safety was a dominating factor of the culture. If workers are engaged and feel managers care for their wellbeing, they’re more likely to get involved with the health and safety process.
4. Reward good behaviour. Incentives and rewards helped to promote and encourage safe behaviour. In many cases positive feedback was the real reward, as it boosted morale.
5. Review and learn. Any problems were constantly reviewed and communicated across the organisation. Most crucially, they were learnt from to improve health and safety.

“This is one of several research projects funded by HSE to create a learning legacy from the Olympic construction project,” said Stephen Williams, HSE director of operational strategy and London 2012 Games. “Evidence that change in workers’ safety behaviour has been sustained since they left the Olympic Park is a very encouraging sign that transfer of the good practice to other construction projects is already happening.”
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From safety constraints to safety facilitation

Safety is traditionally focused on adapting people or designs to prevent failure, however, a different approach suggests that failures can be prevented by adapting people and designs for success, writes Daniel Hummerdal

Safety is boring. And it does my head in! From the very start I could tell that my meeting with a top level manager of an Australian hospital was going to be interesting.

"Don't get me wrong! We have serious safety issues here: we occasionally do wrong-side surgery. We chop off the wrong leg and we give out the wrong medicine. We have people falling out of bed at night, we mix up the wrong medicine, we give out the wrong medicine. We have people cutting their fingers etc. It was going to be interesting.

Her story was all too familiar.

Safety in Australia seems to have become something dreadfully negative – perhaps understandably so. Deaths, injuries, illnesses and material damage are indeed unwanted deviations. So it makes sense that safety efforts focus on either preventing such events from happening, or protecting against their consequences.

Safety I

Safety programs like zero harm, and much of the current safety legislation, are set up to reduce the likelihood of negative events. Measurements of safety typically contain statistics over lost time injuries, near misses, accident and other negatives. Similarly, an internet image search on the word 'safety' turns up red, yellow and orange inspired pictures of warnings, prohibitions, reminders and protective gear.

Seemingly underlying these conventional safety ideas is the assumption that safety will be achieved if only we were able stay away from unwanted deviations. To ensure that outcomes do not deviate from what is desired, the predominant solution is to constrain performance. So we seek to decrease mess, variety, creativity, instability, uncertainty, autonomy and reactivity at work. This is done by increasing order, conformity, compliance, stability, predictability, discipline and repetition.

The result is an ever increasing number of rules, procedures, checklist, restrictions, prohibitions, reminders, audits, and other measures to ensure control. Similarly, safety departments have become a sort of organisational internal police, assuring that people comply with procedures, that they wear their protective equipment, that they hold the handrail when using stairs and so on.

Professor Erik Hollnagel at the University of Southern Denmark has labelled this approach "Safety I". Safety I is based on a definition of safety as being the absence of (the risk of) negative events or outcomes. Put differently, safety is traditionally defined in relation to what it is not.

Safety I has been a rather successful way to reduce accidents, especially when the task is given to safety professionals. But the success of the Safety I approach is not without problems. In various safety critical industries, like transportation, healthcare, and power generation, additional safety investments in procedures, training and safety barriers yield less and less return, if any at all. In fact, in some industries accident rates are rising despite increasing efforts to control people and processes.

Perhaps even more problematic, is that the many rules, procedures and constraints are turning into too high a cost in terms of work efficiency and productivity. The systems become more and more rigid and difficult to work within. People cannot make local dynamic adaptations to risks as they appear but must await centralised approval.

In any case, it seems this approach is increasingly recognised as limiting, if not flawed, and for many situations ultimately self-defeating. It may very well be that Safety I is effective for simple and linear means of production. But when the systems we try to manage become increasingly complex, when the systems have tight and multiple couplings between the different components, and are populated by people we want to be autonomous and creative, then these traditional ways of thinking about work become unreasonable.

Safety II

A growing community of safety thinkers and practitioners have
recognised that safety is more than just the absence of negative events. Although they have the same ambition of reducing unwanted deviations, they take a different path towards that goal – their focus is on the things that go right. Identifying the factors that enable people and organisations to achieve success, their goal is to increase the number of events and outcomes that go right. Safety is, in this sense, not the absence of negatives, but the presence of a capacity that enables success under varying conditions. Professor Hollnagel identifies this approach as Safety II.

Safety II thinking not only shifts the focus from negative to positive events, but also changes the questions we ask to improve safety. Safety I efforts are geared towards tightening control of the system, often by reducing available degrees of freedom. Safety II efforts, on the other hand, seek first to understand how success is achieved, and then to support and enhance the identified critical functions. This presents a radically different approach to how we think about, for example, safety in design, operational safety, as well as the role safety plays in an organisation.

Safety in design

Traditional approaches to producing safe designs suggest that safety can be improved by the early identification of risks and weaknesses in designs. Risk assessment tools (like HAZID and HAZOP) can help systematic identifications of such negatives. Once substandard components have been recognised, these are eliminated, substituted or otherwise subject to engineering controls. The goal is to reduce risks as low as reasonably practicable. In line with safety I thinking, this method is based on safety being a state in which nothing bad happens.

However, even if every component were up to the mark, this does not guarantee safe outcomes. When designs are realised, their outcomes depend on interactions with factors that are external, diverse, complex, dynamic, and therefore difficult (if not impossible) to control.

From this perspective a design can never be safe in itself. A Safety II approach to design shifts the focus from hunting risks and weakness, to how a design can support the success of functions and goals to be achieved.

Operational safety

As outlined earlier, Safety I is primarily about reducing negative events. To this end, barriers are put in place to ensure the performance does not stray away from the intended goal, and safety management becomes increasingly normative. All that people need to do is to follow procedures, and they will be safe. Any kind of performance variability, such as shortcuts, is seen as reproachable and dangerous transgressions in an otherwise safe system.

However, new technologies, new material, more interactivity, interdependence, and just-in-time schemes have made workplaces increasingly dynamic and complex. Besides safety, people and organisations also need to attend to calls for productivity, efficiency, and profitability. There are always competitive pressures to produce faster, better, and cheaper work. In such settings, prescriptive work guidance efforts are quickly outdated, and solutions that do not foster success soon discarded.

In Safety II performance variability is seen as a necessity. In a constantly changing system with multiple and sometimes opposing goals, only people can monitor, anticipate, and adapt to the constant flux of events. People do not divert from procedures simply because they are lazy or stupid – they do it to get the work done. Safety II is about giving people the resources, the mandate and the possibility to adapt dynamically and successfully to events as they develop. If people do not follow procedures, it may be because a procedure is not the solution that is needed.

Towards a new role for safety

Safety is, or has the capacity to be, a positive value. As a positive value, safety efforts are no longer mere expenditure to avoid events that may or may not happen, but an investment to improve efficiency and productivity. Hence, the role of safety goes from having a constraining and potentially business-hostile function, to having an improvement and facilitating function – something that should be in the interest even of those who primarily want to optimise profitability.

This, however, requires a better understanding of work as actually done. Have we understood what the capacities are that help people steer activities and events towards success? If not, that is where we need to begin. Safety professionals should in this sense not tell people what to do to be safe, but be interested and inquisitive about how people go about their work, what workers think they need, what their resources are, how people understand dangers in the workplace, and so on.
Integrating contractor safety into strategy

Ensuring contractors share your commitment to safety and are engaged in developing solutions will help pave the way to providing your organisation with a strong competitive advantage, writes Fiona Murfitt

The oil and gas industry is a major contributor to the Australian economy and over the past five years it is estimated that the industry has generated more than $70 billion in revenue. With numbers like these it’s no surprise that the outlook for Australia’s gas industry is set for continued high growth, with exports predicted to rise dramatically within the next few years.

The number of onshore drilling contractors has increased rapidly to meet the needs of Queensland’s CSG-LNG projects. The industry, in Queensland, Western Australia and the Northern Territory, is experiencing an unprecedented surge in activity. Of the 84.6 million hours worked in the oil and gas industry in 2012, 68 per cent of them were worked by contractors and the remaining 32 per cent by employees (Oil and Gas Producers, Safety Performance Data Summary Information 2010). However, contractors are 52 per cent more likely to be injured at work when compared to permanent employees (Oil and Gas Producers, Safety Performance Indicators 2010).

While the Australian oil and gas industry’s safety record is better than those of the construction, transport, manufacturing and mining sectors, it still remains clear that the management of contractor safety is an important task that cannot be underestimated.

Managing contractor safety

Considering these statistics there is a strong business case for companies to have a fresh look at the way they manage contractors and contractor safety in particular. The soundest approach to contractor safety management is one that is imbedded in core business strategy and is integrated with all other management functions.

The business case is made even stronger by the trend for organisations to differentiate between prospective contractors based on their safety performance.

So why are contractors more likely to be injured? Fundamentally the activities contractors undertake tend to be operational by nature. No matter how varied (from specialised tasks such as hot taps into live lines, erecting scaffolding or providing the necessary people for manual tasks), contractors are most often “executing” the work. This factor, combined with the reality that contractors are often working in an unfamiliar environment, increases the likelihood of an incident. The implications can be far reaching with often catastrophic potential. Sadly, history has too many examples that testify to this fact.

A six-step approach

We use a six-step approach to deliver and sustain the management of contractors that focuses on selecting, engaging, communicating, reviewing, training and evaluating. Implementing these six steps has proven effective many times — for our own engagements with contractors and for our clients.

This six-step contractor safety management process is as follows:

The selection process: It applies to both contractors and to individual employees — they must adhere to the same safety vision as the manager/CEO/owner.

Document and communicate expectations: This includes the scope of works, safety standards, project training requirements and performance metrics management.

Review of proposals: Ensure alignment, commitment and understanding of all expectations, standards and deliverables, including factors such as employee involvement and retention strategies.

Assess, execute and review orientation and training: It needs to align contractors and employees to ensure they understand expectations, standards, values, and undertake ongoing training.

Manage and audit: Regularly promote contractor line supervision responsibilities and demonstrate these consistently throughout the duration of the project.

Owner and contractor review: Monitor metrics and review them as part of a post contract evaluation.

However, any approach to contractor safety management is not a standalone formula for success. It is important for all approaches to be integrated into the systems, structures and procedures that exist within the operations of every business.

Contractor safety at Grocon

DuPont worked with Australian construction giant Grocon, which was awarded the best OHS management system 2012 by WorkSafe Australia in recognition of its unique approach in including subcontractors as part of its overall safety management system. Grocon achieved an 81 per cent reduction in its total injury frequency rate from 2008 to 2011, while one of its subcontracting companies achieved a 73 per cent reduction in just 12 months.

Grocon’s entry to the awards stated that while the standards they are measured against are common industry standards, Grocon’s partnership with DuPont and their fully integrated approach to safety, coupled with training for every employee and subcontractor, over and above industry requirements is unique.

“Our safest projects are our best performing projects,” said Jason O’Hara, construction manager at Grocon. It is no coincidence that the safest projects are also those that are completed to specification, on time and within budget.

Additional activities that formed part of Grocon’s award winning safety improvement plan included:

• One-on-one coaching for managers to help develop the leadership and interpersonal skills required to communicate the importance of safety throughout the organisation

• Training for everyone — from the CEO to line managers, site workers and contractors

• Implementation of a formal incident investigation process, which allowed the organisation to share learning outcomes from incidents and near-misses

• Adoption of leading and lagging indicator metrics, which allowed the monitoring of safety trends within the organisation, highlighting where more focus was required and what practices were yielding the best results.

Overall, regardless of the industry, it just goes to show that good safety is more than complying to legislation. Ensuring that contractors share your commitment to safety and are engaged in developing solutions will help pave the way to providing your organisation with a strong competitive advantage.

Fiona Murfitt is the Australia, New Zealand and Pacific Islands business director of DuPont Sustainable Solutions. The next issue of OHS Professional will feature a case study on Grocon and its award-winning OHS management system.
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Under pressure: 
safety in the oil & gas industry

A number of major incidents have tarnished the safety reputation the oil and gas industry. Craig Donaldson looks at the safety challenges facing the industry locally and examines what organisations can do to lift their OHS game.

Australia’s oil and gas industry is booming. Worth an estimated $39 billion, it represents close to 3 per cent of current gross domestic product (GDP). This is set to increase significantly in coming years, with estimates that the oil and gas and exploration sectors will reach $66 billion in 2020.

However, a number of major incidents have tarnished the safety reputation of the industry, both locally and globally. The BP Macondo blowout in the Gulf of Mexico in April 2010 – the largest accidental marine oil spill in the history of the petroleum industry – led to the loss of 11 lives. Closer to home, the PTTEP Montara blowout in the Timor Sea in 2009 is considered one of Australia’s worst oil disasters.

Jane Cutler, CEO of the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA), believes Australia’s oil and gas industry cannot afford to be complacent at any stage of offshore petroleum exploration and production. “Strong safety performance is fundamental to restoring confidence in an industry that has seen the tragic consequences of inadequate risk prevention,” she says.

Room for improvement

NOPSEMA, the national independent regulator for offshore petroleum health and safety, well integrity and environmental management, recently released a report detailing the health and safety performance of Australia’s offshore petroleum industry.

The top three root causes of accidents and dangerous occurrences in the industry are design, procedures and preventive maintenance, according to the Offshore Health and Safety Performance Report. “From the early design stages of a facility to the end of its lifecycle, it is up to operators and industry regulators alike to be vigilant in their commitment to the safety of people working offshore,” says Cutler.

The report, which contains data of inspections, investigations and information collected from 35 operators and 209 facilities operating in Australian waters, found that while there were no fatalities reported in 2010/11 and the rate of total OHS injuries (per million hours worked) decreased, the rate of lost time injuries requiring less than three days off work increased slightly between 2010/2011.

The most common complaints from employees in the industry about health and safety concerns, related to safety culture and management while the number of enforcement actions taken by NOPSEMA also increased markedly over the same period.

A factor in this increase is that a number of operators were each subject to multiple improvement notices regarding non-compliance with legislation at a single facility or group of related facilities. The increase also reflects an increase in the number of non-compliances observed by authority inspectors.

The report also revealed there were three major hydrocarbon gas releases reported in 2011. “Uncontrolled hydrocarbon releases are of particular concern due to their potential to cause ignition. Preventing releases of this nature should continue to be a top priority for operators,” Cutler says.

A shift to behavioural-based safety

Australian National University professor Andrew Hopkins, who recently wrote a book on the Gulf of Mexico oil spill disaster (see review on page 30) and also advised the US Chemical Safety Board in its investigation of the disaster, says there are a number of steps the Australian oil and gas industry can take to improve safety standards.

The low-hanging fruit for the industry is to extend behaviour-based safety programs, which are currently focused on personal safety, to cover process, or major hazard safety.

“What that means is thinking about the behaviours that people are supposed to be engaged in which are relevant to major risk,” he says. “So what are the procedures they’re sup-
posed to be following – the startup procedures and normal operational procedures? These are the behaviours which people are supposed to be engaged in, which imply the control of major hazard risks."

Hopkins notes that operators often don’t routinely follow specific procedures – sometimes with complicit agreement of their immediate supervisors.

"These things can ultimately contribute to a major accident. So the point is to extend behavioural-based safety observation programs to cover major hazard risk as well as personal safety," he says.

Shane Addis, managing director at ERGT Australia, which provides safety training to the oil and gas industry, also says there are many areas in which the industry can continue to improve.

"Perhaps its biggest challenge is that its rapid growth will draw new entrants from industries with a lower level of safety performance where the focus is on personal safety rather than process safety," he says.

Employers will need to ensure that the skills and behaviours of these new entrants are rapidly brought in line with industry expectations, or Addis says there is a risk that safety performance will decline in coming years.

Managing cost pressures and safety
Cost pressures often play a role in safety shortcomings, and Australia’s oil and gas industry is no exception. "There are naturally cost pressures everywhere, but the question is how companies manage those cost pressures, and what sort of other pressures are at work in the direction of safety?" Hopkins queries.

"Production often takes precedence over process safety"
There are usually considerable pressures in the direction of personal safety to counterbalance production pressures, but there are often no pressures in the direction of process safety to counterbalance production pressures. "That’s why production often takes precedence over process safety – often unintentionally and without people being aware of it. It’s just the way it is," he says.

Addis says compliance has driven a cost-focused approach in the area of skills development over the past decade, where national competency standards have incorrectly been seen as a reliable means of demonstrating compliance. However, the industry is trending toward exceeding minimal safety compliance requirements and has recognised this in the development of number of programs – "but this is just a small beginning," he says.

Hopkins agrees that while the industry is getting better, there is still a lot of room for improvement. "The goal has to be zero major accidents," he says. "Whether the industry can ever get there is not the point, the point is that has to be the goal because every time one of these things happen, not only is it a personal catastrophe for a whole lot of people, but it threatens the very survival of companies. Companies sometimes go out of business after these sorts of events."

Another area in need of improvement is the industry’s approach to incident management, according to Addis. Many operators, especially those headquartered internationally, approach Australia in the same way as their operations in the North Sea or Gulf of Mexico. "This fails to recognise the implications of Australia’s extreme remoteness and comparative lack

A LOOK BEHIND THE GULF OF MEXICO DISASTER
There were at least three fundamental organisational failures that led to the oil well blowout and subsequent explosion onboard BP’s Deepwater Horizon oil rig, according to Australian National University Professor Andrew Hopkins.

The first major failure was the subordination of engineers to the production and schedule targets of BP, he says. "So the engineers onboard the rig were not answerable to high-level engineers for whom engineering excellence was the most important criterion," says Hopkins.

"They were answerable to line managers for whom scheduled production was the most important issue, and that subordination undermined quality of what the engineers were doing."

The second major failure was BP’s financial incentive system, says Hopkins. "This system was all about saving money rather than engineering excellence," he says.

The third failure was BP’s inability to think carefully about the prevention of rare but catastrophic events. "The issue was a crucial one. Because catastrophic events are rare, companies’ risk assessments are often biased, and they certainly were in this case," says Hopkins.

"There are fundamental biases involved in risk assessments and the whole thing can become an academic exercise. The failure to think carefully about preventing rare but catastrophic events is a big issue in the petroleum industry generally."
of government resources suitable to address major incidents. A different perspective relying more on self-sufficiency and industry cooperation would be beneficial,” he says.

The role of OHS professionals
OHS professionals in the industry should encourage a view of safety as being more than a collection of statistics, according to Addis. While statistics are a vital tool for safety professionals to use, the critical human dimension of safety will be diluted when they become the driver or the objective. “Time and again it has been shown that apparently compliant organisations with good statistical performance can suffer catastrophic events,” he says.

OHS professionals can also play a key role in helping OHS to be viewed as a shared organisation-wide and industry-wide responsibility he says. Within organisations, this means that all staff have a responsibility to contribute to safety outcomes and overcome organisational barriers that often create misalignment between organisational objectives and actual outcomes. “Between organisations this means actively helping colleagues, sharing knowledge and solutions,” says Addis.

“Finally, and perhaps most importantly, safety professionals must continue to work hard to ensure that their leaders – especially CEOs – are not only engaged in OHS but actively drive a strong safety culture.”

ExxonMobil Australia’s approach to OHS
ExxonMobil Australia is Australia’s oldest petroleum company, and is involved in a range of industry activities from oil and gas exploration and production, through to petroleum refining and supply of fuels, lubricants and chemical products.

ExxonMobil Australia’s safety, health, environment and security manager, Ron Reinten, says safety within the organisation is approached with stringent planning and takes into account every aspect and variable, including design, equipment, terrain, expertise and, most importantly, the human factors. “An effective safety management framework is the process that ties all these elements together,” says Reinten.

ExxonMobil Australia’s safety management framework focuses on reducing risks and incidents through rigorous execution of its Operations Integrity Management System (OIMS). “Through OIMS, we monitor, benchmark and measure our performance,” he says.

There are 11 standard ‘elements’ and 65 ‘expectations’ included in OIMS that are the same for all employees worldwide. From there, Reinten says is the responsibility of affiliated businesses to enact the framework by implementing guidelines relevant to their specific activities. “Finally, local safety management systems include processes and procedures, responsible and accountable resources, and feedback mechanisms for continuous improvement,” he says.

OIMS has driven consistent results in the global operating environment of the company, however, he says achieving this has not been easy. “It needs to be adapted to specific operating environments, such as onshore and offshore,” he says. “A strong safety culture is one in which all employees utilise OIMS to identify risks and take action to mitigate those risks in the workplace. They have to own safety.”

As a result, ExxonMobil Australia has fared well in its safety performance, according to Reinten. In 2011, it completed an unprecedented season of scheduled shutdowns (turnarounds) free of recordable injury. This included shutdowns for major projects at its Long Island Point and Longford Plants, West Tuna and Bream A offshore platforms, as well as the Altona Refinery turnaround. “In all, these activities have involved more than 350,000 work hours,” says Reinten.
Sun protection in the workplace:
tips and traps

Sun protection in the workplace is a particularly important OHS issue for organisations in Australia. Craig Donaldson looks at how OHS professionals can make sure workers are adequately protected.

Payments for skin cancer compensation claims by workers have doubled in less than a decade. It is estimated that about 200 melanomas—the most deadly form of skin cancer—and 34,000 non-melanoma skin cancers develop each year because of workers’ exposure to harmful ultraviolet radiation from the sun.

The amounts of money being paid out in compensation now exceed the amount spent on public education campaigns about the importance of sun protection, according to Terry Slevin, chair of Cancer Council Australia’s Skin Cancer Committee and Occupational and Environmental Risk Committee.

While research has shown that workers are more likely to protect themselves if their workplaces have a mandatory sun protection policy, the 2008 National Hazard Exposure Survey found that 17 per cent of workers who worked in direct sunlight reported that they or their employer did nothing to prevent health problems caused by exposure to direct sunlight or sunburn.

Those working in small workplaces (less than five workers) are less likely to be provided with sun protection than those in large workplaces (with more than 200 workers) and the most common forms of protection provided by employers were sunscreen, hats or protective clothing.

"Increased knowledge about skin cancer and prevention strategies is not necessarily responsible for better sun protective behaviours among outdoor workers, but an increase in perceived skin cancer risk is," says Slevin. "Workers’ perception of their workplace’s support for sun protection also affects their sun protection behaviour."

Sun protection pitfalls

Many workplaces do not understand the significance of the risk of UV exposure and therefore do not take it seriously, according to Robert Lord, director of Newcastle Hats. "This is evidenced by the number of employees who are not wearing PPE that fully protects them. Is this ignorance of the advice of organisations like Cancer Council or simply a lack of commitment to the issue?" he says.

"Certainly some items of sun protection PPE can be easily removed or ignored by staff. For instance, it is hard for staff to not wear their long pants but easy to not wear their hat, sunglasses and sunscreen. This is a significant management issue," says Lord.

Furthermore, he noted that not all sun protection clothing is the same, and the design and the fabric used in a garment determines its level of protection. Fabric is tested and rated by Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) to determine its protection level, and an Ultraviolet Protection Factor (UPF) rating of 50+ is considered excellent.

"If garments are made from different fabric each needs to be tested," says Lord. "Small amounts of non-protective fabric can create significant localised risk for a wearer. Swing tags can be applied to indicate protection however these need to clearly state the protection level and whether all fabrics have been tested. In general, tags do not indicate if a garment is well designed and in the case of ARPANSA they do not generally licence or endorse garments (only testing of fabric samples supplied)."
Sun protection in the workplace: tips and traps

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SAFE AS.
Brad Rodgers, product development manager for Paramount Safety Products, says that while things seem to be changing, many workplaces will simply provide workers with 30+ sunscreen and headwear as a sun protection program. “Like any safety program sun protection is not only about providing the correct safety gear, it’s also about incorporating the correct safety procedure and controls,” he says.

“For example, reapplication of sunscreens and hydration products is a major issue. Users tend to think if they have applied sunscreen they are protected for the day, this couldn’t be farther from the truth. In fact perspiration, wiping your face with a sleeve or even rain or water will reduce the amount of protection in terms of time in the sun. Frequent application is advised.”

Another common mistake is failure to consult the workforce, according to Rodgers, who observes that far too often, a line of PPE is specified into a worksite that the users either don’t like or don’t understand the protective benefit of using the item. “In the case of sun protection, a common worker complaint is that sunscreens are greasy and uncomfortable to wear on the skin,” he says.

Avoiding the pitfalls

Employers often assume sun protection is the worker’s personal responsibility and therefore do not provide or encourage the use of sun protection, however, Slevin says this can be an expensive mistake. A total of 1,360 workers compensation claims for sun related injury or disease were made in Australia between 2000...
and 2009, at a total cost of $38.4 million. “This figure is likely to increase in the future and is preventable by the establishment and enforcement of proper sun protection policies and practices,” he says.

“Many workplaces go as far as providing sun protection, but don’t enforce using it. Similarly, some employers assume that providing a yearly skin check will be enough to meet their health and training requirements.

“A common but easy mistake to avoid is when management and supervisors don’t act as role models to workers. This undermines any sun protection policy they may have put in place and gives workers the perception that they don’t need to comply with it.”

Rodgers affirms that employers as well as OHS professionals need to have an intimate understanding of the potential dangers of the sun in relation to activities carried out in their workplace. “Once the dangers have been identified, procedures can be implemented and the correct sun protection items can be procured. We recommend site trials before spec’ing-in any piece of PPE to ensure employee adoption,” he says.

Employers need to understand and assess the risk that UV exposure poses to all of their staff, and in doing so, Lord says it needs to be addressed in the same way as any other risk – by using the hierarchy of controls. “Control measures need to be carefully assessed and evaluated for effectiveness. Then of course they need to be implemented and monitored to ensure employees are adequately protected,” he says.

“The protection afforded by sun protection clothing needs to be considered carefully and it is best to obtain UV test certificates rather than rely on swing tags.”

OHS and improving sun protection
OHS professionals need to educate themselves on the issue of UV exposure, according to Lord. “In particular they need to understand how sun protection products work and actively be involved in the purchasing process, so that appropriate products are supplied to the workplace. Implementation and monitoring is the bane of OHS professionals’ work, and sun protection is no different,” he says.

OHS professionals play an integral part in facilitating any safe workplace practice, and Rodgers says they must keep abreast of standards changes and be aware of the associated implications.

“OHS professionals have a duty of care. Legislation requires employers to provide and maintain safe working environments. Employers must ensure their employees can work safely and without risk of over exposure to UV radiation,” according to Rodgers, who says employees have a responsibility for their own safety and must follow UV protection policies and use sun protective measures provided by the employer.

“We also recommend having a solid relationship with a trusted PPE supplier, and maintain communications channels that encourage feedback from the workforce who are using the PPE product,” he says.

WHAT ABOUT INDOOR WORKERS?
OHS professionals responsible for an indoor workforce may not face the issue of overexposure to the sun, but they do need to be aware of the opposite problem – not enough sun and the potential for vitamin D deficiency, according to the Cancer Council Australia.

“We need vitamin D to help keep bones and muscles strong and healthy,” said Cancer Council Australia CEO Ian Olver. “The main source of vitamin D is UVB radiation from sunlight, but the sun also increases skin cancer risk. In Australia, where we have the highest rate of skin cancer in the world (along with New Zealand), we need to balance the risk of skin cancer from too much sun exposure with maintaining vitamin D levels.”

The Cancer Council has launched a free resource, which is designed to be included in organisations’ OHS programs supporting the health and wellbeing of an indoor workforce, available at http://elearning.cancer.org.au.
Taking the initiative with OHS compliance

Compliance with harmonised OHS laws has been on the agenda of organisations for some time. Craig Donaldson looks at how OHS professionals can get compliance right and also raise the importance of the safety agenda.

“This seems to be an issue that the OHS professionals in a business have to deal with at an operational level. Similarly, the differences in the transitional provisions between the harmonised WHS laws have added to this complexity,” she says.

General compliance preparedness
Organisations that have implemented a system based on compliance with the legislation should find themselves well prepared for the WHS laws, according to Sonja Screpis, national marketing manager, Assurance Services (Australia), SAI Global. “In fact, over the past 12 months most of our auditors would have seen evidence of good preparation,” she says.

“The major concern that most businesses have is that the legislation has not been adopted by all states and territories. However a systematic approach to the identification of legislation as required by the standards assists in identifying a method of dealing with the lack of uniform adoption by the states and territories.”

Michelle Whyte, operations manager, Lloyds Register Quality Assurance (LRQA), also says it is important that OHS professionals are aware of and understand the new laws and how they affect their business activities. “For instance, as a result of the regulatory changes, organisations with sites in multiple states nationally must ensure their OHS procedures and management systems reflect the new encompassing laws,” she says.

The WHS Act also introduces significant increases in penalties and breaches, with maximum penalties scaled according to the offences. The maximum penalty for a body corporate ranges from $500,000 (category 3 offence) to $3 million (category 1 offence).

“Therefore, it is essential to ensure your management systems are compliant with the new laws,” says Whyte.

Can compliance be assured?
Many large organisations have conducted external audits of their safety processes to identify and plug gaps to comply with the new laws. As part of an OHS audit, Screpis says auditors will review strategy and compliance for dealing with legislative changes. “Although unable to provide legal advice per se, they are able to ensure organisations have a robust system in place and strategy for dealing with these changes. A management system needs to be dynamic to address these sorts of issues,” she says.

Whyte noted that there are many advantages in obtaining third party certification in OHS management systems standards (such as AS/NZS 4801 and OHSAS 18001). “One of these advantages can include ensuring confidence that your business complies with the new regulations,” she says.

“Obtaining certification that provides a business assurance approach, which is a step further than standard verification, is very valuable in helping to further improve business operational control, performance and risk management.”

“This legislation offers a unique opportunity in that OHS professionals can use regulations as a vehicle to bring attention to OHS with their senior management”
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“Over the past 12 months most of our auditors would have seen evidence of good preparation”

Advice for OHS professionals

In staying ahead of OHS compliance issues, Gaden’s Morris recommended OHS professionals focus on the detail of legal requirements.

“Sometimes when there are significant change projects occurring, such as introducing new WHS systems, the actual legal requirement can get lost in the volume of documents and issues being discussed, which sometimes results in problems arising that could be avoided, or results in undertaking more change than is necessary,” she says.

There is still a lot of uncertainty around the WHS laws, according to Screpis, who recommended that OHS professionals make sure that they have a robust OHS management system in place and that they make themselves familiar with the laws as they currently stand.

“The next stage would be to do a risk assessment of the impact on the business with the changes and review your current documents to ensure that they will reflect the laws. You will also need to create an action plan and training schedule for staff so that everyone is across the changes,” she says.

While the new laws present a number of challenges, Whyte says they also present a great opportunity. “While I would expect most OHS professionals to be across legislative changes, it’s a great opportunity for OHS professionals to take initiative and achieve things within their business,” she says.

“From my experience auditing with LRQA, I can see that many professionals have great plans in place to make positive changes, but often they lack senior management support or attention to really make these changes happen. This legislation offers a unique opportunity in that OHS professionals can use regulations as a vehicle to bring attention to OHS with their senior management.”

The new legislation places a much greater focus on senior management input and involvement with their company’s OHS system, and Whyte says this is something that was not necessarily required in past.

“Senior management now has to demonstrate how they are helping meet these new mandates and there are significant penalties if they don’t,” she says.

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The Safety Conference Sydney

The Safety Conference Sydney will be held from 23-25 October 2012 at Sydney Olympic Park

The all encompassing theme for the three days of The Safety Conference Sydney 2012 is ‘as the dust settles’. With dozens of high profile speakers providing the latest information on a broad range of health and safety topics, sessions will focus on providing valuable takeaways for small and large business safety practitioners and professionals alike.

The conference, which is expected to attract more than 300 professionals, will feature nine key streams, covering contemporary industry topics from safety leadership, WHS legislation/codes of practice and research, through to behaviour and human factors, prevention of bullying and workplace violence, alcohol and drugs.

Keynote presenters include motivational speaker Lisa McInnes Smith, presenting on ‘lead or get out of the way’; former police officer Peter Baines on the Bali bombing and the Boxing day tsunami and WorkCover NSW’s principal policy officer Michael Costello on the evolution of safety regulation.

Speaking ahead of the conference, Costello said the evolution of safety regulation has been driven by regulators designing legislation in response to the industrial, social and political environment.

“Such legislation then impacts in various ways with consequences, sometimes unintended, for both the regulator and the regulated. Coupled with these consequences is environmental change which requires further adaption,” he said.

“It is a dynamic process in which design of the regulatory system and adapting to the environment creates ongoing change. Evolution appears to be the opposite of this process.”

Costello also spoke about harmonised OHS laws and how they were impacting the evolution of safety regulation. The most interesting feature of the new WHS legislation is the change from the employer/employee relationship to the person conducting business or undertaking/worker relationship, he said.

“This has been in response to the complexity of the modern workplace where there are not only employees but also contractors, labour hire workers and even volunteers engaged in an enterprise,” said Costello.

“A consequence of this approach is the introduction of the concept of shared duties for workers’ safety.”

In discussing employers’ compliance behaviours and keeping abreast of the latest safety regulations, he observed that large employers have generally supported the move from specific regulation to one of more general duties of care.

“There are still a large number of businesses, particularly small businesses that want prescriptive regulation – ‘Just tell me what I have to do and I’ll do it.’ The challenge for work health and safety regulators is to help move all businesses away from a prescriptive mentality,” he said. “This means building capability, not dependence.”

The Safety Conference Sydney will be held from 23-25 October 2012 at Southco Complex, 1 Showground Road, Sydney Olympic Park. For more information visit sia.org.au/tsc2012.

“The challenge for work health and safety regulators is to help move all businesses away from a prescriptive mentality”
The Perth Safety Conference met a notable demand for more information on harmonised Work Health and Safety (WHS) laws in Western Australia and the impact they could have on business, according to Tony Mitchell, Deputy Chair of the SIA and Chair of the recent Perth Safety Conference.

Commenting on highlights of the conference, held from 7-9 August 2012 at the Perth Convention and Exhibition Centre, Mitchell said he identified a need for more practical information on harmonisation while researching and putting together the conference program.

"There was a great need to engage the key organisations to talk to the challenges ahead of us around harmonised WHS laws," he said.

On the third day of the conference, for example, leaders from WorkSafe WA, WorkCover WA and the WA Department of Mines and Petroleum discussed how the model WHS laws might be adopted in WA. They addressed some of the processes which could be put in place to facilitate adoption of the laws, as well as the short- and medium-term impacts of such laws and their related regulations.

Mitchell said a key learning for attendees was that of the required due diligence under the harmonised WHS legislation, and in particular the closer relationship between the WHS legislation and the Corporations Act, which places positive duties of care on directors and officers of companies.

A number of presenters, such as M+K lawyers principal Andrew Douglas and safety director Alcoa of Australia, Danny Spadaccini, highlighted the fact that directors and officers will need to do much more than have an OHS management system in place in order to comply with the new laws.

"They must also ensure they understand the risks of doing business, and that there are suitable systems and resources allocated to control, monitor and improve the management of those risks," said Mitchell, who made note of the quality of the stream speakers’ presentations.

Maria Saraceni, a barrister with WA-based Francis Burt Chambers, for example, examined safety regulation trends across the region and pointed to an increased focus on health and safety as an integral part of the move to a green economy, where people – as well as the environment – are protected.
event wrap-up

“There was a great need to engage the key organisations to talk to the challenges ahead of us around harmonised OHS laws”

“The implications of these trends, is that occupational safety and health is being pushed back to an earlier phase in employment to those in leadership roles who have the capacity and means to make the necessary changes,” she said.

“Another way to look at this is safety leadership and the rise of those who actively care for their people, rather than seeing them merely as tools needed to achieve an end [as well as being] disposable and replaceable by other workers.

“This greater consciousness of the value of human life and the dignity of workers is a welcome change and an addition to process-driven safety, rather than a replacement for it,” said Saraceni.

General Peter Cosgrove opened the conference with a keynote address, speaking about leading safety from the top of an organisation.

“He shared his experiences about leading safety in the Australian Defence Force (ADF) and more recently as a board member of Qantas, with 160 delegates on day one of the conference,” said Mitchell.

“His commitment to caring for the troops under his command, with safety as a natural part of the leader’s role, established the atmosphere for the conference.”

There was also strong interest in international speaker, Gerard Forlin QC, who spoke about the increased attention of courts to defendant-company’s global safety performance when considering sentencing/punitive measures where a breach is repeated – especially where a company has not demonstrated learning from its past mistakes in another country.

He also noted that where notable workplace incidents do occur, regulators are looking at what organisations are doing in other countries and why they’re doing it in a different way.

“If there is a difference that can’t be explained, then that is something that they may take into consideration,” he said.

“Regulators are increasingly cooperating across borders and jurisdictions now, so corporates need to realise this and know what the other hand is doing. Often headquarters for multinationals might be in Europe or the US, so what a regulator in one jurisdiction says about them can have a massive effect on them in another.”

Mitchell said all presentations had to have a high level of appeal to a broader audience, as well as specific industry sectors and businesses both large and small.

“This year’s conference theme was ‘downtown to boomtown’, as we wanted to ensure emerging issues and contemporary OHS practice were provided for the mining and construction sectors, as much as they were for small and medium enterprises,” he said.
Disastrous Decisions: The Human and Organisational Causes of the Gulf of Mexico Blowout

Hopkins, A.
ISBN 978-1-921948-77-0
2012 CCH Australia Ltd
Cost: $85

It is sad that Professor Hopkins continues to write the books with which we are becoming so familiar. If only the lessons from Pipa Alpha, Longford, Space Shuttles Columbia and Challenger, Texas City etc were learned he would not have the opportunity. This is a point that I have heard Hopkins himself make during one of his frequent appearances at our SIA conferences.

Before reading this latest book, my understanding of the events leading to blowout on the Deepwater Horizon drilling rig in the Gulf of Mexico were limited to those presented in the media. Therefore the succinct and easy-to understand explanations that Hopkins has a knack for were very welcome and the picture painted at the outset made it very clear what had happened but also enabled a much clearer understanding of the analysis that follows. He has an ability to provide enough technical detail to make sense of a story without bamboozling the reader with too much technical detail or industry jargon.

Associated with a desire to cut through a lot of the emotive information that has surrounded the blowout, Hopkins chooses to refer to the incident by the name of the well (Mocondo) rather than the rig or the major corporate players (BP and Transocean). As one reads, it becomes increasingly clear how effective this is and it does reduce confusion and enables a more objective view of the analysis. This analysis focuses almost exclusively on the events leading to the blowout rather than the consequences and the magnitude of the environmental impact. The visibility of the latter made it the emotive information that has surrounded the blowout, Hopkins chooses to refer to the incident by the name of the well (Mocondo) rather than the rig or the major corporate players (BP and Transocean). As one reads, it becomes increasingly clear how effective this is and it does reduce confusion and enables a more objective view of the analysis. This analysis focuses almost exclusively on the events leading to the blowout rather than the consequences and the magnitude of the environmental impact. The visibility of the latter made it the

As I began to read I wondered how Hopkins would manage to avoid the book feeling a little repetitive and naturally there are some references to the events discussed in his other books and, for obvious reasons, many references to the BP Texas City explosion. However, the cross references are apposite and complement the failure to learn message. Also, the focus of this book is different. Hopkins has chosen to illustrate the organisational failings through an in-depth examination of the role of the engineers and defence-in-depth system.

Defence-in-depth offered a number of barriers and, had the system been effective, would have prevented the blowout. However, the effectiveness hinges on the independence of the barriers and what emerges is that they were not independent. The role of the engineers in this failure becomes clear. However, the influence of the organisational structure on the lines of reporting among and between the engineers and senior personnel along with the influence of the pressures for cost savings are also clear. Sadly what is repetitious is the identification of common themes around poor communications, failures of management walk-arounds and focus on low consequence, high frequency events. There is a considerable discussion around the need to understand process safety versus “conventional safety hazards”.

The conclusion and list of lessons means it would be possible to read just the first and last chapters and still extract significant value from the book. However, to do so would lose the richness of the story and of course the grounds for some of the assertions. In making some of these assertions Hopkins does not pull his punches. With respect to regulation I was surprised to learn that not only have the US failed to adopt the safety case regime but they have withstood the post-event pressure to adopt it and Hopkins writes:

“The weakness of the regulatory regime at the time of the Mocondo blowout was a consequence of a lack of resolve at the political level to ensure effective regulation. It is only when an accident forces a shift in the balance of political forces that real change is possible. It is a depressing commentary on the US political system that the shock of the Mocondo disaster has not been sufficient to shift the political balance in favour of a safety case regime.”

However, he goes on to point out: “The analysis of the Mocondo incident presented in this book highlights organisational problems that are not adequately dealt with in most safety case regimes. The Mocondo accident therefore provides an opportunity for regulators around the world to fine-tune their safety case regimes, regardless of what happens in the US.”

The book is therefore essential reading for everyone in the process industries, but like his other books, the principles are universally applicable and I will certainly be drawing on the lessons in my own work as well as referring my students to the text.

Reviewed by Steve Cowley

SIA Members may be eligible to received discounted copies of Disastrous Decisions: The Human and Organisational Causes of the Blowout. For more information contact info@futuremedia.com.au or call 02 9279 4499 and quote FM2027.
As I began to read I wondered how Hopkins managed to cut through a lot of emotive information that has surrounded the Gulf of Mexico blowout. However, to do so would lose the richness of the story and of course the grounds for some of the assertions. In making some of these assertions Hopkins has chosen to illustrate the organisational problems associated with a desire to cut through a lot of emotive information that has surrounded the Gulf of Mexico blowout.

If only the lessons from Piper Alpha, Longford, Space Shuttles Columbia and Challenger, Texas City etc were learned he would not have the opportunity to write this book. However, he goes on to point out: “The analysis of the Mocondo incident presents a scenario of common themes around the need to understand process safety and complement the failure to learn message.”

Hopkins does not pull his punches. With respect to the US regulatory regime he states: “The weakness of the regulatory regime at the time of the Mocondo blowout was a consequence of the US political system that the shock of the Mocondo disaster has not been sufficient to shift the political balance in favour of a safety case regime.”

There is a considerable discussion around the need to understand process safety and to adopt it and Hopkins writes: “The analysis of the Mocondo incident presents a scenario of common themes around the need to understand process safety and complement the failure to learn message.”

However, the cross references are apposite and the book provides an opportunity for regulators around the world to learn from the Mocondo disaster. As one reads, it becomes increasingly clear that Hopkins has a knack for doing this. He has an ability to provide enough technical detail to make understanding of the analysis that follows. He has an almost total absence of too much technical detail or industry jargon.

The conclusion and list of lessons means it is sad that Professor Hopkins continues to write about the same issues year after year. Hopkins has chosen to illustrate the organisational failings through an in-depth examination of the role of the engineers and defence-in-depth. As one reads, it becomes increasingly clear that Hopkins has a knack for were very welcome and natural there are some little repetitive and naturally there are some references to the events discussed in his books, the principles are universally applicable and provide an opportunity for regulators around the world to learn from the Mocondo disaster.

However, he goes on to point out: “The analysis of the Mocondo incident presents a scenario of common themes around the need to understand process safety and complement the failure to learn message.”

Defence-in-depth offered a number of cost savings are also clear. Sadly what is repetitious would be possible to read just the first and last chapters and still extract significant value from the book. However, to do so would lose the richness of the story and of course the grounds for some of the assertions. In making some of these assertions Hopkins has chosen to illustrate the organisational problems associated with a desire to cut through a lot of emotive information that has surrounded the Gulf of Mexico blowout. However, to do so would lose the richness of the story and of course the grounds for some of the assertions. In making some of these assertions Hopkins has chosen to illustrate the organisational problems associated with a desire to cut through a lot of emotive information that has surrounded the Gulf of Mexico blowout.

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