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# MONITOR

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MARCSTA is a not-for-profit Association. All proceeds are reinvested into the industry for future development of safety and training.

### Federal government moving quickly to centralise OHS and workers' compensation laws

The Federal Government has introduced into Parliament the Safe Work Australia Bill 2008 which will establish Safe Work Australia as an independent statutory body with the responsibility to improve occupational health and safety outcomes and workers' compensation arrangements in Australia.

Its functions will include:

- national policies about OHS and workers' compensation
- model OHS legislation and codes of practice
- policy dealing with compliance and enforcement
- workers' compensation arrangements

The speed with which the Federal Government has moved in these key workplace related areas is without precedent and suggests that the program outlined for the National Review into Model Occupational Health and Safety Laws referred to in the June issue of the Monitor will need to be accelerated if the input to that Review is to be taken account of.

Membership of Safe Work Australia is a bureaucrat's dream.

It comprises:

a Chairman and CEO chosen by government	2
representative from the Commonwealth	1
representatives from each state and territory	8
representatives of workers	2
representatives of employers	2
occupational health and safety expertise	nil

Given the composition of the new body and the direction being taken in some states with regard to compliance, enforcement and prosecutions the outcomes are uncertain and the mining industry in Western Australia will need to closely monitor developments if it is to retain the very effective legislative model under which it operates today.

The outcomes of the National Review into Model Occupational Health and Safety Laws expected to be released shortly will be crucial to the direction taken by the new Safe Work Australia.

#### MARCSTA training packages...

As a Registered Training Organisation, MARCSTA delivers occupational safety and health units of competency for the following national training packages: (Applications for recognition of prior learning may be lodged for all training programs)

Metalliferous Mining Transport and Logistics Business Services Resources and Infrastructure Skills Safety Awareness Training (Construction)

### Director Safety and Health points the way forward on OHS law

MARCSTA Director of Safety and Health, Pat Gilroy, at the Safety Institute of Australia WA Conference in August, made some striking points about the preferred model for national model OHS legislation, based on hard evidence. The Rudd government promised evidencebased government, so Pat's views should have some appeal.

The first key point was that the WA mining industry has set the benchmark for mining safety by adopting the Robens challenge for employers to consult employees on OHS issues. Secondly the industry has the highest rate of penetration for safety and health representatives and the highest rate of training of them. Victoria has achieved big reductions in injuries with the same approach.

By contrast, the statistics for NSW where the model is one of increasing penalties, a high rate of criminal prosecutions and part of the fines being paid to the unions show that it is not the preferred option to use nationally.

You can view public submissions to the national review of OHS legislation at http://www.nationalohsreview.gov.au/ohs/ PublicSubmissions/. Pat Gilroy's is No. 120.



### **Government activity in Australia by jurisdiction 2005/06**

The ninth edition of the Workplace Relations Ministers' Council's Comparative Performance Monitoring Report 2005/06 issued earlier this year compares occupational health and safety and workers' compensation schemes in Australia including enforcement activity by jurisdiction.

The data shows that Victoria and Western Australia, who have the lowest rate of prosecutions resulting in conviction, also have the lowest incidence rates of injury and disease and importantly, experienced the greatest reduction in average workers' compensation premium rates over the three years to June 2006 by a wide margin.

The evidence in the mining industry in Western Australia clearly shows that co-operation and consultation between management and an empowered workforce is achieving outstanding levels of safety and health performance.

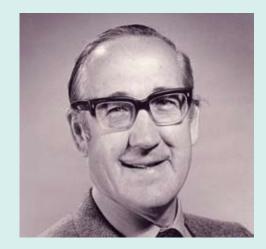
Outsider interference and the use of prosecutional approaches being promoted in some other jurisdictions to allegedly improve occupational safety and health outcomes cannot be substantiated by the available data.

### Vale Dr Fred Heyworth

Dr Fred, as he was widely known, passed away in July. Originally from Lancashire, he first brought his family to Queensland, and then returned to the UK for further studies in occupational medicine. On his return he commenced work for the WA Public Health Department, and succeeded Dr Jim McNulty as head of the Division of Occupational Health, Clean Air and Noise Abatement. Part of his role was as chair of the Mines Ventilation Board. and during his time there, marked reductions were achieved in occupational lung disease. He then became Chief Medical Officer at the then Department of Occupational Health and Safety of WA when it was first formed. He also served later on workers compensation medical panels.

He was an early president of the Occupational Health Society in the late 1970s.

Dr Fred was a genial person with a ready sense of humour, and respected by those who worked for him. He is survived by his wife Freda, four children and also grandchildren.



Above: The late Dr Fred Heyworth

#### 2008 National conference of the Australian Institute of Occupational Hygienists

This important conference will be held 1-3 December 2008 at the Burswood Entertainment Complex with key topics including health risk assessment, intervention and control of workplace exposures, collection of exposure data, hazard identification and effective stakeholder communication.

A weekend of Continuing Education Sessions will precede the Conference.

Details available on www.aioh.org.au/ conference/2008

# Editorial

I want to highlight certain issues which are pertinent to the national review of model OHS laws. In comments made five years ago about the withdrawal of Pan Pharmaceuticals' operating licence, the then head of the Therapeutic Goods Administration (TGA) defended giving advance warning of an impending audit, because, he said, a demo production run, for example, may need time to set up. Incidentally, the TGA has now been successfully sued by Pan's founder for taking away their licence. The National Offshore Petroleum Safety Authority NOPSA recently put a prohibition notice on a WA FPSO, so presumably NOPSA does not face the same problems of civil liability. For different reasons to those applying to Pan, it can be difficult for a government inspector to visit unannounced an offshore oil and gas facility on an island, FPSO or rig, as effective as that approach might be.

There are both safety, and as we have learnt to our cost from Longford and Varanus Is, huge economic implications of a serious gas facility incident, especially where a state is critically dependent on one pipeline. So the current national inquiry into OHS legislation certainly needs to consider the implications of divided and overlapping regulatory responsibility that the coverage of that industry by the federal body NOPSA, as well as WA's DOIR and DOCEP typifies. Add to that Joint Authorities and Designated Authorities the law sets up. There are differences in approach to consultation, even within WA. An oil and gas industry safety rep is elected by a designated workgroup process under WA and Commonwealth law, and may have a deputy safety rep. Not so under other WA OHS law.

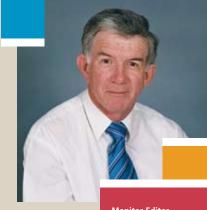
DOIR has publicly stated that DOCEP – Resources Safety's view that pipeline testing on Varanus Is should be carried out was too prescriptive under the enabling legislation. The OHS regulations under the WA Petroleum (Submerged Lands) Act which the inspectors work with require an inspector to have detected a breach of the law. It may be the case that an inspector feels that in the circumstances a maintenance check is desirable. The Regulations don't really allow for notices based on a suspicion of a "latent error or resident pathogen", to use James Reason's accident model terminology. This was later called the "Swiss Cheese model", probably by Rob Lee, then Director of Australia's Bureau of Air Safety Investigation. However by contrast a NOPSA OHS inspector may issue an improvement notice specifying action that is to be taken to prevent contraventions of a listed OHS law, and the WA minister responsible for petroleum pipelines can direct an inspector to check on the observance of any listed OHS law. The offshore oil and gas industry operates under a safety case regime, a proposal which is being considered for the mining industry by the Hooker review in WA. But that is not an excuse to drop targeted inspections.

The editor can be contacted at Work Safety and Health Associates. Tel: 08 9457 6487 or at wsha@iinet.net.au An article in The West Australian of 14th August on the Varanus Is gas escape highlighted the issue of paper-based audits versus "cheeseboring on the ground". This is a mixed metaphor but it means that an audit has to select certain critical aspects of safety and check them

thoroughly on site as a check on the validity of the documentation. If the Varanus Is incident had taken place on an offshore rig, it had the potential to become another Piper Alpha with men jumping into the sea to escape the heat, flames and asphyxiating combustion products. Lloyds Register's public statement about the qualifications in its audit highlights the need to be aware of

what an audit does and doesn't do. While this is in no sense a criticism of Lloyds, in the light of the recent trenchant criticism of financial ratings agencies paid for by those they rate, we also need to be careful that the same problem does not afflict third party certification of workplaces.

Consultation in OHS as a concept was always intended to complement effective OHS inspection, not replace it. This has been highlighted in Tasmania where it has been recommended after the Beaconsfield fatalities that at least six mines inspectors be employed in that state. WA also must pay the salaries needed to attract more competent people into mining and resources inspection roles, if it wishes to avoid another incident like Varanus. Only one question in the national review of model OHS legislation deals with the jurisdiction issue, thirty-four questions deal with consultation,



Monitor Editor, Geoff Taylor

and there are nine on compliance and enforcement, so there is certainly scope to examine the issues just raised. On a lighter note, the whole question of national OHS legislation may have been solved by the NT's Workplace Health and Safety Act 2007, which says that it binds the Territory and its instrumentalities, all other jurisdictions and their instrumentalities, including a foreign state or body politic!

By the way, this is worth reading on the Swiss cheese model: http://www.eurocontrol.int/eec/gallery/content/public/documents/EEC\_notes/2006/EEC\_note\_2006\_13.pdf.

Geoff Taylor (Adj. Prof.)

#### Failure to elect and train health and safety representatives by small business

#### A NEWSLETTER FOR HEALTH AND SAFETY REPRESENTATIVES REPORTS THAT MORE THAN HALF OF WESTERN AUSTRALIAN BUSINESSES SURVEYED DIDN'T THINK THAT OHS LAWS APPLIED TO THEM.

A large percentage of businesses underestimated their level of risk (60% thought they were in the 'low risk' category; WorkSafe WA believes only 37% are in that category).

The mismatch in classification of risk was more common in retail/accommodation, cafes and restaurants/wholesale business.

This lack of awareness is reflected in the training of health and safety representatives in those sectors in 2006/07.

- Retail/accommodation et al one HSR per 2,000 employees trained
- Wholesale trained three HSR's per 2,000 employees
- Mining by comparison trained 45 HSR's per 2,000 employees.

The failure to recognise the key role played by SHR's in improving OHS in the workplace is beyond doubt the major reason for the unacceptable incidence of injury and harm to health in Western Australian workplaces.

#### Health and Safety Representatives - Introductory Training by Industry 2006/07 (Selected Categories)

	Trained Reps	Reps Trained per 1,000 workers
Accommodation, cafes and restaurants	23	0.53
Construction	267	4.09
Manufacturing	232	2.68
Mining	985	22.70
Retail Trade	69	0.49
Transport and Storage	171	4.58
Wholesale Trade	104	2.59

### UK HSE rediscovers Robens

AFTER MORE THAN 30 YEARS THE CHAIR OF THE UK HEALTH AND SAFETY EXECUTIVE DELIVERED A STRONG MESSAGE TO DELEGATES AT THE NATIONAL SAFETY SYMPOSIUM IN EARLY SEPTEMBER.

#### The message:

## The HSE is not responsible for managing health and safety at the workplace - you are!

Giving her vision of health and safety in the 21st century, Judith Hackett revisited the fundamental principle that "those who create the risk are best placed to manage it."

This however tells only half of the story.

The Robens Report of 1972 had this to say:

#### "The primary responsibility for doing something about the present levels of occupational accidents and disease lies with those who create the risks and those who work with them."

The continual failure to understand that employers consulting with, and encouraging the participation of, an empowered workforce is the only way to recognise and manage workplace risks is still the major deficit in management practice today.

Legislative proposals at the national level that continue to promote external enforcement and prosecutional actions as a means of improving occupational health and safety performance fail to appreciate what has been achieved by the mining industry in Western Australia.

MARCSTA has drawn the attention of the National Review into Model OHS Laws to the factual situation. We can only hope common sense will prevail.

## Jim Torlach Commemorative Scholarship

Applications will shortly be invited for this annual scholarship which provides payment of all HECS fees for the three years of study in the Bachelor of Science (Health and Safety) at Curtin University.

The scholarship is open to all students undertaking their first full time undergraduate year in 2009 who are able to demonstrate an interest and commitment to the discipline of occupational health and safety.

Practical placement opportunities are offered over the three years of the degree course.

## MARCSTA members

#### **ORDINARY MEMBERS**

Ausdrill Ltd Barminco Limited BGC Contracting Pty Ltd Cemex Australia Pty Ltd Cooks Construction Pty Ltd GFR Group

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GR Engineering Services GRD Minproc Kellogg Brown & Root Pty Ltd Komatsu Australia Pty Ltd Roche Mining Process Engineering Skilled Group Ltd Terex Materials Processing and Mining Australia

Thiess Pty Ltd Total Corrosion Control Westrac Equipment Pty Ltd

#### **ASSOCIATE MEMBERS**

AVELING Jako Industries Pty Ltd Mandurah Safety and Training Services Pty Ltd Mine SafeGear Safety First Risk Management Strudwick HR

#### Classified hazardous substance index updated by the ASCC

THE ASCC IS ABOUT TO UPDATE THE LISTING OF CLASSIFIED HAZARDOUS SUBSTANCES ON THE HAZARDOUS SUBSTANCES INDEX SYSTEM (HSIS) TO REFLECT CURRENT CHANGES IN EUROPE.

The HSIS online database is a free publicly available internet resource on the ACCC website http://hsis.ascc.gov.au/

The update comprises a total of 919 entries of which there are 465 amendments to existing entries and 454 new entries.

## Young adults early hearing loss

A NEW SURVEY COMMISSIONED BY AUSTRALIAN HEARING HAS FOUND THAT MORE THAN 70% OF YOUNG ADULTS IN AUSTRALIA ARE SUFFERING FROM THE FIRST SIGN OF HEARING LOSS.

The survey found adults between the age of 18-24 reported suffering from tinnitus (or ringing in the ear). It also showed that two thirds of Australians listen to music through their headphones, and of these, 60% play music at dangerously loud levels.

The Director of the National Acoustics Laboratory at Australian Hearing says it could take as little as weeks or months, or years, before hearing loss becomes prevalent.

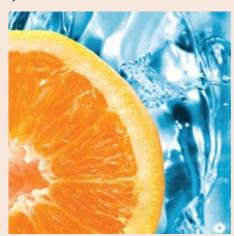


#### Injected vitamin C cuts cancer growth

RESEARCHERS AT THE US NATIONAL INSTITUTE OF HEALTH HAVE REPORTED THAT INJECTIONS OF HIGH DOSES OF VITAMIN C HAVE ALMOST HALVED THE RATE OF TUMOUR GROWTH IN MICE LEADING THEM TO BELIEVE THAT IT MAY BE USEFUL IN THE TREATMENT OF CANCER IN HUMANS.

The idea that Vitamin C (absorbic acid), when taken orally, could be used to treat cancer had earlier been discounted.

In the latest study researchers *injected* the Vitamin C to enable greater concentrations of it to get into the system.



Source: ABC Science

#### Automation to improve efficiency and mine safety

CATERPILLAR INC HAS ANNOUNCED THAT THE DRIVERLESS HAUL TRUCK IS ONLY PART OF AN AUTONOMOUS MINING HAULAGE SYSTEM THAT IT IS DEVELOPING WITH BHP BILLITON LTD.

Plans call for autonomous trucks to be integrated into some BHP Billiton sites by 2010.

The autonomous technology is designed to provide productivity gains through more consistency in processes. It will also help minimise environmental impact by both improved efficiency and overall mine safety.

## Using food diaries doubles weight loss

DIETERS WHO WRITE DOWN EVERYTHING THEY EAT EACH DAY LOSE TWICE AS MUCH WEIGHT AS THOSE WHO DON'T, ACCORDING TO ONE OF THE LARGEST WEIGHT-LOSS STUDIES EVER CONDUCTED.



In a study of 1,685 overweight or obese adults who weighed an average of 96kgs participants were offered 20 weekly group sessions led by nutritionists and behaviour counsellors and encouraged to lose 4kg in 6 months.

Those who kept their food diary six or more days a week lost an average of 8kg in six months compared to 4kg for those who didn't.

Source: Working Nights, USA Today, July 2008

### ACT Work Safety Act 2008

NEW LEGISLATION INTRODUCED IN THE ACT CONTAINS NEW INNOVATIONS WHICH MAY WELL HERALD THE CONTENT OF THE PROPOSED NATIONAL MODEL LEGISLATION.

They include:

- a general duty on all employers to consult workers on health and safety regardless of the number of employees;
- enabling private prosecutions to be commenced by union or employer organisation;
- payment of penalties awarded to be used to promote better work safety practices;
- directors and senior officers to be liable when legislation is breached.

The question is whether the proposed national legislation will be identical.

## Training provider profile **Ralph Keegan**

Ralph Keegan is a MARCSTA provider based in Bunbury. His business, Frontline Safety and Training Services, specialises in occupational safety.

Ralph initially joined MARCSTA as one of the first providers for the Managing a Shiftwork Lifestyle – A Personal Approach, a course that now only a few provide, and commenced delivering the General Induction in January 2002. Since then Ralph has provided regular MARCSTA courses in Bunbury with additional courses in Collie and Albany and surrounding areas. Frontline Safety and Training is a Registered Training Organisation (RTO) providing a variety of OSH based courses including the Worksafe Accredited safety representative course, tilt up construction and Monitor a Safe Workplace along with a range of other accredited and non accredited training courses.

Ralph's company also provides consultancy to a broad range of industries, focusing on the engineering sector Ralph is also a consultant to



WorkSafe's Thinksafe program, for which he visits small businesses and provides them with guidance and an action plan. This is free of charge to small business with Worksafe footing the bill. Frontline Safety has now been running for seven years with Ralph at the helm and has a staff of four, and five contractors. During that time Frontline has won various awards including a South West WA Small Business Awards - Judges Commendation.

Ralph has developed Frontline as a very community orientated company and conducts most of its training in venues that benefit the community. Ralph can be found most Fridays at the Bunbury Football Club where he conducts the MARCSTA course. Bunbury might not be the local league premiers this year but look out in 2009, Ralph says!

## National Audit and Regulation Agency to lead regulation of vocational education and training

The Deputy Prime Minister and Minister for Education, the Hon Julia Gillard, launched the National Audit and Registration Agency, NARA, in early September with the announcement that the new body's operations will support business growth by 'leading regulation best practice in the vocational education and training sector.'

She added that the development of a single national body to audit and register training providers is an important milestone on this reform path.

Just how the new arrangements will impact on organisations like MARCSTA and its supporting RTO providers is as yet unclear as, to date, only South Australia, Queensland, Tasmania and the ACT have delegated their regulatory functions to the Agency.

Whether RTO's in Western Australia will have any involvement in the transition process is yet to be seen. Visit http://www.nara.tvetaustralia.com.au/



# Hearing loss - the third most common health problem in the USA

Hearing loss currently affects more than 36 million Americans. Although hearing problems are commonly associated with the normal ageing process, more than one half of all hearing-impaired persons are younger than 65.

With the increased usage of personal music players (MP3 players, Ipods and earbuds), the number of Americans experiencing hearing loss at a younger age is growing.

The President of the American Academy of Audiology says that most people consider hearing loss a condition associated with ageing; they don't know how to recognise the condition and they don't know who is qualified to diagnose and treat the condition.

Hearing loss can be caused by a number of things such as noise exposure, ear infections, trauma, certain medications as well as hearing loss related to the ageing process.

Although most hearing loss that is caused by nerve damage is permanent, an audiologist can determine the best treatment to improve and enhance communication, which may include hearing aids, assistive listening devices and/or hearing rehabilitation.

### **Conferences and courses**

Goldfields Mining Expo, 28-30 October, 2008 Kalgoorlie. Website: www. goldfieldsmining.expo.com

Australian Centre for Geomechanics (Perth) short courses: Underground Blasting 3-4 November, Ground Support in Underground Mining 5-7 November. See http://www.acg.uwa.edu.au/events\_and\_courses/current\_courses.

Conveyors in Mining: 11-13 November, Perth. Website: www.iir.com.au/conveyors

Future Mining 19-21 November 2008, Sydney. Website: www.futuremining.org

#### **OCCUPATIONAL HEALTH FORENSICS:**

## Analysing the evidence to make a difference

Burswood Entertainment Complex - Perth, W.A. 29th November - 3rd December 2008

www.aioh.org.au/conference/2008

## **New publications**

#### WorkSafeWA:

Code of Practice - Safe Design of Buildings and Structures. Guidance Note - Fall Prevention for Scaffolders; - Guidance Note – Alcohol and Drugs.

Draft Code of Practice- Safeguarding of Machinery and Plant. See www.docep.wa.gov.au/WorkSafe/PDF/Codes\_of\_ Practice/Draft\_Safeguarding\_of\_machinery\_and\_plant.pdf. You can comment until 10th October at worksafersvp@docep. wa.gov.au.

#### ASCC:

National Standard for Construction Work, see www.docep. wa.gov.au/WorkSafe/Content/Industries/Construction/ Further\_information/National\_standard\_for\_construction. html. This is already implemented by regulations in the nonresidential sector and will apply to the residential sector from 1st October.

#### **DOCEP - Resources Safety:**

Magazine – *Minesafe* - Volume 17, no. 1, May 2008, no. 2, August 2008

Poster and Annual report - Safety Performance in the WA Mineral Industry 2006-07

Code - Dangerous Goods Sites – Emergency Planning Code Guidelines - Dangerous Goods Incident Reporting; - Managing Naturally Occurring Radioactive Material (NORM) in Mining and Mineral Processing; - Major Hazard Facilities in Western Australia Guidance Note - Alcohol and Other Drugs at the Workplace

Guidance material related to introduction of the Dangerous Goods Safety Act and associated regulations - Legislation information sheets; - Explosives management plan templates; -Blast plan templates; - Security risk substances templates

Medical Bulletin No. 5 – *Cyanide Poisoning – First Aid and Medical Treatment* (revised April 2008) Safety Bulletins - 81 and 82

Significant Incident Reports - 146 to 150





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## Worker Health and Well Being

#### The effect of light on alertness

Exactly why light improves alertness is not well understood. The leading theory is that light suppresses the brain's production of melatonin, a hormone that promotes sleepiness. Some studies also indicate that exposure to light raises body temperature, which helps boost alertness and mental performance.

Regardless of how exactly light enhances alertness, it is a good idea to use light to your advantage if you are someone who works the night shift. Try to brighten up your work environment and see if you feel more alert on the job.

#### Shift work sleep

The head of the Alfred Hospital in Victoria reported in September that a study of 40 seriously injured drivers which excluded those with blood-alcohol readings over 0.5 or with psychiatric conditions - has found that 48% were regular shift workers, with a third finishing a shift immediately before their crash.

"We estimate that sleepiness contributes to about a third of single-vehicle fatal motor collisions", he said.

Writing in the Internal Medical Journal, Associate Professor Mathew Naughton said the disturbance in the circadian rhythm of shift workers was compounded by them sleeping two to four hours less than the rest of the population.

He said going long periods without sleep was the same as drunk driving, while young people driving between midnight and 7:00 am faced similar dangers.

Source: Herald Sun

#### Sleep apnea and memory loss

An important new study by researchers in the USA reports that the part of the brain that stores memory appears to shrink in people with sleep apnea. They do not know why the sleep disorder affects brain tissue but suggest it is related to repeated drops in oxygen levels.

Obstructive sleep apnea is a common problem that occurs when the soft tissues at the back of the throat collapse and close the airway during sleep. *Source: Working Nights, July 2008* 

#### Working hard can be harmful to health

When fatigued individuals perceive a task as achievable and worth doing, they increase their effort to make up for their diminished capability due to fatigue. As a result, blood pressure tends to rise and remains elevated until the task is completed or individuals stop trying because they think success if impossible or too difficult to be justified. The researchers considered their findings relevant to health because of the links established with hypertension and heart disease.

The research was published in the July issue of International Journal of Psychophysiology.

Source: ohsonline July 2008

## 75% of paramedics making errors because of fatigue

An online survey conducted in June 2008 by the Ambulance Union in Victoria of 350 paramedics (nearly 20% of the workforce) has revealed that 75% of those surveyed have been so exhausted by their workload and long hours that they are making errors of judgement.

The paramedics are averaging just six hours sleep at night while rostered on, with 25% saying they are getting five hours sleep or less.

Errors included administering wrong drugs, wrong dosages, falling asleep and missing incoming emergency calls.

The paramedics say that urgent resolution of the current enterprise bargaining negotiations was crucial to reducing fatigue.

Source: AEA of Australia

#### Diabetes in the USA at epidemic proportions

According to the American Diabetes Association almost 8% of the population have diabetes. A further 19% have prediabetes.

Shift workers can be at increased risk for diabetes with only 27.5% reporting that they have good nutritional practices. A further 77% report not exercising regularly.

Source: Working Nights, August 2008

#### **Automatic behaviour**

Automatic behaviour refers to a period of several minutes or more during which a person is barely awake and able to continue performing routine duties, but loses the ability to make quick decisions.

For example, if you experience automatic behaviour while working on an assembly line, you might continue doing your specific task but ignore the fact that the product is missing several parts.

Automatic behaviours tend to sneak up on you and many people have no memory of having one. If you're feeling tired and doing a monotonous task be sure to check yourself for automatic behaviour.

Source: Working Nights, September 2008

### Health and environmental consequences the responsible management of nanotechnology

A NEW REPORT RELEASED BY THE AUSTRALIAN GOVERNMENT IN JULY SAYS THAT THE LACK OF SCIENTIFIC KNOWLEDGE MEANS AUSTRALIAN REGULATORS COULD BE UNABLE TO ADEQUATELY PROTECT HUMANS AND THE ENVIRONMENT FROM POSSIBLE RISKS OF NANOTECHNOLOGY.

While the report claims there is no need for major changes to regulatory regimes, critics say the findings suggest that nanomaterials are essentially unregulated and should be taken off the market until we know how to assess their risk.

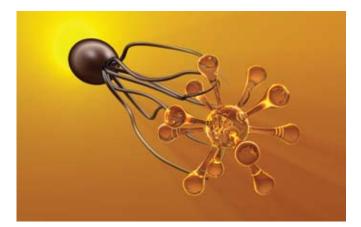
The report says that scientific uncertainty also means that risk assessment protocols used by regulators designed to protect humans or the environment may not be appropriate.

A Canadian report claims that there are currently more than 600 products on the market that their manufacturers say were produced using nanotechnology with the largest segment in the broad category of health and fitness products. They include 29 different sunscreens, cosmetics, clothing, tennis rackets, shoe deodorisers and optical wear.

Nanotechnology has broad application across a wide variety of industries including manufacturing, construction, mining, agriculture, environment, health, energy and communications.

Meanwhile, commercial pressure is hastening the utilisation of nanoparticles. The US National Institute of Standards and Technology has announced that an infusion of the right amount of nanoparticles to standard mixes of lubricants and refrigerants can boost the performance of chillers used to cool office buildings, hospitals etc by from 50 to 275 percent.

Nanomaterials are measured in nanometres or millionths of a millimetre. A human hair is 100,000 times thicker than a particle measuring one nanometre.



## Victoria - the safest place to work in Australia

In 2007/08 Victoria achieved a record low rate of 11.11 injury claims per 1,000 workers down from 11.32 claims in the previous year.

Workplace fatalities compared to 2006/07 were halved at 16.

The Chair of the WorkSafe Victoria Board claims that ongoing strong safety performance and sound financial management has allowed four consecutive annual 10% cuts to average workers' compensation premiums and a further 5% reduction in the average premium rate earlier this year.

She said that Victoria's lowest ever injury rate, record levels of client satisfaction and improved claims management have meant that Victoria's competitive advantage continues.

Victoria's average premium rate is now 20% below that of NSW and less than half the rate of South Australia.

Incidentally, the Chair reported that the volatility on world financial markets had impacted WorkSafe's investment returns, resulting in a net loss of \$587 million for 2007/08.



### Mine supervisors indicted

Three mine supervisors in Kentucky USA have been indicted on charges relating to violating the law by turning off the main fan at the mine they were employed in for about six hours while eight miners continued to work miles underground.

The main fan is crucial because it sweeps out dangerous dusts and gases that can build up when miners are cutting coal.

It is also alleged that they did not shut off power and mechanical equipment in the affected areas of the mine, nor did they take the miners out during the change.

If convicted on both counts, each faces a maximum prison sentence of five years and a fine of up to \$250,000.

Source: Herald Leader, UK

## Member Profile - TCC Group

TCC Group, formerly known as Total Corrosion Control, is an industrial services company providing a range of services to the mining, refining and construction industries. Established in 1982, TCC Group has emerged as a leader in scaffolding, industrial blasting, protective coatings, insulation, sheet metal fabrication, polyurethane coatings, fireproof coatings, rubber lining, rope access, asbestos removal, and skills training and assessment.

The Skills Training and Assessment Centre, (TCC Group's training division), is pivotal to its ability to provide these services due to the high standard of training it has become known for. Granted RTO status in 1992, it was instrumental in getting abrasive blasting and industrial spraypainting recognised as a qualification. The Centre is currently the only RTO in WA delivering Certificate II and III in Surface Finishing and will soon be recruiting for 2009.

TCC Group is an integral board member of the Process Manufacturing Industry Training Council and is able to access all associated on and off the job training for that industry through the Australian Manufacturing Training College.

The TCC training centre is the only accredited provider in Australia based on the corrosion control industry; offering short courses in variety of areas including safety awareness training, confined space entry, asbestos removal, working at heights and national licenses to perform high risk work such as forklift and EWP, as well as the MARCSTA general safety induction.

TCC Group is proud of its association with MARCSTA since it joined in 1998, and has had a number of personnel not only become providers, but also sit on the Committee of Management including Garry Round, TCC's Training Manager. It is anticipated that this association between TCC and MARCSTA will continue to benefit workplace safety and health for a long time to come.

**Below: TCC equipment** 





Mark Adam Jayson Aveling Graham Bailey Ron Baker Carl Berglin Wayne Berkrey Danny Bognar Stacey Clark Scott Clarke Brian Cloney Dale Cocker (U) (S) Jim Dandie Geoff Day Peter Dowding Joe Duyvestyn Linda Elezovich Donelle Fraser Ross Graham Ray Hargreaves Sheryl Henley (C) Jeffrey Hickin Peter Jones

## MARCSTA licensed training providers

Ralph Keegan (S) Joe Maglizza Les McIntyre Neil McMeekin Guy Mead Katherine Montague Rodney Pool John Preston Kevin Ramsay Merryn Richards Jason Roberts Victor Roberts Shane Salt Grant Shearwin Marcus Taylor James Titmus Peter Tynan Ron Van Baaren (C) Micheal White Graham Williams Peter Williams (C only) Paul Willoughby All training providers listed provide general inductions. C denotes the Construction Safety Awareness program U denotes the underground program. S denotes the extended working hours program.



# news and views

#### NATIONAL AND INTERNATIONAL SAFETY, ENVIRONMENT AND EQUIPMENT INFORMATION FOR THE MINING INDUSTRY

Australian Drilling for May/June 2008 contains an article by Bob Regan the Director of the Mine Safety Operations Branch at the NSW Department of Primary Industries.

This describes the **loss of the lower forearm by a driller**. His arm was close to steel mesh which became entangled in a drill steel on a continuous miner –mounted hydraulic roof bolter. The process involved locating the roof mesh and the horizontal section of the rib mesh on top of the continuous miner-mounted temporary roof support, using the left and right hand drill steels as guides. The continuous miner was to be trammed forward for the next mine support cycle. The magazine also relates the way changes have been made to two pieces of mine safety legislation after workers at the BHPB Cannington mine, on legal advice, refused to tell the inspectorate the **location of a fatal underground accident**. 28 hours was lost obtaining this information. There is information on Ausjet, the Australian High Pressure Water Association's view that **steel or nylon whipcheck restraints** to secure hose connections are unacceptable. Instead steel or stainless steel stocking types should be used. Also three pages contain HSE Manager at Worley Parsons, Carolyn Crompton's speech to the Mineral Drilling Association of Australia Symposium on "Are you a **risk taker or risk maker**?"

*Australian Journal of Mining* for May-June 2008 writes of the NSW Mine Safety Advisory Council's **Digging Deeper Action Plan** following the 2005 Wran Review.

This examined the impact on OHS performance of production bonus payments, safety-based incentive schemes, fatigue management and working hours in mining, and OHS management systems and consultation. There were 25

recommendations and the report includes contractor safety and educative action for the industry. See www.dpi.nsw.gov.au/minerals/ safety/consultation/digging-deeper. There are also articles on Lynas Corporation and the **future for rare earths** and **infrastructure demands from the SA mining boom**, a six page feature on **mining technology for nickel and coal**. Further articles cover EESTech's rights to the HTCPurenergy **carbon capture and storage technology**, the **economics of tyre protection chains**, Crane and Machinery Parts and Service's **tyre pressure monitoring system**, James Bridger on **prioritisation in mine management**, Bede Boyle on use of a **coal/water mixture** to replace fuel oil, Vale building **sustainability** into its Australian coal operations, and **midwest iron mining**.

In the Australian Journal of Mining for July-August 2008, Clayton Utz warn of the need to look at **insurance cover for gas outages**, ie. utility supply interruption endorsement and specified and unspecified suppliers/customers endorsement. These cover material damage to a supplier of the business and not the business itself. Flight Systems Engine Saver is also noted. It monitors **temperature and rpm in 8, 12 and 16 cylinder diesel engines** and detects trouble before damage can occur, before an operator can detect it on the gauges, and without false alarms. 16 problems can be identified. See www.ngclark.com.au. And finally the magazine notes that the federal minister for Resources and Energy, Martin Ferguson has introduced **legislation on carbon capture and storage.** 



Chairman Ross Graham, Terex Materials Processing and Mining

> **Deputy Chairman** Joe Maglizza, Cemex Australia PL

Director Safety and Health Patrick Gilroy AM Training Manager Sheryl Henley

Committee of Management Warren Claydon Allaine Coleman Terry Condipodero Peter Nicholls Garry Round Kim Stewart

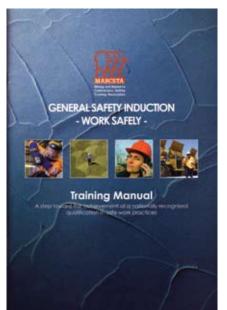
MARCSTA Monitor Editor Geoff Taylor

## MARCSTA's review of General Safety Induction

The annual review of MARCSTA's General Safety Induction is underway with input being sought from a wide range of expertise including member companies, providers, the regulatory authority, OHS professionals, industrial hygienists and occupational health physicians.

New material has been included particularly in the areas where workplace injuries regularly occur e.g. manual tasks, high risk work, working at heights, confined space, machinery guarding.

Health issues which are becoming increasingly relevant are also being expanded.





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The General Safety Induction provides a comprehensive introduction, to not only mining workplaces but to all other industrial situations, and is recommended for all persons including young people entering the workforce for the first time.

The annual review process ensures the currency of the program content and

represents the most up-to-date health and safety information available at the time of printing.

Regular monitoring of participant evaluation of the program content and delivery enables MARCSTA to maintain quality in every aspect.

MARCSTA's General Safety Induction is now available in NSW, Victoria and South Australia in addition to its traditional bases of Tasmania and Western Australia.

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