

MONITOR

Official publication of the Mining and Resource Contractors Safety Training Association

Vol 8 Issue 4

December 2004



MARCSTA providers receive excellence awards

Two of MARCSTA's long standing providers, Darren Ridley and Ray Hargreaves, have been recognised by the Association for their outstanding contribution and commitment to safety and health training in the mining industry.

Both have delivered more than 10,000 general safety inductions and throughout their careers have been identified by candidates as trainers of excellence. Ray intends to continue as a MARCSTA provider while Darren has accepted a senior position in the construction sector.

The awards honour the memory of Catherine Stedman who made a major contribution to the establishment of MARCSTA. The awards were presented at the AGM held on December 3rd by MARCSTA's inaugural chairman, Greg Harris.



Above: The late Catherine Stedman

Safety and health education a life-long process

A recent report published by the European Agency for Safety and Health at Work (EASHW) claims that integrating occupational safety and health into school and university education is the key to reducing the high incidence of work-related accidents and illnesses in many European Union industries, especially among young workers.

The report says one of the main problems is that most adolescents enter the labour market with little knowledge of the risks, let alone education on preventive measures. The Agency's Director claims that one of the lessons of the study is that health and safety education has to be a life-long process to succeed.

MARCSTA supports the EASHW view and takes every opportunity to facilitate delivery of the General Safety Induction to high school students.

Risk assessment training program

MARCSTA's Conduct Local Risk Assessment training program was delivered in Kalgoorlie on 25 November to a group of supervisors and area managers as part of a comprehensive training exercise organised by Roche JR.

On completion of the classroom learning aspects the participants were taken to a construction site at St Ives where they were required to adapt the learning to actual operational activities.

Feedback from the joint learning/workplace application exercise was positive with some useful suggestions put forward for the addition of a communication module to complement the program.



Above: MARCSTA Chairman, Terry Condipodero and participants in the Risk Assessment program



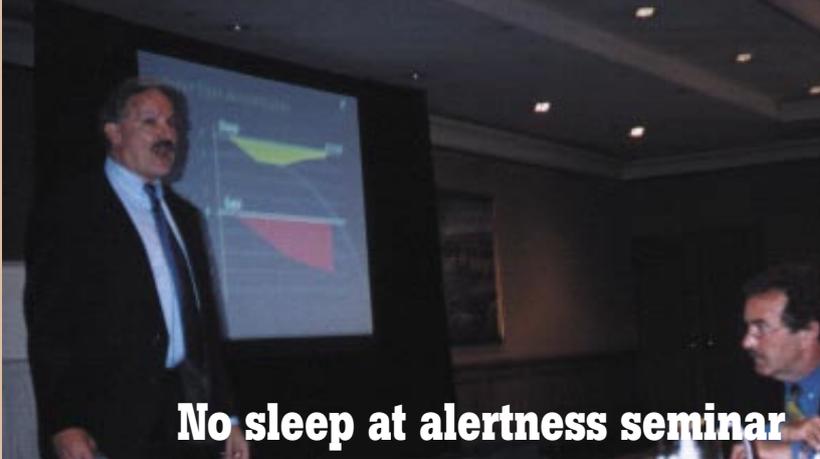
Extended working hours workshop	page 2
Editorial	page 3
Who's who	page 3
Farmer shoots labour inspectors	page 3
New OH&S laws passed	page 4

Warning on silica risks	page 4
Conferences and courses	page 5
ISMSP	page 5
Training of S&H representatives	page 5
Ritter report	page 5
Member profile Thies	page 6

ANTA to be abolished	page 6
New publications	page 6
MARCSTA members	page 6
Provider profile G Williams	page 7
MARCSTA providers	page 7
New and Views	page 8

MARCSTA wishes all readers the compliments of the season





No sleep at alertness seminar

Left: Dr Mark Rosekind and Tony Cooke The top graph shows daily sleep deficit and the bottom graph the cumulative sleep debt over the period.

A dynamic presentation by US alertness specialist Dr Mark Rosekind to a seminar of over eighty participants on 17th November kept everyone on their toes. Apart from the mining and resource sector, the hospital and law enforcement sectors were among those represented. The Chair of the WorkSafe WA Commission, Tony Cooke, the Director General of DOCEP, Brian Bradley and the State Mining Engineer, Martin Knee also attended

The seminar was organised by MARCSTA in association with the International Society of Mine Safety Professionals and Murdoch University Institute for Research in Safety and Transport Psychology, and was opened by the Minister for DOCEP, John Kobelke.

Dr Rosekind must practice what he preaches because he had arrived the evening before from California and delivered high energy presentations throughout the day, supported in the afternoon by Professors Bonnie Barber and Laurence Hartley, and Melanie Freeman, all from Murdoch University.

Professor Barber and Ms Freeman explained research they had done on the family and social effects of extended working hours and FIFO. Professor Hartley addressed the importance of circadian and sleep education.

The three key sleep parameters affecting human performance are the chronic sleep debt, on an acute basis, the time since last sleeping, and the continuous hours of wakefulness. Any sleep as long as it is safe to do so is good sleep, Dr Rosekind said.

The keynote presenter noted that Megan's law in New Jersey making driving after more than 24 hours awake a felony illustrated that if people didn't take action themselves, they might be made to, often with simplistic approaches. Using sleep education exercises helps to create employee "buy-in."

Dr Rosekind concluded the seminar with an interactive workshop developing approaches to alertness management for individuals, employers, families and society. He emphasised that while solutions were many-faceted, starting with just one intervention was the beginning of change for the better.

Some key points from Dr Rosekind:

- Sleep deprivation can produce up to 20% decrease in memory, 25% decrease in reaction time, 500% increase in attention lapses, 50% increase in lethargy and apathy, 100% change in mood, 75% decrease in vigilance, 30% decrease in communication, 100% increase in microsleeps, and 50% decrease in judgment and decision making. Cognitive fixation (tunnel vision – can't see the wood for the trees) is a further effect.
- Non REM sleep gives physical restoration, REM sleep mental restoration.
- Alcohol is a REM sleep suppressor, so if used allow time to metabolise before sleep
- A sleep surplus can't be built up.
- Non fatal sleep apnea can last up to two minutes – that's two minutes not breathing.
- Apnea causes heart and gastrointestinal problems and can have effects equivalent to around 0.06% blood alcohol.
- Four night shifts can produce an 8 hour sleep debt.
- Even a two hour sleep deficit is like 0.045% blood alcohol.
- A person cannot assess their actual alertness well, and it can be measured (not by them) by the time taken to fall asleep.
- Pilots who got a nap functioned 34% better, with many less microsleeps.
- To the corporate skeptics of permitted napping – "what other 26min intervention raises productivity 34%?"
- Caffeine is useful but must be used strategically.



Above: Dr Rosekind presents



Above: Professor Laurence Hartley



Above: Melanie Freeman and Professor Bonnie Barber



Above: Mark Rosekind and Melanie Freeman

Editorial



Geoff Taylor

The US Mine Safety and Health Administration (MSHA) has recently published its "20 most frequently cited standards". A citation is issued by an inspector when they have found a violation of a standard (which is legally equivalent to our regulation). The list is taken from citations issued for metal surface mines.

Top of the list was guarding of moving machine parts, followed by mobile equipment safety defects, and electrical conductors, all at around 10% of all citations.

What followed? Well, there were inspection and cover plates, two aspects of housekeeping, horns and reversing alarms, insulation and fittings for power wires and cables, safe access and handrails and toeboards.

In the group below 2% of all citations, the violations included two types of inspection (presumably mandatory ones not done), protection for openings around travelways, correction of dangerous conditions, parking procedures for unattended equipment, guard construction, warning signs, securing gas cylinders, preparation and submission of MSHA accident reports and closure of valves.

Clearly the figures will depend to some extent on whether the inspectorate is blitzing certain violations with targeted inspections. They may reflect what is easy to pick up and what is not so easy. Perhaps these aren't mirrored in the Australian surface metalliferous mining industry, or if they are, maybe the percentages are quite different.

WA DoIR does not have a relational database for collected entries in mine record books so the percentages of problems for our metal surface mines by category are not readily available.

Still, the US figures act as a useful reminder of some of the safety problems which can arise in surface metalliferous operations, and to that extent deserve attention by those responsible for health and safety on our sites. We would be interested to hear to what extent these types of issues are coming up in routine company health and safety inspections.

MSHA has also examined a recent year with 52 fatalities in metalliferous and non –metalliferous mines. In 71% of maintenance fatalities, victims were working with others. In production and other activities the figure was 43%. MSHA's point is that in 21 out of 29 of the fatalities co-workers could have made a difference.

It emphasised that everyone needs to think about safety, that our actions have an impact on others, that safety concerns should be voiced, and that the safety concerns of others should be listened to. All good advice surely, whether in the US or here.

And on that note, we wish all readers a safe and happy festive season and the best for the year 2005.



Who's who?

Chief Executive Officer

Patrick Gilroy AM

Chairperson

Terry Condipodero
Roche Mining (JR)

Vice Chairperson

Joe Maglizza
Readymix Holdings

Committee of Management

Warren Claydon
Ross Graham
Peter Luobikis
Arlene Roe

MARCSTA Monitor Editor

Geoff Taylor

Farmer shoots dead two labour inspectors

Two labour inspectors checking the contracts of seasonal plum pickers in the southwestern French region of Dordogne were shot dead by a farmer in September. The 57 year old opened fire on the inspectors and then tried to kill himself after his workers were asked to produce their papers, legal sources said. A female agricultural inspector died immediately while a male colleague died later in hospital.

The farmer was reported to have personal and financial difficulties, however officials said he faced problems no more severe than others in the region. Labour inspectors have been the victims of attacks worldwide. In June 2000 three meat inspectors were shot dead by a US sausage company boss and in March 2004 a Cornish farmer was jailed for two years for plunging an animal health inspector and a vet into a slurry pit.



New laws pass through Parliament

Legislation to bring about major changes in occupational safety and health laws has passed through the Western Australian Parliament and will shortly receive Royal Assent.

The changes result from the 2002 review by former Australian Industrial Relations Commissioner Robert Laing.

In his report, Mr Laing said that for employee representatives to be effective and encouraged to take on the obligations associated with their role, they should be given authority and decision making power.

Changes overview

- Expansion of general duties of care - to make sure those who have control at a workplace are responsible for the safety and health of those in their care. Covers new ways of working, such as labour hire arrangements;
- Substantial increases in penalties, particularly for corporations;
- New provisions enabling prosecution when offences relate to government agencies;
- More flexible processes for electing safety and health representatives and establishing safety and health committees;
- Provision for safety and health representatives to issue PINs;
- Establishment of a Safety and Health Tribunal under the auspices of the Western Australian Industrial Relations Commission, to hear appeals and related matters (including questions of entitlement to pay and conditions under the *Occupational and Safety Health Act* issue resolution provisions); and
- Establishment of a Mining Industry Advisory Committee, to advise and make recommendations to the Minister responsible for the *Mines Safety and Inspection Act*, and the Minister responsible for the *Occupational Safety and Health Act*, as well as to the Commission for Occupational Safety and Health. This committee will replace the existing Mines Occupational Safety and Health Advisory Board.

Penalties and sanctions

Under the new legislation, maximum penalties for OSH offences will more than double, reflecting the community's view of the seriousness of such failure of care.

The current maximum penalty is \$200,000 for a general duty of care breach by a non-employee, whether a corporation or an individual. The highest penalty awarded to date was \$75,000 in 2003.

With the changes, a corporation convicted of the most serious offence can be fined up to \$500,000 for a first offence. A subsequent offence will attract a maximum penalty of \$625,000.

For the first time, courts will be able to send an offender to prison for 'gross negligence' - that is, where there was a disregard for the likelihood of death or serious harm occurring and, where death or serious injury did result from the contravention.

The other significant change will be non-monetary penalties in the form of enforceable undertakings.

Courts will be able to make an order allowing an offender either to pay a monetary penalty, or to enter into an undertaking with the WorkSafe Commissioner to take action, such as remedying or publicising details of the offence or punishment imposed. The value of the undertaking would be roughly equivalent to the level of the penalty. Failure to comply will be an offence and if convicted, the offender would be required to pay the original penalty as well as a further penalty for the new offence.

New powers for representatives

Once the changes come into effect elected and qualified safety and health representatives will be able to issue provisional improvement notices (PINs) where they believe there is a breach of the *Occupational Safety and Health Act* or Regulations.

A PIN is similar to an improvement notice issued by a WorkSafe inspector, except for its 'provisional' nature. Before issuing a PIN, the safety and health representative will have to consult with the person to whom the notice is to be issued, about the matter that needs remedying.

There are checks and balances in the system to guard against misuse of the power, although the experience in other states where PINs have been in operation for some time, suggests that initial fears about the abuse of this power have been shown to be unfounded.

To support the introduction of PINs, the introductory training course for safety and health representatives has been reviewed.

The legislation, which amends both the *Occupational Safety and Health Act* and the *Mines Safety and Inspection Act*, is expected to take effect from early 2005.

Insurer warning on silica risks

Aon, the major insurance broker, has added silica to its list of top toxic risks.

It says that individuals extracting silica on working or manufacturing sites may be over-exposed, which could lead to silicosis - a disabling, non-reversible and sometimes fatal lung disease. Other problems can include lung cancer, pulmonary tuberculosis, airway diseases, autoimmune disorders and chronic renal disease.

Silica now joins asbestos and tobacco and other highly dangerous substances on Aon's toxic substances database.

In July US insurers warned of the possibility of a silica-related disease claims explosion and South African authorities have announced a program for the elimination of silicosis.

Recently the Australian National OSH Commission reduced the exposure standard for respirable silica to 0.1 milligram per cubic metre and the industry can expect increasing pressure for compliance with that reduced exposure limit.

Conferences and courses

Managing Rock Dumps and Stockpiles, A two-day course, February 17-18 2005, Perth. Contact: ACG (08) 9380 3300
9th AusIMM Underground Operators' Conference, March 7-9 2005, Perth. Contact: www.ausimm.com, (08) 9662 3166
ACGRaSiM6 (rockburst and seismicity), March 9-11 2005, Perth. Contact: www.ausimm.com, (08) 9662 3166
Ground Support in Open Pit and Underground Mines, April 5-8 2005, Brisbane. Contact: ACG (08) 9380 3300

International Society of Mine Safety Professionals (Australia) Inc

The incoming Chairman of the ISMSP USA, Tom Vanderwalker, has expressed his appreciation of members of the society for their support in addressing the principal objectives of the Association which are

- to develop safety professionals throughout the international community
- to save lives and
- to reduce injuries through better leadership and understanding of the mining industry.

With active membership of 750 and 675 certified mine safety professionals the Association is ideally placed to assure the credentials and continuous professional development of mine safety professionals.

The US Association started in 1991 with six safety professionals.

The Australian chapter will offer its second law examination, the first step in certification, in early 2005 and expressions of interest are invited from mine safety and health personnel interested in furthering their careers.



Jim Torlach
ISMSP Chairman

Training of safety and health representatives

Figures produced on the annual participation by industry in the training of safety and health representatives for the eight years to June 2004 confirm the continued commitment by the mining industry to ensuring workforce participation in workplace safety.

Over the period 1996/97 to 2003/04 the industry has trained more than 5000 safety and health representatives.

A comparison with some other major industry sectors highlights this commitment:

Safety and Health Representative Training - Annual Participation by Selected Industries

	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	Total
Construction	173	155	135	119	105	109	122	167	1085
Health & Community Services	345	309	300	392	374	291	301	423	2735
Manufacturing	166	213	165	206	138	216	230	207	1541
Mining	736	627	670	653	619	686	566	718	5275
Transport and Storage	136	125	147	132	162	104	112	137	1055

The mining industry has maintained an average participation rate of approximately 30% over this period and can be relied upon to continue that commitment in the future when the role of safety and health representatives will include the right to issue provisional improvement notices.

Ritter Report

On 26 November the Minister for Mines tabled the Ritter Report which was triggered by problems at the Boodarie iron plant in Port Hedland.

Key decisions:

- a tripartite panel to advise on changes to the MSI Act and Regulations
- appointing an independent person expert in occupational health and safety to advise the tri-partite panel on these matters
- review of the structure of the mines safety inspectorate within Government and the culture, skills, resourcing and remuneration levels required to achieve a world class safety regime
- consideration of whether to transfer the mines safety function and that relating to dangerous goods into the Department of Consumer and Employment Protection (DOCEP)
- classifying the Boodarie Iron plant as a major hazard facility under the National Standard.



Above: Pat Hoppe, Geoff Hope and Troy Martin

Thiess is one of the largest Australian-based integrated engineering and services providers and is currently progressing some of the most significant projects throughout Australia, South East Asia, and the near Pacific. Their more than 8000 employees aspire to make Thiess the leading service provider in each area of its diverse operations including building, civil engineering, mining, process engineering, environmental services, and oil and gas.

At Thiess, the health and safety of its people and visitors to its sites is of highest priority - Thiess' objective is to achieve an incident and injury free workplace. Its Health and Safety Policy seeks to create a work environment that is conducive to high levels of safety performance through demonstrated commitment and safe behaviours. To do this it communicates Thiess' Health and Safety Policy and procedures to all employees and other stakeholders as appropriate to ensure they are aware of their obligations with respect to its operations.

During this year, renewed vigour and increased focus on safety by everyone throughout the business from its employees and sub-contractors to its executive team, has enabled it to continue on its performance improvement trend. A direct result of this has seen Thiess achieve a 40% reduction in its Lost Time Injury Frequency Rate and 149 of 182 workplaces (including offices) completing the year without a lost time injury.

To achieve these results, its staff were trained through the implementation of a number of business unit health and safety initiatives. Many projects have adopted positive performance measures, including items such as meeting attendance, training attendance, and number of risk assessments completed.

Another successful initiative undertaken by Thiess has been to implement Safety Days. Safety Days are held each quarter to provide employees with updates and reviews of any incidents or hazards and to facilitate training in safety awareness and safe behaviour. The nature of Thiess' business means its employees need to be trained in a variety of safety procedures to ensure their personal safety and the safety of the project. Thiess has also held a Safety Advisors Workshop, which was aimed at ensuring all those with a safety function were up-to-date with its policies, procedures and systems to ensure that a consistent approach to health and safety management is applied throughout the business.

ANTA to be abolished

On 22 October the Prime Minister announced that the Australian National Training Authority is to be abolished from July 2005 and its responsibilities taken over by the Australian Government Department of Education, Science and Training.

A Ministerial Council on vocational education will be established to ensure continued harmonisation of a national system of standards, assessment and accreditation, with goals agreed in a Commonwealth State Funding Agreement.

Developments will need to be followed very carefully as there are few examples of federal bureaucratic intervention operating successfully.

New publications...

DoIR

- Tyre Safety Fires and Explosions Guideline

- Refuge Chambers for Underground Metalliferous Mines Guideline

DOCEP

- Fatigue Management for Commercial Vehicle Drivers Code of Practice
- Working Safely with Forklifts. Video and DVD.
- Preparing for Emergency Evacuation at Workplaces. Guidance Note
- Provision of Information on Hazardous Substances. Guidance Note.
- Poster Factory: Safety poster leasing and exchange program.

MARCSTA members

FULL MEMBERS

Ausdrill Ltd
 Australian Raise Drilling
 Barmingo Mining Contractors
 BGC Contracting
 Brambles Ltd
 Charles Hull Contracting
 Cooks Construction Ltd

Readymix Holdings Pty Ltd
 GRD Minproc
 Komatsu Pty Ltd
 Macmahon Pty Ltd
 Roche Mining
 Roche Mining (JR) Pty Ltd
 Skilled Group Ltd
 Thiess Pty Ltd

Total Corrosion Control
 Westrac Equipment Pty Ltd

ASSOCIATE MEMBERS

AVELING
 Mandurah Safety and Training Services

This list is current at the time of going to press. For further information contact the Secretariat on (08) 9355 1400

PROVIDER PROFILE **Graham Williams**

Graham Williams is the training officer with KCGM at the super pit Kalgoorlie and is married with three children. Graham has been involved the gold mining industry for over 19 years, and has worked as a leading hand/supervisor, training officer and recently as a crusher supervisor.

During this time he has operated mining equipment himself and trained operators on numerous types.

Like many people in mining operations, Graham left school in year 10 at 15 years of age to start an apprenticeship which he did not complete. After joining Safety and Training at KCGM he has completed many certificates, some of which are the Certificate IV in Training and Assessment, Certificate IV in Frontline Management, and Diploma in Occupational Health and Safety.

MARCSTA induction sessions have been combined into KCGM's open pit refresher inductions and have been presented to most of the company's open pit production employees. These inductions have been received well across the production crews and also by supervisors, managers, geologists, mining engineers and environmental personnel. Since becoming a MARCSTA provider in 2003 Graham has seen over 200 employees attend these inductions.

KCGM runs a comprehensive safety and training program that is designed to take trainees with no or very little mining experience and turn them into safe and productive operators. Safety training is the basis of the program alongside the latest information available from the equipment manufacturers with an Immersive Advanced Equipment Simulator set up for Caterpillar haul trucks as well as the Komatsu PC 8000 Face Shovel.

Safety is a crucial aspect of the mining industry and Graham has found that if you get safety right production will follow. People in mining are always keen to share their experiences and knowledge, which is why Graham feels work in the mining industry is a great area to be involved in.



MARCSTA REGISTERED PROVIDERS

Mark Adam	Peter Dowding	Des Shaw
Jayson Aveling	Joe Duyvestyn	Brian Smith
Tony Aveling	Linda Elezovich	Peter Stoneman
Graham Bailey	Helen Fleming (S)	Wayne Sullivan (S)
Ron Baker	Ashley Gilbert	Kim Sutton
Tom Bateman	Ross Graham	Mitchell Talbot
Catherine Benato	Ray Hargreaves	Peter Tredgett
Carl Berglin	Ralph Keegan (S)	Peter Tynan (U)
Barbara Best	Guy Le Noir	Graham Wall
Danny Bognar	Joe Maglizza	Graham Williams
Clive Brindley	Malcolm McFarland	
David Campbell	John Preston	
Dale Cocker (U) (S)	Graeme Richards	
David Collins (S)	Merryn Richards	
Jim Dandie	Jason Roberts	
Geoff Day	Victor Roberts	

All listed above provide general inductions. U denotes underground trainer as well. S denotes shiftwork lifestyle trainer as well. This list is current at the time of going to press

News and Views

Australasian Drilling for September October 2004 contains an article by WA State Mining Engineer Martin Knee on causes of and preventing explosions in RC drilling involving booster compressors. Ingress of oil into the compression chambers allows it to ignite and cause tremendous heat and pressure, so maintenance including maintenance of scrubber elements is vital. Bob Phillips from Western Air follows up by suggesting bursting discs not just pressure relief valves, better synthetic oils with higher flash point and hard piping.

Australian Journal of Mining for September/October 2004 notes that Fortescue Metals is considering strip mining of iron ore with draglines and crosspit conveyors to crushers rather than excavators and dump trucks, at its Christmas Creek site.

In the same issue the severe skills shortage resulting from the resources boom is discussed, affecting both professions and trades. The slump in apprenticeships over the last twenty years and the boom and bust cycle in mining-related professional faculties hasn't helped the Journal says, with engineering and technical disciplines losing students to other areas. Family friendly rosters are being introduced to attract skilled personnel. In addition the new joint WA Government and Chamber of Minerals and Energy mining education institute will coordinate courses at Curtin, Murdoch and UWA. Private providers such as the Caterpillar Institute are also active, and Roche Mining has encouraged indigenous recruitment, while KCGM has tapped into the female labour pool and now has 75 female truck drivers.

The journal also describes the 2004 Minerals Council of Australia National Safety and Health Innovation awards. BHP Billiton Mitsubishi Alliance (BMA) won an award at Blackwater for an engineering solution which reduces crush incidents to operators of vehicle loading cranes. BMA got a second award at Crinum, for roof bolters which reduce musculoskeletal injuries while inserting drills or spanners in the drillhead chuck. Boral Quarries (Metro) of NSW' award was for a cutout switch which eliminates exposure of surface drill rig operators to rotating plant. Rio Tinto Coal at Kestrel received an award for an isolation lockout device which positively isolated the econovalves in the air water reticulation system using personal danger locks.

CIM Bulletin for September 2004 has a seven page article on Regenderneering the Mining Industry, written by Ginger Gibson and Malcolm Scobie. CIM Bulletin is edited by a woman and so is the Canadian Mining Journal.

To January 2004 50 women had been surveyed. The hurdles were balancing family and work, promotions, stereotyping, harassment, workplace culture, inflexibility with no part-time or home-based work, lack of role models and suspicions if a male took a female "under his wing", different styles, and health and safety. The women suggested solutions to all of these. The article notes that AusIMM has a women in mining network.

In the same journal there is an article by Peter Cain titled Engineering Safety, where he writes with wry humour on ensuring that our "wetware", our personnel, are suitably designed, fit for purpose and maintained properly, using as an example a woman operator on a 4x4 schedule. Further on Berezan, Joseph and del Valle write on whole body vibration in mobile equipment operators.

Australia's Longwalls for September 2004 has an article on overcoming hose hazards describing the RYCO Lifesaver, an Australian product combining hose burst suppression, whip check and abrasion resistance.

The same issue also describes in some detail the current debate about the ACTU push to reduce the respirable quartz standard to 0.1 mg per cubic metre, and Ray Parkin who rebuilt the Queensland Mines Rescue Service after government funding was withdrawn in 1996.

World Mining Equipment for October 2004 has the latest review by Mike Woof of LHD and truck haulage developments.

South African Mining for March 2004 reports on a plan by GoldMoney.com to provide retail use of gold as a currency backed by insured audited gold bullion in London.

MARCSTA Monitor

The Monitor is published quarterly by:
Mining and Resource Contractors Safety Training Association
Suite 5, Petroleum House,
12 Brodie Hall Drive, Technology Park,
Bentley Western Australia 6102
Phone 08 9355 1400 Fax 08 9355 1499
Email safety@marcsta.com Website www.marcsta.com
Monitor Editor:
Phone/Fax 08 9354 7590 Email wsha@iinet.net.au

PRODUCED by Work Safety and Health Associates
and PRINTED by Delta Print for MARCSTA