

MONITOR

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Conduct local risk assessment

MARCSTA's Conduct Local Risk Assessment program is now available following successful trialling in the workplace situation.

The emphasis in the program is very much "hands on" with observation of actual operations in three locations:

- Maintenance Machinery Workshop
- Open Pit Operations
- Treatment Plant Maintenance

The program is designed for delivery in both the classroom and on site and is suitable for all levels of the workforce.

Successful completion of the training program and demonstration in the workplace of application of the learning will entitle participants to a Statement of Attainment for either the metalliferous training package unit MNMC205A Conduct Local Risk Assessment or the extractive industry unit MNQGEN200A.

READYMIX employees undergoing risk assessment training



Amendments to OSH Act 1984

Amendments proposed by the **Occupational Safety and Health Legislation Amendment and Repeal Bill 2004** are currently being debated in Parliament and are predicted to take effect from January 2005. Similar changes are expected in the Mines Safety and Inspection Act.

Briefings given by the Director General of DOCEP, Brian Bradley, to MARCSTA and the International Society of Mine Safety Professionals on 3 and 4 June provided a clear explanation of the impending changes and enabled the issues to be discussed at an informal level.

The major bone of contention is the proposal to enable safety and health representatives to issue Provisional Improvement Notices.

Training of safety and health representatives, supervisors and management would be crucial to the process.

Other key aspects of the amending legislation:

- Increases in penalties.
- Option for imprisonment.
- Option for enforceable undertakings by employers.
- Extension of general duties to labour hire organisations.
- Requirement to report serious work related injuries/deaths of non-employees.
- Increased flexibility for appointment of safety and health representatives and committees.
- Introduction of restricted inspectors.
- MOSHAB to be replaced by a Standing Committee of the WorkSafe Commission.

It became obvious during the briefings that there was little general knowledge and understanding of the content of the amending legislation. With the proclamation expected later this year a major educational program will be necessary to ensure a smooth transition in the workplace.

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New Falls Code

On 20th April the Minister for Consumer and Employment Protection, John Kobelke, launched the new Prevention of Falls at Workplaces Code of Practice at Hightech Safety Systems.

Hightech safety manager Mark Haney showed MARCSTA through the training facilities which include height work simulation and a series of interconnected confined spaces. Other OHS service and product firms also took part in a trade display.

The new code considers the risk management process for falls prevention, training, supervision, design of plant buildings and structures, access and egress, edge protection, fall injury prevention systems and anchorages, ladders, building maintenance units, temporary working platforms, forklifts, purlin trolleys, hole and opening protection, flooring panels, brittle roofing, freight transport and general plant, industrial rope access, tree climbing, and emergency rescue.

Breathing apparatus can get contaminated

A recent safety alert (SA0405) from the NSW Department of Mineral Resources warns that compressed air breathing apparatus (CABA) **when stored underground** may become contaminated with pathogenic mould fungus. This can produce toxins that can contribute to disease and contain potential carcinogens.

The Department made a number of recommendations regarding the appropriate storage of CABA and ancillary equipment.

Camera to help save trapped miners

A new mine safety inspection camera designed to be lowered into underground mines has been successfully tested by Simtars in Queensland.

The camera can be lowered through a small hole at the surface of the mine to a refuge chamber to inspect the area and send video images of the condition of trapped miners and other key information back to the site management team.

Failure to provide adequate training of drivers

In the UK, Thames Trains has been fined a record A\$4.87 million for its part in the Paddington rail disaster.

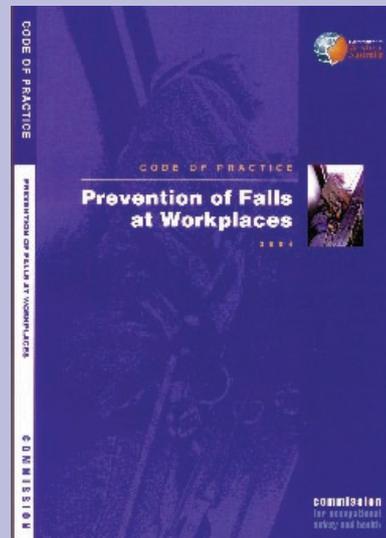
Justice Rodger Bell said that the company had failed to limit passenger risk by **remediating defects in its driver training program**.

The Thames chairman said that the size of the fine was irrelevant to the grief and suffering of the bereaved and injured.

Confined space hazards

In the USA the Goodyear Tire and Rubber Co of Akron, Ohio is facing a fine of US\$275,000 for offences involving worker entry into confined spaces, lack of personal protective and rescue equipment, lack of lockout/tag out procedures and **failure to adequately train workers**.

The action has been taken despite multiple inspections at various locations during the past decade.



"Irritable Desk Syndrome"

Researchers at NEC-Mitsubishi claim that long working hours, cluttered desks and poor posture are making many people ill.

In a survey of some 2,000 people, 67% said they are more tied to their desks than they were two years ago and 40% said that while they were infuriated by too much clutter and paper on their desks, they could not be bothered to do anything about it.

NEC-Mitsubishi have joined with Open Ergonomics to produce a guide to help people improve their work area.

Family friendly policies benefit employers

A recent study by WorkLife Balance International of more than 300 public and private companies has challenged the myth of the long hours working culture. The study found many staff reported that they were working longer but not smarter and were not more productive.

The study found "best practice" companies that promoted family friendly policies e.g. paid parental leave and flexible working hours to cope with children, had fewer stress-related absences, lower turnover and increased employee motivation.

Pressure continues for corporate manslaughter offence

Proposed changes to NSW law have been supported by an Upper House inquiry into workplace death and injury which has recommended a new offence of corporate manslaughter under the Crimes Act.

The report also recommended that companies have their safety performances rated and published.

Whether the proposals will have support from the NSW government is problematical as there has been a reluctance in the past to pursue the option.

Editorial

The WA Occupational Health and Safety Commission is currently considering the implications of giving the right to issue provisional improvement notices (PINS) to safety and health representatives. Clearly this raises important issues for both employers and employees, who need to be sure that the PIN action is taken by someone who can act responsibly on the basis of knowledge, training and experience. The proposed legislation provides that only “appropriately trained and accredited” safety and health representatives can issue PINS.



Geoff Taylor

They must have completed a “prescribed course of training”, which presumably means, as now, that the representative has completed the introductory safety and health representatives course, which is presently being reviewed. However the existing course does not provide for any assessment. If assessment was to be introduced, should it fit within the existing competency assessment requirements of the national competency based training (CBT) system? If it was to be competency based, the training providers involved would need to be registered training organisations (RTOs).

Also it means that some parts of the assessment would need to take place in the workplace after completion of the part of the course conducted in a training room. This would require the representative to provide evidence to the training provider before being issued with a statement of attainment. It also raises the question of what happens if a representative is elected but does not “pass” the training. However this misunderstands the nature of CBT where an unsuccessful trainee is only rated “not yet competent” and can be assessed again on part or all of the competencies, without the need to undergo all the formal training again.

CBT would also allow an experienced representative who has never been formally trained to be assessed as competent against the competencies in the selected training package units.

The three key parts of the representatives course are law, risk management, and consultation. There are three suitable units within the new OHS Practitioner training package which could be used. This would then allow portability and recognition of prior learning (RPL or RCC – recognition of current competence) for those representatives who wish to continue with their studies, whether in safety and health or in other courses where the OHS units are permitted electives. However the general view of rep training providers is that these units (AQF Level 4) are at too high a level.

Employees who become representatives in those parts of mining and other industries which have opted for MARCSTA training as a prerequisite to starting on a site, have a decided advantage, especially if they have progressed to converting the statement of attendance into a statement of attainment. This could give them recognition of prior learning in parts of the law, risk management and consultation competencies, and even more so if they have completed the MARCSTA **Conduct Local Risk Assessment** course.



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
Arlene Roe

Assessment Panel Chair

Joe Maglizza

MARCSTA Monitor Editor

Geoff Taylor

General safety induction skills recognition now available via FastTrack process

Candidates who provide evidence of five (5) years recent practical experience in the mining industry (3 years must be WA experience) and who have a working knowledge of current occupational safety and health practices can now make application to sit the FastTrack written question one hour examination.

Candidates who hold a current equivalent general safety induction from other mining jurisdictions can make application to attend the half day refresher program.

These options have been introduced to enable full skills recognition for candidates with extensive experience and knowledge. Full details are available online at www.marcsta.com.



TRUCK tray jammed in underpass, truck wheels off ground



DRIVER'S cab jammed against underpass. Crushed handrails, second truck used to stabilise elevated truck

Dump truck trays hit overhead structures

A Safety Alert issued by the Department of Mineral Resources NSW reports on recent incidents involving raised trays of large dump trucks hitting overhead structures.

In the first incident the tray became wedged against the roof of a public road underpass as a result of the impact. The driver's cabin roll-over protection system was also forced into the roof of the tunnel.

In the second incident a conveyor gantry was carried some distance by the truck. The gantry ended up being jammed between the tray and the driver's cab.

In both cases:

- The truck drivers were familiar with the trucks and the site.
- The trucks had been driven with the trays up for at least 100 metres.
- Visibility was good.

Neither of the truck drivers were injured. However one of the incidents had the potential to result in a fatality.

Further information and recommendations regarding the incidents can be found online at www.minerals.nsw.gov.au/safety/safalert.htm

Moves to replace NOHSC

Respective State governments and the union movement throughout Australia are expected to strongly oppose the federal government's decision to abolish the National Occupational Health and Safety Commission and hand its functions over to the Federal Department of Workplace Relations.

In its place the Australian Government has proposed establishing a new body, the Australian Safety and Compensation Council. The Federal Minister for Employment and Workplace Relations says that the new body will achieve better workplace health and safety for employers and employees and will build on the achievements of the NOHSC in pursuing a national approach to occupational health and safety and workers' compensation issues. Sceptics consider that the move is more aptly described as a federal bureaucracy takeover.

High school students complete MARCSTA

High school students attending Woodvale Senior High School considering careers in the mining industry successfully completed the General Safety Induction earlier this year and were presented with certificates on 15 March. The program was delivered by experienced provider Linda Elezovich.



The induction provides students, who spend periods on site during the year, with a full knowledge of the environment they can expect to encounter and the hazards they need to be aware of. The program, provided at no cost to students, is available to all high schools.

Inductions are also provided at Karratha Senior High School by Total Corrosion Control Training Manager, Ron Baker, who is a licensed provider.

MARCSTA strongly supports the provision of general safety inductions to all high school students as part of preparation for entry to the workforce.

WOODVALE SHS students receiving MARCSTA General Safety Induction Certificates

Conferences and Courses

Explo 2004, Explosives - A Time of Rapid Change conference, 26-28 July, Perth, Western Australia. Contact: www.ausimm.com

Queensland Mining and Engineering. 27-29 July, Mackay. Contact: phone 02 9422 2511 fax 02 9422 2553.

Email: kathrine.d'costa@reedexhibitions.com.au

PACRIM HiTech and World Competitive Mineral Success Stories. 19-22 September 2004, Adelaide. Contact: phone 03 9662 3166, fax 03 9662 3662. Email: conference@ausimm.com

Minexpo. 27-30 September 2004, Las Vegas. Contact: www.minexpo.com

Orebody Modelling and Strategic Mine Planning. 22-23 November 2004, Perth. Contact: phone 07 3365 3473. Email brc@uq.edu.au.

Provider moderation meetings

Meetings of providers conducted as part of the continuous improvement process at MARCSTA on 3/4 June at Technology Park were well attended and provided a number of learning opportunities.

The recent introduction of external auditing of provider training delivery was a major discussion topic as was the introduction of an augmented skills recognition process to simplify certification for experienced mining personnel.

Other major discussion topics included compliance with the requirements of the Australian Quality Training Framework and in particular the quality assurance of training providers. Professional development for all personnel involved in the vocational education system was another key issue.

The topic, however, that attracted most attention was the forthcoming upgrading of the Certificate IV in Workplace Training Assessment which looks set to elevate training standards to a new level.

While recognising the transitional problems that may arise MARCSTA is totally committed to the scheduled upgrade and will work with its providers to facilitate its introduction later this year.



International Society of Mine Safety Professionals (Australia) Inc

The ISMSP is dedicated to development of mine safety professionals throughout the international mining community, to save lives and reduce injuries through better leadership and understanding of the mining industry in all countries of the world.



Jim Torlach
ISMSP Chairman

Inaugural professional certification of members

Members who were successful at the law examination held in September 2003 and who have lodged for assessment portfolios documenting their experience will shortly be invited to complete the final stage of the professional certification process.

The portfolios must consist of substantial documented projects or case studies covering a range of fields in the discipline of occupational safety and health in mining.

The final stage of the certification process consists of an extensive interview to assess the candidate's knowledge, understanding and commitment to the Society's Code of Ethics.

Candidates who meet all of the Society's prerequisites for certification will be listed on the International Society's roll of certified professionals and be entitled to use the letters CMSP to indicate their professional status.

The certification of mine safety professionals is long overdue and provides the opportunity for committed mine safety and health professionals to be recognised as such. For too long the key role of safety and health has gone unrecognised with other professional personnel assuming the responsibility for making public comment on matters of safety and health and responding to community concerns on particular and general issues.

Professional certification may be the stimulus needed to effect the change.



Komatsu Australia Pty Ltd is one of the early members of MARCSTA, joining in 1996.

It is the national distributor for Komatsu, Komatsu Mining Germany, Komatsu Mining Systems and Ingersoll Rand drills. It offers a full product line up to meet all the needs in these important sectors, plus a range of highly innovative and cost-effective customer support packages.

Komatsu Australia is owned by a number of manufacturers which it represents. It believes that the initiatives of its people can have a great impact on the solutions it provides for industry. There are over 1,160 professionals nationally, with over 965 involved in product support and 105 in account management and sales.

Komatsu combines direct manufacturer involvement in the Australian marketplace with one-stop supply of heavy equipment. Komatsu is the first mining and construction equipment manufacturer in Australia with complete responsibility for its entire sales and service network and is unique among suppliers to Australia's mining companies.

Perth is the regional head office for Komatsu's Western Region (WA, NT and SA) with branches, parts and service facilities, and support units throughout the region.

Komatsu has direct satellite access to Komatsu Ltd's worldwide parts holdings, while the Komatsu Australian network has over 150,000 line items linked by network.

193 of Komatsu Western Region's 224 personnel are in product and customer support. All staff are fully trained to provide customers with a high level of service and expertise.

The Komatsu family of products embraces the traditional Komatsu lines, Komatsu Haulpak mining trucks and Komatsu Moxy articulated dump trucks. Komatsu Ltd's recent acquisition of Modular Mining and formation of Komatsu Mining Germany with its shovels and excavators will further expand the range of services and products to the mining industry.

With these combined distributorships, Komatsu can therefore better satisfy the needs of all its customers - in mining, construction, forestry, earthworks and quarrying. Komatsu Australia has invested around \$38 million in parts inventory, holding over 28,000 lines items in the Western Region.

New publications...

Caterpillar. *Fatal Mistakes: How to Reduce the Risk of Haul Truck Accidents*. Available free from www.cat.com/mininged.

Davies, B and Rogers, A. *A Guideline for the Evaluation and Control of Diesel Particulate in the Occupational Environment*. Melbourne, Australian Institute of Occupational Hygienists

US NIOSH. *Overtime and Extended Work Shifts: Recent Findings on Illnesses, Injuries and Health Behaviors*. Cincinnati, DHHS NIOSH.

NOHSC. *National Code of Practice for Noise Management and Protection of Hearing at Work, 3rd ed., Guidance on OHS Reporting in Annual Reports*

Taylor, GA, Easter, KM and Hegney, RP. *Enhancing Occupational Safety and Health*. Oxford, Elsevier.

WorkSafe WA. *Code of Practice: Prevention of Falls at Workplaces, Code of Practice: Masonry and Concrete Cutting, Guidance Note on Material Safety Data Sheets*.

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
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 Roche Mining
 Roche Mining (JR) Pty Ltd
 Skilled Engineering
 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 but for further information contact the Secretariat on (08) 9355 1400 or Fax (08) 9355 1499

PROVIDER PROFILE **Mark Adam**

Interactive Training Network is structured under the umbrella of the Central West College of TAFE and has been running for over 10 years.

ITN's full time trainer, Mark Adam, has been training for over four years.

His background was initially in the construction industry where he spent the first 16 years of his working life laying bricks as a contract bricklayer in the Midwest.

He then moved into the mining industry, where he spent almost four years learning the mineral sands side of mining, after which he spent a short time in the gold mining industry. He managed Cockburn Wreckair in Geraldton for two years before moving into training.

Mark has qualifications as a MARCSTA provider and also in:

- Forklift (WorkSafe Assessor)
- Elevating work platform (WorkSafe Assessor)
- Dogging (WorkSafe Assessor)
- Vehicle loading crane (WorkSafe Assessor)
- Front-end loader/ backhoe
- Skidsteer loader
- Safety auditing
- Certificate IV tower rescue
- Rope access – industrial
- Certificate IV workplace assessing and training
- Confined space training and rescue

A registered training organisation responding to industry needs, ITN is also a Quality Endorsed Training Organisation certified to ISO 9001.

MARCSTA provider, Mark Adam



MARCSTA REGISTERED PROVIDERS

Mark Adam
 John Amphlett
 Jayson Aveling
 Tony Aveling
 Graham Bailey
 Ron Baker
 Tom Bateman
 Darren Bennetts
 Carl Berglin
 Barbara Best
 Danny Bogнар
 Clive Brindley
 David Campbell
 Dale Cocker (U) (S)
 David Collins (S)
 Jim Dandie
 Geoff Day
 Peter Dowding (U)

Joe Duyvestyn
 Linda Elezovich
 Helen Fleming (S)
 Ashley Gilbert
 Ross Graham
 Andrew Hamill
 Ray Hargreaves
 Ralph Keegan (S)
 Guy Le Noir
 Chris Logan
 Joe Maglizza
 Malcolm McFarland
 Greg North
 Patrick O'Sullivan
 John Preston
 Graeme Richards
 Merryn Richards (S)
 Darren Ridley

Jason Roberts
 Victor Roberts
 Des Shaw
 Brian Smith (U)
 Peter Stoneman
 Wayne Sullivan (S)
 Kim Sutton
 Mitchell Talbot
 Stephen Taylor
 Peter Tredgett
 Peter Tynan (U)
 Graham Wall
 Graham Williams
 Terry Young

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

In the **Canadian Mining Journal** for February 2004 Jim Vincent gives **some figures for Ontario** mines. The current rate for lost time entries is 1.1/100 workers, which is a drop of 21% from 2002. The current rate for medically treated injuries is 8.4 /100 workers which is a drop of 8% from 2002.

CIM Bulletin April 2004 edition carries an article by Heather Ednie on Blasting Forward - Advances in **Explosives Technology**.

Heather Ednie also writes on Mine Safety - Achieving Zero. Part II in the May edition will cover Bill C-45, the Canadian Westray bill, introduced after the Nova Scotia mine tragedy. Heather looks at the Canadian **internal responsibility system**. LTIFR have gone from 12 to just over one in a decade. There are two prime causes of lost time injuries -- fall of ground (25% of serious accidents) and mobile equipment collisions (18%).

The Canadian Centre for Occupational Health and Safety is evaluating the merits of common core training, MARCSTA's prime focus. The Mines and Aggregates Safety and Health Association of Ontario (MASHA) has an audit tool for internal responsibility system effectiveness. **CIM Bulletin** April, Liquefaction Incident in a Fill Raise -- a case study by F Hassani and others. It describes a **sudden spill of waste rock** used for backfilling from a waste pass.

AJM March/April 2004 edition looks at **RAM modelling**, which covers reliability, availability and maintainability of new or existing resource projects. Modelling software called AvSim+ from Isograph, say ARMS Reliability Engineers, can model complex redundancies, common failures and component dependencies that cannot be modelled using standard analytical techniques. These include warm and cold standby arrangements, queuing for labour and spares, and hold for repairs. The same journal looks at Microfresh **filters** from Braeside Victoria which remove up to 95% of diesel particular matter from mining machinery exhaust. They say diesel exhaust is no longer on the menu. Bruce Gregory in the journal then looks at **owner versus contract** mining. He looks at the six operational factors that favour contract and three corporate factors.

In a separate article psychologist Brad Strahan gives his views about **fatigue** based on experiences at mine sites across Australia. You can read more at info@bradstrahan.com.au

In **Mining Technology** for December 2003 M.Leonardos and N. Terezopoulos give a case study **on rimslope failure** mechanisms in the Greek deep lignite mines which are open cut.

Australian Drilling for March/April 2004 looks at Atlas Copco radio **remote-controlled drill rigs** - which have improved operational safety and improved productivity. In the same journal Protector Technologies warns about **fluorescent helmets** and ultraviolet light as compared to solid-colour helmets. There is also an article on **family and work** by Steve Faulkner, President of the New Zealand Drillers Federation.

Australia's Longwalls, March 2004 describes a UNSW, New South Wales Coal Services and Australian Coal Association research program on **virtual reality simulations**. Their motto: *"I hear and I forget, I see and I remember, I do and I understand"*. Also US NIOSH looks at a **personal bolter screen** for roof falls, made of gridmesh. It has been designed for underground coal mines, as 98% of US roof injuries and 19% of fatalities are due to small rock falls between roof bolts or around temporary supports.

Angie Bahr looks at coal and metalliferous **regional instability**. There have been nine incidents in Australia in the past 12 years and they can affect whole mining districts. Professor Jim Galvin of UNSW says that part of the problem is loss of corporate memory and gives six steps to manage it.

In the same issue the Minerals Industry **Risk Management Gateway** is launched. This initiative by the Minerals Industry Safety and Health Centre at the University of Queensland gives good practical information. More information available at www.mishc.edu.au.

South African Mining February 2004 edition contains an article on a new MSA Africa **self rescuer** using potassium superoxide. The temperature of the inhaled air is reduced below 50°C. It has a longer operating period, and reduced inhalation and exhalation levels.

World Mining Equipment April 2004 describes Paul Wever Construction Equipment (Illinois) **mechanical mines scalers** which fit onto wheeled and tracked excavators. Also an article by Neil Archer with tips on identifying, delegating and **controlling dust** before it becomes a problem, while further on in the journal Mike Woof shows eight striking pictures of **safety problems with equipment**.

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