



## Industry commitment to the National Training Agenda

There are increasing signs that major sectors of the industry are becoming more receptive to the notion of national training packages despite the costs and effort needed to do so. This can only be beneficial to the skills level of the overall workforce.

MARCSTA acknowledged this early in 2002 and re-focused its training packages and plans to meet the performance criteria and competency standards contained in the National Training Framework.

The 2003 General Safety Induction program mirrors the revised *Work Safely* core unit and is now supported by a Skills Recognition Workbook and Supervisors Guide. This assists inductees and their supervisors to gather the evidence required to achieve a Statement of Attainment.

Both of these documents are available from the MARCSTA website [www.marcsta.com](http://www.marcsta.com).

What this means is that inductees can gather the required competency evidence, be assessed by a Certificate IV holder and be issued with a Statement of Attainment by either MARCSTA or an appropriately certified Registered Training Organisation.

Every effort will be made by MARCSTA to assist in achieving national competencies through minimising training costs and simplifying the process of evidence accumulation.

## General safety induction -FastTrack initiative

Refreshing MARCSTA certification using the FastTrack option is gaining in popularity although not all candidates are meeting the required standard and those who don't must undergo the half day refresher.

Candidates for the FastTrack are strongly advised to obtain the 2003 training manual and familiarise themselves with the content before attempting the one hour written question examination.

## Serious injuries - a continuing concern

Despite the fact that overall injury incidence fell to an historic low in the year to June 2002, serious injuries continued to be a major concern for the mining industry.

Serious injuries incidence has declined only marginally since 1997/98. However, as serious injuries not only represent most of the workers' compensation costs incurred by the industry but, more importantly, have significant human and social consequences, urgent attention is needed to rectify what seems to be an entrenched problem.

An analysis of sectoral workforce representation and serious injuries for the year to June 2002 is enlightening and identifies those sectors which are performing well and conversely those which need to improve their performance.

Mineral	% of Workforce	% Serious Injuries	% Minor Injuries
Alumina	15.72	11.03	8.15
Base Metals	3.12	4.72	4.21
Diamonds	2.59	3.94	3.42
Gold	30.40	40.55	40.79
Iron Ore	21.79	11.81	10.53
Mineral Sands	5.48	5.51	5.53
Nickel	11.89	8.66	8.68
Salt	1.68	.39	.53
Coal	1.61	1.97	5.26
Const. Mat	1.12	2.36	2.90
Other	4.60	9.06	10.00

Sectors leading the way are salt, iron ore, alumina and nickel. Sectors at close to the industry norm are mineral sands and coal.

The remainder are in need of improvement.

Over the past five years some sectors have continued to improve their performance and some have not. Urgent attention is needed!

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# Management Committee Activities

## New Training Initiatives

The December 2002 meeting of the Management Committee set the stage for a number of training initiatives for 2003. These include the updated 2003 General Safety Induction which has been modified to meet the requirements of the reviewed National Training Core Unit *Work Safely*.

Inductees who intend to achieve the full qualification will be required to collect evidence of their demonstrated competency in the workplace and be assessed prior to the issue of a Statement of Attainment.

The risk awareness and management program which will deliver the unit *Apply Local Risk Control Processes* is currently under development and is expected to be available by mid-year and further similar competency attainment provisions for candidates to the unit *Work Safely* will be available from the MARCSTA website.

## Auditing of Program Delivery and Assessment

In keeping with the Australian Quality Training Framework, increased auditing of all aspects of program content and delivery will be progressively introduced during the year.

In addition, assessment of provider applicants will be modified to reflect the increasing responsibilities and standards expected by ANTA.

## New providers

A number of applicants for provider licences were assessed by the MARCSTA Accreditation Panel in February.

Applicants included some from Hamersley Iron who are keen to be able to provide the induction program at their various sites in the Pilbara.

The Panel was impressed with the overall standard of applicants although not all were successful at this time in securing licences.

Unsuccessful applicants were required to gain further exposure to aspects of the program to meet the level sought by the Panel.

The new Providers will be included in the List of Providers in the next issue.

## Transport and Distribution Training Package

MARCSTA is currently developing a bridging program that will enable the current MARCSTA General Safety Induction to meet the requirements of the Transport and Distribution unit *Follow Occupational Health and Safety Procedures*.

The purpose is to enable heavy vehicle operators involved in mining related activities to minimise training costs and down-time in meeting the requirements for drivers under the WA Heavy Vehicle Transportation requirements.

The bridging program is expected to be available by the end of April.

MARCSTA now includes in its scope the following Transport and Distribution units:

*TDTF1097B Apply Fatigue Management Skills*

*TDTF197B Follow Occupational Health and Safety Procedures*

## New Member

The Committee also welcomed GRD Minproc as a member.



Above: Alison Hutton from Hamersley Iron presenting to the Accreditation Panel

## WorkSafe forums

WorkSafe WA will conduct safety and health forums during May in Kalgoorlie, Bunbury and Perth.

The forums will commence with the Minister for Consumer and Employment Protection, John Kobelke, providing an insight into the future direction in relation to the recommendations of the Laing Report and hopefully the working hours issue.

Major topics at the regional forums will be the impact of working hours and the importance of work skills development. The Perth forum will include the role of safety representatives and their interaction with management. This will be particularly relevant to the proposal in the Laing Report that health and safety representatives be empowered to issue safety alerts.

Dates & Venues: 13 May - Mining Hall of Fame, Kalgoorlie. 15 May - The Sanctuary, Bunbury. 30 May - Hyatt Regency, Perth.



# Editorial

Recent Australian research from Deborah Lupton at Charles Sturt University and John Tulloch from Cardiff University shows that deep down people can feel pretty good about taking risks.

The researchers say that being risky contributes to self-development, self actualisation and self control. The key is needing to extend oneself to change one's life in some way. However when someone is "riding the edge", a feeling of control is an important part of enjoying risk. Risk taking may be based on knowledge of oneself, one's own bodily capacities and desires and not just ignorance. This supports the view of sports scientist Professor Gunnar Breivik who says that mountaineers may be more risk averse than chess players, but offset the risk through training, equipment and planning.

Economists have accepted the theory of Daniel Bernoulli, an early mathematician, who came up with idea of *utility*, that is how highly does one value the outcome they want (ie. how much utility do they assign to it) and so how much risk will they take to achieve it?

Going a step further, the new draft national OHS practitioner competencies were outlined in the last editorial. After comment, the second draft is now out. We won't describe all of it, but we will select one performance criterion from the unit *Analyse and evaluate OHS risk of a task*. It is *OHS risks are ranked in order of level of risk*.

Sound simple? Well the Range Statements for the Unit describe ranking as a highly subjective process. Another performance criterion for the risk process says *Steps are taken to minimise the subjectivity of the analysis*. How does it suggest this be done? Well the Range Statement includes a heading on *Techniques to minimise subjectivity* which includes broad consultation, multidisciplinary focus groups, structured interviews, questionnaires, modelling, fault trees and HAZOP.

The Unit *Implement contingency planning processes* in the package sees prioritisation of risk as a different thing to ranking it. Manageability, seriousness, acceptability, urgency and growth, which are all defined in the Range Statement, are included in prioritisation, it says in that unit.

The new MARCSTA risk management course now under development for presentation this year aims to address these issues and take much of the mystery out of risk management with a straightforward approach based on actual situations in the mining and civil contracting sectors. It is also based on a careful analysis of where most of the serious injuries are occurring.

Risk management as a whole has received a renewed focus since 11 September, 2001, the Bali nightclub bombing on 12 October, 2002, and the Iraq standoff.

So the new MARCSTA course will be good value.



Geoff Taylor



## Who's who?

**Chief Executive Officer**  
Patrick Gilroy AM

**Chairperson**  
Terry Condipodero  
Roche Mining (JR)

**Vice Chairperson**  
Joe Maglizza  
CSR Readymix

**Committee of Management**  
Warren Claydon  
Ross Graham  
John Lemon  
Arlene Roe

**Assessment Panel Chair**  
Joe Maglizza

**MARCSTA Monitor Editor**  
Geoff Taylor

## Conferences and courses

AusIMM Youth Congress 30 April to 2 May 2003, Brisbane. Email: [s363209@student.uq.edu.au](mailto:s363209@student.uq.edu.au), Tel: 0413 270 948.

Future Directions; Impact of Working Hours: Skills Development: OSH Visions for the Future: WorkSafe Forum, Kalgoorlie 13 May, 2003. Bunbury 15 May 2003. Perth 30 May 2003.

AIMEX. 9 to 12 September 2003. Sydney. Tel: 02 9422 2511, email: [george.martin@reedexhibitions.com.au](mailto:george.martin@reedexhibitions.com.au)

Minesafe International Conference. 12 to 15 October, 2003 Perth. Tel: 08 9332 2900, email [promaco@promaco.com.au](mailto:promaco@promaco.com.au)

Large Open Pit Conference. 3 to 6 November 2002, Kalgoorlie. email [workmanc@wasm.curtin.edu.au](mailto:workmanc@wasm.curtin.edu.au)

Fax: 08 9088 6151



# St Barbara Mines

St Barbara is a Perth-based gold producer listed on both the Australian Stock Exchange and the London Stock Exchange (Alternative Investment Market) with nearly 12,000 shareholders and a current market capitalisation of approximately A\$50 million.

The major assets comprise:

- the Meekatharra Gold Operations (100 percent owned and managed) – the gold mining complex is located approximately 650 km northeast of Perth. Meekatharra produced 103,217 ounces of gold for the year ending 30 June 2002.
- the Paulsens development project in the Ashburton region of north western Australia – approximately 1000 km north of Perth. St Barbara intends to bring Paulsens into production at a life-of-mine annual rate of 90,000 ounces of gold per annum at the beginning of 2004.
- the largest shareholding (13% interest) in Dioro Exploration NL (joint venture partners in the highly prospective Frogs Leg project in the Kundana district near Kalgoorlie).

St Barbara is actively pursuing opportunities to be a 500,000 ounce per annum producer by June 2005. Initiatives in the 2002/2003 financial year include the acquisition of the Paddys Flat tenements, located 15 km from the Meekatharra treatment plant and the proposed merger with Toronto listed Geomaque Explorations and unlisted London company, Midas Gold plc.

Promoting and maintaining high standards of safe work practice, and a safe and healthy work environment are integral to a successful business.

The Company is focused on maintaining a system of safe work practices, maintaining a pro-active approach to control and management of hazards, and developing and improving management and performance standards.

The focus on development and implementation of continuous improvement, by way of providing effective training for all employees, supervisors, managers and contractors in risk and hazard assessment, has been essential given the changing operating environment and inevitable changes in personnel and contractors.



Gold pour at St Barbara Mines

## New publications

- DIR: Management of Asbestos in Mining
- MOSHAB: Safety Performance in the Western Australian Mineral Industry
- 2001/02 Accident and Injury Statistics
- WorkSafe WA: Dealing with Workplace Bullying: A Guide for Employees
- WorkSafe WA: Dealing with Workplace Bullying: A Guide for Employers

## MARCSTA members

### FULL MEMBERS

- Ausdrill Ltd
- Australian Raise Drilling
- Barmenco Mining Contractors
- BGC Contracting
- Brambles Ltd
- Charles Hull Contracting
- Cooks Construction Ltd
- CSR Readymix

- GRD Minproc
- Komatsu Pty Ltd
- Macmahon Contractors
- Roche Mining
- Roche Mining (JR) Pty Ltd
- Skilled Engineering
- Thiess Contractors
- Total Corrosion Control
- Westrac

### ASSOCIATE MEMBERS

- Ausco Building Systems
- Driver Training and Education Centre
- AVELING
- Mandurah Safety and Training Services
- St Barbara Mines

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



Jim Torlach,  
ISMSP Chairman

## International Society of Mine Safety Professionals (Australia) Inc

The inaugural examination on occupational safety and health practice for Society members seeking to obtain professional certification will be conducted before mid-year.

The process has been delayed somewhat due to the recent incapacity of the Chairman, however, the Management Committee will meet during April to endorse the structure of the examination process and agree a date for its conduct. Knowledge of the Mines Safety and Inspection Act 1994 and Regulations will be essential for candidates for the examination.

Interested candidates should ensure that they register their interest with Paula Sinclair on (08) 9355 1400.

## Long time providers bow out

MARCSTA's earliest provider, David Watkins and another long-serving provider, Jeff Mathews, have surrendered their licences after periods of excellent service.

Jeff believes that MARCSTA was a catalyst for change and assisted the overall cultural shift towards safety in the mining industry. People go on a minesite today with a subconscious understanding of safety, and talk freely about it whereas twenty years ago, Jeff says, it might have got the person sacked. As an example of the paradigm shift, managers today may find the wrong decision about safety can be career limiting.

MARCSTA wishes both David and Jeff every success for the future.

## Progress of the Laing Report recommendations

*Decisions by the State Government on the recommendations contained in the Laing Report, which will affect both the mining and non-mining industry sectors, are expected shortly.*

*The contentious issues of the right for elected health and safety representatives to initiate safety alerts, increased penalties for breaches of the Acts or regulations and the retention of the independent status of the mining sector are all matters of consequence for the mining sector.*

*The decision by Government will be keenly awaited.*

## Safety induction for high school students

Woodvale Senior High School was the venue for delivery of the General Safety Induction to the Year 11 Vocational Mining class in February, when 18 students and their teachers were introduced to occupational safety and health in the mining industry by Peter Tynan, one of MARCSTA's widely experienced providers.

Feedback from the school indicates an appreciation of the opportunity given to the students. They will spend time gaining first hand experience at Barrick's Lawlers Gold Mine, to gain an appreciation of safe working practices.

The program is expected to become an annual event at Woodvale.

*Top Right: Peter Tynan presents the MARCSTA General Safety Induction*

*Bottom Right: Terry Condipodero addressing the Vocational Mining class at Woodvale Senior High*





# Westrain Plant Operator Training and Recruitment Services

Westrain is a West Australian company based in Neerabup 45 minutes north of Perth, and has recently employed Peter Tredgett (pictured at right) to open and set up its Kalgoorlie office at 47 McDonald Street.

Peter's role is to provide a quality service to the mining industry with respect to safety training including MARCSTA training along with quality labour hire. Peter has worked in brown coal, iron ore, gold and nickel mining both as an occupational health and safety practitioner and in the training environment, in both mining and processing, for over 30 years.

Westrain has an agreement with an adjacent limestone quarry creating a realistic training environment for all heavy equipment operator training. It is looking to duplicate this training facility in the Goldfields very soon and is currently seeking interested parties and locations.

Westrain is a registered training organisation.



The assessment instruments are set against national standard 7019.

Westrain's scope of qualifications encompasses the following:

- BSZ Assessments and workplace training (AQF 0-IV)*
- Extractive Industry MNQ98 (AQF 0-IV)*
- Metalliferous Mining MNM98 (AQF 0-IV)*
- BCC 98 Civil Construction (AQF 0-IV)*

Westrain have the ability to train, assess and issue statements of attainment and certificates of competencies on all types of mobile plant. Trainers have been selected for both their experience and expertise in the mining and civil industries.

All trainers without exception have earned the respect of people within these industries.

Westrain can offer two options:

- onsite training or assessing by one of our qualified trainers, or
- providing training to the individual or group at our training venue at Neerabup.

It is able to assist companies in developing their own specific policies and procedures, training and safety manuals. Westrain also has the ability to act as a host registered training organisation on behalf of its clients.

It is working with companies in developing indigenous training programs and has made exceptional progress with these companies in meeting their commitments.

"Setting Australia's Standard" is Westrain's motto and it firmly believes that it is meeting the standard for both the mining and civil sectors.

## MARCSTA REGISTERED PROVIDERS

Mark Adam	Central West College of TAFE ITN	Joe Maglizza	CSR Readymix
Jayson Aveling	AVELING	Sharyn McCulloch	NOSA Ltd Queensland
Tony Aveling	AVELING	Malcolm McFarland (S)	IFAP
Ron Baker	Total Corrosion Control	Greg North	Westrain Plant Operator Training and Recruitment Services
Peter Barnard (U)	KCGM	John Preston	AVELING
Tom Bateman	TRACMIN	Graeme Richards	Richards Mining Services
Carl Berglin	Berglin Consulting Services	Merryn Richards (S)	Richards Mining Services
Danny Bogнар	Bognar Enterprises	Darren Ridley	TRACMIN
Clive Brindley	JG Engineering	Jason C Roberts	AVELING
Dale Cocker (U) (S)	TAFE Tasmania	Victor Roberts (S)	AVELING
David Collins (S)	D&S Safety Training	Des Shaw	Shaw OS&H Disciplines
Geoff Day	Mandurah Safety and Training Services	Brian Smith (U)	OSHTRAM
Peter Dowding (U)	Roche Mining (JR) Pty Ltd	Peter Stoneman	Kendawn Pty Ltd
Joe Duyvestyn	Duyvestyn Safety and Training	Wayne Sullivan (S)	Wayval Safety Consultants
Dennis Farlow	Roche Mining	Mitchell Talbot	AVELING
Helen Fleming (S)	Strudwick HR	Peter Tredgett	Westrain Plant Operator Training
Ashley Gilbert	Strudwick HR	Peter Tynan (U)	Tassmia Safety Training Services
Ross Graham	Komatsu Australia Pty Ltd	Graham Wall	Mandurah Safety and Training Services
Ray Hargreaves	RH Safety and Training	Chris Wilson	AVELING
Ralph Keegan (S)	Frontline Safety and Training Services	All listed above provide general inductions. U denotes underground trainer as well. S denotes shiftwork lifestyle trainer as well.	
John Lemon	Total Corrosion Control	Kris Burchell (S only)	
Guy Le Noir	Switched Onto Safety	<i>This list is current at the time of going to press.</i>	
Robert Lewis	Smart Training and Consultancy		
Chris Logan (U)	Logan CBT		

# News and views

## Platinum futures

The *Mining Journal* for 31<sup>st</sup> January 2003 notes that platinum has hit US\$670 oz. If the hydrogen economy the US government is giving incentives to develop leads to widespread fuel cell usage, demand for platinum over 10-15 years is expected to increase significantly.

## PAL nickel

*Australian Journal of Mining* for January/February 2003 has John O'Shea publisher of *Nickel Australia* has providing an overview of pressure acid leach nickel projects and where they might go. He notes that the process chemistry works but side reactions cause scaling and gypsum formation.

Their viability also depends on the cobalt price which is currently depressed.

Three projects are in train – Goro, Voysey's Bay and Ravensthorpe. Goro construction has been temporarily suspended for review because of large cost blowouts.

After 40 years of mixed fortunes Cuba's Moa Bay plant is operating at 33000 tpa, 30% over nameplate capacity.

## Diesel particulate matter (DPM) emissions

The *CIM Bulletin* for October 2002 writes up Canadian research on reduction of DPM emissions.

The American Conference of Governmental Hygienists (ACGIH) proposal in 1996 to reduce the limit to 0.15 mg per cubic metre (from 1 mg per cubic metre) stimulated the work. Key parameters are engine maintenance, low sulfur fuels, ventilation, particulate filters and catalytic converters.

## In-tyre sensor

*CIM Bulletin* for October 2002 reports on an in-tyre pressure and temperature sensor for mine trucks developed by Michelin and Fuller Bros. The data goes to a receiver on the truck. If it exceeds defined limits it is sent to the mine control room for further action. The collected data is also logged. As tyres cost C\$45000 each there is a strong incentive to stay within tyre operational limits.

## Drilling simulator training

Mike Woof in *World Mining Equipment* for December 2002 reports on South African firm ThoroughTec's CyberRIG simulator units. These can be used to select and train operators without putting equipment at risk.

## Mine cage safety arrest

*CIM Bulletin* for October 2002 contains an interesting article by Stan Gorzalczynski on shaft conveyance safety arrest mechanisms. In 1854 Elisha Otis said the famous words "All safe, gentlemen" after being hoisted in an elevator in an open sided shaft and half way up having the rope cut with an axe. This was at the Crystal Palace exposition in New York. Deficient safety dogs led to the death of 16 miners in the Paymaster accident in 1945.

## Planned maintenance

Tony Deane of Hatch Consulting writes in *CIM Bulletin* for October 2002 on developing maintenance plans using Reliability Centred Maintenance.

## Hours of work in the Tasmanian mining industry

This is a one and half page review by Terry Long of the Tasmanian Minerals Council in the *AusIMM Bulletin* for Nov/Dec 2002. Kathryn Heiler was appointed to carry out a study of safety in Tasmania's mines with emphasis on hours of work and family life. Her report is now out for public comment.

## Training management software

As of January 2003 all RTOs delivering training in WA, who submit their training data to the Office of Training, are required to submit that data electronically. In this regard, readers may wish to visit the website [www.ochreis.com.au](http://www.ochreis.com.au) to view information regarding the "Wise" training management software.

Alternatively, contact the Office of Training [www.training.wa.gov.au](http://www.training.wa.gov.au) for further information regarding their directives.

## Professional indemnity insurance

Two companies in the very small market providing professional indemnity for health and safety practitioners have just added new exclusions. To asbestos they have added for 2003-04: (Exclusions are prospective and retrospective)

Chemicals; maritime, aviation, marine, airports or defence facilities; bridges, dams, harbours, tunnels or jetties; fair exhibition or mechanical rides; utilities, mining, oil, gas or petroleum facilities; fire security protection systems; and nuclear facilities. They also no longer covers errors losses or amendments in electronic data. There are also some changes to claim notification in the light of the Insurance Contracts Act, the effect of which is that to be on the safe side, it seems that the insured should provide the insurance company with a copy of all reports and work at the time it was done.

# Review of **working hours**

The WA Government is expected to release a discussion paper on the contentious issue of working hours some time in April and the mining industry can be expected to feature prominently in the debate which will follow.

Issues such as fly-in/fly-out operations, 12 hour shifts, compressed work schedules and social issues in established mining towns will come under scrutiny.

The mining industry produced a *Guideline on Shiftwork and Occupational Health and Safety* in 1994 which was updated again in 1998 and much of industry works within its parameters.

Operations or contracting organisations who are not working within the guidelines can expect to be targeted by those who are strongly opposed to the current working arrangements, not only in the mining sector but in other industry sectors where extended working hours are the norm.

## Office **relocation**



MARCSTA will move from number three (3) Brodie-Hall Drive to number twelve (12) Brodie-Hall Drive at the end of March.

The move is due to expansion of our current neighbours in the existing building but it is to a new and more spacious location and will involve minimal disruption.

*At left: The new premises at No. 12*

## Advertising

A limited amount of advertising is invited for the next issue. Please contact the Editor.

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**Occupational Health & Safety**  
MARCSTA Monitor

Work on published papers in all major industry publications. Includes Computer Health and Safety with many interesting articles.

Three main and various contributors. **Contributors for Chapters 3, 4 and 5 are in 150**

Our 2002 industry publication **Monitor** was out on

**10th Anniversary**  
Engineering  
Clear-Jud Haines  
The 10th Anniversary Special  
The Institution of Engineers and  
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