

VOLUME 4 ISSUE 2 JUNE 2000

# Official Publication of the Mining and Resource Contractors Safety Training Association

# NEW MARCSTA INDUCTION MANUAL

MARCSTA has just released a new 80 page General Safety Induction Manual with colour illustrations and an easy-to-read A4 format.

It replaces the existing manual which has served 50,000 trainees. The new safety training manual has had input from experts in education and training, the mining industry, OHS, and from contractor representatives, MARCSTA's registered training providers, and the WA State Mining Engineer.

Consisting of eighteen chapters, each linked to a learning outcome, the handbook is packed with essential information on safety and health in the mining industry. The manual is used by inductees in the one-day nationally accredited induction course and retained by them for future reference. Copies of the manual have been distributed to all mining operations for perusal and input, where necessary.

Additional copies can be obtained from MARCSTA at a cost of \$23-50 (inclusive of postage and packing within Australia, or \$25-85 from July 1st)

A revised facilitators guide goes with the manual to further improve the quality of training given by MARCSTA providers.

MARCSTA would like to emphasise the benefits of requiring employees and contractors to hold current certification:

- The content of the induction is reviewed annually by industry, the Department of Minerals and Energy WA and educational experts to ensure currency and compliance with adult learning processes
- The competency level required ensures that candidates must meet an acceptable level of knowledge and understanding of the course content
- Certification must be re-validated through a competency-based process every two years
- The possession of a current MARCSTA Certificate provides employers with evidence that competency based general safety training has been carried out to nationally recognised accreditation standards This training is integral to meeting duty of care obligations.

MARCSTA is now a quality endorsed training organisation and all accredited providers must possess a minimum of Certificate IV in Training and Assessment and reapply annually for accreditation.

## Pat's Piece



Pat Gilroy CEO MARCSTA

#### **FATIGUE MANAGEMENT- A CONTINUING DEBATE**

The mining industry has, for some time now, been under pressure to adopt a Code of Practice in relation to its current working hours and rostering practices. Not unexpectedly, the industry has expressed its opposition to any constraints on its current working arrangements. It points to the lack of evidence that there has been any deterioration in its worker health and safety performance. In fact, if injury statistics were the only measure, then its safety performance continues to improve.

The major concern of industry is the requirement in the current draft code for each mining operation to determine whether 24 hour operations are really necessary and whether staffing

levels, work schedules and rosters provide an adequate margin of safety. A further concern is a requirement to assess the risk profile for every employee at risk to an extent considered both impractical and costly. Similar pressures are emerging in other states. (Continued Page 2...)

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General Safety

Induction Manual

2000

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

#### PAT'S PIECE Continued...

In response to draft guidelines issued in November 1999 by the Queensland Department of Minerals and Energy the Queensland Mining Council has released a report, Safety Performance Related to Shiftwork in the Queensland Mining Industry, which concludes:-

- 12 hour shifts are associated with an improvement in safety standards with lower injury rates than for traditional 8 hour shifts
- Management of shiftwork should not be regulated and should be a matter for individual mine sites to deal with
- Management of shiftwork and rostering should be treated as part of the overall risk management process in operating a mine

The Australian Chamber of Commerce and Industry has claimed (ACCI Review May 2000) that there is very little to suggest that long working hours have contributed to a significant deterioration in health for the majority of persons working those long hours.

#### **MARCSTA'S POSITION**

MARCSTA acknowledges that individual differences, both physical and mental, mean that it is not sensible to ignore the possibility of fatigue occurring when the combination of long working hours and problems associated with work are exacerbated by the personal, social and economic pressures of living in today's 24 hour society. Sometimes it becomes difficult to identify the source of the fatigue.

MARCSTA contends that the duty of care obligations on employers to:

- · provide a workplace free from hazards
- provide information, instructions and training to, and supervision of, employees to enable them to work in such a manner that they are not exposed to hazards.

entail providing awareness training for employees at risk. This training should also make employees aware of their obligations.

Consequently, MARCSTA will shortly introduce a competency based training program for the management of fatigue for all parties concerned. This program will be available both on and offsite.

The program is a joint initiative of MARCSTA and Murdoch University and can be delivered by either organisation.

### PROFESSIONAL CERTIFICATION OF MINE SAFETY PERSONNEL

The lack of an acceptable process for recognition of the skills of mine safety personnel, many of whom are able to demonstrate a level of professionalism that warrants such recognition, has long been the bane of the mine safety officer, manager, co-ordinator, or advisor .

The tendency to place tertiary qualifications in a range of disciplines as a pre-requisite for appointment above the long term experience of candidates has disqualified many of the industry's most competent safety practitioners from reaching their potential.

MARCSTA is currently examining options for the establishment of a certification process for mine safety professionals that could lead to international recognition.

This process would need to take into consideration long term documented mine safety experience, competency based qualifications or certification and tertiary qualifications. It would also need to have a number of certification options to provide a pathway to the highest level of certification.

Readers interested in the evolution and ultimate achievement of these objectives can register their interest with MARCSTA.

#### MINESAFE INTERNATIONAL

The preliminary program for Minesafe International 2000 is now available from the Minesafe secretariat (Paula Sinclair ph 08 9325 2955) or from the Minesafe website www.mineralswa.asn.au/minesafe

The program includes all current areas of concern in the occupational health and safety field and includes more than thirty selected overseas speakers.

Minesafe represents the best value both in qualitative and economic terms compared to any similar conference program and is a must for all mining personnel, health and safety representatives and regulators.

The representation by overseas presenters is a clear indication of the internationalisation of the mining industry and is certain to increase the pace of global improvement in the health and safety of the mining workforce.

# **Quality auditing of MARCSTA training**

The Executive Committee of MARCSTA has given the green light to a new Audit Protocol. The Protocol will further ensure that MARCSTA training as delivered in the field meets the high standards MARCSTA has set itself.

The protocol was developed by Vic Roberts with input from a number of other providers. The objective of the protocol is to provide a guide or check list so that auditing is carried out in a uniform manner across the Association.

In January the first provider to be audited was Tom Bateman of TRACMIN. The audit progressed very well and identified a few minor necessary changes to the protocol. The presentation by Tom Bateman was very professional and scored 97.2%, rated by the standard checklist.

A preliminary audit report was provided to the auditors who annually assess quality endorsed training organisations and it received an excellent review from them. The auditing of performance in the field is a major part of the QETO accreditation. The protocol developed will provide an excellent basis for audits of other MARCSTA providers in the future.

QETO is based on continuous improvement not just quality assurance.

- Vic Roberts





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#### From the Desk of the State Mining Engineer...

#### HAZARDS IN PLANT OPERATION AND MAINTENANCE

In recent weeks Inspectorate staff from the Department have carried out investigations and directed remedial action in relation to a series of high potential incidents at several process plants, some of which involved injury and could have resulted in fatalities, but for the circumstances

Most process plants use hazardous substances, and almost invariably stored energy sources are part of the systems. These have been factors in recent incidents.

In general, a higher level or risk is evidenced during scheduled or breakdown maintenance activity, than in the course of normal operations, where following proven standard safe operating procedures usually ensures an adequate margin of safety.

#### MAINTENANCE ACTIVITY - NON-STANDARD CONDITIONS

Carrying out maintenance of plant often results in increased levels of risk resulting from non-standard conditions, which may arise as a result of partial isolation of plant sections within an operating complex, and a range of other factors.

It is therefore essential that all such tasks are carried out using standard work procedures which have been developed on the basis of a thorough hazard identification and risk management assessment. An extensive range of factors will determine the risk spectrum to be

Some of the more obvious and critical of these factors include:

- correct, effective and proven isolation processes
- · confined space procedures and precautions
- precautions in opening closed systems, particularly those containing hazardous substances and stored energy; (appropriate testing and monitoring equipment is required)

Switched Onto Safety

**TRACMIN** 

Kelport Pty Ltd

checking for corrosion and wear in critical components, particularly if they are load bearing

- · adequacy of access to the worksite and the work area including a safe and ready retreat if there is potential for unplanned hazardous emissions
- · a check of the integrity of access ways, work stations, lifting facilities and attachment points, where corrosion, wear, or damage may be a factor
- · correct bleeding and flushing of systems when required
- complete integration and coordination of activities when interrelated parts of the plant are to be worked on simultaneously, together with effective communication systems

Jim Torlach

- · including controllers of ongoing plant operations in these communication systems
- ensuring adequate emergency preparedness and response procedures are in place and relevant personnel are alerted that nonstandard work is involved
- actioning hot work procedures and other essential permits
- providing and using all appropriate personal protective equipment
- making personnel aware when closed systems contain hazardous substances, (Regulation 7.26), and of the required precautions
- ensuring all personnel are fully trained and competent in the tasks and procedures, all hazards are made known, and the risks and necessary controls are understood and in place
- adequate supervision by competent and experienced persons.

Failure to recognise and deal with several of these factors was evidenced in the range of incidents requiring the attention of the Inspectorate, referred to earlier.

Operators should refer back also to relevant Safety Bulletins, including:

No. 13 Injuries through Opening Enclosed Systems, (16/2/96)

No. 26 Service Pipe Ranges, (23/6/97)

#### MARCSTA REGISTERED PROVIDERS

PRIVATE PROVIDERS

Darren Ridley

Rennie Sterle

Tony Aveling Aveling and Associates Wayne Sullivan Wayval Safety Consultants Tom Bateman **TRACMIN** Peter Tynan (U) Tassmia Safety Training Services Carl Berglin **CJB** Consultants Dave Watkins Safety Skills Training Dale Cocker (U) **Burnie TAFE** Chris Wilson Management Consulting Services Pty Ltd **D&S Safety Training** 

**David Collins** Helen Fleming Strudwick HR Linda Forsyth Westrac Equipment COMPANY PROVIDERS Ray Hargreaves Aveling and Associates Reuben Barber Joe Knight-Smith ITN Central West TAFE Macmahon Contractors

Peter Dowding (U) JR Engineering Services Pty Ltd Guy Le Noir Bert Lundie Baseline New Fra Drillcorp Joe Duvvestvn

Michael McCudden Ashley Gilbert Ausdrill Ltd Roche Bros Ptv Ltd Sharyn McCulloch Century Drilling, Queensland Ross Graham NS Komatsu Malcolm McFarland John Joyce Hampton Transport Nick McIntyre (U) Aveling and Associates John Lemon **Total Corrosion Control** 

Jeff Mathews Safety Paradigms (Aust) Pty Ltd Joe Maglizza **CSR Readymix** Greg North Mobile Skills Training

Victor Roberts Roberts Safety Training Consultancy Gary Sharpe Barminco U denotes underground trainer as well. This list is current at the time Shane Salt Safety Resolutions of going to press but for further information contact Anna Verteramo Brian Smith (U) at the Secretariat on Phone 08-9355 1400, Freecall 1800 678 554 or Barminco Fax 08-9355 1499.



# Who's Who?

#### **CHIEF EXECUTIVE OFFICER**

Pat Gilrov

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Greg Harris, BGC Contracting

#### VICE CHAIRPERSON/ TREASURER

Terry Condipodero, JR Engineering Services Pty Ltd

#### **ADMINISTRATOR**

Anna Verteramo

#### INDUCTION

Ross Graham

#### **TRAINING**

Joe Maglizza

#### **PROMOTION**

Warren Claydon & Ashley Gilbert

#### **ACCREDITATION**

Irene Ioannakis

#### MARCSTA MONITOR EDITOR

Geoff Taylor

# Letter to the editor

On many occasions I have been asked by MARCSTA inductees and reuinductees why there is not the same emergency number on each minesite. This would be similar to the 000 emergency number that everyone is familiar with.

Contractors who travel from site to site are often confused when each minesite has a different emergency number.

I believe this is a good point and warrants consideration.

Joe Knight-Smith

# Editorial

I was recently contacted by Monsieur F. Forney of the French mines research institute INERIS in the University of Nancy. M. Forney wanted to contact people in Australia who were researching detection of workers trapped by rockbursts, as he is developing a new seismic device to detect them.

A quick check around the country at some likely places such as the University of Wollongong, University of Queensland, and SIMTARS revealed that there seems to be little research in Australia in this area, but I passed on possible contacts to M. Forney. So it is interesting that while there is a high level of interest and



Geoff Taylor

competition in practical mines rescue in Australia, which achieves high standards, it does not seem to be backed by ongoing research in this important area.

The mines rescue field was of particular interest too after reading an account of the Austrian Lassing talc mine disaster and the subsequent rescue attempts recorded by an Australian mining academic, Jim Galvin of the UNSW, who was visiting a colleague of his in Austria at the time. Mining under cemented fill was taking place, but after a month of rain a crater developed over 4 hours, swallowing three homes and 80,000 cubic metres of material. A big problem in removing the water flooding was too rapid decompression if someone was trapped in an air pocket. This disaster was a tragedy for ten men (one was saved), and involved rescuers working to balance a raft of second best options. For those interested the report is in Australia's Mining Monthly for February.

The Safety Institute of Australia and the Monash University Accident Research Unit have been asked to assist Westpac Financial Services to survey larger companies on the ASX. Stakeholders in the ten Australian workers compensation jurisdictions are thinking of using OHS performance of the companies as another "filter" in deciding where to place the \$4bn worth of funds they annually must invest. The idea is that companies with a good OHS track record would attract the compensation investments. These companies would go into an OHS-screened share portfolio planned for introduction later this year. Now there's some lateral thinking!

## **MARCSTA Members**

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#### **ASSOCIATE MEMBERS**

Westrac

**Driver Training and Education Centre** 

This list is current at the time of going to press but for further information contact the Secretariat on 08-9355 1400, Freecall 1800 678 554 or Fax 08-9355 1499



## NS KOMATSU PTY LTDVVVV

NS Komatsu is the national distributor of Komatsu, Komatsu Haulpak and Ingersoll Rand mining and construction equipment, with the Perth Branch being the regional head office for NS Komatsu's Western Australian and Northern Territory operations.

NS Komatsu completed its formation in 1993 and is unique among suppliers to Australia's mining companies. It combines direct manufacturer involvement in the Australian marketplace with one-stop supply of heavy equipment needs. Komatsu is the first mining and construction equipment manufacturer in Australia to take complete responsibility for its entire sales and service network.

NS Komatsu Western Region provides extensive coverage of Western Australia and the Northern Territory. Branches, parts and service facilities and support units can be found throughout the region, ranging from the South West of Western Australia to the far North of the Territory, with two new service centres in Bunbury and Port Hedland.

To support these operations, NS Komatsu has direct computer access to Komatsu Ltd's worldwide parts holdings via satellite communications, while the NS Komatsu Australian network has over 150,000 line items linked by network.

NS Komatsu Western Region currently employs 233 personnel and of that number, 193 staff are centred around product and customer support. All staff



NS Komatsu Welshpool

are fully trained in their profession, providing customers with a high level of service and expertise.

The Komatsu family of products now embrace 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 Shovels and Excavators will further expand the range of services and products to the mining industry. In addition to this, NS

Komatsu also hold the Australian distributorship for Ingersoll Rand Rotary blasthole and rock drill products, Fleetguard filters and Berco undercarriage.

These combined distributorships create one of Australia's most powerful and effective mining industry service organisations. NS Komatsu can therefore better satisfy the needs of all its customers - in mining, construction, forestry, earthworks and quarrying.

# New Publications

The first six publications below are from the Mines Occupational Safety and Health Advisory Board (WA).

Guideline on Duty of Care.

Guide to the Mines Safety and Inspection Act -Resolution of Issues, Election of Safety and Health Representatives and Committees.

Geotechnical Considerations for Open Pit Mines.

Safety and Health Risk Management Guidelines.

(Above four published by the Department of Minerals and Energy on www.dme.wa.gov.au)

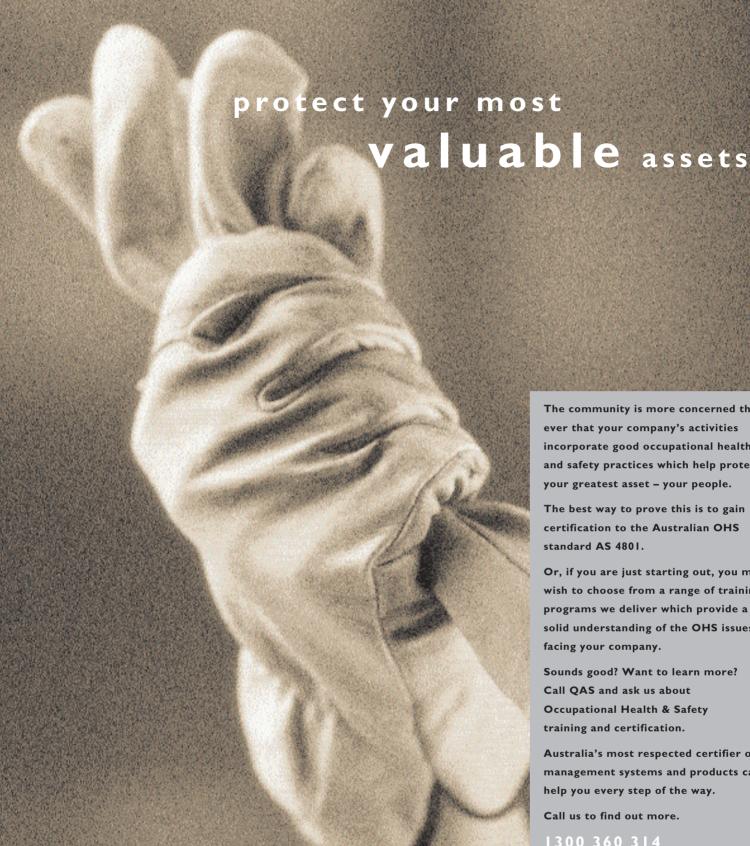
Draft Guidelines for Geotechnical Considerations for Old Workings. (for comment)

Draft Guidelines for Legislative Reporting Requirements. Part 1. Incidents, accidents and occupational diseases explanatory text. Part 2. Checklist for reporting. (for comment).

(Copy of the drafts available from the Department.)

Principal Contractors Safety Alliance (NSW). *Subby Pack*. Can be downloaded from www.safetyalliance.org.

Standards Australia (2000). *OHS Management Systems. Specifications with Guidance for Use.* Sydney, Standards Australia.



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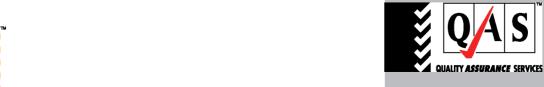
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#### PROVIDER PROFILE PROVIDER PROFILE



#### **DAVID WATKINS**



David is a director of Safety Skills Training Pty Ltd. In 1978 he began devoting himself to a career in the fields of occupational safety and health training and rehabilitation. His dedication to this field came about because of the many accidents and personal suffering he saw whilst undertaking his trade skills work.

Those early days where several persons died whilst building a large refinery in the South West of Western Australia made him

determined to get involved and be active within the fledgling OSH management structure of that dark time.

Over the years, many projects and opportunities have kept David in the main stream of the advancement of safety and health management, training, assessment and certification.

Opportunities included such vocations as TAFE skills lecturer, government construction safety inspector, skills training manager, company safety and health manager, company personnel development manager, expert member of the WorkSafe WA Commission and company director.

David received the WorkSafe Award from the Western Australian Government in 1991, for his dedication to safety and health.

The move to the present certificate of competency standard NOHSC 1006 for Users and Operators of Industrial Equipment saw him become the first Registered Assessor in Western Australia.

The same applies for the MARCSTA provider registration, where David provided his personal support to this important initiative. His involvement through the concept and evolution stages of the MARCSTA induction to today's active and successful program, has also assisted in his personal development.

Being the proud owner of the very first MARCSTA provider's status, he now, among many other functions and duties, delivers the MARCSTA Inductions at his Bibra Lake Training Centre and on site at various locations.

Having achieved so much, where to from here, David asks.

More training, more safety management advancement and certainly more learning and advancement. The modern day safety and health regimes are never static for long, with so many areas and directions open to progress through the study of best practice and its adoption. Perhaps in a few hundred years time, he says, we will find an organisation who has "got it right". Until that time let us all keep trying and enjoy the benefits of an improved quality of life while at work. That is, don't measure what we used to do against what we have now, focus on where we want to be and so achieve high levels of occupational safety and health for the future.

## **MARCSTA Website**

The MARCSTA website **www.marcsta.com** is an information site containing relevant information regarding the purpose of this organization. The website is broken into five main areas

**Area 1**, Association Overview contains information on training and assessment, the induction card, quality assurance, the advantages of MARCSTA training, how to become a member, how to become an associate member, and details on the training programs available.

**Area 2**, Providers List is broken into commercial providers and company providers. Within both of these areas are contact details regarding all providers available and these are updated on a regular basis.

**Area 3**, Members List contains a list of the MARCSTA management committee with contact details and a list of the current members and their contact details.

Area 4, Forms allows you to download various forms that you would previously need to have sent via the mail. They include a statutory declaration for lost cards, application for membership, application criteria for a training providers licence, application for associate membership and a button called WinZip evaluation. WinZip evaluation is a demonstration program needed to unzip the downloaded files which have been compressed so as to allow for quicker transfer via the internet. This button will direct you to the WinZip site where you can download the demonstration program and then install

it on your computer and unzip the required documents.

**Area 5**, E-mail is where the push of a button will open your preferred email program with the MARCSTA email address automatically inserted into the mailing address field.

The purpose of this area is to give access to the providers contact details which is a common request that is received at the office. This makes it easier to obtain this information which you now have to do by phone. This area also provides an understanding of what the MARCSTA organisation does.



## **MARCSTA POSTERS**

Members and providers are encouraged to obtain supplies of these safety posters from the Secretariat. Developed by Bob Halse, the two posters now available feature manual handling and job safety analysis. These posters are one of the ways in which MARCSTA is putting the money it earns back into the industry.

## news and views...news and views...news

# NATIONAL OHS IMPROVEMENT FRAMEWORK

Federal Minister Peter Reith has released the National OHS Improvement Framework on behalf of the Workplace Relations Ministers Council. It covers principles for a systematic approach to improvement, objectives goals and targets, national infrastructure requirements and implementation.

The actions on training for OHS skills development include:

- integrating health and safety into vocational, professional and inspectorate training arrangements
- promoting the integration of OHS competencies into management training, including small business management
- encouraging the development of suitable OHS training resources for inclusion in workplace, industry and professional training programs
- researching improved methods of OHS skills development.

Further details are available from Worksafe Australia in Sydney. Phone: 02- 9577 9555.

# WATER JETTING CODE OF PRACTICE

WorkSafe WA invite comment until 30th June 2000 on a proposal to adopt AS/NZS 4233:1999 High Pressure Water Jetting Systems as a code of practice under the Occupational Safety and Health Act. Contact them on fax: 08 9321 2148

#### **MINING HISTORY**

The Bulletin magazine of 100 years ago reported that the Mt Margaret Goldfield in Westralia was mostly uninhabited, yet on two days in one month it lost eight of its people to heat apoplexy. For twelve days the average daily maximum was 45 degrees C.

# WorkSafe Youth Achievement Award

If you are under 25 or know of someone under 25 in WA who deserves recognition for a contribution to OHS in the workplace or for a significant piece of OHS research, contact WorkSafe for further details on 08 9327 8781. Closing date: 30th June 2000.

# Monitor

The Monitor is published quarterly by:

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# Conferences

Minesafe International, Perth. 3-8 September 2000. Phone: 08 9325 2955 Fax: 08 9221 3701

#### MEMBERSHIP AND ASSOCIATE MEMBERSHIP

Are you a company with employees on mine or other sites which require a MARCSTA induction? Consider MARCSTA membership. Do you provide services on site to MARCSTA members? Consider associate membership of MARCSTA. For full details of fees and benefits contact Anna on 9355 1400.

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