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M message from the CEO



Pat Gilroy, MARCSTA CEO

QUALITY THE KEY

The determination of MARCSTA to maintain a quality approach to the provision of safety training in the mining and associated industries received judicial backing in a recent District Court Judgement.

Key elements of the judgement were: -

- MARCSTA had an absolute right to impose standards and conditions as pre-requisites to licensing providers and to ensure that standards are maintained according to the prevailing requirements of the mining industry.
- MARCSTA had acted in all circumstances with complete propriety and professionalism.

This quality approach has been reinforced with the decision of the Management Committee to require providers to hold a Certificate IV in Workplace Training and Assessment from January 2000.

With more than forty quality providers operating throughout Western Australia and in other States, MARCSTA represents a significant resource for the industry training sector.

MARCSTA MILESTONE

The number of training inductions, General, Underground and Refresher carried out by MARCSTA providers will reach 50,000 in January, which is timely in the opening month of the year 2000.

While it is not possible to measure the effect that a standardised, competency based approach to safety has had on overall industry safety performance there can be no doubt that the initiative has raised the profile of safety in the work force in a significant way. (See the latest DME figures on page 6)

This elevated profile will continue to impact on the way the workforce thinks and acts about safety while a current competency based MARCSTA certificate is a pre-requisite to enter mine sites.

THE CASE FOR REFRESHER TRAINING

Recent findings from the ESSO Longford Report and the Board of Inquiry into a fatal F111 crash off Malaysia earlier this year have emphasised the importance of refresher training.

Early figures available from recognition of current competency assessment carried out by providers of the MARCSTA refresher program show that the great majority of people being reinducted under achieve. Following the full refresher process the situation is reversed with most regaining the required competency.

Progress is being closely monitored.

ASSOCIATE MEMBERSHIP

The Management Committee have decided to create an Associate category of Membership to enable the direct involvement of persons or organisations in the activities of MARCSTA. This includes subcontractors to MARCSTA Members. Associate membership fees have been set at \$100 with benefits including reduced company provider fees and discounted advertising in the MARCSTA Monitor. Contact Anna 9355 1400 for an application form.

(Continued Page 6...)



MARCSTA wishes all readers the compliments of the season



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MARCSTA is a not for profit association.

All proceeds are reinvested into the industry for future development of safety and training

Editorial

I recently came across an approach to safety assessment and certification which promised to further the objective of making OHS an integral part of the way a company does business. This adds to the considerable progress already made in linking systems within a company for quality, environmental management and occupational health and safety. However there are several auditing methods used to check safety systems in Australia, produced by private organisations and different state governments. ISRS is one and the WorkSafe Assessment Plan and SafetyMAP are two others. So I sought a comment from Leah Di Dio of QAS, Perth, and this is what she said.



“ You might be feeling a little bit confused about the two Australian Standards currently relating to Occupational Safety and Health Management Systems (OSHMS): AS 4801 and AS4804.

Occupational health and safety management systems - specification with guidance for use, AS 4801, is designed as an auditable specification standard for Occupational Safety and Health Management Systems (“OSHMS”), usually by third party certification bodies, such as QAS. This is currently in draft form, and is expected to be released as an Interim Standard in early 2000. After it has been released as an Interim Standard, you can apply to QAS for certification or an evaluation of your OSHMS against this standard.

The other standard *Occupational health and safety management systems - General guidelines on principles, systems and supporting techniques*, AS 4804, is designed to be used by an organisation itself in the development of its own OSHMS, taking into account its own specific needs.

In QAS’ view, when AS 4801 is released, it will operate in conjunction with, rather than in competition with, the WA WorkSafe Plan. Organisations operating in Western Australia that have been issued with Certificates of Achievement under the WA WorkSafe Plan, may wish to be recognised for their achievements on a national scale, applying for certification to the Australian Standard.

Quality Assurance Services Pty Limited (“QAS”), as the region’s leading provider on conformity assessment services, can assist organisations with understanding how to use both AS 4801 and AS 4804. As QAS is also a recognised provider of education and training in management systems, QAS can also assist organisations with understanding the process requirements for developing an OSHMS. Training can be provided on-site, and can be tailored specifically for your needs.”

For a contractor of course, another advantage of a standard system is that it should allow a better mesh with the principal’s system, as long as the principal is using a standard system itself. One other possibility on the horizon is the ISO draft 18001 for OSH, which has yet to gain international approval. British Standards have adopted it.

Safety management systems pose some interesting challenges. For example, the keystone of a system is usually reckoned to be the health and safety policy. As one contractor’s health and safety manager recently said to me, in one- page wall statement form, this looks more like a vision and mission statement. And of course in fact it is part of that. The safety and health policy should fit comfortably within the company’s business plan.

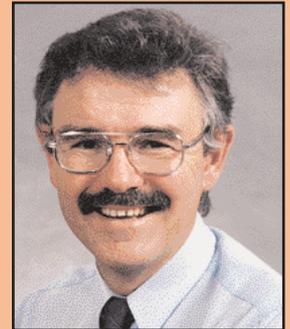
A second aspect to consider is the fit between what I will call generic OHS procedures, which describe how the company’s health and safety policies will be implemented, and the safe working procedures for specific areas of work.

Some companies are buying off the shelf generic OHS procedures (or SHE procedures). They have a task ahead of them to ensure that the SWP’s accurately reflect what is contained in the generic procedures.

To all of you a Merry Christmas and Happy New Year.

Geoff Taylor.

Revised CONTAM System



Mike Rowe

The Department of Minerals and Energy (DME) first recorded mining industry atmospheric contaminant sampling data in 1977. This computerised MINDUST system was developed in response to elevated levels of silicosis in mining industry employees.

By 1983, MINDUST was replaced by the first CONTAM system, which concentrated on personal sampling of employees. It also expanded the number of contaminants recorded such as fumes, gases, vapours and mists. Further reviews emphasised random personal monitoring, and introduced the allocation of sampling quotas to mine sites.

However, major problems remaining were the continuing focus on mineral dust results, difficulties in analysing the collected data and the contentious quota allocation system. In 1995 another review of CONTAM led to the changes currently being implemented.

The revised CONTAM system will concentrate on ensuring that high quality, representative and relevant exposure data is collected. This has involved the implementation of a new outsourced competency based Surface Ventilation Officer’s course, which is providing people with the skills to develop improved monitoring strategies.

The system still enables assessments as to whether exposure standards are being complied with and ensures that results will not be lost over time. CONTAM will also be used in conjunction with MINEHEALTH, the DME health surveillance program for mine employees, enabling studies to be conducted with the aim of linking future health effects with specific occupational exposures.

Within a year industry should have better access to CONTAM and be able to electronically submit results to the system. Companies will also be able to access their own site results and compare their performance against industry averages. The new CONTAM system will also enable the DME to produce reports outlining average site exposures, average industry exposures, etc, as well as trend reports which show variations in exposure over time. By doing this, problem areas can be identified, and the industry will be better able to allocate health and safety resources.

- Mike Rowe, Manager, Occupational Health, Department of Minerals and Energy.

QETO, FMI and Tracmin

Quality Endorsed Training Organisation (QETO)

The demand for quality vocational education and training has never been greater. Corporations, training participants, the government and the community expect a training system which delivers quality products and services. At the same time, training providers are operating in a new, competitive market where trainees' demand for places cannot be taken for granted. Trainees and corporations will be attracted to training organisations which are able to demonstrate that they provide high quality training. In this competitive training environment, training providers must be flexible and responsive. They must have in place quality systems and management processes that ensure the needs and expectations of their customers and clients are met and promote continuous improvement.

QETO is a quality system specifically designed for the vocational education and training sector in Western Australia. TRACMIN has invested in the effort required to become a QETO. Our quality system is based upon our clients' needs and is used to continuously improve our products and services. The benefits to TRACMIN clients are that they will consistently receive improved quality of products and services based upon their needs.

Applicable Training (Frontline Management Initiative)

Tom Bateman (Director) and Janet Undy (Manager) attended the Chamber of Minerals and Energy's South West Occupational Health and Safety Conference in Bunbury in July. At the conference, TRACMIN's display booth promoted the MARCSTA Inductions as well as other courses and services that they provide.

At the conference, the Chamber launched the new Applicable Training Strategy which they hope to be adopted by the regulators as a statutory requirement and by the industry as a standard to ensure supervisor and manager competence. The Applicable Training benchmark for supervisors' and managers' competence is the Frontline Management Initiative (FMI) competency standards.

What is the purpose of Applicable Training?

It is part of a long term strategy to implement a vision of an industry free of fatalities, injuries and diseases. It is intended to effect behavioural change across industry and address the people management skills across all sectors of our industry.

A copy of the 'draft' Applicable Training Guidance Note is available from the Chamber of Minerals and Energy of WA (Tel. 08 9325 2955).

TRACMIN is a Registered Training Organisation (RTO) that specialises in the mining industry and is accredited to run Frontline Management for all three levels (Certificate III, Certificate IV and Diploma).

TRACMIN's Website: TRACMIN is on the Net! Check out our Website: www.tracmin.com.au

From the Desk of the State Mining Engineer...

The regular reporting of outbreaks of fire at mines, both surface and underground, is an issue of major concern to the Department, to the Mines Occupational Safety and Health Advisory Board, and to the Chamber of Minerals and Energy. It should also be a matter of serious concern to every person working in the industry.

This is an extract from an article on the subject from the November 1990 edition of MINESAFE.

While there are combustible materials present underground, the risk of mine fires remains with us. No hazard is more to be feared.

The most critical hazard resulting from mine fires is not the direct impact of flame itself but the generation and spread of toxic gases resulting from combustion, asphyxiant fumes and gases which dilute oxygen levels in the atmosphere, and the reduction in oxygen levels as a result of the combustion. The confined conditions underground, (enclosed atmosphere), raise the underground fire hazard far above that on surface. Generally there is an indication of fire by smell and the visible presence of smoke, but in some situations, especially in the aftermath of a fire which has been extinguished, the insidious danger of invisible toxic gas which can not be smelt, (e.g. carbon monoxide), may remain. Thorough checking of the mine atmosphere must therefore follow any fire outbreak.

The article went on to deal with analysis of the risks, operating precautions (risk management), and emergency preparedness and response.

Throughout the nineties the Department has issued a series of alerts on fire hazards, together with summaries of reported incidents.

A recent review of reported incidents over a 6 to 7 month period showed some 300 surface fires, and over 80 in underground operations.

Whereas fires on the surface regularly result in substantial property loss and damage to plant, particularly mobile plant, the potential for a large loss of life is normally much less than for underground fires.

An underground fire in Mount Lyell Mine in Tasmania in 1912 lost 42 lives.

In May 1972 a fire in the underground Sunshine Mine at Kellogg, Idaho in the USA killed 91 men. The fire was not completely extinguished and the mine re-opened until December 1972.

The subsequent inquiry identified 17 factors which contributed to the severity of the disaster. Several of these related to ventilation deficiencies, including the use of series ventilation.

We have been incredibly fortunate in that during the course of over 100 years of underground mining in Western Australia, there has not been an underground fire disaster involving loss of life.

The potential for this type of disaster is with us every day. In recent years several diesel engine units have burned in underground mines, fortunately in areas where there was not major potential for downstream transmission of fumes. In some cases use of self rescuers was required and also refuge chambers.

Every underground mine should regularly audit for fire hazards, assess risks, and

ensure that those risks are effectively controlled.

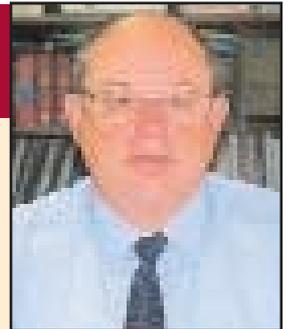
One of the Major Hazard Standards developed by WMC deals with underground fires and it is supported by an audit protocol.

Underground operations should consider benchmarking their systems against this standard and audit protocol.

The framework of these documents will be incorporated into a High Impact Function Audit being developed by the Department's Mining Operations Division.

Managers of underground mines should exercise due diligence to ensure that the requirements of the Mines Safety and Inspection Act Regulation 4.36, Specific emergency precautions required to be taken for underground mines, are complied with.

- Jim Torlach.



MARCSTA Members

Ausdrill Ltd
Australian Raised Drilling
Barmenco Mining Contractors
BGC Contracting
Brambles Ltd
Brandrill Ltd
Charles Hull Contracting
Cook's Construction Ltd
CSR Readymix
JR Engineering Services Pty Ltd
Macmahon Contractors
Monadelphous Group Ltd
NS Komatsu
Roche Bros

Skilled Engineering
Thiess Contractors
Total Corrosion Control
Westrac

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



Who's Who?

CHAIRPERSON

Greg Harris,
BGC Contracting

VICE CHAIRPERSON/ TREASURER

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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

MARCSTA POSTERS

Members and providers are encouraged to obtain supplies of these safety poster 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.

Eastern Region Mining Safety Conference

This conference took place in Kalgoorlie on 16-17 September. It shared a number of sessions with the Bunbury conference in July. The competency based approach to underground miner training was presented this time by Brendon Bastian of Henry Walker Eltin, and Patrick Barrs and Rob Mutch presented the session on Applying Competency in the Workplace this time round. New topics included these:

Competency Based Inductions - The First Step to a Safer Workplace

Dr John Woods of Top Shelf Edutaining Enterprises one of MARCSTA's training consultants, described the national background to MARCSTA's competency based approach. John described the steps taken by MARCSTA to ensure the reliability and validity of MARCSTA training. The four main themes in the eight hour induction are:

Rights and Responsibilities (4 performance criteria)

Safety at Work (7 performance criteria)

Working Environment (4 performance criteria)

Emergency Procedures (3 performance criteria)

Duty of Care and People

Peter Simpson of BSS Corporate Psychology Services looked at a working environment which ensures an employee's psychological wellbeing.

Mobility has led to less importance of traditional social groups. Informal support from churches, clubs and social organisations has decreased increasing social, emotional and personal problems. (The suicide rate in the Goldfields is three times the national average.) Average hours per week, after dropping, are now on the increase, but some groups are underemployed. Middle managers and white collar employees are working harder and longer. Economic rationalism and decrease in welfare will see a need for companies to provide these especially in remote or regional centres.

Undesirable stress can result from some current workplace changes.

High mobility, isolation, long hours, shift work, arduous and hazardous working conditions, fostering drug and alcohol abuse, and FIFO, all increase stress and put pressure on families. Current mining conditions have increased insecurity. A more complex IR environment has stepped up the pressure on managers and supervisors. Many supervisors know old ways are out but lack skills in the new.

Peter described an increasing distance in mining between employees and front line managers.



Rob Filmer, Peter Plavina, Brett Macintosh and Dr Brian Galton-Fenzi at the Eastern Region OHS Conference

The costs of ignoring psychological demands include:

- Retraining due to rapid turnover
- Absenteeism
- Substance abuse
- Accidents
- Rising stress claims

Some remedial steps are:

- Monitor the organisation (Loss of a computer is investigated. Is loss of an employee?)
- Improve the people skills of front line supervisors
- Effectively manage change, restructuring and redundancy
- Improve selection
- Train and educate employees
- Provide employee assistance programs
- Properly manage critical incidents

Systems Based Approach at Paddington

Darren Batchler of Paddington Gold Pty Ltd described in detail their 23 part safety management system.

It includes culture, care and teamwork but with a focus on individual responsibility. Task analysis is used to develop procedures. Paddington use a loss causation model to analyse accidents. Of interest is that Paddington have compiled figures for their "Bird triangle ratio" and compared them with F.E. Bird Jr's original figures. Bird found for every serious or major injury there are 10 minor injuries, 30 property damage and 600 incidents with no visible injury or damage.

Paddington found for every LTI, 60 other injuries, 535 loss/damage/ environmental, and 929 near miss/ hazard/"gains"/ off the job.

A "gain" is Paddington language for reporting issues which lead to a better way of doing things or save time or money.

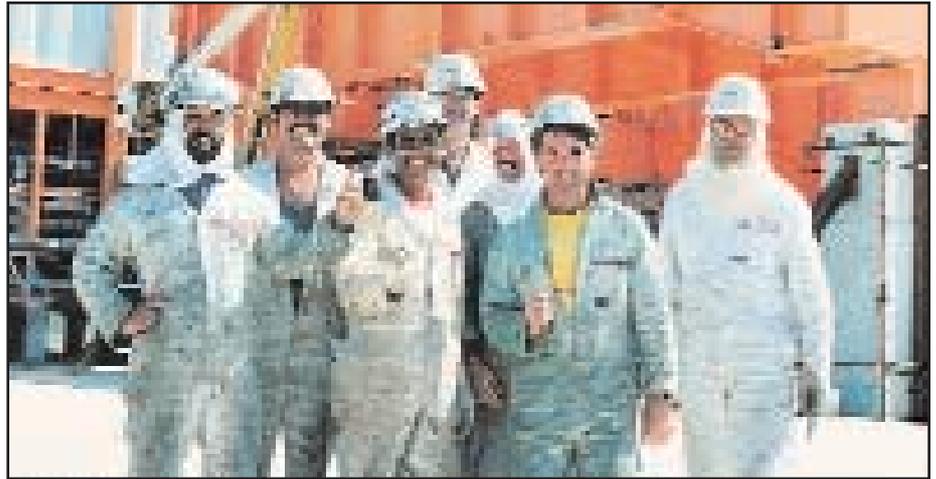
TOTAL CORROSION CONTROL ▼▼▼

Total Corrosion Control Pty Ltd (TCC) is a privately owned Western Australian Company that was established in 1982. Since its inception, the company has moved to the forefront of the protective coating industry in Australia. It has 250 employees.

Situated on ten hectares of land at Kwinana, Western Australia, it has a modern well equipped workshop, with adequate laydown areas. There is a mobile wet blasting equipment unit ensuring compliance with the most stringent health regulations. A Branch Office and workshop in Karratha has a workshop area of 532 square metres and adequate laydown areas.

The North West Shelf Project has formed 60 - 70% of the major protective coating contracts awarded since the Domgas Phase I stage of Woodside's Onshore Complex.

In 1988 the company was awarded the site painting contract and the supply of scaffolding for LNG Trains I and II, apparently the single largest painting contract awarded in Australia. TCC was the only company



Left to Right:
Ivan Sylvester, Bill Tasker, Fernando Viegas, Stuart Mitchell, John Tomlinson,
Norm Mulchay, Sam Cinalli

to receive back to back safety awards during the construction period.

TCC has:

- accreditation to AS 3902 - 1987/ISO 9002 - 1987 gained in May 1990 recognising a long term commitment to quality
- a TQM program to enhance its competitive edge
- highly qualified professionals

- recognised its moral and legal obligations for safe work
- formalised a health and safety program ensuring effective strategies to reduce accident risk
- its own recognised training centre with a full time manager servicing internal and external clients
- continued to offer labour market programs.

INDUCTION, TRAINING AND ONGOING ASSESSMENT

The importance of induction, training and ongoing assessment of competency of employees was underlined by riders issued by the Coroner following an inquest into a fatal accident.

These riders were circulated to the industry in Safety Bulletin No. 40, 27 May 1998.

These extracts from that Bulletin are worthy of note.

"(1) An induction process should include a mechanism to evaluate the inductee's understanding of the material covered. The process should include provision for regular re-assessment of employees' knowledge of induction material.

(2) Operator competence should be assessed on a regular basis, especially where tasks or procedures change."

"It appears from this recommendation that the jury were mindful of the influence which induction, training and competency assessment processes may have had with respect to the occurrence of this particular accident.

Employers and managers in the mining industry are urged to give consideration to

the current systems of induction, training and assessment in place in operations under their control and principal employers are reminded of their duties and responsibilities in respect of contractors who may be employed in their operations.

Of particular note is the need to ensure that, not only are the safe-working standards of the operation communicated during the induction process, but also that some positive check is carried out to ensure that the message presented has actually been understood by the person receiving it. Similarly, there is a need to regularly and consistently monitor the application of the appropriate standards in the workplace. This is of particular importance when conditions or systems of work change and where employees may be assigned new tasks."

Regulation 4.13 of the MSI Regulations (**Induction and training of employees**) spells out the need to instruct and train in safety procedures, systems of work and tasks, to assess competency, and to retrain and reassess when systems of work and plant are changed, or new ones introduced.

The induction process is a critical component of the chain at the beginning.

To be effective, not only must the content be of an appropriate standard but quality assurance of the delivery and validation of the effectiveness, (that is the comprehension of each individual participating), are essential. This relies on ensuring that the competency and effectiveness of the persons providing the induction is maintained at a high standard.

If the conduct of the induction is desultory (disconnected and unmethodical), and validation not carried out, the result may be worse than no induction, as the presumption of knowledge and capacity by supervisors and workmates may be false.

Even without ongoing change in the workplace, (and no change is very rare over a year or two), it is essential to periodically re-induct or re-validate the state of knowledge and understanding of employees.

Too often the individual's knowledge and awareness is taken for granted.

Jim Torlach

Message from the CEO (Cont...)

FRONTLINE MANAGEMENT INITIATIVE AS AN INDUSTRY BENCHMARK

The decision to introduce the nationally endorsed competencies of the Frontline Management Initiative as a minimum standard for management and supervisors in the Western Australian mining industry is to be commended. These competencies were developed as a result of the national study and recommendations on management contained in the Karpin Report.

It will be important however to recognise that the location and production pressures of today's twenty four hour industry will require the maximum flexibility in the provision of training and the development and assessment of competencies if the purpose of the initiative - behavioural change - is to be achieved. Great care will need to be given to delivery of the training and assessment at the workplace and this is appropriate for that is where the behavioural change must occur.

A major influence on the rate of pick-up by the industry of the initiative will be the associated costs. This aspect will be a particular concern for the contracting sector. The Frontline Management Initiative is being coordinated by the Chamber of Minerals and Energy and is expected to be formalised early in the year 2000.

Conferences

Minesafe 2000, Perth. 3-8 September 2000. Phone: Chamber of Minerals and Energy, 08-9325 2955.

Mienex 2000, Perth. 22-24 March, 2000. Phone: 08-9221 8055.

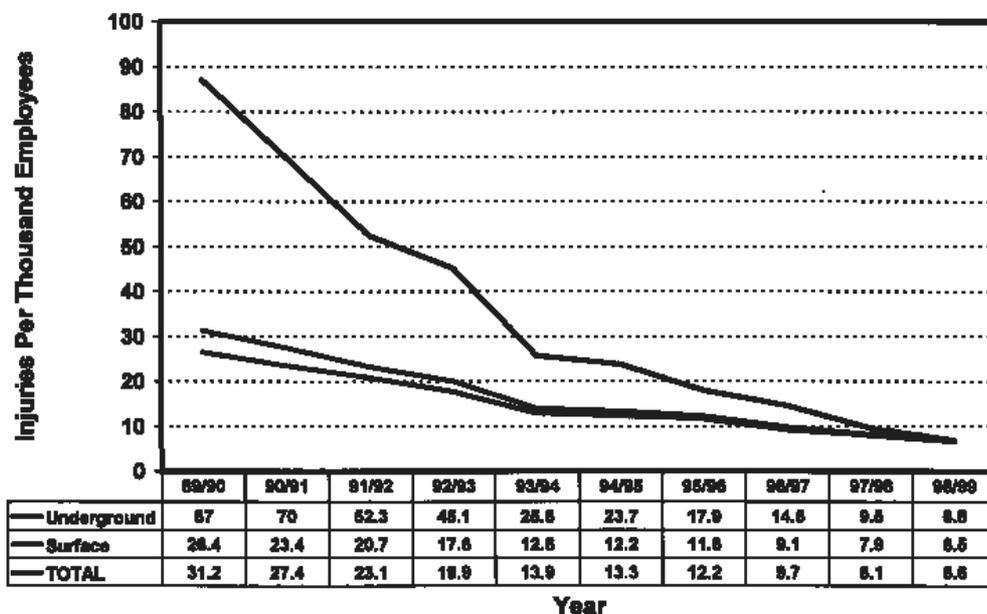
Queensland Mining and Engineering Exhibition, Mackay. 25-27 July 2000. Phone: 02- 9422 2511.

Mining 2000, Melbourne. 19-22 September 2000. Phone: 08-9485 1166.

▲ NEW PUBLICATIONS

- ▲ *Asian Journal of Mining: Indonesian Minerals and Mining Exploration Directory 1999/2000 (800 pages plus CD-ROM).*
- ▲ *Chamber of Minerals and Energy: Guidelines for Mine Emergency Preparedness in WA.*
- ▲ *Primary Industries and Resources South Australia: Environmental Management for Field Personnel. CD-ROM Training Module for Mineral Exploration Activities.*

WESTERN AUSTRALIAN MINES
Lost Time Injury Frequency Rate



Underground
Meets
Surface



BASELINE NEW ERA



Suzanne Howard from SW Audiology and Dr Nick Ormonde from Alcoa at the Baseline New Era Booth, Eastern Regional Conference

Baseline Audiometric Services was formed by Mark and Pauline Rhodes in 1991.

In 1992 the “Bunker” at 196 Hay Street, Kalgoorlie, which resembled a bomb shelter, was built for audiological testing.

A complete one stop shop eventuated in Easter 1996. Mark Rhodes and Mark Penketh began working full time. New services in environmental engineering were added and New Era Safety was created to accommodate the demands for MARCSTA inductions.

Over three thousand trainees went through the MARCSTA inductions in the first year of offering this service.

New Era Safety is the area of the company providing MARCSTA induction and other training. It is also the division which performs research and development into new products requiring innovation. Planned future developments include a solar project to develop a cooling system for safety showers and computer animated training programs on maintenance.

Baseline’s success depends on the ability of the staff to pick up on a new concept and run with it. Staff are multi-skilled so that they can adapt.

Baseline’s client base is spread over a very large area, so mobilisation costs can be higher than the bill for the actual job. We try to combine the needs of a number of clients in one run. Customers in remote locations have a viable choice in getting Baseline to do the work rather than doing it themselves. Here the role of multi-skilled staff becomes particularly important.

Baseline tries to constantly improve the way it does things. Noise reports are now done using a spreadsheet. Plans in noise reports are drawn using a CAD package.

Baseline:

- offer a competitive service and price
- are the only people in the Goldfields who offer certain services
- are the only company which offers the range of services in the area that a particular customer may want.
- consistently perform services at short notice
- have a sound reputation for quality work
- listen to our clients’ needs and try and accommodate them

What Does Baseline Do?

The medical division of the company caters for clients’ needs in the area of occupational medical services.

The environmental division offers a variety of noise, pollutant and vibration services, while the occupational health and safety division also offers a wide range of mining-related services, using CAD drafting where needed.

MARCSTA REGISTERED PROVIDERS

PRIVATE PROVIDERS

- | | |
|-------------------|---------------------------------|
| Chris Annesley | TRACMIN |
| Tony Aveling | Aveling and Associates |
| Tom Bateman | TRACMIN |
| Carl Berglin | TRACMIN |
| Dale Cocker (U) | Burnie TAFE Inovatrain |
| David Collins | D&S Safety and Training |
| Joe Duyvestyn | Drillcorp |
| David Fitzgerald | Prism Business Development |
| Helen Fleming | Goldmark Training Services |
| Ray Hargreaves | Aveling and Associates |
| Joe Knight-Smith | ITN Central West TAFE |
| Guy Lenoir | Switched Onto Safety |
| Bert Lundie | Baseline New Era |
| Michael McCudden | Roche Bros |
| Sharyn McCulloch | Century Drilling, Queensland |
| Malcolm McFarland | IFAP |
| Nick McIntyre (U) | McIntyre Mining Services |
| Jeff Mathews | Safety Paradigms (Aust) Pty Ltd |
| Greg North | Mobile Skills Training |
| Darren Ridley | TRACMIN |
| Gary Sharpe | Barmincio |
| Shane Salt | Safety Resolutions |
| Rennie Sterle | Kelpport Pty Ltd |
| Wayne Sullivan | Wayval Safety Consultants |

- | | |
|-----------------|--|
| Peter Tredgett | Baseline New Era |
| Peter Tynan (U) | Tassmia Safety & Training Services |
| Dave Warner | IFAP |
| Dave Watkins | Safety Skill Training |
| Chris Wilson | Management Consulting Services Pty Ltd |
| Amanda Youngman | Industrial Safe Pty Ltd |

COMPANY PROVIDERS

- | | |
|--------------------|---------------------------------|
| Reuben Barber | Macmahon Contractors |
| Peter Dowding (U) | JR Engineering Services Pty Ltd |
| John Fletcher | Newcrest Mining |
| Ashley Gilbert | Ausdrill Ltd |
| Ross Graham | NS Komatsu |
| John Joyce | Hampton Transport |
| John Lemon | Total Corrosion Control |
| Joe Maglizza | CSR Ltd |
| Peer Stareczek (U) | Great Central Mines |

U denotes underground trainer as well. This list is current at the time of going to press but for further information contact Anna Verteramo at the Secretariat on Phone 08-9355 1400, Freecall 1800 678 554 or Fax 08-9355 1499.

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

CONTRACTING AND SAFETY

In a recent issue of CCH's *OHS Magazine*, Jean Cross, Professor of Safety Science at the University of NSW, says: "There are no free lunches when using contractors. If you don't pay for a good safe job you won't get a good safe job and eventually someone will be injured or killed."

MARCSTA IN QUEENSLAND

Australasian Drilling for October 1999 reports on the provision of MARCSTA training in Queensland by Sharyn McCulloch under the auspices of Century Drilling.

OLD BIRD, NEW JOB

The Finnish Nordberg Group shows in its advertisement a canary outside its cage in a mine. The canary is the mining professional judging Nordberg's grinding equipment.

MORE MINING UNDERGROUND

In the *AusIMM Bulletin* for October 1999 Zeal Consulting's Dick Carter notes an increasingly rapid shift

from open-cut to underground mining in Australia. He believes that will make it difficult for the industry to take the long-term steps necessary to overcome our relative lack of experience in managing the safety risks.

UNDERGROUND TRUCK REVIEW

World Mining Equipment for November 1999 (pages 4-12) reviews a range of underground trucks and LHDs on the market. Brands include, Sandvik Tamrock, Terex, Bell, Atlas Copco, Caterpillar Elphinstone, GHH, Kiruna Truck, Paus, and Schopf. Kiruna/ABB electrics are included.

SINKHOLES

A paper by T. Szwedzicki in the *Transactions of the IMM* January-April 1999 describes (with pictures) a series of sinkholes which occurred at the Coronation, Chaffers, Iron King, Perseverance, Prince of Wales, and Scotia mines in WA and Nobles Nob and Warrego in the NT.

GROUND CONTROL

Australia's Mining Monthly for July compared Australian and Canadian underground safety knowhow. Ground support was recognised as a major issue and fifteen years ago, the Canadians pooled their talents in that area. They are now recognised as a world leader in the field.

CONTINUOUS IMPROVEMENT

MARCSTA is:

- updating its induction handbook for 2000, with the assistance of Jim Torlach
- reviewing maintenance of competency
- reviewing the reaction sheet used to assess inductions
- recommending new induction videos
- emphasising the continued use of the induction book after inductions
- auditing course providers

TIP:

To keep safety skills current, use the MARCSTA *Working for the Industry* induction handbook to build toolbox meetings.

MARCSTA Monitor

The Monitor is published quarterly by:

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HOW NOT TO...

This issue's how not to work safely story again comes from Nuri Vittachi of the Far Eastern Economic Review.

An immigrant worker was found asleep in a Malacca factory one night recently. Two workers held the man down while the supervisor used an air pump appropriately inserted to inflate him. His abdomen became bloated and he was in great discomfort, which required a hospital operation. The supervisor was charged by police with grievous hurt.

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