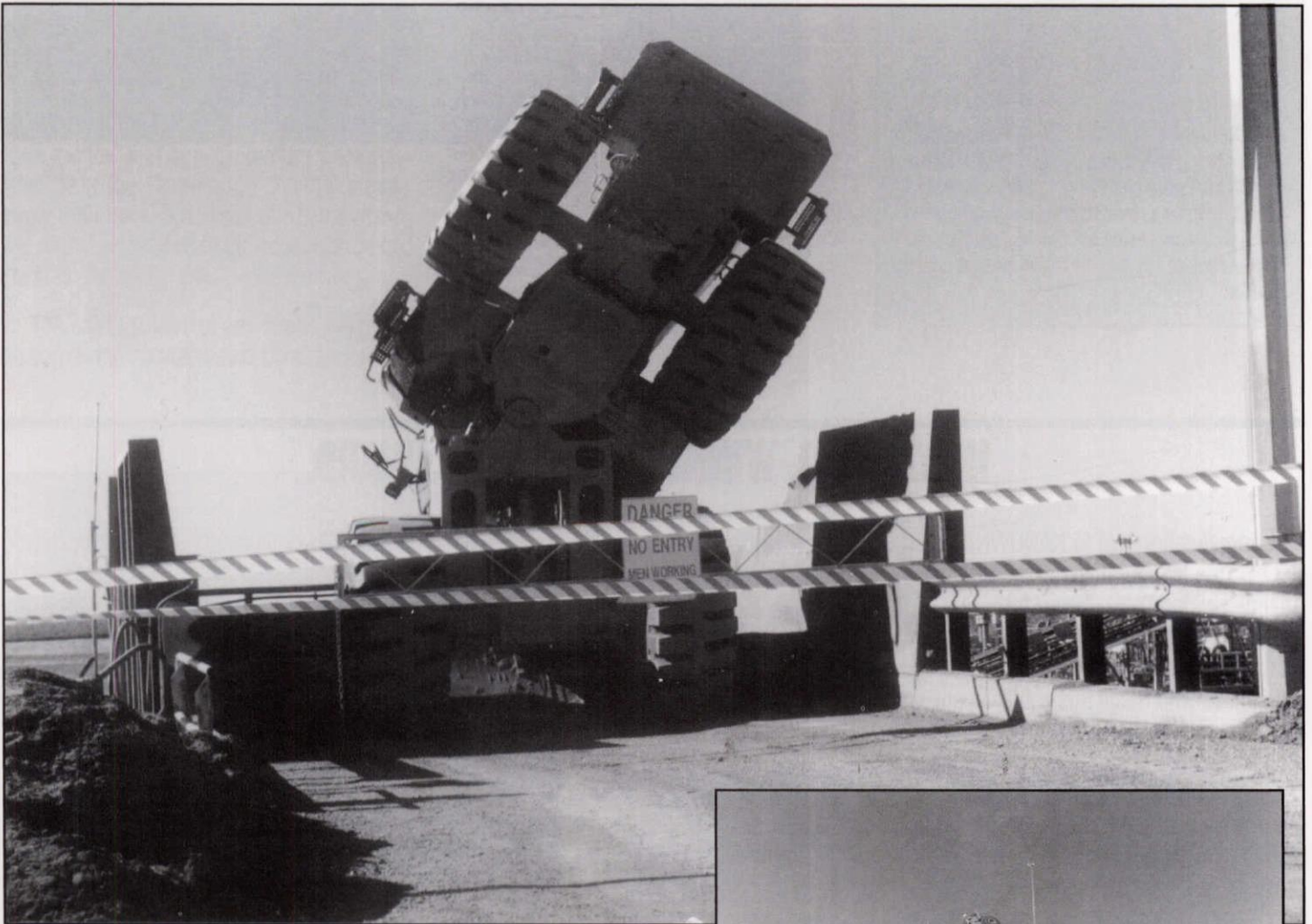




MINESAFE

ISSUED BY THE MINING OPERATIONS DIVISION OF THE DEPARTMENT OF MINERALS AND ENERGY (WA)

AND FOR MY NEXT TRICK.....

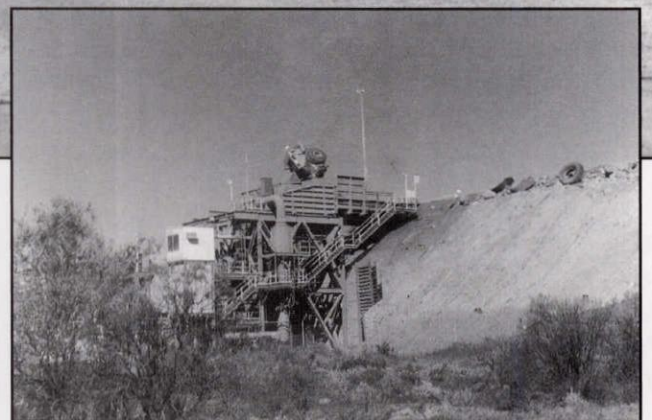


This front end loader was driven into the R.O.M. bin and was left vertically suspended with the bucket down.

Fortunately the operator was not injured. The intricate recovery operation was faultless, and the recovery team are to be congratulated.

This is not an isolated heavy machinery incident. The incident says something about operating systems and training.

Can it happen to you?



MINESAFE IS PUBLISHED BY

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MINESAFE is published four times a year by the Mining Operations Division in conjunction with the Policy and Planning Division. Articles and news items may be used freely, although we would appreciate acknowledgment, as well as a copy of any publication in which they are used.



Interlude - At Mt Dimer

INAUGURAL WINNER OF MINEX AWARD

Congratulations go to KANOWNNA BELLE, (the inaugural winner of the Australia wide MINEX Award for excellence) the Kanownna Belle Staff, the mining contractor, ELTIN and all individuals who made this achievement possible. The mine has set a standard not only in Western Australia but across the country, and both principal and contractor have proved that by working together, safe working practices, high standards and production targets can be achieved without injury or compromise.

The National Mining and Mineral Resource Industries Award for Health and Safety (the MINEX Award) an initiative of the Australian Mining and Industry Council (AMIC) is based on the processes, principles and standards adopted by the

Australian Quality Awards (AQA) and with the participation and support of Australian mining companies, contributes significantly to raising the standard and profile of OH&S throughout the mining industry.

The criteria in these national awards are being used internationally by many organisations to undertake their own self assessment. The national award criteria are based on a conceptual model which shows that *customer satisfaction, employee satisfaction and beneficial society impacts* are achieved through *leadership, planning, people, resources and processes*.

By using these criteria, mining enterprises are able to evaluate their

capabilities of managing health and safety through self assessment, and by applying for these national health and safety Awards they receive an external assessment from a trained team of evaluators drawn from the mining industry.

All applicants benefit from being part of the process. Constructive feedback forms an integral part of the Award's process and is given to all applicants regarding their strengths and improvement opportunities. An enterprise recognised with an Award receives national recognition and benefit from enhanced teamwork, pride, motivation and confidence within their organisation.

Another mile stone was achieved in July when Kanownna Belle became the first Eltin site to complete 12 months without a medical treatment injury.

CONGRATULATIONS TO YOU ALL!!

EDITORIAL

Changing the workplace culture..... improving the climate of the workplace..... continuous improvement..... commitment to safety and training..... the phrases roll off the tongue and into industry lexicon, but what do they mean?

Commitment from the top, and a different way of not only doing but also thinking is the simple answer. In practice, changing behaviour is not an easy task, and many are in the process of adapting to new workplace philosophies simply by trying to fit new ideas into an existing structure. It doesn't work.

Changing workplace behaviour is a long term process that requires reinforcement and reward to succeed. It is a terminal objective that needs to develop within enlightened systems and structures that facilitate change. That means commitment from the top, and through the top to every function of the organisation and the role of every individual regardless of whether they are direct employees of the organisation or contractors on the site.

The safety culture of any site is only as strong as the demonstrated commitment of

the organisation which is reflected in both attitudes and behaviour and not by the logo of a quality assurance accreditation unless the tool is woven into the fabric of the organisation and not used merely as a marketing tool.

This issue of MINESAFE features a story on a Seminar run by DuPONT for the benefit of Chief Executive Officers and General Managers in the Western Australian mining industry. The seminar is an acknowledgment that the process of change and commitment to that change starts at the top. For many it will not be an easy process, and initially, it will not be a cheap one, but it is change that is demanded not only by legislation but also by community standards. Mining because of its nature, will continue to be an inherently hazardous industry, but that does not mean that there would be an acceptance of hazards.

Most accidents in the industry have nothing to do with the nature of mining and everything to do with the nature of man. Recognising that simple fact is the first step on the ladder of change.



Catherine Stedman

Catherine Stedman
EDITOR



*O.K. So I'm not really awake at 5:15 am.
A Commuter bound for Meekatharra makes
an unplanned visit to the Pilbara.*

R and R ... Yippee!



USES AND ABUSES OF ROCK HOOKS

Rock hooks are normally used to move oversize rocks which are inadvertently dumped in the crusher chamber during routine mining operations. The function of the hook is to rotate / move the rocks which must be free (not jammed between jaws or mantle and cone) to a position which will allow the crusher jaws or mantle and cone to accommodate the oversize rocks in their crushing action. There have been several instances where the rock hooks have been used with the crusher jaws / mantle moving. This practice has resulted in:-

- (a) Damage to the hooks (as shown in the photographs).
- (b) Damage to the jaws or cone and mantle.
- (c) Permanent damage to the crane structures from which the hook was suspended.
- (d) Complete dislodgment of the crane hoist and motor from the overhead crane in use.

It has been good luck rather than good management that no personnel have been injured to-date, by this clear abuse of a lifting appliance.

Feeding a rock hook through a crusher has the potential to:-

- (a) Dislodge the hoist from the bridge beam of the crane and strike any persons in the vicinity including the operator at the pendant control.
- (b) Project the hook upwards by the spring action of the overtensioned wire rope(s) if the hook becomes dislodged during the rock movement / rotation process.
- (c) Break the supporting wire rope(s) and allow the broken rope(s) to whip around in an uncontrolled manner.



Rock hooks aren't meant to do some things

- (d) Severely damage (or weaken) the whole lifting structure of the crane which can result in an accident during subsequent normal lifting operations.

The use of a rock hook to dislodge rocks whilst the crusher is under power and moving is an extremely dangerous practice and persons using hooks in such a manner are clearly in breach of the general duty of care of the Mines Regulation Act (Section 30c). Equally employers who allow such use are deemed in breach of Section 30B of the Act.

If you have rock hooks at your site you are obliged to use them in a correct manner with minimum risk.



VEHICLE FIRES IN UNDERGROUND MINES

The incidence of vehicle fires occurring in underground mines remains unacceptably high, and more safeguards are required if potentially disastrous consequences are to be provided.

While most fires are caused by damaged or leaking fuel lines and hydraulic services, a significant proportion are caused by electrical wiring faults.

Consider the following causes of some recently reported vehicle fires and note the very obvious trend:

- ❖ **Starter** motor cable rubbed against chassis
- ❖ **Starter** motor came loose and contacted fuel line
- ❖ **Starter** motor cable overheated
- ❖ **Starter** motor did not disengage
- ❖ **Starter** motor solenoid shorted out
- ❖ **Starter** motor cable contacted hot engine
- ❖ **Starter** motor terminals shorted out



Starter motors not only start engines, they also can and do start a lot of vehicle fires.

The remedy is as apparent as the problem:

- ❖ properly secure cabling in a manner which precludes chaffing or contact with hot parts;
- ❖ use locking nuts, spring-washers, loctite, or other devices that will prevent connections or fixing bolts from loosening;
- ❖ insulate and/or guard electrical connections;
- ❖ avoid repeatedly cranking an engine that refuses to start; and
- ❖ ensure maintenance schedules incorporate specific checks.

Why do we have so many problems with engine starting circuits? Essentially, because they are high current circuits and are unprotected by fuses. Practically, we tend to ignore them until they go wrong. We are too easily satisfied when the engine actually starts.

A commitment to resolving this problem will reduce the incidence of vehicle fires in underground mines.

We should never forget the absolute horror and tragedy that fire in an underground mine can bring.

OCCUPATIONAL HEALTH FILE:

FLOW CHART - ESTIMATION OF THE NOISE LEVEL FOLLOWING THE INSTALLATION OF ANY NEW PLANT OR EQUIPMENT

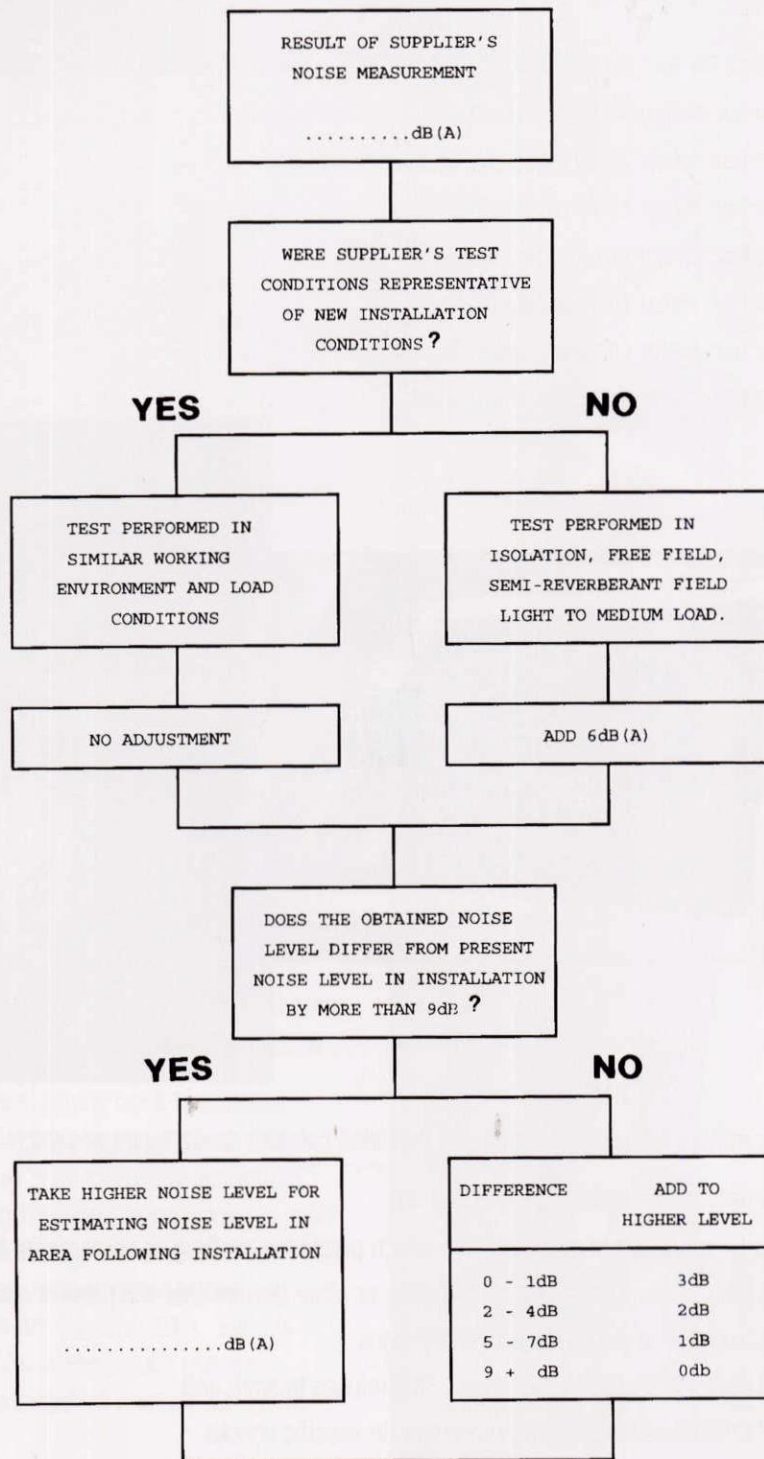
COST EFFECTIVE NOISE CONTROL - BUY QUIET PROCEDURES PART 2

Following the completion of buy quiet procedures, described in the last edition of Minesafe (Vol. 6 No. 2), a blank noise information sheet should be provided to the supplier for recording noise tests, together with any relevant information on noise reducing attachments fitted to the plant or equipment, methods of operation to minimise noise emissions etc.

Finally, the flow chart should be used for establishing the estimated noise level in the area following installation of the new plant or equipment. The buy quiet procedures apply to all potentially noisy plant or equipment.

It is also advisable to include powered hand tools which are a significant source of excessive noise in many operations. If the size of the organisation warrants it, consideration should be given to compiling a specific list of the potentially noisy items to simplify the purchasing procedures.

For further information contact Jerry Wilczewski Tel: (09) 222 3128.



NOTE: If measured as a sound power level, subtract 8 dB(A) from the value quoted before entering the result in the top box.

OCCUPATIONAL HEALTH FILE:

NOISE INFORMATION FROM MANUFACTURERS/SUPPLIERS

1. **MANUFACTURER/SUPPLIER**

NAME:

ADDRESS:

.....

PHONE:

FACSIMILE:

2. **PLANT/EQUIPMENT TESTED**

DESCRIPTION:

MAKE:

MODEL:

SERIAL NUMBER:

NOISE REDUCING ATTACHMENTS FITTED, METHODS TO MINIMISE NOISE DURING OPERATION OR OTHER FACTORS RELATED TO NOISE HAZARD:

.....

.....

3. **TESTS**

OPERATING CONDITIONS (SPEED, LOAD, MATERIAL BEING PROCESSED, FEED RATE ETC):

.....

ACOUSTICAL CONDITIONS (REVERBERANT, SEMI-REVERBERANT OR FREE FIELD):

MEASUREMENT POSITION (OPERATOR'S EAR LEVEL, DISTANCE 1.0m HEIGHT 1.5m):

.....

	Range	Mean
L _{Aeq} A-weighted todB(A)
L _{Aeq} C-weighted todB(A)
Unweighted, peak todB(lin) Peak
Sound power (if applicable) todB(A)

DATE ISSUED.....

NOTE: THE CONTINUOUS A(C)-WEIGHTED SOUND PRESSURE LEVEL L_{Aeq} SHOULD BE MEASURED OVER A COMPLETE OPERATING CYCLE OR THE AVERAGE OF SEVERAL CYCLES.

- L_{Aeq} AND PEAK NOISE LEVEL CAN BE USED TO ESTIMATE THE LIKELY NOISE EXPOSURE FOR THE OPERATORS.

RECENT VEHICLE MISHAPS

This dump truck lost control when it approached a ramp at high speed and consequently hit a high wall coming to rest on its side.



Another vehicle was being used to pull-start this truck. A tow fitting failed and the tow chain subsequently flicked back into the windscreen of the truck. The driver received facial injuries.

Pull-starting can be a hazardous practice because of the loads applied to the towing assembly, and the potential for a collision between the vehicles.

EXPLOSIVES ARE NOT FRIENDLY

The mining inspectorate is seriously concerned by the continuing evidence of sub-standard and in some cases seriously deficient practices in explosives handling and blasting operations across the industry.

The frequency of incidents which involve explosives and blasting practice is increasing.

Examples noted and acted upon by the inspectorate over the past year include:-

- excessive quantities of detonators and explosives being stored in working party magazines;
- provision is not always made in planning for underground working party magazines to ensure that mechanised equipment can not impact on such magazines;
- a lack of understanding of the characteristics of some of the chemicals used in explosives, particularly when mixed differently;
- the inadequacy of containers to be used for explosives in magazines, transport and storage;
- the potential for various communication systems to initiate detonators;
- a lack of on-the-job testing of charging equipment to ensure appropriate earthing;
- lack of provision for the control of unauthorised access to explosives;
- transporting and storing explosives together with a variety of other equipment;
- failure to provide for adequate safe access for explosive trucks on drill patterns;
- driving motorised equipment over charged holes and Nonel leads;
- failure to understand the potential of fly rock from a blast;

- failure to understand the high risk of inhalation of blasting fumes.

In operations involving hazards as critical as explosives and blasting, the management of risks must be of the highest possible standard.

It is evident from the above that currently it is not.

Inspectors ought not to find it necessary to correct glaring deficiencies at the most basic level.

The primary cause is, as with all sub-standard practices, a failure to manage the process to an adequate standard.

Factors which demonstrate that failure to manage include:

- lack of in-depth experience in the workforce;
- lack of adequate structured and systematic training of personnel involved;
- failure to follow up continuously, to check that standards are maintained, and to correct sub-standard practices.

In summary, a failure to set standards, demonstrate commitment and enforce these standards.

Other factors can be identified, and these include:-

- changes in technology, particularly in initiating systems;
- a larger amount of explosives is being used by fewer persons, reducing the aggregate level of hands-on experience. (This reflects the predominance of surface mining; the requirement for explosives usage in underground mines is more widespread).
- a mistaken perception that the new generation of explosives is "safe".

NO EXPLOSIVES ARE SAFE

Explosives are designed for only one purpose, which is to explode, and they will do so under the right set of conditions or given the necessary stimulus.

Signal tube initiation systems and AN based explosives do offer a higher margin of safety than the earlier nitroglycerine (NG) based explosives, but they should never be treated as harmless.

You rarely get a second chance after an explosives incident.

The inspectorate is developing strategies for its own staff and jointly with the industry, but the basis for safe behaviour rests with every individual.

Sub-standard or less than adequate operating practices with explosives above all, should never be tolerated.

It's up to you! If you don't know, ask and find out.

Don't take chances. The energy release from explosives is massive and instantaneous.

The post blast fumes are an insidious danger.



"IF YOU ALWAYS DO WHAT YOU ALWAYS DID, YOU'LL ALWAYS GET WHAT YOU ALWAYS GOT..."

Those words from Stafford McQuillin of DuPONT say it all. Stafford and Marcus Lackey were addressing Chief Executive Officers, Managers and Safety Professionals at an information seminar at which they outlined the content of the regional seminars organised by the Chamber of Mines and Energy and the Department of Minerals and Energy held recently around the state.

So why does the Western Australian Mining Industry need the advice of DuPONT to improve an already leading edge safety performance? We are doing well, but DuPONT are acknowledged world leaders in safety performance, and knowing more about how they accomplished their outstanding achievement of close to zero incidence is something that the rest of us need to know more about if we are to stay on course as the best performing industry in the state with the lowest worker's compensation premiums.

The Minister for Mines, George Cash, MLC, who attended the Seminar told the audience that the industry accident incidence reduction curve had begun to plateau, and that we were still having fatal accidents which was unacceptable. The Minister also said that the outstanding achievements of enterprises like DuPONT demonstrate that zero or near zero incidence of disabling injury was achievable.

SAFETY EXCELLENCE: You will achieve the level of safety excellence that YOU DEMONSTRATE YOU want.

Demonstrating excellence comes straight from the top was the overriding message for the mining industry...not just the policy statement...but a "golden thread" woven through the fabric of the organisation and each and every individual from the CEO down, demonstrating a

commitment to getting employees home in the same way they came to work - in one piece.

Changing a workplace culture means changing how we think about things...something that has been said in MINESAFE on many occasions, and something that is said by industry personnel every day of the week but saying is not the same as doing, and it is the doing that makes the difference.

"If you can't manage Safety, you probably can't manage business....If you can manage business, you probably can manage safety." DuPONT 1995.

The DuPONT story began with a powder mill in 1802, and the first safety rules were established in 1811. One of E.I. DuPont's rules was that no employee may enter a new or rebuilt mill until a member of top management had personally operated it, and

the DuPONT philosophy has continued in that vein. DuPONT has believed since the 1940's that all injuries are preventable, which means that the depth of experience in a profitable workable safety culture has lessons for us all.

"The workplace itself is never really safe. It is the behaviour of people in the workplace that determines whether or not injuries occur." DuPONT 1995.

It is well known that most injuries are the result of unsafe acts rather than unsafe conditions, but changing workplace behaviour is a continual process, and with the advent of the new Mines Safety and Inspection Act and regulations much more time and effort will need to be devoted to the education and training that will bring the behavioural change about, and again the boardroom is the first place to start. The Chief Executive Officer of DuPONT has to



L-R: Marc Lackey, DuPONT (USA), Hon George Cash, (Minister for Mines) and Bob Davis, DuPONT (Sydney).

be personally notified within 24 hours of any injury to an employee anywhere in the world. According to Stafford McQuillin, the CEO will ask three questions: **“How is the employee?”** **“How did we fail?”** and **“What are you going to do to make sure it doesn't happen again?”** That kind of accountability goes through to senior and middle management, line managers and shopfloor employees and involves everyone in the company.

A workable safety policy begins with the resolve to achieve an incident free workplace. A workable safety strategy must enable people to work safely and a safe workplace is one that empowers people to take responsibility for their own safety and that of others, knowing that their resolve is supported by management.

The high standards of performance that achieve a safe workplace need to be documented so that they can be measured, which means written policies, written safety rules and procedures, written hazard identification procedures, written operating procedures and written safe work practices that need to be followed.

How do you motivate employees to work safely? The answer to that is simple. You can't. Motivation is an internal process and what management, supervision and all employees need to do is provide the climate that allows people to motivate themselves by using strategies like demonstrated commitment, involving employees (what's in it for me?) correcting safety problems as they occur, setting an example, enforcing the rules and using an effective discipline process. That is how they do it at DuPONT and it works.

A good safety culture is also good business, and that is a very good reason for listening and learning from an organisation that started off as a small gunpowder manufacturer and became one of the giants of world industry.



L-R: Peter Ozals, DuPONT (Sydney), Jim Torlach, Department of Minerals and Energy and Stafford McQuillin, DuPONT (USA).

The Chamber of Mines & Energy have organised a series of 2 day regional Seminars conducted by DuPONT in the Eastern Goldfields, Southwest & Murchison Regions.

The Seminars have been presented to capacity audiences and enthusiastically received. Two Seminars were also held in Perth.

The demand may necessitate more being arranged in 1996.



DuPONT Seminar was well received by all attendees.

PIONEER - NEW DIRECTIONS

Pioneer Concrete (WA) Pty Ltd achieved 1 year without a lost time injury in June 1995. The Administration, Concrete and Quarry Divisions all contributed to this safety accomplishment within Pioneer.

The Quarry Division achieved their '1 year lost time injury free' in January 1995. With over 160 employees scattered over many different sites this achievement has not come without hard work from everyone.

Pioneer operates two metropolitan and one south west quarry and has three active quarries in the north west. Pioneer also undertakes contract crushing for five mines throughout the state.

Pioneer has been a successful company for many years and has operated on a tight budget with a strong management controlled production process. Safety has always been part of Pioneer's business philosophy but not as an important a part as it should have been.

In 1993 a new Chief Executive Officer was appointed to Pioneer International. Dr John Schubert arrived with a passion

for safety and set an international goal of zero lost time injuries.

Pioneer in Western Australia has embraced the need for greater importance in health and safety and last year's achievements attest to that.

The aim for Pioneer in Western Australia is to integrate the need for health and safety with the need to remain a viable business. Health and safety must be part of a daily business routine. If health and safety is viewed as something done after all other planning is complete, then it will always remain secondary to other business practices.

The current achievements can be traced to three major changes in how business is done at Pioneer.

1. A new CEO has made safety an integral part of how Pioneer's business is to be run.
2. Communication with employees who in many cases know how to do it better and safer. This has taken the form of safety meetings, greater access to training for employees, involving employees in developing safe work practices and inspection sheets, and

using the experience of employees to help make health and safety decisions.

3. Employees willing to give the health and safety initiatives a chance. If new employees will not change field practices, then money or "management initiative" will not produce a safe work site. Pioneer's employees have taken part in new initiatives, have spent time cleaning and maintaining workplaces, and have worn personal protective equipment. They are changing old habits and participating in training.

The aim in the Quarry Division this year is to consolidate. Many new initiatives have been put in place. This will involve reviewing, adjusting and refining what exists and will provide the necessary training to Managers, Supervisors and Employees to ensure they have the skills and knowledge to work the new Pioneer way, where safety is an integral part of the business.

Ian Old
Pioneer Concrete

ISOLATION AND TAG-OUT PROCEDURES

The Department of Minerals and Energy is putting the final touches to a guideline on isolation and tag-out procedures which will assist industry to ensure they have effective isolation procedure policies appropriate to mine site conditions.

The guideline has been compiled from a review of existing work practices and with input from experienced mining industry practitioners with the purpose of describing and defining well established principles of '**personal danger**' tags and '**equipment out of service**' tags. The guideline also refers to other systems of work including those which involve permit systems and common tagging points.

The procedures and recommendations outlined in the guideline summarize key points which will assist in reviews or audits of existing systems of work, as well as providing a source of comprehensive material for induction and training programs.

For further information contact Denis Brown Tel: (09) 222 3546 or Fax: (09) 325 2280.

PEOPLE AND PLACES



Vin Rose (RME Collie), Dr Hilda Turnbull (MLC Collie), Hon George Cash (Minister for Mines), Rob Ferguson (previous RME) and Ken Perry (Director General, DME) at the Collie Office opening.

MARCSTA puts the finishing touches on the Generic Induction package.



*Alcohol and other drugs education session
Mt Dimer*

*Hazard identification session - hard yakka!!!!
(Brockman)*



Safety Bulletin No 10 - Fires on 4 x 4 Light Vehicles

Safety Bulletin No 11 - Forklifts - Access Ramps to Road Haulage Trucks.

Significant Incident Report 47 - Injuries Sustained While Working on Drilling Mast.

Significant Incident Report 48 - Elevating Work Platform Users Tipped from Basket.

Significant Incident Report 49 - Auger Mixers

Significant Incident Report 50 - Trailing Cable Coupler - Electrical Accident

Significant Incident Report 51 - Failure of Mast Supports on Drill Rigs

Significant Incident Report 52 - Rope Power Shovel Maintenance - Fatal Accident

Significant Incident Report 53 - Elevated Work Platform Falling

Significant Incident Report 54 - Structural Collapse of an Iron Ore Stacker

Significant Incident Report 55 - Conveyor Belt - Fatal Accident

Significant Incident Report 56 - Uncontrolled Discharge of Stored Energy Source Fatal Accident

Significant Incident Report 57 - Remotely Operated Mobile Machine - Fatal Accident

Significant Incident Report 58 - Removal of a Rise Ladder - Fatal Accident

Fatal and Lost Time Injuries in Western Australian Mines 1994

AS/NZS 4576:1995 - Gives practical guidance for the training and certification of scaffolders, the preparation of sites for scaffolding, and the safe selection, supply, erection, alteration, dismantling, maintenance, inspection and use of scaffolding and scaffolding equipment.

MINet is a proposed computer based mining information network for providing important, up to date information to the Department's regional mines inspectorates and to mines across Western Australia.

WHY IS MINET NECESSARY ?

Legislation changes in 1993 introduced provisions for :

- duty of care principles
- election of safety representatives
- formation of safety committees.

Since these changes, inspectors have had greater contact with safety representatives and committees and there has been a greater onsite demand for immediate information on safety matters.

Legislation changes in 1995, with the introduction of the Mines Safety and Inspection Act, will require inspectors to carry out audits of work practices and procedures. The legislation is less prescriptive and more reliant on current standards, guidelines and approved codes of practice.

Expansion in the mining sector is forecast to continue beyond the end of the century. To maintain the downward trend in mine accidents, it is necessary to improve the distribution and understanding of current safety information.

MINet will provide easy access to current standards, guidelines, codes of practice and contribute to a wider distribution of information.

WHAT CONSTITUTES MINET ?

MINet will consist of 3 subsystems :

AXTAT II

The existing mainframe computer system AXTAT, now in its eighth year, will be redeveloped and become AXTAT II, an improved PC based system. High potential

accident and incident details will be recorded even though no injuries to persons have resulted. The present system records only details of accidents in which lost time injuries have resulted.

MODIS

A powerful information system known as MODIS (Mining Operations Division Information System) will be introduced. This system will be available to departmental users and will store and allow easy retrieval of :

- audit data
- record book entries
- up to date legislation
- standards, guidelines, significant incident reports, safety bulletins etc

Mines inspectors will have access to the information by laptop computer which can be taken into the field.

EXIS

A new information service known as EXIS (External Information System) will be available to registered users. This system will have dial-in access to the department's Perth office through the customer's PC, equipped with suitable software and a modem. Information available to customers will be up-dated regularly and include :

- selected accident statistics from AXTAT II in the form of graphs, charts and tables
- collated accident information from other States
- codes of practice, guidelines, standards, current legislation, etc
- Significant incident reports, safety bulletins etc.

WHAT'S ON

AUSTRALIAN CENTRE FOR GEOMECHANICS

REVISED 1995 COURSE OFFERINGS

AN INTRODUCTION TO SOIL MECHANICS

27 - 29 SEPTEMBER 1995

Venue: University of W.A., Civil Engineering Building
Ground Floor, Room No. AG11,
Fairway Entrance No.3,
Nedlands

Designed to help bridge the gap between soil mechanics principles and their application to practical solutions such as occur during the management of tailings structures.

UNDERGROUND MINE DESIGN AND

GROUND CONTROL

4 - 6 OCTOBER 1995

Venue: Department of Minerals and Energy, Conference Centre,
9th Floor, Mineral House, 100
Plain Street, East Perth.

Designed to provide course participants with the basic principles of rock mechanics and its use in designing safe and economic underground mine openings and ground support systems.

ROCK SLOPE DAMAGE CONTROL(BLASTING)

2 - 3 NOVEMBER 1995

Venue: Department of Minerals and Energy, Conference Centre,
9th Floor, Mineral House, 100
Plain Street, East Perth.

Specific areas include: Mechanisms of rock breakage that are operating in a blast; the fundamental influence of geological structure and the use of field controls to verify the application of design parameters; and common methods of wall control blasting including pre-splitting techniques.

For expressions of interest or suggestions, please contact Christine Meskudla: Tel: (09) 380 3300 Fax: (09) 380 1130

QUEENSLAND WORKPLACE HEALTH AND SAFETY COUNCIL BEST PRACTICE FORUM AND ASIA PACIFIC CONFERENCE ON OHS (THEME - EDUCATION AND TRAINING)

BRISBANE

19-20 & 20-22 SEPTEMBER 1995

For further information call

Tel: (02) 565 9424

Fax: (02) 565 9207

TRAINING FOR OH&S IN THE MINING INDUSTRY

MERCURE HOTEL - PERTH

23 & 24 OCTOBER 1995

For further information call

Tel: (02) 959 4684.

CALLING ALL OCCUPATIONAL HEALTH AND SAFETY NURSES!!!!!!

The Australian College of Occupational Health Nurses (OCOHN) would like to hear from you.

If you are interested in learning more about OCOHN and its activities please contact Kath Howell at DOHNSWA Tel: (09) 327 8777.

MINE VENTILATION OFFICERS COURSE (SURFACE MINING)

26 - 27 OCTOBER 1995

23 - 24 NOVEMBER 1995

Further details and nomination forms are available by contacting Mr James Lawrence

Tel: (09) 222 3095

Fax: (09) 325 2280

STAFF CHANGES

Best wishes go to **Geoff Dodge**, **Dave Collie** and **Maurice Knight** on their retirement.

Farewell to **Trevor Robinson** who has resigned to join Western Mining Corporation Pty Ltd.

INCIDENT ALERT

THE INCIDENT

A mobile crane was travelling whilst carrying a compressor suspended from the crane hook, when the crane became unstable and subsequently overturned coming to rest on its side. Fortunately the operator was not seriously injured.

This incident is not unique; there have been several such incidents in the past.

COMMENTS

All models of mobile cranes have load charts and operational guidelines which are provided by the crane manufacturers to ensure safe operation of these cranes for stationary lifting or 'pick and carry' operations (travelling with a freely suspended load). Guidelines vary according to the manufacturer, however typically, the following guidelines are provided for 'pick and carry' operations:

1. Boom must be centred over the front of the machine.
2. Mechanical swing lock must be engaged.

3. Load to be restrained from swinging.
4. Travel speed limitations. These vary according to the weight of the load being carried.
5. Correct tyre inflation, size and condition.
6. Never travel over uneven or unstable ground.
7. Avoid travelling over slopes. If slopes cannot be avoided the crane must have a generous margin in capacity over the load to be carried.
8. Axle lockouts must be functioning.

The incident is currently under investigation and early indications are that a number of the above guidelines were not followed.

PREVENTATIVE ACTION

1. 'Pick and Carry' mobile crane operations should be kept to a minimum whenever possible.



2. If a mobile crane must be used to travel with a freely suspended load, then the manufacturer's load charts and guidelines must be strictly followed. Failure to do so could result in damage to the crane and, worse still, serious or fatal injuries to personnel.

We answer **YES!** to these questions. Can your current printer do the same?



YES!

We do all our typesetting on the premises — so we can do your job **FASTER!**



YES!

We can print in full colour!



YES!

We offer free pick up and delivery.



YES!

We can print any colour on a vast range of papers! We don't restrict you to a short list of papers or ink colours like some 'instant printers'.



Leaderpress

INSTANT & GENERAL PRINTERS

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OSBORNE PARK WA 6017

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YES!

We can do almost any printing job:

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- DOCKET BOOKS — INVOICE, RECEIPTS, ORDERS
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- NEWSLETTERS
- BOOKS AND BOOKLETS
- MAGAZINES
- PROGRAMS
- LEDGER CARDS
- MENUS
- DRINK COASTERS
- BROCHURES
- SELF ADHESIVE LABELS — AND MANY MORE