

Defining exposure to health and hygiene issues

A massive audit of exposure of underground coal miners to all health and hygiene issues is underway in the Illawarra region of NSW.

It is being undertaken by BHP Billiton Illawarra Coal and the Coal Services Health and Safety Trust.

The project is being driven by Steve McFadden, Occupational Health and Safety Manager of the Illawarra Coal and Carbon Steel Materials Division of BHP Billiton and Brian Davies, a consultant occupational hygienist who has worked in the mining industry for many years.

They believe the comprehensive audit will set the health and hygiene improvement agenda for all Australian underground coal mining for the next 15 years.

Information generated by the project is not being treated as confidential company information but is being made available to the industry. Steve and Brian reported on progress at the 2003 NSW Minerals Industry Occupational Health and Safety Conference.

They said the aim of the project is to develop a comprehensive systematic, scientific and accurate measure of coal miner exposure to health and hygiene issues that can be compared to compensation claims and other health information to develop strategies for managing or eliminating these hazards.

The information gained is being used to determine the need for improvement programs and as a base line for continuing testing.



At the opening of the Dendrobium mine near Wollongong were Allan Ninnes, Kerry Hickey – Minister for Mineral Resources, Daniel Skillen and Bob Carr – NSW Premier. Dendrobium is involved in the project measuring underground coal miners' exposure to health and hygiene issues

The \$200,000 plus project is being funded and run by BHP Billiton and the Health & Safety Trust. Now in its second year, it came from the realisation that, apart from a generalised idea, there was no total and accurate picture of the exposure of coal miners to health hazards.

"We want to deliver something that is of value to the whole of the underground coal industry. All mines have similarities, one longwall is pretty much like another so we believe our findings will be applicable everywhere," Steve said.

Having already reported on the project at the 2003 NSW Minerals Industry OH&S Conference, BHP Billiton will finalise a report, which will be available from the Health & Safety Trust.

According to Steve McFadden, the key to the ongoing

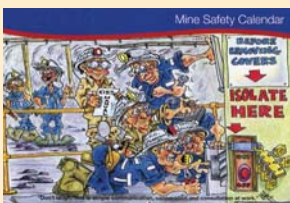
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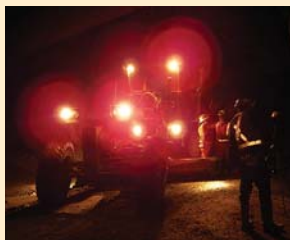
In this issue....



Page 1



Page 4



Page 6



Page 7

Defining exposure to health and hygiene issues	1
BHP-B Risk Ranked Occupational Health and Hygiene	3
Warning on oil injection injuries	4
Humour sells safety	4
Lightning Ridge students learn about mine safety	5
Plant assessment & modification	5
Analysing diesel exhaust particulate matter in NSW underground mines	6
Dangerous Goods	7
No loading of box trailers	7
Prosecutions	8
Safe mining healthy business	8
Electric shock prevention publications on internet	9
Legislation Update	9
How is your mine safety planning?	9
School is out – no children on mines	10
Safety Alerts	10
Advisory group examining unplanned movement	11
HIESN: increasing awareness of electrical safety	11
Departmental Offices	12
Subscription form	12



The New South Wales Government is targeting improved safety in all sectors of the mining industry.

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Information is provided in this newsletter to promote the enhancement of the safety culture of NSW mining and to alert a wide range of people to potential risks and to potential risk controls. Each site must manage its own risks according to its own hazard identification, risk assessment, control systems and monitoring process. Whereas all care is taken in producing NSW Mine Safety Update, the NSW Department of Mineral Resources accepts no responsibility for accuracy of information supplied. Inclusion of any product, service or company in NSW Mine Safety Update does not imply NSW Government or NSW Department of Mineral Resources endorsement. © NSW Department of Mineral Resources

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success of the project lay in extensive and comprehensive planning by a steering group over several months. The steering group consisted of a:

- Mine management representative
- Occupational hygienist
- Occupational physician
- District Check Inspector
- OHS committee representative from each site
- Safety training coordinators
- Coal Services representative

This broad base of experience was carefully structured to avoid a management bias and to be totally transparent. Planning began in August 2002 and no exposure sampling began until January 2003. The group brainstormed and decided on 20 risk ranked, health and hygiene exposure issues.

The amount of work involved made it apparent that not everything could be studied at one time so the highest ranked issues of noise, respirable dust, inhalable dust and hazardous substances were considered first.

Many previous exposure surveys have focused on specific situations or tasks and the steering committee decided that this would not give an accurate picture of overall exposure.

Instead it was decided to establish HEGs, or homogenous exposure groups, of people working in similar environments such as: everybody on a longwall including fitters, operators and management.

For the sampling, 30 different HEGs were established ranging from underground longwall to above ground haulage drivers. The chosen issues were studied at Appin, Dendrobium Coal Preparation, Elouera, Westcliff Coal Preparation and Westcliff.

A total of 1,200 personal exposure samples were collected from mine workers over 16 weeks. Steve has paid tribute to the tireless efforts of the Coal Services Technical Officers, Gary Mace and Peter Adlington, who travelled to the mines at all hours on all shifts and over

weekends to collect samples. Rigorous statistical methods were used to ensure accuracy and the results showed that exposure to respirable dust and silica was well below current standards.

Inhalable dust exposure was above best practice levels so an Operational Excellence Project has been investigating dust reduction on the Appin Longwall. Results to date are encouraging.

The level of exposure of employees to noise was shown to be extreme and this is consistent with industry hearing loss compensation claim information published by Coal Services Health.

A comprehensive hearing conservation program has been implemented and noise levels are being written into equipment purchasing policies. Noise reduction will not be easy because much of the underground equipment is loud and engineering changes occur over years, not months.

The project also showed that hazardous substance procedures were both inconsistent and below levels considered necessary. Improved procedures consistent with NSW Hazardous Substance Regulations have been developed, preliminary training completed and an implementation plan developed.

BHP Billiton Illawarra Coal is now moving into sampling the other identified exposure issues. Exposure measuring will be undertaken at other mines in the Division.

For further information, please contact Steve McFadden of BHP Billiton Illawarra Coal on email address steve.j.mcfadden@bhpbilliton.com ■■■



The total audit of underground coal mine health and hygiene exposure issues is being managed by Steve McFadden and Brian Davies

BHP-B RISK RANKED OCCUPATIONAL HEALTH AND HYGIENE ISSUES

1. Dust
2. Noise
3. Hazardous substances
4. Microbiological agents
5. Organic Vapours
6. Gases
7. Diesel particulate
8. Welding fumes
9. Soluble oil
10. Confined spaces
11. Vibration
12. Asbestos
13. Heat stress
14. Radiation
15. Synthetic mineral fibres
16. Lighting
17. Electromagnetic fields
18. PCBs
19. Personal protective equipment
20. Mould – fungi ■■■

Warning on oil injection injuries

Since February 2002, there have been 12 incidents where people were subjected to the danger of being injected with hydraulic oil in the NSW mining industry. Three of these have resulted in fluid injection injuries and nine have been near misses requiring medical treatment.

The high pressures involved, typically up to 350 Bar (5,070 psi) and the materials present in the hydraulic fluids mean the incidents can result in serious injuries which may result in fatalities. Fluid injection injuries can occur at pressures from around 100 Bar (1500 psi), which can puncture human skin.

Above ground incidents tend to occur during equipment maintenance when hoses are being taken off or replaced. Several entries in the Innovation Awards at recent Minerals Industry Occupational Health and Safety Conferences have described devices for safely releasing the pressure in hydraulic systems prior to maintenance.

Increased usage of longwall equipment in underground mining has increased the potential for fluid injection incidents because some longwalls have as many as 8,000 hydraulic hoses with 16,000 connections, many of which can be within half a metre of workers in the workplace.

A study by Professor James Reason of Manchester University suggested that skilled workers will make mistakes, or vary from a set procedure, in one of every ten tasks. When considering maintenance associated with this equipment the probability of human error and risk is a real concern. Without adequate guarding and isolation control, mistakes can be fatal.

A 1992 oil injection incident on a NSW longwall instantly killed a miner.

Incidents can be the result of:

- Hose connector failure or hose failure
- Equipment not fit for purpose
- Maintenance issues
- Isolation
- Operational issues
- Inadequate training
- Human error

The harsh underground environment and presence of abrasive coal, coal dust, steel plates and other hoses can easily damage or abrade the outer rubber coating of a hose and allow water penetration. This causes corrosion of the steel braided reinforcing and leads to structural failure of the hose.

Apart from the danger of oil injection, a broken hose can flail around and cause severe bruising or broken bones. An oil injection injury in the torso will most likely result in death. Oil injection injuries to the limbs will always require surgical intervention. An oil injection injury

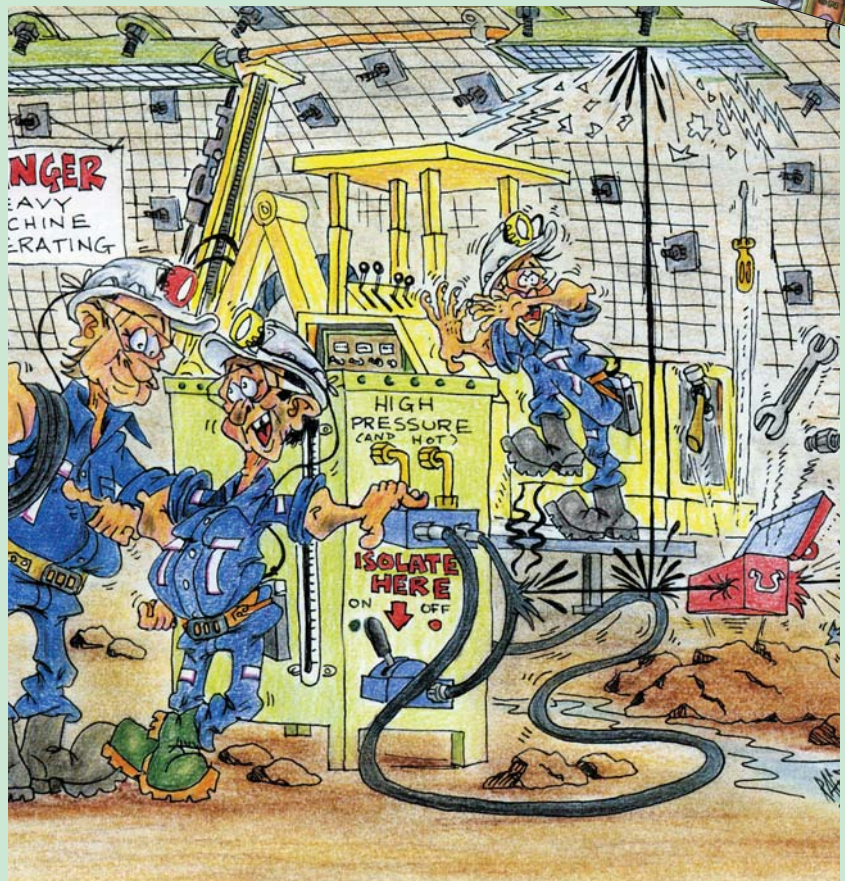
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Humour sells safety

A touch of humour is being used to get the safety message across in the NSW Department of Mineral Resources 2004 calendar.

Each month is illustrated by a cartoon by Bob Groves, who has used his artistic skills and mining experience to convey important safety messages in a unique and humorous way.

You can get your free copy of this calendar from the Department's Information and Sales Counter (02) 9901 8268, or by email at orders@minerals.nsw.gov.au ■■



"Why change it – just how dangerous could a worn hose be?"

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can at times appear minor, maybe just a pinprick with no loss of blood. No matter how minor it may appear, it must be treated as a major injury. Not all medical people or facilities are aware of the serious nature of such incidents and the need for immediate surgical intervention at a hospital that has a fluid injection protocol in place is essential.

Accident and emergency services at the major public hospitals are likely to be equipped to deal with high-pressure fluid injection injuries.

One of the factors making oil injection injuries so severe is the additives that may be in the oil. Longwall hydraulic fluid can contain as little as 2% oil and as much as 98% water, to which formaldehyde has been added as an anti bacterial agent.

A treatment protocol is included in MDG1016. Every mine should ensure it has this document, has assessed the hazard, taken steps to control it and has developed an emergency response plan in consultation with its rescue services and medical advisers.

For further information refer to MDG1016, or check Safety Alerts SA02-14, SA02-13, SA00-02, and SA98-08. This can be done by going to the NSW Department of Mineral Resources website www.minerals.nsw.gov.au and then clicking on Safety and following the link to Safety Alerts. ■■

Plant assessment & modification

This series of one day regional workshops is being conducted by the NSW Minerals Council, in partnership with the Department of Mineral Resources and the Crushed Stone and Sand Association. February 12 (Wollongong) February 19 (Penrith) February 26 (Newcastle) and March 4 (Orange). Further information from Steve Stewart on 02 9901 8413. ■■

Lightning Ridge students learn about mine safety



Lightning Ridge Mine Safety Officer Jim McMahon discusses opal mining safety with Lightning Ridge High School students (from left) Kristina Kelly, Natalie Pocock, Nicole Pace and Derek Dunlop

A new feature was added to the curriculum at Lightning Ridge High School when 25 year 11 and 12 students completed the one day, Opal Miner's Safety Awareness Course that is regularly run by the NSW Department of Mineral Resources. The course covers all aspects of safety including shaft guarding, personal protection equipment, support pillars, mechanical and electrical equipment.

At Lightning Ridge, the Department is also running Mine Operator Workshops in response to provisions of current legislation and the forthcoming Mine Health and Safety Bill that every mine in NSW, including opal mines, must have a nominated Mine Operator and a Mine Safety Management Plan.

The one-day workshop covers development of a Mine Safety Plan, hazard identification and control, work place inspections, contractor management, emergency response plans and safe use and maintenance of equipment. To ensure effective communication and learning, each workshop is limited to 12 participants. Up to 12 workshops are being held each month to cater for the 3,000 opal miners who must qualify as Mine Operators to comply with current and future legislation.

During 2003, 3,936 people have attended training courses, seminars, conferences, workshops or legislation information sessions that have been run or supported by the NSW Department of Mineral Resources.

Included in this number are 2,936 who have attended seminars, the NSW Minerals Industry OH&S Conference and new legislation information sessions. Over 800 people have attended the Lightning Ridge Opal Miners' Safety Awareness courses and 200 have attended the new Lightning Ridge Mine Operators courses.

For further information on the Lightning Ridge Opal Miners' Safety Course, please contact Debbie Knee on 02 6829 0678 and for the Mine Operator Workshops contact Janet Towns on 02 6829 0159. ■■



Analysing diesel exhaust particulate matter in NSW underground mines

The final report on particulate matter in the exhaust of diesel engines used in underground mines is now available from the NSW Department of Mineral Resources in both hard copy or on compact disc, both priced at \$33.

This publication is an overview of the potential health hazards that could result from miners breathing diesel exhaust in the confines of underground mines.

It discusses exposure levels, looks at control measures and makes future improvement recommendations for users, equipment manufacturers and regulators.

Diesel particulate matter is produced along with other components of diesel exhaust.

It includes elemental carbon, organic carbon and trace elements of nitrates, sulfates etc.

These particles are small enough to reach the deepest recesses of human lungs and be absorbed into the body's systems. They are capable

of causing irritation, respiratory illness, cardiovascular disease and even lung cancer. It is recommended that all mines using diesel engines



The NSW Department of Mineral Resource's Mine Safety Technical Services section is currently completing an 18 month investigation into developing a scientifically accurate method of measuring particulates

obtain copies of the report and take steps towards managing and alleviating the levels of exposure. In the short term, these measures can include educational programs and maintenance strategies.

It is suggested that de-rating of engines and six monthly de-coking should be investigated as a means of reducing particulate emissions. Increasing ventilation rates is another way to manage this hazard.

The report also recommends that diesel particulate exposure be set at a pre-determined level and suggested that the Minerals Council rate of 0.2mg/m³ be established as a sensible point at which diesel engines can operate while minimising harm to miners.

It suggested that work should proceed on establishing a benchmark method of determining diesel particulate levels in a scientific manner.

The NSW Department of Mineral Resource's Mine Safety Technical Services section is currently completing an 18 month investigation into developing a scientifically accurate method of measuring particulates.

Funded by a \$290,000 grant from Coal Services Health and Safety Trust, the project has considered different methods and instruments, conducted tests on a dynamometer and is now evaluating the results.

Another of the report's recommendations is that manufacturers of underground equipment adopt electronically controlled engines and examine de-rating as a small loss in power leads to a large decrease in diesel particulate production.

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www.minerals.nsw.gov.au/safety/safety ■■

DANGEROUS GOODS

The Occupational Health and Safety Amendment (Dangerous Goods) Bill 2003, was introduced on July 17, 2003 to extend the operation of the *Occupational Health and Safety Act 2000* to regulate dangerous goods in the same way it has already been extended to plant affecting public safety. This will apply a duty of care and performance based approach to regulation of storage and handling of dangerous goods as outlined in the National Occupational Health and Safety Commission's national standard. When the amendments come into effect, the *Dangerous Goods Act 1975*, *Dangerous Goods (General) Regulations 1999* and various other legislation will be repealed. These amendments, and the *Explosive Bill 2003* – also introduced on June 17, will result in safer storage and handling of explosives and dangerous goods. ■■



A backyard handyman heads for the nearest quarry for a box trailer of blue metal with the car's back seat full of kids and dogs. This is a common occurrence but it can introduce a range of hazards including children on the site, people without operating knowledge manoeuvring small vehicles near mobile equipment, overloading of small vehicles and interruption of normal operations. There are few reported incidents but it is thought that many near misses occur. Any incident involving small and large vehicles has the potential to result in fatalities. Many quarries are moving to control these hazards by various means including banning small load-outs, as the sign at Bathurst's Pioneer quarry indicates. The quarry manager believes sales to the general public needlessly increase the risk of accidents for little gain. For further information, please contact Chris Dolden, Manager of the Pioneer Construction Materials Quarry at Bathurst on 02 6331 1933.



PROSECUTIONS

Dartbrook

On November 7, 2003, Tecrete Industries Pty Ltd was convicted over an incident on January 20, 1997 in which a mine worker had been killed by falling fibrecrib blocks. A fine was imposed of \$175,000 with moiety and costs to the prosecutor. The fine was discounted to \$122,500 in consideration of the defendant's early plea of guilty, cooperation and significant positive changes regarding OH&S.

Dartbrook

On November 19, 2003, Anglo Coal (Dartbrook Management) Pty Ltd, the operator of Dartbrook Coal, was convicted over the above incident. A penalty of \$215,000 with moiety and costs to the prosecutor was imposed. The penalty was discounted to \$139,750 in consideration of an early plea of guilty, cooperation with the investigators and otherwise good industrial record.

Awaba

On November 21, 2003 four charges against Powercoal were dismissed and the decision reserved on the charges against one person. The charges related to an incident, in which a roof fall in the Awaba Colliery on July 17, 1998 directly resulted in the death of a miner. The Department is appealing the decisions.

Northparkes

On November 21, 2003, a decision on an appeal by the Department of Mineral Resources resulted in a penalty imposed on North Mining Limited being increased from \$82,500 to \$275,000. The penalty was for an incident on November 24, 1999 in which four miners were killed by an air blast resulting from a major ground movement at the Northparkes Mine. The penalty was discounted to \$206,250 for early plea of guilty, immediate assistance to workers, contractors and the families of the deceased, subsequent steps to enhance the safety of workers and others at the site and full cooperation with the investigation.

United Collieries

On November 28, 2003, United Collieries Pty Ltd and United Mining Pty Ltd were convicted over an incident on November 27, 1997 in which a miner died from crush injuries that occurred during maintenance duties on a remote control, continuous miner. Evidence indicated the continuous miner had not been isolated from electrical power. Consideration was given to the unblemished record, prompt action to rectify the safety risk and early plea of guilty by both defendants. United Collieries Pty Ltd was fined \$180,000 with moiety and costs to the NSW Department of Mineral Resources. United Mining Pty Ltd was fined \$144,000 with moiety and costs to the Department. Consideration of the level of this fine was also given to assistance provided to the family of the deceased by United Mining Pty Ltd.

Cooranbong

On November 28, 2003, a decision on appeal increased a fine imposed on Powercoal Pty Ltd from \$65,000 to \$155,000 with moiety and costs awarded to the NSW Department of Mineral Resources. The fine was imposed for an incident on July 1, 1999 when a miner was fatally injured when his legs were crushed during maintenance on a continuous mining machine.

Gretley

This matter is being prosecuted by the WorkCover Authority and not by the NSW Department of Mineral Resources. Four miners died in 1996 in the Gretley coal mine near Newcastle after a wall collapsed and there was an inrush of water from adjoining, old workings. On November 18, 2003 the defence indicated it would challenge the validity of this consent, arguing that the Minister for Mineral Resources should have given the consent. The Occupational Health and Safety Amendment (Prosecutions) Bill 2003 (NSW) was subsequently introduced into State Parliament to make it clear that any Minister can consent to a

prosecution under the OH&S Act. The Bill amends the Occupational Health and Safety Act 2000 (NSW). The prosecution is now proceeding.

Forged certificate

A person was prosecuted at Cessnock Court on 14 counts of using false instruments by presenting a forged competency certificate in an effort to gain employment in a coal mine. The case was proved and the court imposed an 18 month suspended sentence and a good behaviour bond.

There have been 17 successful prosecutions since the introduction of a new enforcement policy at the beginning of 1999 by the NSW Department of Mineral Resources. Four guilty pleas are currently before the NSW Industrial relations Commission and 13 other prosecutions are proceeding. Three prosecutions have been unsuccessful. An appeal is underway in one of these cases and an appeal is being considered in another. ■■■

SAFE MINING HEALTHY BUSINESS

The 2004, Annual NSW Mining Industry Occupational Health and Safety Conference will be held from July 25 to July 27 at a venue that will be announced in a future edition of Mine Safety Update. The theme will again be "from paperwork to practice" and the conference is expected to be attended by over 300 delegates from all aspects of NSW mining, including management, workforce, unions, suppliers and government regulators. Proposals are sought by March 5, 2004 for papers on any issue of relevance to improving mine and quarry safety and health performance. Proposals should be sent to Jodie Hooper, Manager OHS Strategy, NSW Minerals Council, phone: 02 8202 7200, fax: 02 8202 7255, email: jodie@nswmin.com.au ■■■

ELECTRIC SHOCK PREVENTION PUBLICATIONS ON INTERNET

LEGISLATION UPDATE

The three publications resulting from the electric shock prevention project are now posted on the internet at <http://www.minerals.nsw.gov.au/mapspubs/safepubs.htm> as PDF files for free downloading.

These publications are:

- Analysis of Causes of Electric Shock Incidents in Mining in NSW
- Electric Shock Incidents in the NSW Mining Industry
- Electric Shock Incident Final Report

Publications 2003

MDG 25	Guideline for Safe Cutting and Welding at Mines	\$33.00
MDG 40	Guideline for Hazardous Energy Control (Isolation or Treatment)	\$33.00
MDG 1030	Guideline for Raiseboring Operations	\$33.00
MDG 2005	Electrical Technical Reference for the Approval of Power Winding Systems	\$33.00
	Diesel Particulate Matter – an overview with respect to underground mining – hard copy or CD	\$33.00
	Small Mines Safety Management Kit	\$35.00
	Minerals Industry Safety Handbook	\$30.00
	Electric Shock Prevention Project Final Report	\$33.00

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After an exhaustive program of consultation involving industry, unions and public, the Mine Health and Safety Bill has been redrafted.

Completion was not possible in time for it to be considered by the NSW Parliament in 2003. It is expected that this legislation will now go before the first session of Parliament in 2004.

When passed it will apply modern health and safety principles to the metalliferous mining, quarrying and extractive industries sector of NSW.

This new legislation is the result of the Carr Government's major review of mining health and safety legislation for this sector that began in 1999.

Regulations to support the Coal Mine Health and Safety Act 2002 are under development. The process has closely involved the Coal Safety Advisory Committee (CSAC), which has provided both comment and consideration.

Steps will be taken in the near future to obtain a first draft of the regulations from the Parliamentary Counsel's Office.

There will be ongoing consultation through the CSAC as the regulations are refined. The Act will fully come into force when the regulations are complete. ■■

How is your mine safety planning?

Two new quizzes have just been posted on the DMR website: <http://www.minerals.nsw.gov.au/safety/safety.htm#new> to assist in mine safety management planning. The first is a simple 12 question quiz to find out whether you have established a mine safety plan to help you manage the occupational health and safety of people who work at your mine. It is designed for metalliferous mines, extractive industries and quarries but can also be used to review systems in coal and shale mines. The second quiz is intended to help managers improve their plan. It will take a little longer to complete and can be used in conjunction with Small Mines Safety Management Kit and the Safety Management Plan - Workbook. The quiz covers areas such as safety policy, OH&S documentation, identifying hazards, assessing risks and emergency preparedness, maintenance programs and training development. ■■

School is out – no children on mines

During the last school holidays, staff at a NSW quarry noticed a group of teenage boys, playing on the site. They approached the boys to warn them of the hazards but the boys fired “orange guns” at them, then ran away and left through a gap under the chain mesh fence.

For obvious reasons we won't explain the mechanism of an orange gun. Suffice to say it is a dangerous device that can propel an orange over a substantial range at a high enough velocity to cause a serious injury.

There is also potential for the firer to be injured by the device malfunctioning.

Over recent years, several incidents of children on quarries and mines have ended with tragic results.

Safety Alerts issued by NSW Department of Mineral Resources have highlighted these incidents and stressed the need for control action.

After considering the situation, the quarry management decided the matter had to be taken further. It was decided that going to the police would probably be an over reaction that could have negative instead of positive results.

Instead the quarry management wrote a letter pointing out the hazards of children on the site and noted that they had only approached the boys to warn them.

The letter was hand delivered to all of the homes for some distance around the quarry.

Within a couple of days, a group of parents turned up at the quarry with their sons who had been involved.

The quarry management pointed out the hazards and showed the group around the quarry to reinforce the message. This sensible action was a positive step towards controlling the

hazard while building a reputation of good corporate citizenship in the local community.

Perhaps the solution chosen could be expanded for this and other quarries and mines troubled by children on their sites during holidays and weekends. Options could include letterboxing the local area before each school holiday, visiting local schools to warn of the dangers, providing speakers to

local schools for career guidance days and maybe even running an annual open-day with work demonstrations, talks about the hazards of the site and a sausage sizzle.

Benefits would include controlling the hazards, interesting young people in a career in the industry and reinforcing the benefits to the local community of the quarry or mine. ■■■

SAFETY ALERTS

SA03 – 10 November 26: crane dogman killed unloading trailer

A contract dogman was killed when struck by a materials trailer, which detached from a crane while being unloaded. The trailer was being unloaded in the surface storage area of an underground mine. It appears the lifting chains became detached from the crane and, or the trailer allowing it to fall on the dogman, who was guiding the trailer into position.

The dogman was in an exposed position. The method of securing the load appears to have failed. The incident is being investigated by the Investigation Unit of the NSW Department of Mineral Resources.

It is recommended that all mine sites review safe work procedures for site cramage, particularly in regard to the safe location of all participants. All chains and other lifting devices should be checked to ensure they are 'fit for purpose'. All arrangements for supervision of contractors should be reviewed.

SA03- 09 November 26, 2003: quarry employee injured after failure to isolate pugmill

SA03- 08 November 23, 2003: pre-heating on confined space prior to welding

SA03- 07 October 15, 2003: drill rig strikes overhead power lines

SA03- 05 July 7, 2003 LHD: and QDS attachment, tip over

SA03- 04 June 27, 2003: intersection with water boreholes

Safety alerts can be found on the internet at <http://www/minerals.nsw.gov.au/safety/safalert.htm> ■■■

Advisory group examining unplanned movement

"You are in a dark, confined and dusty space. A noisy, 90 tonne machine that is controlled by a radio transmitter occupies most of the area. Close to the machine are several workers. If it moves in an unexpected or unplanned direction, these workers could be crushed."

This scene was described for delegates to the 2003 DMR Electrical Safety Conference by Steve Bentham, who is an Electrical Engineer from Dartbrook Coal and a member of the Remote Control Equipment Advisory Group (RCEAG).

The group was established in 2002 by Rob Regan, DMR Assistant Director of Safety and Technical Services, in response to continuing unplanned movements. More than 100 incidents have been reported over the last eight years and some of these have resulted in fatalities.

RCEAG is made up of representatives of unions, the managers' association, the DMR, manufacturers, service providers, engineers, researchers,



developers, metalliferous miners and coal miners. At its first meeting it established its scope as being: "Underground coal and metalliferous mine remote controlled mobile machines that can be operated from off the machine, encompassing the life cycle of the equipment and mining methods."

Its work includes the completion of AS/NZs 4240, reviewing MDG

5002, monitoring compliance levels, developing failure data and continuing to monitor underground, remote control machinery development.

For further information, or to contribute to the work of the RCEAG, please contact John Waudby, DMR Senior Inspector of Electrical Engineering, on 02 4942 3200. ■■■

HIESN: increasing awareness of electrical safety

"The more you talk together the more you know," these were the words used to describe the benefits of the Hunter Industry Electrical Safety Network (HIESN) by Jim Webster, who is an electrical contractor and a member of HIESN. He was speaking to the Electrical Engineering Safety Conference, held by the NSW Department of Mineral Resources, at Penrith on November 12 and 13.

Jim Webster told the delegates that HIESN began in 1997 as an informal network of 14 organisations in 1997 following several severe electrical incidents in the Hunter area of NSW. It now has 41 member organisations representing just about every major industrial sector in the Hunter region.

Other factors that prompted the formation of HIESN included

changing government regulations, changing work environments and a desire to see the needs of heavy industries taken into account in the development of regulations and standards.

The aims of the organisation are to improve electrical safety, communicate the needs of industry to controlling bodies, develop electrical safety resources and share information within a strong regional electrical safety network.

Members of HIESN work in:

- Mining
- Metal manufacturing
- Power generation
- Chemicals
- Food manufacturing
- Engineering
- Education and research
- Power distribution
- Bulk goods handling

HIESN has representatives on electrical standards committees and meets regularly with various government bodies involved in developing and administering electrical regulations.

According to Jim Webster, one of the major benefits of membership is the instant advice that is available.

"If you are faced with a problem or need information all you have to do is send an email to members of the group and someone will send back the answer within minutes," he said.

The members of HIESN are encouraging the formation of similar groups in other areas.

For further information, or to be put on the email distribution list, phone Jim Webster on 0408 643 128. ■■■

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(PO Box 65 Armidale NSW 2350)
Phone: (02) 6776 0300
Fax: (02) 6776 0399

BROKEN HILL

Level 2, 32 Sulphide Street, Broken Hill NSW 2880
(NOTE CHANGED PO BOX NUMBER)
(PO Box 696 Broken Hill NSW 2880)
Phone: (08) 8088 9300
Fax: (08) 8087 8005

COBAR

62-64 Marshall Street, Cobar NSW 2835
(PO Box 157 Cobar NSW 2835)
Phone: (02) 6836 4392
Fax: (02) 6836 4395

GATESHEAD

Lot 1766 Bullsgarden Road, Gateshead NSW 2290
(PO Box 2245 Gateshead NSW 2290)
Phone: (02) 4942 2300
Fax: (02) 4942 2323

LIDCOMBE

State Hospital Grounds
Cnr Joseph Street & Weeroona Rd, Lidcombe NSW 2141
(PO Box 76 Lidcombe NSW 2141)
Specialist Services & Applied Research Section
Phone: (02) 9649 5266, Fax: (02) 9646 3224
Mine Safety & Technical Services
Phone: (02) 9646 1644, Fax: (02) 9646 3224
Investigation Unit
Phone: (02) 9649 8959, Fax: (02) 9649 5631

LIGHTNING RIDGE

Lot 60 Morilla Street, Lightning Ridge NSW 2834
(PO Box 314 Lightning Ridge NSW 2834)
Phone: (02) 6829 0678
Fax: (02) 6829 0825

LITHGOW

The Hartley Building
184 Mort Street, Lithgow NSW 2790
(PO Box 69 Lithgow NSW 2790)
Phone: (02) 6351 3052
Fax: (02) 6352 3876

LONDONDERRY

Core Library
947-953 Londonderry Road, Londonderry NSW 2753
Phone: (02) 4777 4316
Fax: (02) 4777 4397

ORANGE

185 Anson Street, Orange 2800
(PO Box 53 Orange NSW 2800)
Phone: (02) 6392 6333
Fax: (02) 6392 6363
After hours - emergency only - (02) 6392 6358

SINGLETON

1 Civic Avenue, Coal Services Building, Singleton NSW 2330
(PO Box 51 Singleton NSW 2330)
DX 7071
Phone: (02) 6572 1899 (Inspectors)
Phone: (02) 6572 4200 (Geology)
Fax: (02) 6572 1201

WOLLONGONG

State Government Offices
Level 3, Block F, 84 Crown Street, Wollongong NSW 2500
(PO Box 674 Wollongong NSW 2520)
Phone: (02) 4227 1699
Fax: (02) 4226 3851



Do the right people in your organisation read Mine Safety Update?

NSW Mine Safety Update and Safety Alerts are only of assistance if read by the widest possible cross-section of people who can influence safety performance in mining. If you want to get Mine Safety Update or Safety Alerts mailed directly to you at home or work, or want them to go to someone else, please fill in the form, fax it to us and we will add the name to the mailing list.

TO: Steve Stewart, Mine Safety Performance Improvement Division, NSW Department of Mineral Resources, fax: (02) 9901 8584

Please send me by mail

MINE SAFETY UPDATE

SAFETY ALERTS

Name: _____

Position: _____

Mine / Company: _____

Address: _____

Postcode: _____