Kenneth Andrew SLATER

Findings and Recommendations

[Schedule A] [Schedule B] [Schedule C] [Schedule D] [Schedule E]

The *Mines Regulation Act 1964* -

Findings and recommendations of reviewers and mining warden following an inquiry into fatal injuries received by Kenneth Andrew Slater at low grade stockpile, Tick Hill Gold mine on 12 september 1994 warden's court 6-8 december 1995

Before: Mr A J Chilcott esquire acting Mining Warden

Reviewers:

- Mr John Patrick BRADY
- Mr John Arthur TORLACH
- Mr Gregory Allan DALLISTON
- Mr William Barron ELRICK

To assist:

Mr Christopher Paul Skelding, acting senior inspector of mines, Department of Minerals and Energy, appears to assist.

Appearances:

- Mr G R Moffatt, solicitor of Messrs V R Moffatt solicitors for next of kin (Mrs Slater in person)
- Mr R M Cooke, principal legal officer, MIM Holdings Limited for Carpentaria Gold Pty Ltd
- Mr D Pappin, district workers representative

Witnesses examined: refer transcript and schedule "a"

Exhibits tendered: refer transcript and schedule "b"

Findings: refer transcript and schedule "c"

Recommendations: refer transcript and schedule "d"

Report of mining warden: refer transcript and schedule "e"

Schedule "A" Witnesses examined:

- Constable Ian Michael ROBERTSON
- Alan Peter DOWNHAM
- Duncan Peter Hugh PAPPIN

- Jayantha Lakshman MAHARAGE
- Phillip HOLDEN
- Bradley John FORTESCUE
- Anthony Peter HYDE
- Shane Irvine PETERSEN
- Brett Leslie McGUINESS
- Richard Darcy ROBERTS
- Russell John TOMLINSON
- Odd NYBORG
- Peter John MINAHAN

Schedule "B" List of Exhibits

No of Exhibit	Nature of Exhibit	Tendered by
1	Medical Certificate - Raymond Seymour	C P Skelding
2	Report by R A A Seymour dated 8 September 1995	"
3	Small Colour Photograph	G R Moffatt
4	Police Photographs	C P Skelding
5	Post-Mortem Examination Report	"
6	Post-Mortem Examination Certificate	"
7	Statement of Ian Michael Robertson	"
8	Statement of Alan Peter Downham	"
9	Report of D P H Pappin dated 11 October 1994	"
Ex. A for Ident	Report of Carpentaria Gold Pty Ltd	G R Moffatt
10	22 Colour Photographs taken by D Pappin	C P Skelding
11	Plan - Marked with Blue Biro Cross by Witness Pappin	G R Moffatt
Ex. B for Ident	Statement by P J Minahan	C P Skelding
12	Statement of J L Maharage	"
13	Four (4) Colour Photographs taken by J L Maharage	"
14	Statement of Gregory Sleziak	"
15	Statement of Phillip Holden	"
16	Statement of Bradley John Fortescue	"
17	Statement of Anthony Peter Hyde	"
18	Statement of Shane Irvine Petersen	"
19	Statement of Brett Leslie McGuiness	"
20	Statement of Richard Darcy Roberts	"
21	Statement of Russell John Tomlinson	"
22	Statement of Odd Nyborg	"
23	White AS 1801 Safety Helmet	"
24	Orange Protector Safety Glasses SN 5000	"
25	Light Brown Protector Safety Glasses S29	"
26	Empty Orange Bell Wire Reel	C P Skelding
27	Quantity of Red and White Bell Wire with remnants of electric detonator leads attached	"
28	Stinger SB 10 Exploder used for initiating electric detonators	"
29	Samples from Chemical Laboratory	"
30 Formerly Ex. B for Ident	Statement of Peter John Minahan	"

Schedule "C" Findings:

We find -

Name of deceased: Kenneth Andrew Slater

Date of death: 12 september 1994

Place of death: Low grade stock pile, Tick Hill Gold mine

Nature of accident:

On tuesday 6 september 1994 Mr Greg Dellar, contractor, notified Mr Richard Darcy Roberts, acting mine manager, that he'd discovered a number of oversize rocks which still had explosives in them on top of the low grade stockpile.

After investigation Mr Roberts confirmed this and organised the area to be flagged off. During the course of a safety meeting held on 7 september 1994 at 2:00 p.m. the attendees were informed of the situation and asked to stay well away from the area.

It was decided at this meeting that Mr Alan Peter Downham would follow up with Mr Phillip Holden when he returned from leave. From the evidence before us, it would seem that some oversize rocks had been charged up and fired sometime between december 1993 and january 1994 and that the responsible person did not check the blast area for misfires before the all clear was given.

On his return to the Tick Hill mine on the morning of 12 september 1994, Mr Holden had a meeting with Mr Roberts, Mr Downham and Mr Tomlinson. During this meeting he was informed that during an inspection by Mr Dellar of the upper level of the low grade stockpile, a number of misfires had been found. Mr Holden then informed those present he would ask for assistance from Mount Isa Mines Limited.

Mr Holden then rang Mr Peter John Minahan of Mount Isa Mines and informed him that he had misfires on the low grade stockpile and had neither the equipment or the experience to deal with them. Mr Holden asked Mr Minahan if he had any people available who were capable of removing them. Mr Minahan rang back and said he had Mr Kenneth Andrew Slater with him and Mr Slater would be able to travel to Tick Hill and carry out the job. Mr Holden then spoke to Mr Slater and explained to him the approximate size of the rock and that it contained an unknown quantity of explosive.

At approximately 12:15 p.m. on 12 September 1994, Mr Slater (safety advisor) and Mr Brett Leslie McGuiness (workplace trainer) the persons nominated to assist the Tick Hill Mine left the Mount Isa mine complex by vehicle. This vehicle carried a quantity of explosives and accessories which may have been required to complete the assigned task.

At approximately 3:00 p.m. Mr Slater and Mr McGuiness arrived at the Tick Hill Mine office and after they completed the mine's condition of entry form and the visitor's book they followed Mr Russell John Tomlinson, mill foreman, to the low grade stockpile and parked the vehicle near the base of the stockpile.

Messrs Tomlinson, Slater and McGuiness then climbed up onto the stockpile and Mr Tomlinson pointed out the boulders which contained the misfired shots.

Evidence would suggest that discussions were held on the most suitable location to initiate the blast and it was assumed that the firing position would have been behind a Hymac 29 tonne hydraulic excavator which was parked about thirty (30) metres from the base of the stockpile.

A number of witnesses gave varying accounts of the quantity, type, location and state of deterioration of the explosives and detonating cord present in the immediate area.

We have concluded that the quantity of explosive present could have been in excess of 2.6 kilograms and that it had deteriorated markedly due to exposure for a period of about nine (9) months.

Mr Tomlinson left the stockpile area to arrange barricades and sentries on access roads adjacent to the area whilst Mr Slater and Mr McGuiness carried out work designed to initiate the explosives.

Their vehicle was parked behind the Hymac 29 tonne excavator and one roll of bell wire of about

fifty (50)metres in length was run out from the rock to be blasted to the base of the stockpile and about thirty (30) metres short of the excavator.

From the evidence before us Mr Slater decided to initiate the charge from that point which was out of sight from the shot.

Mr Slater called for two (2) detonators which Mr McGuiness got from a carry bag in the vehicle.

Mr Slater attached one detonator to an existing length of red cord and the other to an existing plaster charge. The detonator lead wires were connected to the bell wire before Mr Slater and Mr McGuiness retreated to the base of the stockpile and connected the bell wire to a Stinger SB 10 exploder.

Mr McGuiness requested the warning siren and after a period of about five (5) minutes Mr McGuiness initiated the charge.

At this point Mr McGuiness was kneeling down over the exploder facing north-west towards the direction of the charge and Mr Slater was standing directly behind him and about one (1) metre back.

Immediately after the blast Mr McGuiness saw Mr Slater lying face down on the ground. He noticed that his helmet had been displaced and it was a short distance south-west of where Mr Slater was lying.

Mr McGuiness called for assistance over the radio and then checked Mr Slater's vital signs and administered first aid until help arrived about two (2) minutes later.

First aid was administered at the site until the Royal Flying Doctor arrived. Following an examination the doctor pronounced life extinct at 4:50 p.m.

Cause of death:

From the medical certificate tendered:-

1. (a) Perforated heart

due to (or as a consequence of)

(b) Fractured ribs

due to (or as a consequence of)

(c) Head trauma

Cause of accident:

We have concluded that Mr Slater lost his life and Mr McGuiness was exposed to serious risk due to the exposure to fly rock from unconfined blasting and the deliberate detonation of an unknown quantity of deteriorated explosive.

Fly rock distribution was in excess of an estimated 300 metres and the accident site was 42 metres from the point of detonation.

The blast crew failed to take adequate precautions to protect their own safety in that:-

Sufficient time was not allowed for a thorough inspection of the blast site.

No action was taken to reduce the size of the blast or to confine it in any way which would reduce the quantity of flyrock.

They did not take shelter behind or under the hydraulic excavator which was located about 25 metres away.

We have concluded that Mr Slater, Mr McGuiness and the manager of the Tick Hill mine, that

being Mr Holden, and the competent persons appointed to assist him, failed to identify the potential hazards associated with this misfire.

Major omissions and contributing factors:

There is no evidence to support the belief or the assumption that Mr Slater was a competent shotfirer with demonstrated experience in the recovery or detonation of misfired shots of the type present on this occasion.

Mr Slater was not given any instructions by the manager of the Tick Hill mine, Mr Holden, or any competent person appointed to assist him.

Mr Slater nor Mr McGuiness were not appointed as shotfirers under the requirements of Regulation 5.32 (a) and (b) of the *Metalliferous Mining Regulations 1985* (as amended).

Secondary blasting by unknown persons was carried out on the Tick Hill mine low grade stockpile sometime in December 1993 or early January 1994 and there is clear evidence that a number of misfires occurred.

There is no evidence that post shotfiring examinations had been carried out and no action was taken to find or recover these misfires.

No evidence was produced which would support the requirements of Section 36 of the *Mines Regulation Act 1964* (as amended); weekly inspection of a mine.

When the deteriorated explosive was found on 6 september 1994, the area was protected by barricades, however, no action was taken to remove the potential danger until 12 september 1994.

The manager and the persons appointed to assist him having failed to recognise the potential hazards associated with the recovery of a misfired shot and deteriorating explosives, did not seek advice from experts or specialists in the explosives field.

The Tick Hill mine has no safe operating procedures in place nor were any developed for this particular event.

Transport of explosives on public roads:

At about 12:15 p.m. on 12 september 1994 a nissan pathfinder vehicle, registration number 552-AZT driven by Mr Slater with Mr McGuiness as passenger left the Mount Isa copper isa smelt plant for the Tick Hill mine.

This vehicle was carrying a quantity of explosives, which included:-

- 20 plugs (200 x 25mm) powergel pulsar 3131
- 10 detonators
- Red cord
- Bell wire
- Exploder
- Batteries of various voltages
- Other accessories

This vehicle stopped at a service station where it was refuelled and a 20 litre jerry can of unleaded petrol was placed in the back of the vehicle with the explosives. In addition to this there was a length of chain about ten (10) metres long.

This vehicle carried no fire extinguishers, warning signs or boxes designed for the cartage of explosives and no permits had been issued for the transport of explosives on public roads.

Schedule "D" Recommendations:

The recommendations of the reviewers are as follows:

1. This Inquiry has highlighted unacceptable non-compliance with statutory requirements and lack of implementation of health and safety measures to at least meet applicable standards. Consultation be initiated by company managements, employee representatives and statutory authorities to determine action to bring the health and safety practice in the industry to a high standard. The means to deal with non-compliance with relevant acts, standards and codes should be determined.

The Department of Minerals and Energy should direct the inspectorate to take firm action where non-compliance with the mines regulation act and the metalliferous mining regulations occurs. The disciplinary process should be improved and an effective penalty structure developed and implemented. The means to support this implementation of such a penalty structure should be provided.

It is essential that the Department of Minerals and Energy ensure that the frequency of mines inspections and audits by all government and union appointed officers is sufficient to contribute to continuous improvement in health and safety issues effecting mining employees.

2. A person appointed to manage any part of a mining operation who does not hold a certificate of competency as a mine manager must demonstrate a working knowledge of the mines regulations act and the metalliferous mining regulations before taking up that appointment.

3. Before taking up an appointment as "a person appointed to assist the manager" that person must demonstrate a working knowledge of those parts of the mines regulations act and the metalliferous mining regulations which pertain to their duties and responsibilities.

4. A tri-partite industry group, including the relevant government Inspectors and persons with knowledge of relevant acts, regulations, standards and work practices should be set up to develop competency standards for the storage, transport and use of explosives in the mining industry.

These standards once developed and accredited will give recognition of both theory and practical applications and should be adopted by mining legislation thus promoting safety and delivering portability of competency through the mining industry.

Until this exercise can be completed we recommend that all people required to carry out shot firing operations in accordance with Part (5) of section 5.32 of the metalliferous mining regulations should hold the relevant shot firing competency in line with the requirements of the *Explosives Act 1952* (as amended).

The mines inspectorate should review all procedures associated with secondary blasting and the transport of explosives.

Schedule "E" Report of the Warden:

I concur with the findings of the reviewers as to the nature and cause of the accident and I do not propose to deliver separate findings.

Whilst the panel are mindful of all the provisions of Section 42 of the *Mines Regulation Act* and its requirements as to our powers we have made a number of observations during this inquiry which we believe warrant comment from us.

It is necessary that all relevant documentation and material in the possession of the senior inspector of mines should be forwarded to the mining warden in order that the warden is in a position to set up the holding of an inquiry as soon as possible. In this matter the warden did not have all the material available from the senior inspector of mines, Mount Isa. We believe that had the warden had the benefit of perusing all reports and material before the inquiry commenced then it would have been made considerably shorter. It may also alleviate any concerns that may arise from certain quarters that particular evidence has been withheld which may be construed as attempting to pervert the course of justice.

The delay in the senior inspector's report coming to the attention of the warden (being a period of approximately thirteen (13) months), we feel, it totally unacceptable. This is for a number of reasons i.e. the prolonged grief to the family of the deceased, the evidence of the witnesses not

being fresh, the extra cost of calling witnesses and the time expended in trying to locate the whereabouts of certain witnesses.

It is also of concern that a crucial witness had to be called during the inquiry and could only be given 24 hours notice because one of the reports in the senior inspector's possession did not come to our attention until evidence was adduced from the third witness.

We feel that there should be strict guidelines, or instructions or an amendment to the Mines Regulation Act whereby a timeframe is set for the inspector of mines to forward all preliminary reports, documentation etc. in their possession of their investigations of an accident within a period of two (2) months from the date of such accident occurring.

We also have concerns with regard to the manner and taking of statements and their quality, in relation to this inquiry.

It is evident that the quality of the statements in general is lacking and the statements contained numerous areas of "heresay" evidence. If the senior inspector or inspectors of mines, Mount Isa are to continue to take statements from potential witnesses in relation to an accident then it is obvious that such officers require considerable training to bring the standard of statements up to an acceptable level.

They are the extent of the observations we consider need to be brought to the attention of the appropriate authority.

I do order that the physical exhibits tendered to the inquiry be held in safe custody by the mining registrar, Mount Isa for a period of twelve (12) months and then returned to the rightful owner unless he has notice of any claim and a request to hold the exhibits for any further period.

This inquiry is now closed.

8 december 1995

Last Updated 21 October 2007
