

Queensland Government Department of Natural Resources and Mines

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David Joseph FIRTH

Findings and Recommendations

The Coal Mining Act 1925

Findings and recommendations of reviewers and mining warden following an inquiry into fatal injuries received by David Joseph Firth at Collinsville coal company no 2 underground mine on 18 august 1988 warden's court Bowen Qld 15 november 1988

Before: Mr I T Killeen Warden

Mining inquiry under Section 74 of the Coal Mining Act into the nature and cause of an accident which occurred at the Collinsville Coal Company No 2 Underground Mine on 18 August 1988 which resulted in the death of DAVID JOSEPH FIRTH.

Panel:

- MR ALLAN JAMES WHITE
- MR JON SLEEMAN
- MR LEONARD FREDERICK CUMNER
- MR CHRISTOPHER DAVID RAWLINGS

Appearances:

- MR FREDERICK BARRY BIGGAM senior inspector of mines
- MR WILLIAM MEAD ALLISON, Qld Colliery Employees Union
- MR CARLTON NOTHING, Collinsville Coal Company
- MR JOHN C TAYLOR, For the next of kin, Mrs Melanie Firth and also for the Australian Collieries staff association

Witnesses examined:

- BARRY CLIVE ROBINSON
- NEIL JOHN TUDEHOPE
- THEO WILLIAM PETER JASSEN-ROESBEEK
- GLESTER MARK SELLINGS
- MICHAEL JEFFREY WALSH
- JOHN MARSHALL ROWE
- JOHN PAUL HARRISON
- WINTON GALE
- FREDERICK BARRY BIGGAM
- WILLIAM MEAD ALLISON

Exhibits tendered:

As per transcript

Findings & recommendations:

As per transcript

Findings:

Nature and cause of accident:

The deceased, David Joseph Firth, received fatal injuries when, as a mine deputy on the afternoon shift on the 18th day of august 1988, whilst engaged in a bottom coal removal process at the intersection of Level 47 and 17 heading in 32C Panel, a section of roof fell causing a fall of rib coal and subsequent injury. The mode of working adopted in 32C Panel at the time of the accident was such as to place great stress on the roof due to the massive sandstone cantilevering out of over the remnant pillars in the partial extraction area. These pillars were apparently failing because of their small size and the high stresses to which they were subjected.

Whilst the exact location of the roof failure and the fall could not be predicted in these circumstances, a review of the evidence suggests that such falls might have been expected in this area. When the roof feel through 47 level, it buried the continuous miner and those persons in its immediate vicinity. A significant factor in the consequent death of David Firth was his location adjacent to a high pillar corner of the down-dip rib side of 47 level during the extraction of coal.

In the evidence, a large number of possible contributory factors have been raised, some of which may have had an influence on the occurrence of the fall, but none of which individually could be determined to have been a factor which clearly and specifically caused the fall. The factors which contributed to the intersection failure were:

Uncontrolled transient stress re-distribution in the working area associated with partial and complete extraction in close proximity to each other.

Progressive development of cantilever failure of the massive roof sandstone.

Dilation of the remnant pillars after removal of bottom pole.

Over-widening of the intersection due to development mining and or rib spall.

There were many observations of progressive failure of roof sandstone and rib pole during extraction in 32C Panel. The relevance of these observations to the prediction of the behaviour of the rock mass in the working area was not fully understood by mine management, undermanagers, deputies and the workforce. The random robbing of barrier pillars, whilst not considered as having been a significant contribution to the intersection failure is regarded as poor mining practice. The panel finds no evidence of criminal negligence on the part of any persons or person. The recommendations of the panel are:

The geo-technical investigation currently underway in 32C panel, is required to determine the properties of the coal and the deformation of the rock mass, and distribution of stress in the working area.

The results of the geo-technical investigation be used to determine the suitability of current extraction method, and any future variance of it in 32C panel.

Prior to extraction of previously developed pillars in 32C panel, detailed mapping of roof and pillar strain indicators and geological features should be undertaken and recorded on the extraction plan.

Where a change to the extraction method is to be implemented that a stable barrier of pillar or pillars be left prior to the new extraction area being commenced.

All employees be provided with a clear understanding of the mining method and its requirements for implementation.

The manager's rules for the extraction method and roof support are to be strictly adhered to at all times.

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The mode of reporting by deputies at C.C.P. number two mine be substantially upgraded to allow for detailed and specific information on mining conditions to be accurately recorded.

The results of this reporting should be compiled and analysed so that relevant information can be communicated to the statutory officials and the work force in general.

Warden's findings:

I am also obliged to make formal findings in this matter, and I make the following findings -

Name of deceased:

David Joseph Firth

Age of the deceased:

31 years

Sex of deceased:

Male

Occupation of deceased at time of death:

Mine Deputy

Usual place of residence:

Fifth Avenue, Scottville

Date and place of death:

18 august 1988, Number Two mine, Collinsville Coal Company

Cause of death:

As determined by post-mortem examination conducted by doctor B Hodges on 19 august 1988:

1(a) Asphyxia (accidental) due to

Buried under pile of coal due to

Roof collapse in mine shaft

Without reiterating the findings as to the nature and cause of the accident, I adopt the findings of the panel of inquiry as to the nature and cause of the accident as set out previously. I further suggest that the recommendations of this panel of inquiry be implemented by the appropriate authorities as soon as possible. The inquiry is now closed. Thanks gentlemen.

Mining warden's court is closed.

Last Updated 21 October 2007

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Great state. Great opportunity.