

# Gregory George Nicholson

## Findings and Recommendations

The *Mines Regulation Act 1964* –

Findings and recommendations of inspectors following the fatality of Gregory George Nicholson at Mount Isa mine, Mount Isa on 13 March 1989. **Note this is not a mining warden enquiry, the investigation was conducted by Senior Inspector of Mines – Mr. George Hutchinson**

**Assisted by registered Mine Manger – Mr. Phil Goode**

**Witnesses examined – refer to Schedule “A”**

**Report Attachments – refer to Schedule “B”**

**Findings – refer to Schedule “C”**

**Investigation Conclusions - – refer to Schedule “D”**

**Introduced procedures as a result of the incident – refer to Schedule “E”**

### Schedule A

#### Witnesses Examined:

- Clinton Maxwell Rickard – Miner
- Bohakan Holmkvist – Miner
- Paul Gregory Howarth – Load Haul Dump Unit (LHDU) Operator
- Ralph Leonard Bowden – Grader Operator
- Norman Howard Fuller – Timberman
- Owen Raymond Casey – Locomotive Driver
- Leo John Kose – Mine Rescue Squad Captain
- Alan John Latter – Shiftboss (Area 2 Lower Levels)

### Schedule B

#### Report Attachments:

<u>Number of Attachment</u>	<u>Content</u>	<u>Tendered By</u>
1	Letter to Senior Inspector of Mines (17-03-1989)	Mr. Phil Goode
2	Letter From Senior Inspector of Mines (29-03-1989)	Mr. George Hutchinson
3	Witness Statements	See Schedule “A”
4	Photographs	-
5	Equipment Inspectors Report on LHDU	Mr. P. Werner
6	Fill Bulkhead Layout	-
7	Stope File Note – “ <i>Bulkhead Failure in K711 stope, 19C Sublevel</i> ”	Mr A.G. Price
8	Mine Planning Directive on Grouting of Diamond Drill Exploration Holes and Service Holes	-
9	Wet Fill Run Times Memorandum (19-07-1988)	Underground Manager (Area 5)

10	New Stope Filling Specification Sheet	-
11	Chronological Sequence of Major Events Related to the Fatality Investigation	-
12	Drawing No. C5-1-222 Sheet 1	-
13	Drawing No. C5-1-222 Sheet 2	-
14	Drawing No. C5-1-222 Sheet 3	-

## Schedule C Findings

**Name of Deceased** - Gregory George Nicholson

**Date of Death** – 13 March 1989

**Place of Death** – Mount Isa Mine (Area 2)

At approximately 2.35 pm on Monday 13 March 1989 Underground Mine Manager (UMM) Mr Phil Goode received notification from mine control that an influx of water was coming from K708 stope on 19C Sublevel. About 15 minutes later UMM received a further call from mine control stating that there had been a fill rush on 19C sublevel and that a LHDU had been partially buried with the operator not being able to be located.

UMM, Mining Operations Manager – Mr Bywater, Mine Services Manager - Mr Adams, Acting Foreman (Area 2 Lower Levels) - Mr Horsefield, Shift boss (Area 2 Lower Levels) – Mr Latter and Mines Rescue Squad assembled and travelled underground directly to 17 Level North crib room where the rescue squad proceeded down to K66 North Drive on 19C sublevel. Due to end of shift other parties waited in the crib room for the “IN” disc board to be cleared so that missing personnel could be easily identified. By the end of day shift all but 3 persons (Mr Fuller, Mr Broers and Mr Nicholson) had been located.

Party proceeded down K66 North Drive on 19C sub level where Mines rescue vehicle was found “bogged” in wet fill material. As the party proceeded down the drive, wet fill was noticed to be flowing down K67 RAR to 19 level haulage. The party crawled over fill in K70 North Drive and reached the southern bulkhead access of K711 stope where it was decided to be hazardous to advance further due to poor ventilation and insufficient room for safe entry. Initial suspicions indicated to a breach in the northern fill bulkhead of K711.

After returning to the vehicle the party travelled to 19 Level crib room to find out more information on missing personnel. At the crib room UMM was informed that the body of Mr Nicholson had been located in the N73 by-pass on 19 Level. About this time Mr Fuller and Mr Broers arrived at the crib room.

UMM and party proceeded to the fatality site where it was under control of the Mine Rescue Squad. Mr Latter identified the body as being that of Mr Nicholson. Access to the site was barricaded.

While waiting for Mines Department and police investigators, UMM and Mr Horsefield travelled to K72 decline where Mr Nicholson’s LHDU was located. Where it was observed that a channel of water and fill was continuing to run down K72 Decline. The LHDU had been inundated with hydraulic fill, the operators cabin subsequently was full of fill.

When UMM and Mr Horsefield returned to 19 level the Mines Department and police investigating party had arrived. This consisted of Senior Inspector of Mines – Mr G Hutchinson, Inspector of Mines – Mr R Seymour, Sergeant - B Brampton and Police Photographer – Mr C O’Brien. They were accompanied by Safety Officer – Mr K Slater, Photographer – Mr E Klemola and a Survey Team. Photographs were taken of Mr Nicholson

and the body was removed, photographs and a survey were conducted of the site and LHDU position.

#### **Schedule D Investigation Conclusions**

1. Mr Nicholson sustained fatal injuries when struck by a wave of fill and water which flowed from stope K711 on sub level 19C at approximately 2.20pm
2. Mr Nicholson had parked LHDU with bucket in tramming position at the top of K72 Decline
3. Mr Nicholson was not in the drivers cabin at time of fill rush
4. Mr Nicholson was washed into N73 by-pass by fill
5. LHDU was in good mechanical condition
6. The Fill rush occurred as a result of the collapse of K711 northern fill bulkhead
7. There were no indications that bulk head was likely to fail
8. Approximately 17,500 tonnes of fill exited K711 stope during the fill rush
9. The northern fill bulkhead of K711 stope was well constructed and exceeded standard requirements detailed in MSD – 584
10. Placement rates and quality of the fill were within current guidelines
11. The Water table in stope K711 did not rise above 18B sublevel at any time during filling
12. Drainage from K711 stope was normal
13. There was no evidence that K695 stope firing contributed to the K711 stope bulkhead failure
14. Drainage water from K701 Stope filling and extra flushing runs over the last 2 days of filling in K711 stope contributed in additional water in K711 stope However this alone would not be sufficient to cause the bulkhead failure
15. The cause of the bulkhead failure was a hydraulic connection via H712 ED2 Diamond drill hole between the water on 17 level and the bottom of K711 stope. This resulted in a generation of hydraulic head that exceeded the design capacity of the fill bulkhead

#### **Schedule E Procedures in place as result of incident**

1. Any hole that intersects a stope will be detailed in the final design stope file note
2. All declined holes which intersect a particular stope will be grouted before filling of the stope commences. All other holes will be plugged or grouted
3. Before initial fill run to a stope, a review meeting will be held to establish the filling requirements for that particular stope. This will include specifying pour and rest times, number of restarts, flushing water quantities, location and status of any intersecting holes. An individual stope filling sheet will be issued signed by the UMM responsible for fill placement and the relevant area underground manager