# HIGH GRADE ORE AND A QUESTION OF INDEMNITY

## WHEN A MINE SUFFERS BUSINESS INTERRUPTION THE ISSUE OF HIGH GRADING CAN COME INTO PLAY. THE QUESTION IS WHETHER INSURERS SHOULD ACTUALLY BENEFIT.

Mining Business Interruption insurance and the principle of indemnity is no simple matter. Take the case of a mine that has a 20 year life span and a one year interruption. It could be argued that nothing has actually been lost as over time the mine will recover the lost production. But in simple terms insurance is there to insure the lost opportunity within a defined period. Essentially protecting earnings and cash flow, allowing the mine to secure their assets, workforce and share price until they get back into full production.

Brad Ebel, Partner/President of MDD Forensic Accountants explains "when the insured loss is calculated insurers will take many different factors into account, from the obvious variable cost savings such as drilling, blasting, chemicals and fuels to vehicle maintenance, wear and tear and labour. If the mining production is only partially affected they will also consider the shortfall in terms of the average ore grade".

So take the example of a mine with two stopes, one has a six year reserve with a mined mineral grade of 2% and the other a six month reserve with a mined mineral grade of 6%. From each stope the mine is extracting 50 tonnes per day, which is producing 4 tonnes of mined mineral. An insured loss reduces the mill capacity by 50% for six months.

On the face of it that means a 2 tonnes per day loss of production. But miners are paid metal bonuses and measure their performance on metal production. They are not necessarily aware of any potential impact on the insurance payout. Instead they take a decision to exhaust the high grade ore stope. The effect is to reduce production by just 1 tonne per day (see Table 1).

**HIGH GRADING - THE LOSS**

| Description | t/day | MM grade | MM t/day |
|---|---|---|---|
| **FORECASTED PRODUCTION** | | | |
| Stope 1 - Six year reserve | 50 | 2% | 1 |
| Stope 2 - Six month reserve | 50 | 6% | 3 |
| | 100 | 4% | 4 |
| **ACTUAL PRODUCTION** | | | |
| Stope 1 - Six year reserve | - | - | - |
| Stope 2 - Six month reserve | 50 | 6% | 3 |
| | 50 | 6% | 3 |
| **VARIANCE** | | | 1 |

*Table 1: High Grading – The Loss*

Phil Durrant, Managing Director Europe, Middle East & Africa at Integra Technical Services suggests that "this can cause a difference of opinion between the insured and their insurers. The insurers might take the position that the mine has produced ore and as a consequence earned revenue. If insurers don't take credit it for this revenue generation it would mean the mine has been double paid for the ore".

Brad suggests "the insurers are correct, but the mine would lose the sales of that ore or some version of it outside the indemnity period and usually pretty quickly. Typically the high grading activity involves manipulating how they manage their ore piles or their developed stopes and they are going to experience the impact of that loss period high grading as reduced production often within a year after the indemnity".

To avoid these arguments a High Grade Ore Clause has been developed by some of the leading insurance brokers. This essentially changes the loss calculation to apply the average ore grade that would have been processed were it not for the insured loss. Taking the example set out earlier, the lost production would be 2 tonnes per day (Table 2).

Clearly, the application of the clause is going to depend on different mine circumstances. As Brad explains "if a mine had an equal mix of high grade and low grade and you have 20 year reserves of each then the application of the clause would unfairly benefit the insured". Phil concludes "perhaps this is something that should be evaluated when placing the insurance as it would appear to be a sensible clause for many circumstances and would help to reduce polarisation of opinion when adjusting an insurance claim".

**HIGH GRADING - APPLYING THE CLAUSE**

| Description | t/day | MM grade | MM t/day |
|---|---|---|---|
| **FORECASTED PRODUCTION** | | | |
| Stope 1 - Six year reserve | 50 | 2% | 1 |
| Stope 2 - Six month reserve | 50 | 6% | 3 |
| | 100 | 4% | 4 |
| **ACTUAL PRODUCTION** | | | |
| Stope 1 - Six year reserve | - | - | - |
| Stope 2 - Six month reserve | 50 | 4% | 2 |
| | 50 | 4% | 2 |
| **VARIANCE** | | | 2 |

*Table 2: High Grading – Applying The Clause*