

OPEN CAST PIT SIDEWALL COLLAPSE – QUO VADIS INSURANCE?

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ABSTRACT

Insurers are hesitant to provide coverage for Open cast Pit side wall collapse, and even the consequent damage to plant and equipment in the pit as well as the resulting interference with the mining operations. After a general introduction to relevant principles of insurance, this paper addresses some of the major reasons for that reluctance based upon the authors' extensive claims experience, examines what limited coverage can still be obtained and looks to the future possibilities. Confidentiality of sources and examples referred to in this presentation is a natural imperative so that a bibliography is not provided but reference is made to relevant sample insurance policy wordings.

1. INTRODUCTION – TAKING ON RISK

1.1 The role of the Insurers

At the risk of stating the obvious, Insurance Companies, like Mining Houses, are in business to stay in business and they do so by making profits.

The “Companies”, as they are commonly referred to, are in the business of assuming risk in consideration of the receipt of an adequate premium, which means that they are not in the habit of advancing their shareholders' funds towards providing cover against certainties of damage and financial loss.

They are, however, willing to analyse potential risks they might face and the degree of fortuity involved (or lack thereof) based upon the details of the mining operation as disclosed to them. That process might encourage them to accept a specific business risk into their books, whereas others might be rejected as unacceptably high risk and thus unprofitable.

1.2 Principles of Insurance

As a start, some relevant general principles of insurance are considered below so as to provide a basis for the analysis of the current attitude of Insurers to the coverage of open cast pits, the collapse of their side walls, damage to the in-pit plant and equipment and the resultant financial loss. These will hopefully also provide an insight into why Insurers appear to adopt a perceived hard line when claims arise and how that position can be dealt with.

It is an age-old accepted tenet of Insurance that, by taking on the risks of the many, Insurers should be in a position to more than meet the claims the few.

Difficulties arise for the Companies in holding to this principle when the “many” form part of a group whose claims are sufficiently frequent and large enough that their combined premiums are too little to cover the associated total exposure to risk.

1.3 Insuring the larger risks

When it comes to a large risk, such as exists frequently in the mining world, few if any Companies have the financial capacity to assume the total risk on their own. Thus, the insurance Brokers acting on behalf of their Client place the business with a number of so-called Co-Insurers, each of whom carries only a reasonably small proportion of the risk at large. Even then, most of the interested Companies tend to lay off a significant part of their risk to the “professional” insurance market of Reinsurers.

It thus often happens that there are several direct Insurers listed on a Policy Schedule as Co-Insurers, with the “Leading office” carrying the greatest proportion and being referred to in short as simply the “Lead”. The names of the Reinsurers standing behind their individual “Cedant” Companies do not normally appear on the Schedule.

1.4 Large risks in a hard market

In the historical cyclic hard/soft Insurance markets, with particular hardening towards the latter quarter of the 1990’s and the early part of the new millennium, such as those following 9/11, Brokers encouraged their Clients that had not previously done so to assume greater proportions of the risk themselves. That was undertaken in a similar way to the larger Groups that had traditionally responded to increasing Policy deductibles (the first amount payable by an Insured in the event of a claim, also referred to as an “Excess”) and rising premiums by forming their own “Captive” insurance companies to which each wholly owned subsidiary of the Group contributed a share of the premium.

Such a Captive would limit its own exposure to a maximum annual loss, or Aggregate Deductible beyond which it ceded its risk to interested Reinsurers, giving up a portion of its self-funded premium in the process to those Underwriters. Not infrequently, Captives used to be established offshore with some tax advantages.

The false impression that that created was that the Captive would meet claims up to its annual Aggregate limit without adjustment in the normal way in terms of the requirements of the Policy. In other words, it was thought by the uninitiated that there was free money up for grabs to help them ease the consequences of the inevitable and of poor maintenance.

Nothing could have been further from the truth.

- (i) Firstly, each subsidiary in the group had already contributed a not insubstantial sum to fund the Captive that was essentially a non-profit

- organisation, returning uneroded contributions to the subsidiaries at the end of each year of insurance,
- (ii) Secondly, cover was provided by the Captive on exactly the same basis as an external Insurer or group of Co-Insurers would do, i.e. via a Policy with words specifying what was covered and what was not, etc.
 - (iii) Thirdly, the Reinsurers behind the Captive demanded that the handling of claims within the Captive's limits carry over seamlessly to their "layers" in the event of the Aggregate being eroded by the very large claims.

Nevertheless, this structure introduced an extra facet of good corporate governance into the management of the group's business. It also allowed the Captive to invest its funds until claims were met, thereby enjoying the interest benefit that would otherwise have accrued to the Insurers.

1.5 Cell Captives and Alternative Risk Transfer (ART)

Some larger international Insurers saw a business opportunity in the early 1990's to recover lost revenue by setting up their own Captives and offering individual managed portions of it, or cells - called Cell Captives - to Groups that were not that massive or did not wish to carry the costs of set-up and administration of a stand-alone Captive.

Unique financing arrangements were created by those Insurers to spread the risks involved via a process of Alternative Risk Transfer, involving substantial financial institutions.

1.6 An overview

It will be gathered from the above that the whole approach by the Insurance market is one of acceptance, but spreading and management of risk by those who are not themselves directly involved in the core businesses of their Insured's yet wish to profit from risk assumption.

2. THE POLICY

2.1 As a formal Contract

It is not unusual for inexperienced Public to view the insurance of property, profit and lives as an almost "necessary evil" and expense without much interest being taken in what the respective Policies actually offer, what requirements an Insured faces and what Policies do not cover, that is until the crunch happens and damage or loss occurs or, more disastrously, lives are lost.

There is often also scant recognition that the Policy is a formal Contract between an Insurer and an Insured and that it isn't a case of "have cheque book, will pay irrespective". Both parties have rights which demand respect.

2.2 Policy forms

In the short term (i.e. non-life) insurance business world there are many different types of Policy that cover so-called “insurable interests” against damage and loss due to the operation of Insured Perils (e.g. fire, explosion, wind, storm hail, subsidence, etc.) as well as from damage that occurs suddenly and in unforeseen manner (e.g. Accidentally or via Mechanical or Electrical Breakdown), and as protection against an Insured’s liability to Third Parties (i.e. primarily those not insured against the same perils of damage under the same Policy).

Wide cover under all of these conditions together is available via “All Risks Cover”, but in certain instances Insurers offer specific covers to cater for particular risks.

3. MINING RISKS

3.1. Major distinctions and difficulties

Insurers perceive underground and surface risks as being rather distinctly different and as those in the mining industry will naturally understand.

In some instances, however, the distinction is not that clear. A case in point was the inundation of an open cast coal mine pit during Cyclone Demoina in the 1980’s. A usually quiescent small river became a raging torrent that burst its banks, pouring water into the adjacent pit at a torrential rate.

Had matters ended there it would have been bad enough, but would have been dealt with as a surface-type risk in terms of the Policy conditions and exclusions.

However, the depth of the pit had increased over the many preceding years of mining operations with the use of draglines and in-pit face-shovels to the point where exposure to the underground workings occurred that the addits in the lower side walls had to be plugged with concrete.

During the cyclonic attack the large water head created by flooding of the relatively deep pit initiated leakage past the plugs, which grew in intensity with time. Finally, the rate of leakage reached the point where the plugs were no longer adequate barriers against inflow. Consequently, areas at that level where mining operations were still underway became flooded leading to damage and a significant outage period.

The Insurers had to some extent previously realised what risks were inherent in South Africa in the potential flooding of underground mine workings through man-made openings, thereby linking surface and underground areas to loss. That was a risk that they did not wish to take and they accordingly worded their Policies to exclude

“underground flooding through man-made openings”.

It can be appreciated that in the specific example quoted above, whilst the addits had undoubtedly been created by man, at the time of the event of flooding they were no

longer openings in that they had previously been closed by plugging. Needless to say, intense negotiations took place between Insurers and the Insured, with the Broker participating actively, to reach a compromise settlement.

3.2. Unacceptable risks to Insurers

Time does not permit an exhaustive survey here of the risks that Insurers have come to reject in the sphere of mining as too great for the available premium. But in the context of the present Symposium, attention will be focussed upon open pit side walls and the risk of collapse.

Increasingly over the last several decades, Insurers have grown to view open pit sidewalls as very risky areas of mining operations all over the world. As such, local Insurers have found themselves without adequate backing by their erstwhile reinsurers and cover for such eventualities has largely been withdrawn.

Internationally, more and more stringent terms and conditions were incorporated into their Policies by those Insurers and Reinsurers that were still willing to remain in the market, because collapse at some stage was seen to border on the inevitable.

A few years ago, some local Insurers, still with the respective Reinsurers involved, were finally forced to admit defeat when a substantial side wall collapse occurred at a mine in one of South Africa's northern neighbours, giving rise to large actual losses and a contentious settlement of the resultant claims. For that reason, amongst others, no major local Insurer currently offers cover as the Lead for such eventualities. Likewise, major overseas Underwriters have withdrawn their products from the marketplace.

3.3. Other matters of principle

Land per se is not insurable property, neither are ground, soil or rock, but improvements to land can be. To the entity that incurred expense in bringing about improvements, there is corresponding *insurable interest*.

However, a hole in the ground is not insured property, no matter that it costs to make that hole. So the pit itself is not insurable. On the other hand, benches, roads for haul trucks with all of their infrastructure, and the like can be insurable in principle, especially where overhead electrical power lines have been installed for the processes of haul truck downhill regenerative braking and uphill traction assist.

To the extent that such improvements can be accidentally damaged (e.g. by fire, explosion, impact, collision and the misnamed "Acts of God") cover has been provided historically by Insurers.

3.4. Exclusion of cover for highwall slip

Where there are pit highwalls, the risks are perceived to be untenably large and the Policy will exclude such property with the possibility of limited risk buy-back for other associated items.

An example of the above is provided by the following specific exclusion wording:

“This Policy does not cover open pits and any other open cut excavation, but this exclusion shall not apply to permanent roadways situated within an open pit or to plant and equipment installed or operating therein and for which a value has been declared to the Insurer”.

Other blanket exclusions may be more restrictive, such as:

“This Policy does not cover.....open pits and any other open cut excavation.”

Generally it is not too difficult to obtain buy-back cover for plant and machinery in the pit, although certain reinsurers question why that plant and machinery is kept in operation in a pit close to a high wall that is either already showing signs of slip or where the angle of the wall is excessively steep.

Roadways cover tends to be more difficult to obtain.

As can be seen from the above, Underwriters exclude cover for highwall slip by excluding the actual open pit.

Cover would be excluded totally if there were specific problems at a particular pit.

3.5. The actual loss from highwall slip

Other than the plant and machinery that can be damaged under circumstances of highwall slip, a perennial issue of debate surrounds the question of whether or not ore values adjacent to the pit are lost with slippage.

To an Insured, the outage caused by slippage often results in a slowdown in mining revenue flows. That may or may not result in permanent loss of Insured Gross Profit/Net Revenue during the period that would be covered by the Business Interruption section of an Assets All Risks Policy, were it to cover such eventualities.

For example, if no damage occurred to the in-pit plant and equipment in the process, and if the slip face is not in immediate danger of collapse, the fact that ore has fallen to the bottom of the pit at the sidewall means that easier access may be possible without higher up mechanical removal or blasting. Also, the values in the collapsed material have not actually been lost and may well be recovered during the maximum period provided for by the Policy, known as the “Maximum Indemnity Period”, often ranging from 12 to 24 months for mining risks.

Another issue that gives rise to significant debate is whether the costs of removal of “debris” in the form of slipped soil or rock following storm or collapse is covered. Cover for debris removal is common in Assets All Risks Policies for Property Damage. But what often escapes attention is that the debris is commonly defined as *Insured Property* that has been displaced as a result of the operation of an *Insured Peril*.

Since the pit, its rock and soil are not Insured Property, even if slip occurs as a result of very heavy storm and water ingress which are Insured Perils, the fallen or swept material from the side wall is likewise not Insured Property. It has thus often been contended by Insurers that costs of removing that material are not covered, nor are the financial losses resulting from the interruption of mining operations while the material is being removed.

4. THE WAY FORWARD

In the current insurance climate, the only bright light on the horizon is that so much effort is being put into understanding the stability of rock slopes, the outcome of which would presumably be to improve operating stability to the point where the risks to both the operator of the pit and the Insurers can be reduced to acceptable and measurable levels.

It is thus with appreciation that the author listens to the technical presentations at this Symposium with a view to reporting to colleagues in the Insurance Market that a reasonable risk level may be achieved in the foreseeable future.

