JLT

REDUCING THE IMPACT OF LARGE LOSSES IN THE MINING INDUSTRY

Loss planning, scenario testing and getting insurance right

INTRODUCTION

Losses in the mining industry can be very significant, consuming valuable time and resources – especially when insurance does not respond as expected. While many of the causes of large losses are inescapable, their effects can be mitigated and risks transferred effectively.

The industry is adept at doing this; mining companies have long taken a sophisticated approach to managing risk, and this sophistication is only increasing as firms – both large and small – take an ever more proactive approach to risk reduction and loss mitigation.

In this white paper, we look at how mining companies can take their risk reduction and loss mitigation procedures to the next level. To do this, we consider the following:

- Major losses: common causes – frequent contributors to major mining losses, backed up with actual examples.
- Building resilience – how to use loss planning and scenario testing to minimise exposures.
- Getting insurance right – how to ensure that insurance is fit for purpose, as well as an update on current market conditions.
- Taking action – key learning points and suggested actions.

Adverse weather, the remoteness of many mining operations, supply chain disruption, human error, cyber risk, and environmental and safety investigations all feature in the claims highlighted in this white paper. We explore how the impact of such risk factors can be minimised through loss planning and stress testing of insurance policies, which is becoming increasingly essential.

Another recurrent theme is the degree to which insurance cover does not always mirror the actual claims experience. We'll outline how gaps in cover, inappropriate wordings and insufficient limits can be avoided.

Finally, we look at how the current soft insurance market conditions and benign claims environment present an excellent opportunity for mining companies to prepare for large losses in future, including capitalising on the breadth of cover currently on offer.

MAJOR LOSSES: COMMON CAUSES

While there are a wide range of reasons for large losses in the mining industry, there are several risk factors that frequently escalate or complicate claims, and give rise to unexpected coverage issues.

EXTREME AND REMOTE LOCATIONS

By their very nature, mines are frequently in remote, hard-to-reach locations, and often suffer extremes of weather. For example, in northern Canada, some mines operate in extreme cold, with only ice roads for access, while some Australian mines operate in temperatures of up to 45°C in the summer months.

Such extreme weather conditions and remote locations have an important bearing on mining risks, and on how disruptive a claim will be to a mining operation.

For example, when mines are in remote locations, supplying the spares, people or equipment needed to mitigate a loss may take longer, or come at an increased cost. “In countries where there are issues with seasonal extremes, mines will need access to materials and spare parts, which can be an issue,” says Ian Clendenning, director and engineer at mining loss adjuster Lloyd Warwick.

Repair times can also be impacted, he says. “For example, if a processing plant were damaged by a fire, carrying out repairs in extreme cold or heat may be impossible, leading to delays in carrying out the work and much longer interruption periods.”

SUPPLY CHAIN DISRUPTION

Supply chain disruption is another significant feature of many larger mining claims. Revenues can be severely impacted by damage to infrastructure, such as railways hit by floods or blocked ports.

For example, the iron ore mines of the Pilbara region in Western Australia are spread over 500km^2 and all feed into a small number of ports through a network of railways. “The supply chains in the north of Australia are particularly vulnerable,” says Bill Green, managing director at Lloyd Warwick. “We have seen claims where train wagons have derailed and track has been damaged, or where bridges have been washed away by storms, taking out the only link to port for days at a time.”

Green also cites the example of a mine in Africa, where obtaining supplies of chemicals to process gold depended on access by roads that were often impassable.

HUMAN ERROR

Human error is another important driver for major mining losses. A strong focus on protecting human life drives robust risk management in mature markets, but in countries where health and safety culture is less developed, this is reflected in losses.

Patrick Plaisted, managing director and underwriter at International Mining Industry Underwriters, says: “Having the appropriate skills in place remains a challenge for some companies – especially in certain parts of the world, where there is

considerable pressure to employ local staff. During the recent boom period, the demand for labour meant that some mines had little option other than to employ less experienced people, which increased the potential for things to go wrong."

Many claims are the result of basic mistakes or not following agreed procedures. For example, a number of previous fire losses have involved a human element, such as employees smoking or a process involving the application of heat being carried out unsafely.

Chris Stevenson, senior partner at JLT Mining, cites an example where a mining client suffered a USD 70 million property damage and business interruption loss because a workman failed to use standard precautions when working on a welding repair.

In contrast, when a contractor started a fire with a blowtorch at another mine, the mine was able to limit its loss to USD 7 million by borrowing spares, people and other resources from a nearby mine to resume operations within 30 days.

"Clients have differing views on the level of detail they put into planning for potential losses, but in this case, the mine was able to draw on its risk management resilience and act quickly," says Stevenson.

REGULATORY SCRUTINY

Increasing regulatory scrutiny – most notably for environmental and health and safety issues – is the big emerging issue for mining companies everywhere, according to Plaisted.

"There is no doubt that environmental and health and safety regulations will have a significant impact going forward," he says. "You can't pollute and you can't harm people – and mines must expect the intervention of regulators if they do. That's the very clear message."

One outcome of this regulatory scrutiny is that business interruption periods are being significantly increased by the actions of regulators after losses that have any element of environmental or safety breach.

In one example, in 2014 a tailing pond on the Mount Polley copper and gold mine was breached, resulting in 10 million cubic metres of contaminated water leaking into Polley Lake in Canada. An independent investigation found that a lack of foresight in planning for raising the dam to accommodate higher levels of tailings material was a contributing factor. The mine has yet to reopen at the time of writing (July 2015), and future production is dependent on regulatory permission to restart mining at the site.

EMERGING CYBER RISK

Cyber risk is a growing risk factor as the mining sector comes to rely more on technology and automated equipment. This increasing reliance on technology brings great benefits, but also significant risks as hackers can target mining companies' systems and potentially cause actual physical damages. This is a step forward for cyber-attacks, which have traditionally stayed within the digital sphere - for example, causing disruption to online systems or websites, or stealing customer details.

It was reported in late 2014 that hackers had infiltrated a steel mill in Germany, tampering with a blast furnace and ultimately causing "massive damage". This was only the second confirmed case of a cyber-attack causing physical damage. The first case was caused by introduction of the Stuxnet worm, a sophisticated weapon that was used to sabotage equipment at a uranium enrichment plant in iran, causing the centrifuges to over speed and resulted in catastrophic damage to several units. It is not unrealistic to imagine this scenario taking place in the mining industry with potentially large physical damage losses to milling equipment but even greater business interruption exposure. In addition, the wider use of remote controlled equipment leads to potential hacking and cyber exposures.

BUILDING RESILIENCE

Many of the losses highlighted in this report could have been minimised through loss planning and scenario testing, which help to ensure that insurance and mitigation measures are fit for purpose when it comes to a large claim.

LOSS PLANNING AND SCENARIO TESTING

Loss mitigation planning and scenario testing can demonstrate how insurance coverage and claims processes will respond to specific major loss events. They can also help to identify any gaps in cover and make the insurance spend more effective.

Jon Haysom, head of claims for JLT Mining, says: “Only when large losses happen do the deficiencies in policy wordings and mitigation surface. As robust as your risk management might be, you will never know exactly how resilient your operations are until you are hit by a large loss.”

“Therefore, it is crucial to learn from losses and claims in the market and ensure that insurance policies respond as they should. Even where they are not covered, loss planning enables mining clients to know where they stand and not rely on ambiguous wordings and market relationships.”

Nick Entwistle, partner at Echelon Claims Consultants, adds: “We have seen clients that are confident in their supply chain analysis, but when they tested it against their insurance, they discovered weaknesses and were forced to re-evaluate. More often than not, scenario loss planning will uncover any misunderstandings or mismatches in cover, demonstrating how cover will respond in a loss situation. This can lead to discussions on amendments to cover, increased cover or plans for loss mitigation.”

“Planning for losses is about creating an ethos around the claims process, rather than a way of capturing every potential loss scenario,” says Adrian Brennan, partner at Echelon Claims Consultants. “Often it is the most obscure of risks that were not even on the horizon that create the biggest problems. But through loss planning it is possible to cultivate an organisation’s ability to deal with abnormal situations.”

The mining industry has become considerably more proactive in its approach to understanding and planning for risk reduction and loss mitigation in recent years, says Plaisted. “Larger companies have extensive risk management operations and use well developed, sophisticated practices to audit their major hazard exposures.”

Smaller mining companies may not have these resources but are increasingly seeking the input of external consultants. “We have carried out extensive work with many mining companies on risk identification and mitigation, and while some are better than others, there is a lot of very positive action,” he says.

“One benefit of today’s competitive insurance market is that insurers are looking to differentiate themselves and will be more prepared to help clients with scenario planning, as well as policy testing and claims protocols,” says Haysom.

USING DESIGN TO MITIGATE RISK

Design can be skilfully used to minimise risks and potential losses – particularly when it comes to property claims. The causes of property claims tend to be weather, machinery breakdown and fire, and all three can be mitigated in the design stage of a new mine, says Stevenson.

For example, the layout of a mine is critical to its resilience to weather. The location and design of levies and the proximity of an underground mine to an open-pit mine can have a huge impact on the effect of flooding.

Insurers and their mining engineers can be a good source of advice on best practices during the planning stages of a new mine. Stevenson says that in one case insurers advised a mining client to relocate fuel tanks away from the processing plant, while in another the insurers suggested moving an explosive store to a new location because the shockwaves from a potential explosion could have caused considerable damage to the mine.

LEARNING FROM INDUSTRY CLAIMS DATA

The insurance industry has been slow to capture industry-wide data on losses and, in the case of mining, there is no single point of access to claims data, nor is there a common method of reporting losses.

However, the Mining Insurance Group (MIG) – a non-commercial co-operative of mining risk managers, insurers, brokers, lawyers and claims adjusters – is in the process of establishing a database to provide accurate data on mining losses.

"Currently, if there is a rash of claims we see lots of speculative estimates and wild guesses in the media, but these are never revisited with accurate information on the losses," says Plaisted.

"An industry loss data base will provide actual data on the cost of repair and the true scale of the interruption period. It will be the first real opportunity for mining companies to understand the actual impact of the large loss events experienced by their peers."

MIG is also planning an annual forum – similar to those in the offshore energy and power generation sectors – where industry practitioners can learn from collective insurance and claims experiences.

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GETTING INSURANCE RIGHT

As well as using loss planning and scenario testing to foresee potential issues, mining companies need to ensure that they have the right insurance cover and processes in place.

ARE YOU COVERED?

Large losses can be complicated by issues with insurance, where cover does not respond as anticipated or the claims process does not proceed as expected. "One of the biggest causes of trauma for mining companies is when they face a claim and think they are insured, only to find out that they are not covered," says Green.

Many mines in Queensland, Australia that were affected by flooding in 2008 and 2010 found that they were uninsured or ended up in litigation with their insurers. One issue was that many did not have policy extensions to cover the cost of removing water from the pit.

Therefore, it is crucial that mining companies work closely with their brokers and insurers to understand exactly what they are – and are not – covered for. And as insurance clauses and wordings can be generic across industries, mining companies need to ensure that their cover reflects their specific risk requirements, says Brennan.

Even with well-trodden causes of loss, such as adverse weather, understanding whether an insurance policy would be triggered is not always straightforward. "We had a claim where a mining site in Australia received heavy rain, but there was very little material damage or business interruption. However, there was a cost for treating water sitting on the site," says Green.

He adds: "There are many problems that occur that are just not considered at the time of placement. For example, we have seen cyclones hit and wash away tackle and soak stockpiles, which means they then can't go through feeders."

Some past losses have revealed that indemnity periods were woefully short for large, complex business interruption claims. Other losses have highlighted that some of the costs of dealing with a large claim were not covered by the insurance policy, even though such cover may have been readily available in the market (potentially at little or no extra cost).

Brennan adds that, as the mining industry is constantly changing, with falling commodity prices reducing pressures in some areas of operation, but increasing them in others, it pays to carry out a review every two to five years (or at critical times in the commodity pricing cycle) to make sure that wordings and policy limits are fit for purpose.

AGREEING CLAIMS PROCESSES UPFRONT

For many companies a major claim – in particular one that is a threat to the company's balance sheet – will be a rare event. However, planning for making a major claim will pay off.

"It's not only about planning for the causes of loss, but also about how the claim process will run," says Brennan. Some insureds will be able to establish claims processes with their insurer and broker upfront and have these embedded in their insurance contract.

For example, it may be possible to restrict an insurer's ability to use reservation of rights – an instrument that enables an insurer to reserve the right to refuse liability for a claim pending further enquiries, adding time and cost to the settlement process.

THE IMPACT OF MARKET CONDITIONS

Finally, mining companies should make the most of the current market conditions. "The good news is that mining companies can enjoy lower premiums in the current insurance market, but they need to be prepared for more scrutiny of claims," says Haysom. In a softening market where underwriters compete on price, attention must be paid to the track record of individual markets claims payment to ensure this is not put at risk - not all markets are the same and clients should ask their brokers for case studies and performance track record.

"If insurers are writing to a minimum premium with the slimmest of margins, it follows that there will be more scrutiny of contract wordings and less flexibility when it comes to large claims." He notes that it is also harder to get insurers to agree to ex-gratia payments in today's market.

"Premium rates are almost at rock bottom. But instead of pushing for rate reductions, mining companies have an opportunity to seek broader cover – especially where it may help to improve their position if they are unfortunate enough to suffer a large loss," he says.

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TAKING ACTION

As we have covered in this white paper, mining risks are complex, high value and often unpredictable, so the more prepared that mining companies are for large claims, the better. There are tangible benefits to be gained from loss planning and scenario testing, which can help to ensure that risk mitigation and insurance is fit for purpose.

In terms of the key learnings from this report, we recommend that mining companies:

1. Take a strategic approach to managing risk. Losses will always happen in the mining industry, but with a proactive approach, companies can significantly limit the scale of those potential losses.
2. Familiarise themselves with the factors that are frequent contributors to major losses – including remote locations, human error and supply chain disruption – and work to mitigate those factors wherever possible.
3. Make sure that their insurance cover accurately reflects their whole range of exposures, including those that are unique to the mining industry.
4. Talk to their brokers and insurers to make sure they are absolutely clear on how their policy would respond in the event of a claim.
5. Agree claims processes upfront.
6. Use loss planning and scenario testing to help ensure that insurance and mitigation measures are fit for purpose.
7. Think about how they can minimise risks and potential losses at the design stage of any new site – with advice from their insurers, where appropriate.
8. Make the most of the current good insurance market conditions, including capitalising on the breadth of cover and reasonable premiums on offer.

While implementing these points requires some commitment on the part of mining companies, the potential rewards in terms of limiting losses – as well as lengthy, expensive site closures – are significant.

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