Hans Schollenberger

Emerald Risk Transfer (Pty) Ltd

As the leading corporate underwriter in the South African market, Emerald Risk Transfer has built up a substantial share of mining accounts on the African continent, particularly within the SADC region.

Mining, by its very nature, is a risky business. Operating with explosive equipment and digging into the earth to extract valuable minerals puts man and machine in potentially dangerous situations. If you combine the risk of bodily injury and/or loss of life with the risk of damage to property, then the need to safeguard human life and prevent lost-time injuries often results in improved physical protection of property.

Underwriting on behalf of Santam Ltd, Emerald is a leading provider of corporate property insurance services to commodity producers to surface as well as underground mining operations, both in South Africa and across the African continent. In addition, Emerald offers wide-ranging experience and skills required to effectively evaluate and provide coverage for mining risks.

Emerald currently writes business in 17 African countries and is exploring opportunities further afield, as they have the ability to write standalone mining business in the Middle East and South East Asia, with a maximum line of USD20-million per risk.

Given Emerald's relationship with Lloyd's of London, they would additionally be able to provide A-rated capacity on a per risk referral basis.

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"Emerald has the unique ability to combine the variety of technical, underwriting and reinsurance skills of their employees," says Hans Schollenberger, Executive Head: Underwriting and Risk at Emerald. "Our African footprint enables us to provide solutions-oriented insurance backed by market-leading claims expertise and the solid financial credentials of our parent company, Santam Ltd."

It's this very combination of factors that not only enables Emerald to lead complex pan-African programmes, but also puts the company ahead of the pack in tailoring workable solutions for its local clients.

"The specific exposures or risks can vary substantially from mine to mine, but there are common areas which require consideration across most operations," says Glenn Stoneham, Portfolio Executive of Emerald. Stoneham cites the following key risks:

- Loss of power as a result of damage to supply equipment.
- Breakdown of critical plants, such as mills and transformers.
- Underground fire, explosions or seismicity.
- Loss of critical, high-angle, or underground conveyors.
- Fire or explosion risks associated with furnaces.

"The biggest financial risk facing mines, however, is not the obvious physical damage but rather the resultant interruption or stoppage of the business," adds Stoneham.

"Risk assessment involving mining needs to be approached methodically and considered holistically. This means the understanding of specific inherent risks which exist at the type of mine being assessed (underground or opencast), as well as geological issues and exposure to natural perils," says Stoneham.

"The assessment must also survey the entire process at the mine from ore extraction, including access and method of extraction, to the final product, as well as ancillary facilities and external dependencies such as the supply of power."

These assessments need to take into consideration the adequacy of physical protections that exist throughout the process, but should also identify any possible inefficiencies which could give rise to bottlenecks, as well as list all contingency plans in place.

"The proper assessment of these types of risks is highly specialised," says Stoneham. "The process should not only perform the role of an assessment for insurer acceptance, but should also add value by assisting clients in their management of risk and the mitigation of potential losses and consequences thereof."

Over the last several years, Emerald has seen a number of claims coming through from underground hard-rock mines, both in the gold and platinum sectors. The largest losses were mainly due to underground fires, with three substantial underground conveyor fires being reported.

"Underground conveyor fires are particularly problematic as the emissions of toxic fumes from burning rubber are often carried into the mine by the conveyor decline which normally serves as a forced draught ventilation intake." Says Schollenberger.

Seismicity also remains a substantial risk, particularly for deep level gold mines, and earthquakes can be very destructive if they affect shaft infrastructure.

"Underground mine or roof collapse does not only occur following seismic activity - discontinuous clay layers in pillars can have the effect of accelerated deterioration and scaling of pillars to the point where regional collapses occur," says Schollenberger.

In terms of surface operations, smelters and arc furnaces, in particular, have reportedly been the subject of a number of recent claims, ranging from fires on

elevated conveyors to incidents involving transformers.

"One of the more noticeable trends is the enormous cost pressures that most commodity producers are under," says Schollenberger. "These have different implications for different mines, but fundamentally, Capex or funding for projects, spares and even maintenance is becoming difficult to justify some operation of so-called marginal mines. Should this continue for a length of time, then a deterioration in the reliability and operability of critical machinery is likely to be the outcome, with increased probabilities of breakdowns and damage events, which can lead to substantial business interruption losses."

The reduction in capital expenditure in many underground mines has also resulted in a decreasing ability to convert resources to reserves, which in turn, affects future production levels.

A major challenge for the industry is the remote location of mines and access to infrastructure. Bulk commodity producers, such as those mining coal and iron ore, are often dependent on rail and ports, but these mining companies may not own nor have the responsibility to insure these facilities. Incidents such as a minor bridge derailment can disrupt traffic to the extent that several commodity producers suffer Contingent Business Interruption losses as they are not able to move bulk commodities to an export harbour.

Glenn-Stoneham

Mining companies also need to be able to cope with local weather extremes, as that can lead to flooding or prevent access to mining operations, something which finds coverage under Emerald's All Risks Asset Policies.

"It is clear that a number of these underwriting considerations will reflect on the coverage, rating and deductible levels that would be set appropriately for each of the risks presented to Emerald," says Schollenberger, who still sees potential in the local market. "Inasmuch as the commodity cycle is hopefully bottoming out, a number of mining projects are going ahead and – with robust economies of scale and quality deposits – they may well be able to take advantage of an upturn in the commodity cycle when they come into production. As we see, with the emergence of mining companies focussed on Africa, there is little doubt that vast mining potential has yet to be unlocked, and that mining will remain a driving force for a number of African economies for many years to come."

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