Mining closures are all about planning

Coupled with the global movement of protecting the environment and leaving mining communities better off, mine closure is a complex process rather than a single event.

“We don’t have a single case study of a successful mine closure in South Africa, because it is more complicated and more costly than mining companies ever realise,” says Robert Appelbaum, partner at Webber Wentzel. As a result, South Africa has 6,000 abandoned mines.

Picture: Eden Project/Tamsyn William

Some of the reasons for this are inadequate stakeholder engagement, concerns around residual risks and therefore liabilities and the web of legislation involved. Mining majors with the capacity and resources to close successfully have traditionally sold their assets to junior miners that don't have the resources or capacity to close successfully.

Legalities

The Financial Provisioning Regulations of 2015 have prompted mining companies to rethink how to effectively plan for closure. These regulations are a game changer for the industry.

This law requires mining companies to produce a:

- **Risk assessment report**

  To determine the potential financial liability associated with the management of latent environmental liabilities post-closure, and considers long-term water treatment risks.
- **Annual rehabilitation plan**

  Reflecting activities undertaken for concurrent rehabilitation and remediation of the site/operations, year-on-year.
- **Final rehabilitation plan**

  Identify and assess final post-mining land use for the operation, in addition to infrastructure and activities to be decommissioned/remediated upon closure.

There is a web of inter-related laws that underpin effective mine closure planning that are aimed at liability reduction and holistic post closure sustainability.

“The financial provisions required to facilitate a successful mine closure and the accuracy of that forecasted amount needs to find a home in a strictly regulated and audited space if South Africa has any hope of changing its track record. It requires an integrated closure planning process to leave behind a sustainable ecosystem that addresses the inherent liability aspect of mine closure,” says Garyn Rapson, partner at Webber Wentzel.

Pieter Scholtz of Aurecon says that: "historically the main focus in mine closure planning was environmental rehabilitation but unless stakeholders such as the community, government and unions are also involved, a mine closure will simply not work.”

Global success stories

There are numerous examples of successful mine closures around the globe. An almost surreal example of thinking differently would be the Eden Project in Cornwell, England where an integrated approach turned an open pit clay mine into a profitable business with the largest indoor rainforest in the world comprising over 1,000 plant species, Cornwall's first undercover ice rink and a wedding and conference venue.

“It is about taking the long-term liabilities that are commonly associated with a mining project and turning them into rewards that add value and save on costs. A radical change in thinking is required where every mining company starts or undertakes a mining project with an exact and clear picture of what the end of the project will look like,” says Stephan Herb of The MSA Group.

“As we have heard most in attendance are very passionate about getting this right. Key to navigating through all the many challenges will be our ability as an industry and associated supporting services to collaborate and plot a responsible way forward together,” concludes Ben Burnand of The MSA Group.

The discussion was part of a mine closure workshop hosted by Aurecon, The MSA Group and Webber Wentzel.

For more, visit: https://www.bizcommunity.com