

## Mines need to step up on sustainability

The mining industry is feeling the heat from government, communities, investors, environmental organisations and even consumers to implement sustainable business practices and reduce the impact of mining on the environment throughout the entire lifecycle of the mine.



In a discussion, under the auspices of The Joburg Indaba leading experts on best practices, what it takes to mine responsibly and what to consider when evaluating the sustainability of a mining project.

In his keynote address, Marius Keet, chief director: water quality regulation, Department of Human Settlements, Water & Sanitation, provided a concise picture of the current state of water quality in SA. “Everyone knows water quality is a development issue affecting social, economic, industrial, agricultural, health and many other sectors and it is in a very poor state in SA with 44% of waste treatment plants in SA not critical but facing serious challenges and a conservative figure of R49bn is needed for mining rehabilitation alone.

“The prevailing issues include weak legislation, poor mining/environmental practices, new mines proposed/developed in sensitive catchments, a lack of funding and mine closure either absent or weakly implemented.”

His proposed solutions focus on fast tracked implementation - of the integrated water quality management strategy and the waste discharge charge system; an environmental levy on the mining sector; data management with improved and innovative technology; the annual WQM Report for public scrutiny to show who are the real polluters, as well as success

stories; an Anti-Pollution Task Team (per instruction of minister and deputy minister); and improved regulation of the water value chain.

During the panel discussion Khetiwe McClain, CEO, Mine Closure and Rehabilitation Solutions proposed that mines think about the outcomes of their closure when still in the design and planning phase: “All plans must be aligned to the final closure plan including collaboration with other mines in the area. This cannot be done in isolation as it impacts on the entire area, not only the individual mining site, and rivers don’t adhere to mining boundaries. Social and labour plans are critical from the outset.”

Mongezi Veti, head of sustainability, Exxaro Resources, agreed: “It starts with good leadership. We need to understand a mining company doesn’t exist in isolation and has to ensure efforts at environmental stewardship. It’s not enough to simply comply; we are obligated to do more so we impact positively on society.”

## A mosaic of different land uses

“Different mines invest differently in the problem – some simply tick the list while others take a keen interest in sustainability,” Warren Adams, managing director, Jaro Capital pointed out. “There is a need for stakeholders to have a massive mindshift to becoming more responsible.”

Nikisi Lesufi, senior executive: environment, health and legacies, Minerals Council South Africa, suggested implementing new technologies: We can reduce the volume of waste and the toxicity of waste by using new technology available to us. Our reporting systems are not up to scratch; if we had real time water management with self assessment tools to compare ourselves to others in terms of performance status, think of the difference it would make.

“We also need to look at the transition when a mine is closed – how do we use the infrastructure, land and water? The old days of closing and grassing over are unsustainable; we need to transition from one form of economic activity directly to another.”

She was supported by Ingrid Watson, programme manager, Centre for Sustainability in Mining and Industry, Wits University, who believes these challenges require more people to be involved in mine closure activities: “Landscape architects, creatives, people who don’t see the world from a mining perspective. And we need a mosaic of different land use leveraging the broader landscape opportunities for the whole region, not just the site.”

Yogan Reddy, Africa water sector leader, PwC agrees: “The available land opens up a number of opportunities and can be utilised for agriculture, energy production (solar), water provision and many other businesses.”

In closing, Chairman of the Joburg and Junior Indabas, Bernard Swanepoel, says the industry should lead the way forward and not be bullied into change: “We need to be clearer on what our environmental and social footprint is when we leave an area; our impact is way beyond the physical footprint. Getting serious about this impact means adopting new technologies, being more transparent and designing holistically with regional co-operation.”