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# WATER STEWARDSHIP GIVES MINES THE BROADER VIEW

With South Africa's growing demand for water – and the impact of climate change on rainfall variability and water supply security – the need for a systematic approach to water stewardship in mining has never been greater.

Water management has long been a focus in the mining sector, according to Lindsay Shand, associate partner and principal environmental geologist at SRK Consulting. In 2014, the International Council on Mining and Metals' water stewardship framework outlined a standardised approach for mining companies, recognising that water connects an operation to the surrounding landscape and communities.

"In our past work with mining clients, SRK often addressed a particular challenge, rather than taking the broader view," said Shand. "However, there is a growing recognition that a high-level, concerted approach to water stewardship is environmentally responsible and contributes to building resilience in the mining operation."

This resilience lies in the ability to identify and manage water risks, including water supply uncertainty, water quality compliance issues, and downstream discharge impacts. A water stewardship approach allows for pro-active planning and action to avoid incidents threatening operations and presenting a liability to downstream water users.

### Tools for progress

While the focus for mining operations is generally on a specific challenge, corporations are starting to see the value of the bigger picture on water issues, said Fiona Sutton, principal consultant at SRK Consulting.

"Often, the scope and demands of water stewardship seem a daunting prospect at operational level," said Sutton. "This is one of the reasons why best practice tools are so useful, such as the International Water Stewardship Standard from the Alliance for Water Stewardship (AWS)."

"Practical steps and guidance in the AWS Standard help water users to improve their practices for better on-site water

performance, while also contributing to sustainability goals," she said.

### Catchment care

Water stewardship considers impacts not only on the mine site but in the wider catchment in which it operates, according to Dr Simon Lorentz, principal hydrologist at SRK Consulting.

"Risks specific to the company can be direct, which disrupt mining operations, such as the non-availability of water supply," said Lorentz. "They can also be indirect, where supply chains are disrupted due to water supply or water quality issues."

He noted that catchment-specific risks are influenced by local water management and governance effectiveness in dealing with factors such as increasing demand and unpredictability driven by climate variability. They are also affected by local infrastructure adequacy, pollution disposed into water bodies, and the quality of available water.

### Strengthening reputations

The centrality of water in the UN's SDGs is another reason why mining companies are starting to embrace water stewardship, said Sutton. Many corporates align their strategies with the SDGs, many relevant to water.

"An added advantage of the AWS Standard is that it allows mines to be accredited once they have met the detailed range of requirements," she said. "This is valuable in terms of companies' reputations – whether in the eyes of investors, financial institutions, regulators or the general public."

### Credible benchmark

The AWS's position as a member of ISEAL assures stakeholders that its water stewardship framework has been reviewed by an independent and competent body. The framework and the accreditation provide a credible benchmark as a true indication of commitment.

"SRK's decades of experience in the mining sector, combined with its depth of expertise in water-related disciplines, positions us well to guide mining companies in their water stewardship journey," said Shand.

**A water stewardship approach allows for pro-active planning and action to avoid incidents threatening operational continuity**