

OPERATIONAL PERFORMANCE REVIEW continued

## ELIKHULU

## FANIE DE WET

General manager



## OVERVIEW OF OPERATIONS

Elikhulu, Pan African's flagship tailings retreatment operation, distinguishes itself as one of Southern Africa's lowest-cost gold mining operations. In 2024, it produced 54,812oz (2023: 50,573oz) at an AISC<sup>®</sup> of US\$1,034/oz (2023: US\$989<sup>1</sup>/oz), despite challenges such as disruptions to the electricity supply and adverse weather conditions during the rainy season in November and December. Following the successful installation of a 6km pipeline and the commissioning of the Leslie/Bracken pump station in September 2022, gold production is expected to remain unchanged for the 2025 financial year. The operation has a remaining mine life of nine years.

The plant currently processes approximately 1.2Mt of historical tailings per month from the existing Leslie/Bracken TSF. By reprocessing these tailings, the operation deposits processed residues into a single, more modern TSF site, thereby reducing its ecological footprint. Phase 2 of the expanded Elikhulu TSF was completed on time and within budget, and this modern facility adheres to the latest global standards for tailings management, ensuring adequate capacity for future remaining operations including residues from Evander Mines' underground operations.

The Kinross phase 1 TSF extension is lined to mitigate the risk of underground seepage and pollution underscoring our commitment to addressing the environmental impact of historical tailings depositions.

Elikhulu's operation features a technologically advanced, automated plant with a low labour contingent, high throughput and relatively short pumping distances. Its innovations include a modern extraction process that eliminates the need for regrind mills and thickeners. The plant supplements recirculated process water with non-potable water pumped from nearby underground operations and potable water from our reverse osmosis water treatment plant.

The Group designs its tailings plants to incorporate a high oxygen mass transfer pre-oxidation step to improve gold extraction. The remaining activities are also automated to some degree, with the latest in hydro-mining technology employed. These factors contribute to a safe working environment while production costs remain low.

Elikhulu is a testament to Pan African's ability to conceptualise, plan and construct substantial growth projects ahead of schedule and within budget. The Group has successfully delivered three such projects of this nature to date with the fourth project, the MTR project, due for commissioning during the next financial year.

The design of Elikhulu's TSF entailed a significant expansion and construction effort from 2017 and thereafter phase 1 expansion during 2019. This expansion coincided with the construction of the plant and its associated infrastructure. As part of the phase 2 expansion, the existing Kinross TSF footprint will be reutilised once the reclamation process is completed. Phase 2 of the Elikhulu TSF was commissioned in January 2024, and construction is currently underway for phases 3 and 4, constituting the final stages of Elikhulu's TSF extension.

In May 2022, Pan African became the first South African mining company to commission a utility-scale, grid-tied solar plant at Evander Mines. The solar plant, with a capacity of 9.9MW, supplies clean energy to Elikhulu, meeting approximately 30% of its annual power needs. This solar plant significantly reduces Elikhulu's GHG footprint.

Climate change has disrupted traditional rainfall patterns, leading to more intense rainfall and electrical storms over shorter periods, compelling operations to adapt to managing increased water volumes.

The national grid's unreliable electricity supply has caused operational disruptions and process interruptions, resulting in production delays. Unplanned power outages and ageing infrastructure exacerbate these challenges, leading to production losses, which may result in missed production targets in the short term.

While excess rainwater is manageable, severe lightning and subsequent power outages adversely impact production by reducing pumping capacity and hindering water removal from mining areas, which may take hours to drain after power is restored and production can commence.

Despite these challenges, Elikhulu has increased its production levels compared to the previous financial year, demonstrating management's ability to deal with production challenges. The installation of Evander Mines' solar plant has, however, significantly alleviated electricity supply constraints, reducing the operation's reliance on the national grid.

## FOCUS FOR 2025

Our goal for the coming year is to maintain our performance at the surface operations. Our focus areas for the year ahead include:

- completing the construction of phases 3 and 4 of Elikhulu's TSF extension
- the installation of a briquette cyanide make-up facility, which will ensure cyanide availability in the event of supplier logistical constraints
- continuing to invest in sustaining capital projects, focused on maintaining Elikhulu's infrastructure.

## TAILINGS MANAGEMENT

## JONATHAN IRONS

Group consulting metallurgist and executive accountable for tailings



## OVERVIEW OF OPERATIONS

TSF failures in the mining industry have underscored the need for enhanced safety and regulatory measures. In response, Pan African has taken a proactive approach to benchmark its TSF management in accordance with global standards. Below is an overview of the Group's efforts to comply with regulatory requirements, as far as reasonably practicable, and the implementation of measures to ensure safe and responsible TSF management.

We recognise the importance of adhering to the global standards and guidelines for TSF management. In August 2020, the GISTM was launched by the International Council on Mining and Metals, the United Nations Environment Programme and the Principles for Responsible Investment. The GISTM emphasises the safe management of TSFs, community engagement, governance and the requirement for independent reviews.

To ensure continuous progress towards compliance with the GISTM to the extent feasible, Pan African has conducted internal audits and studies in recent years to assess its TSF management against the GISTM standards. In the 2023 financial year, an ITRB, consisting of three qualified external members, was appointed. This board conducted a formal audit of Pan African's TSFs, and its assessment report was released in June 2023. Notably, certain TSFs operated by Pan African have been categorised as high-impact due to their proximity to local communities and water sources. Following the audit, an action list was developed as part of an implementation plan, which considers budgetary requirements and prioritises critical issues.

The majority of the Group's TSFs were constructed before the implementation of the GISTM. Pan African is committed to the Principles for Responsible Investment with the intention that all its tailings facilities adhere to the GISTM within the context of principle 4.7, also known as the ALARP (as low as reasonably practicable) principle. We have assessed the Group's TSFs and our adherence to the ALARP principle in the GISTM. The assessment was completed in June 2024, and the findings are currently under review.

Pan African prioritises effective tailings dam management across its operations. Each TSF site appoints a competent person from a recognised tailings management company to oversee monitoring and ensure compliance with legislation and the Group's internal codes of practice. Following the GISTM recommendations, Pan African made the following appointments:

- An executive accountable for tailings management in June 2022
- A tailings facility engineer in June 2022, responsible for the robust management of the TSFs
- The Engineer of Record for Barberton Mines, who also serves as the Engineer of Record for Evander Mines.

Considering that the majority of Pan African's TSFs were constructed before the introduction of the GISTM, the Group has actively engaged in ongoing assessments to identify and address any compliance deficiencies, to the extent reasonably practicable. Noteworthy progress has been made, including the following:

- Phase 2 of Elikhulu's TSF extension was commissioned in January 2024
- The construction of phases 3 and 4 of the extension commenced in December 2023; construction is expected to be completed in the second quarter of the 2025 financial year
- Design proposals for the MTR project's TSF will be evaluated during the first quarter of the 2025 financial year.

## FOCUS FOR 2025

Our focus areas for the year ahead include:

- constructing and commissioning phases 3 and 4 of Elikhulu's TSF extension
- continued assessment and addressing critical issues, in line with our implementation plan, in response to the ITRB's audit findings
- developing an action list and implementation plan that prioritise critical issues, in response to the ALARP principle assessment
- design proposals for the MTR project's TSF will be evaluated during the first quarter of the 2025 financial year.