

THE PROVIDER OF VALUABLE INTELLIGENCE TO THE ZIMBABWE MINING COMMUNITY

ISSUE
75
2024

Minining

Z I M B A B W E



Exclusive SANY Wheel Loader

QUALITY CHANGES THE WORLD

**GET 3 YEARS WARRANTY &
1000 HOURS SERVICE KITS FOR FREE**

0 618528 356556



Email: Pillar.wang@sanygroup.com

Tell: 0715862328/0778437881

Address: 185 MUTARE ROAD, MSASA, HARARE

Automated Petrography with the Ultimate Digital Slide Scanner



*Axioscan 7 Geo multi-polarization slide scanner.
Olivine gabbro with plane polarization (PPOL),
circular polarization (CPOL), cross-polarization (XPOL)*

Fast, reliable, multi-channel digitization platform

Digitize your thin sections with Axioscan 7 – the reliable, reproducible way to create high quality, digitized petrography data in transmitted and reflected light. Uniquely designed for petrographic analysis, ZEISS Axioscan 7 Geo combines unique motorized polarization acquisition modes with unprecedented speed and a rich software ecosystem for visualization, analysis, and collaboration.

- Ultra-fast high-resolution transmitted, reflected, plain and cross-polarized image acquisition
- Fast throughput for up to 100 thin sections at a time
- Enabling remote collaboration and AI analysis



Scan for whitepapers and more
zeiss.ly/924-mz



Seeing beyond



Stanbic Bank

HOW CAN YOU EXTRACT MORE VALUE FROM YOUR MINING OPERATIONS?

With Stanbic Bank's tailored capital solutions, you can maximise the potential of your mining projects. We offer financial expertise designed to fuel your growth and sustainability.

**Let's unlock value together with
our Corporate and Investment
Banking division.**

TEBWA1688A12

Mining

Z I M B A B W E

WRITERS/ JOURNALISTS
Rudairo Mapuranga
Ryan Chigoche

SALES & ADVERTISING

Kelvin Sungiso
kelvin@miningzimbabwe.com
Cell/Whatsapp: 0775523000

PUBLISHER
Timelison Media (Zimbabwe),
Sungie Media (South Africa)

Copyright disclaimer

All content published in this magazine, including articles, images, and graphics, is the intellectual property of Timelison Media.

Unauthorized reproduction, distribution, or use of any content without prior written consent is strictly prohibited. All rights reserved.

AVAILABLE IN RETAILS STORES



FOLLOW US ON SOCIAL MEDIA



Awards



Ministry of Mines and Mining Development



TIMELISON MEDIA

Publisher contacts
4th Floor Fidelity Life Towers Harare CBD
Tel: +263 242 777728 |
Whatsapp +263 772701730

Advertising: info@miningzimbabwe.com
Web: www.miningzimbabwe.com

CONTENT

MINING ZIMBABWE MAGAZINE | ISSUE 75



INSIDE MINING ZIMBABWE

05 THE CLEAR PERSPECTIVE

06 SANY wheel loader gains quick traction in Zimbabwe

08 Government Advised to Develop Deliberate Policy for Antimony Extraction



09 Plant and Machinery Insurance

10 How Mimosa constructed its US\$75 Million Tailings Storage Facility TSF-4

16 FORIT Successfully Completes Work on MIMOSA'S TSF-4 Construction

18 Miners Continue Crying Foul Over Zimbabwe's Chrome Export Ban

22 Mimosa Boosts Production by Over 4% Amid Operational Efficiency Improvements

24 Unki Achieves Over 11 Years of Fatality-Free Operations

26 Hwange Achieves Over 2 Million Fatality-Free Shifts

27 Blanket Mine to Commission Phase 1B of New TSF in 2024, Phase 2 Set for 2025 Investment

30 Caledonia to make US\$14.3 Million After Selling Solar Plant to CrossBoundary Energy



Mining

ZIMBABWE

ADVERTISE WITH

The Provider of valuable intelligence to the Zimbabwe Mining Industry

Over 3 million impressions monthly

LinkedIn 93 000

facebook 63 000

twitter 4 300

TikTok 1 800



4th Floor Fidelity Life Towers
5 Raleigh street
Harare CBD
Zimbabwe

www.miningzimbabwe.com
info@miningzimbabwe.com

Editorials: +263 772 701 730
Advertising: 263 775 523 000

Condition monitoring is
KEY to mining production



WearCheck, Africa's leading condition monitoring company, is committed to serving the mining industry with its range of sophisticated analytical techniques.

Our specialist oil, coolant and fuel testing programmes allow customers to reduce maintenance costs, avoid unexpected mechanical failures and ultimately reduce unscheduled downtime.

Unlock Machine Reliability!

Meet us at Mine Entra, stand 4A23, Hall 4.

Branches

Botswana	+267 311 6829
DRC	+260 977 622 287
Ghana	+233 54 431 6512
Mozambique	+258 85 792 7933
Namibia	+264 81 141 7205
Zambia	+260 212 210 161
Zimbabwe	+263 24 244 6369



Condition Monitoring Specialists

Head Office (South Africa)

+ 27 31 700 5460 marketing@wearcheck.co.za www.wearcheck.co.za

Testing and Analysis | Lubricant-Enabled Reliability | Asset Reliability Care



SANY

wheel loader gains quick traction in Zimbabwe



Sany SW953K Wheel loader working in Quarry site

Having introduced its new 5-tonne (t) SW953K wheel loader in October 2023, SANY Equipment Zimbabwe has seen a major uptake of the machine, with about 60 units already operational in the country.

The 2023 introduction of the larger SW953K, allowed SANY Equipment Zimbabwe to compete at the heavy end of the wheel loader scale for the very first time, thus plugging a crucial gap in its offering. Sales Manager Pillar Wang says the company can now offer a fitting solution for heavy-duty load-out and stock-piling operations in mining and quarrying. "In less than a year, we have already sold

some 60 units, highlighting the popularity of the wheel loader in the Zimbabwean market. Most of the units are working in quarrying and smelters, making light work of the tough operating conditions associated with these applications. One of the machines has already clocked 4 700 hours and counting, with an average availability of 95%," explains Wang.

Machine in detail

With a 17.2t operating weight, a rated payload of 5.5t and a bucket capacity of 3 to 5 m³, the SW956K front-end loader is ideally suited for heavy-duty mining and quarrying operations.

This is a radical upgrade of the existing 5-t SW953K model, both in terms of the operating weight and features.



The upgrade model SW956K1

more stopping power and improves all-around safety.

Important market

The early market share gains of the new SANY wheel loader in Zimbabwe signal the importance of this market to the leading Chinese original equipment manufacturer. Having established its presence in Zimbabwe in 2021, SANY Equipment Zimbabwe has experienced quick growth, with more than 500 machines sold in the country, with a notable 35% share of the excavator market, confirms Wang.

Consequently, he says, Zimbabwe is such an important market for SANY in Southern Africa. "Currently, Zimbabwe is our secondary headquarters for the Southern African region, contributing 30% of our revenue in Southern Africa. To reinforce the importance of the market, we continue to invest significantly in our aftermarket capabilities. To provide context, we have invested in a 2 000-m² warehouse holding USD3-million worth of spare parts in Harare. We have a team of 35 technicians working in the country, supported by 15 service vehicles. Elsewhere, we have established a service branch in Hwange, with several more investments in the pipeline," says Wang.

In addition, the South Africa Central Parts Warehouse is an additional support structure to the Zimbabwe aftermarket infrastructure. All SANY business hubs in Southern Africa are supported by the recently established South African facility. To better serve its clientele and ensure timeous delivery of spare parts in the region, SANY has significantly increased its spare parts stockholding with the investment in a new, bigger, state-of-the-art warehouse in Olifantsfontein, Midrand.

The new, bigger warehouse has enabled SANY to increase its spare parts inventory from approximately R170-million to R270-million this year. The increase in-stock items has been made possible by the size of the new warehouse, which is 20 000 m² with 12 000 m² under roof.

"The availability of spares impacts positively on customer care and service. Importantly, our comprehensive spares inventory helps reduce equipment downtime for our customers. This has been central to our quick growth in Zimbabwe," concludes Wang.



His Excellency President Mnangagwa Visiting SANY China Base

The new SW956K wheel loader has a special design focus on high productivity and lower cost per tonne of operation – key parameters of significance to every fleet owner. At the heart of the loader is the proven Weichai WP10 engine, which comes with large displacement, power and driving force. With cost of operation in mind, the engine is efficient, easy to maintain and comes with cost-effective accessories.

Specifically tailored for SANY, the large-capacity 5.5-t fully automatic gearbox perfectly matches with the engine's 162 kW @2 000 rpm rated power. Vehicle speed has been increased by 5%, while traction force has gone up to 175 kN, and the overall operating efficiency has increased by more than 10%.

With efficiency in mind, the wheel loader comes with a constant power load-sensitive variable flow system, which uses constant power control and pressure cut-off technology to maximise flow distribution on demand. With the variable piston pump, the machine constantly maintains sufficient power for the application at hand. In shovelling operations, the hydraulic system maintains

high pressure and less flow, reducing power losses by 95%, while realising high efficiency- and energy-saving.

When designing the SW956K, SANY also paid particular attention to reliability and durability – two parameters with great influence on machine uptime and longevity. The reinforced front axle, for example, allows for stronger bearing capacity, thus reducing maintenance costs.

"The wheel loader adopts a heavy-duty frame structure design, large articulation, double tapered roller bearings and a thickened steel plate with stronger load-bearing capacity. All these features speak directly to the greater focus on machine reliability and durability," explains Wang.

With safety in mind, the machine comes with a fully hydraulic wet brake system, which is sensitive, safe and reliable. The wet brakes run in oil, which keeps them cool, especially in heavy braking applications. Wet brakes generally last longer, require less adjustment and maintenance over time. The multiple-disc setup also provides

One of the machines has already clocked 4 700 hours and counting, with an average availability of 95%," explains Wang.



Trucks collecting spares in central Warehouse

Government Advised to Develop Deliberate Policy for Antimony Extraction

The government of Zimbabwe has been advised to implement a deliberate policy to support the extraction of antimony, a resource that has been dubbed the "new lithium" due to its growing importance and value.



Recently, antimony has emerged as a more lucrative mineral compared to lithium, which has seen a significant price drop. BMI predicts that lithium hydroxide monohydrate (56.5% grade) will average \$14,000 per tonne this year and \$20,500 in 2025, down from about \$70,000 per tonne in 2022.

By Ryan Chigoche

On the global market, antimony prices, after a slight decline in 2023, surged to US\$15,500 per metric ton in May 2024, up from an average of US\$7,000 per metric ton in 2020. The rise of antimony in the renewable energy space is significant, as it is a promising mineral that could provide more affordable batteries in the near future, in addition to its many other uses. In Zimbabwe, while the mineral is available in abundance, mining is still in its infancy. However, there has been a sudden influx of foreign buyers seeking the mineral and smuggling it out of the country.

It is important to note that the recent price surge has been driven by supply constraints, and it is unclear when these constraints will ease. China, which historically accounted for more than half of

the world's antimony production, has gradually reduced its extraction capacity due to a combination of factors, including voluntary measures to preserve reserves and stricter environmental regulations that have led to mine closures.

Given this gap in supply and surging demand, Munyaradzi Marwizi, Chairman of the Antimony Miners Association of Zimbabwe (AMAZ), has urged the country to capitalize on its antimony resources to become a major supplier in the world market.

"On the demand side, the solar sector's need for antimony has exceeded supply, creating a significant deficit. Antimony is used to enhance the performance of solar cells, driving up prices as the sector's supply gap widens," Marwizi said.

This situation presents a unique opportunity for Zimbabwe to position itself as a leading supplier of antimony in Southern Africa. However, the country's focus has traditionally been on gold, which is often mined alongside antimony. The high gold prices and established markets make gold a more attractive option for local miners.

"There needs to be a deliberate push from the government to encourage exploration and extraction of antimony reserves to capitalize on the potential gains from this critical metal. Current government policies have not adequately supported its exploitation despite our significant resource potential, particularly in the Midlands Province," Marwizi added.

At the recent 12th Minor Metal Industry Conference Antimony Industry Forum in June, it was noted that the surge in prices is likely to continue due to globally declining ore grades and depleting mines constraining supply.

With rapid technological advancements, antimony's applications are expanding. Currently, it is primarily used in flame retardants (43% of global consumption) and lead-acid batteries (32%). Lead alloys account for 14% of consumption, and about 6% is used as a catalyst in polyethylene terephthalate (PET) production. Additionally, antimony alloys are crucial in military applications, enhancing lead-based ammunition and increasing the hardness of explosives. Notably, antimony is gaining prominence in liquid metal batteries, or molten salt batteries, which are a promising alternative to lithium-ion batteries for grid-scale energy storage.

Zimbabwe's beneficiation of antimony is still in its early stages, with only a few private players involved in producing antimony concentrate. This gap presents an opportunity for small-scale miners in the Midlands Province to contribute to the market.

The government has recently launched a sustainable mining initiative to align with global responsible mining practices. As environmental protection laws tighten, they will likely shape the development of the antimony beneficiation industry.

Despite being a lesser-known minor metal, antimony is included in many countries' critical mineral lists due to its importance in various applications, including emerging cleantech and battery technologies.

Plant and Machinery Insurance

Mining equipment is usually of high value and specialized making it crucial for mining businesses to have the correct insurance coverage to safeguard these assets. Plant and Machinery insurance is a solution designed specifically to protect businesses from the unique hazards they encounter by owning, operating, or even hiring such equipment.

The plant and machinery are exposed to several risks, including physical damage or breakdown which can be caused by natural disasters, such as floods, fires, earthquakes, man-induced issues like vandalism, operator errors and electrical issues, or mechanical failure within the machinery itself.

Having the correct insurance is critical to enable the business to quickly replace, repair or plug revenue loss due to damage to a critical plant. This insurance provides protection in a number of areas including:

1. Property damage protection for the plant and machinery for losses caused by fire, mine collapse, flooding, operator accidents and associated perils. This enables the business to repair or replace the damaged equipment.
2. Machinery breakdown provides protection for a plant when it breaks down due to sudden and unforeseen physical loss of or damage whether at work or at rest, or being dismantled for the purpose of cleaning, inspection, or overhauling, or in the course of the operations.

3. Business income protection covers the business from the resultant loss in profits or increase in operating expenses (for example via hiring a replacement machine) that the company incurs during the period the plant is being repaired or before its replacement arrives.

4. With the advent of semi-autonomous machinery, some form of cyber insurance cover may be required to protect against losses or damages to machinery due to cyber-attacks and hacking-related causes.

5. Protection can be extended to include contractors' plant and machinery covered against similar causes for loss and damage as those above.

Firstlink assists clients to structure adequate cover for the size and scope of their operations. Our clients also benefit from our dedicated claim's service in the event of a loss. Our approach removes the ambiguity and complexity often associated with mining insurance claims.

Talk to us today about cover for your mining operation on **(0242)744048/79, 0772392075, 0773589694 or 0772434103.**

Tichaona Chihambakwe is the Head of Business Development and Marketing for Firstlink Insurance Brokers.





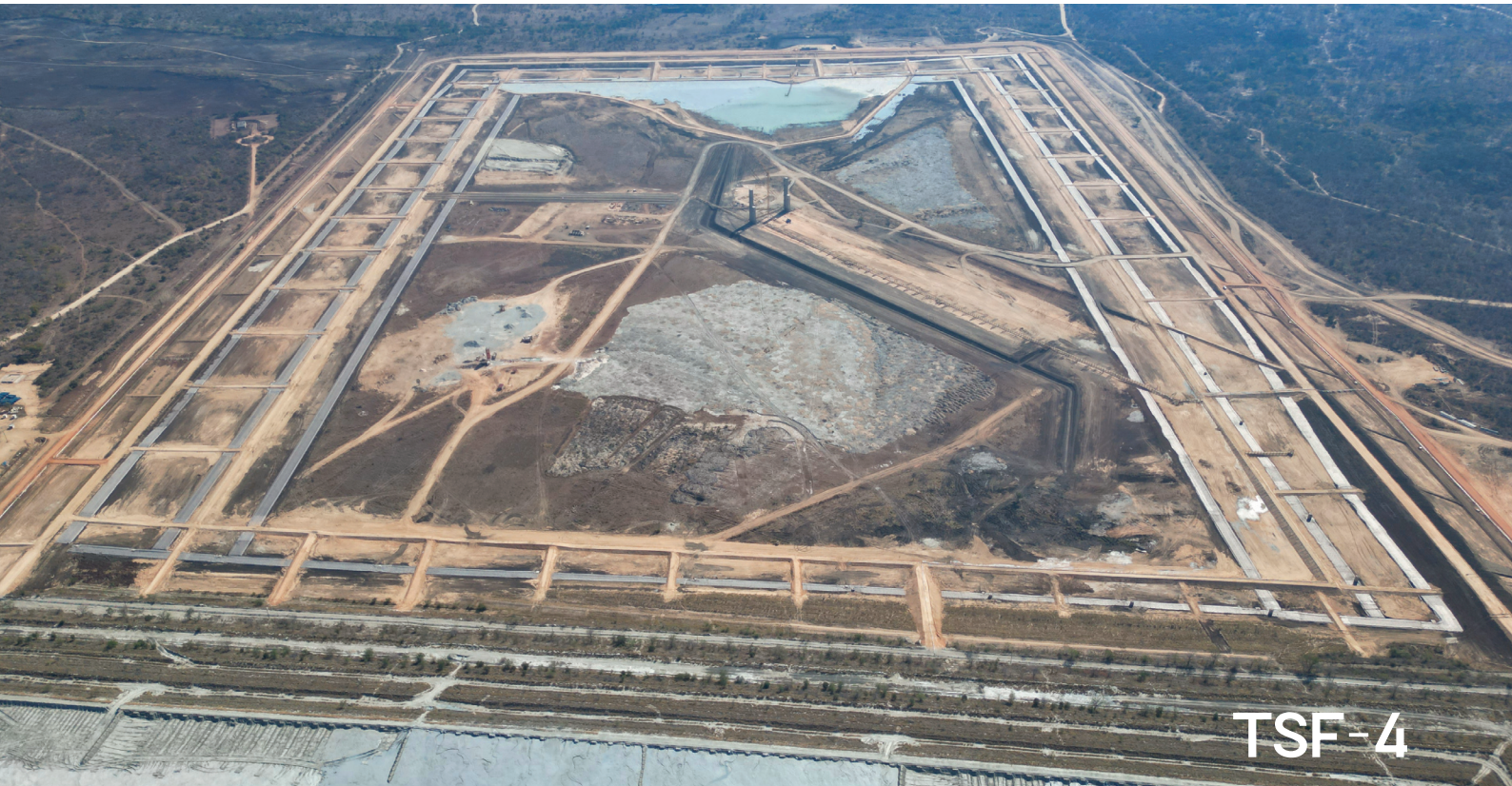
irstlink
Insurance Brokers (Pvt) Ltd

Securing your mining assets

info@riskmanagers.co.zw
www.firstlinkinsurance.co.zw
 0242744048/79, 0772434103, 0772666509  

106 Swan Drive, Alexandra Park
Harare
Zimbabwe

How Mimosa constructed its US\$75 Million Tailings Storage Facility TSF-4



TSF-4

In the dynamic and challenging world of mining, one aspect that demands the utmost attention is the management of tailings the byproducts or waste of mining operations.

By Rudairo Mapuranga

For Mimosa Mining Company, the country's second-leading producer of Platinum Group Metals (PGMs), this challenge was met with a groundbreaking solution in the form of their Tailings Storage Facility 4 (TSF-4).

With a price tag of approximately US\$75 million, the TSF-4 project represents a significant investment in the sustainability, safety, and future of Mimosa's mining operations.

According to Mimosa Mining Company General Manager Engineer Stephen Ndiyamba, the construction of TSF-4 was driven by the need to replace the mine's existing tailings storage facility, TSF-3, which had reached the end of its operational life.

"The TSF-4 project is one of our major initiatives that we've been executing over the last few years. We currently operate on

TSF-3, our existing tailings storage facility, built and commissioned in 2003. TSF-3 has reached the end of its operational life, necessitating the construction of a new facility, TSF-4, at a cost of approximately \$75 million. We are currently in the early stages of commissioning this new tailings storage facility," Eng Ndiyamba said.

Eng Ndiyamba added that the design of TSF-4 was not just a replication of past facilities, it was a forward-thinking approach that incorporated lessons learned from previous tailings management experiences globally.

He said Mimosa's commitment to sustainability and environmental stewardship played a crucial role in shaping the facility's design.

"TSF-4 is designed to cater to the life of the mine, meaning it has the capacity to handle all waste material generated

during the remaining lifespan of the Mimosa Mine. In addition, provisions have been made for the potential retreatment of older tailings dams, such as TSF-3 and TSF-2, with the waste from these processes being deposited into the new facility," he said.

The Mimosa General Manager explained that this approach ensures that TSF-4 will not only serve the current needs of the mine but will also accommodate future operational expansions and tailings retreatment initiatives.

"TSF-4 covers an expansive area of about 175 hectares, and the construction was completed entirely by local contractors under the guidance of South African design engineers. The entire process was conducted safely and effectively, and as we are currently commissioning the facility," he said.

CONSTRUCTION OF
TSF-4
WAS DRIVEN BY THE NEED TO REPLACE THE MINE'S EXISTING TAILINGS STORAGE FACILITY, TSF-3, WHICH HAD REACHED THE END OF ITS OPERATIONAL LIFE.





Mimosa Mining Company General Manager, Engineer Stephen Ndiyamba

Site Selection and Ground Preparation

According to Eng Ndiyamba, the construction of TSF-4 began with an extensive site selection process. The chosen location covers an expansive area of about 175 hectares, offering ample space for the facility's current and future needs. Ground preparation was a critical phase, as the site had to be meticulously prepared to support the massive structure. This included soil testing, compaction, and the installation of drainage systems to manage water flow and prevent seepage.

Eng Ndiyamba highlighted that Mimosa's commitment to supporting the local economy was evident in the construction process. While the design of TSF-4 was completed by SRK, a South African engineering firm, the construction was managed entirely by local contractors.

"All contractors involved in this project were local, and while the design was completed by SRK, a South African

engineering firm, the construction was managed locally," Eng Ndiyamba said.

He noted that this approach not only reduced costs but also fostered skills development within the local community, providing opportunities for local engineers, labourers, and other professionals.

The Role of SRK and the Design Challenges

SRK's role in the project was pivotal. The engineering challenges were substantial, particularly given the unique composition of the tailings generated by Mimosa's operations. Eng. Andy Robertshaw, SRK's principal and head of the TSF-4 construction project, explained:

"The SRK Pietermaritzburg office has been involved with Mimosa in designing the TSF, which is essential for maintaining the mine's operations. An interesting challenge is that the tailings coming from the mine contain a large amount of talc, a

very soft and fine material used to make talcum powder. Talc clogs drains efficiently, which is undesirable for tailings dams. Therefore, part of the design focused on how best to construct the tailings dam, not using conventional methods but rather employing a variety of drains to prevent clogging and ensure the TSF remains operational for many years," he said.

According to Eng. Robertshaw, one of the key principles in the design of TSF-4 was future-proofing.

He said future-proofing involved incorporating infrastructure that would allow for the facility's expansion if needed.

"Future-proofing allows for the potential expansion of the facility by incorporating certain infrastructure at the beginning of the project. For example, you may have noticed the 40-meter-high towers in the centre of the tailings dam and the very complex drain system. These enable the mine to extend the height of the tailings dam from 30 meters, similar to the existing dam, to 60 meters, thereby providing an additional 6% capacity for future operations," Robertshaw said.

Eng. Robertshaw explained that this foresight ensures that TSF-4 will remain a viable and efficient tailings management solution throughout the life of the mine.



Continued on the next page>>





The Gorge Dam: A Multi-Purpose Water Management System

According to Eng Ndiyamba, a standout feature of TSF-4 is the inclusion of a much larger wastewater storage facility, known as the gorge dam.

He said this facility was designed not only to hold mine wastewater but also to manage runoff from the surrounding area.

"The new TSF-4 also includes a much larger wastewater storage facility, known as the gorge dam. This facility is designed not only to hold mine wastewater but also to manage any runoff from the area surrounding the tailings dam. The concept behind this design is to consider sustainability in mining operations, allowing the facility to serve multiple purposes, including recreational use. We've even introduced wildlife into the area, with the aim that, eventually, local schools and

communities can visit and learn about both the mining process and environmental stewardship," Eng Ndiyamba said.

Eng. Kennedy Chiguvare, Mimosa's Cluster Manager Projects, said the gorge dam serves as both an essential component of the mine's water management system and a potential future resource for community engagement and environmental education.

"As I highlighted earlier, the key principle being emphasized today is sustainability. At Mimosa, we are focusing intensively on this. We aim to reduce the amount of water we extract from Ngezi river by at least 50% on an annual basis. Currently, we extract about 4 million cubic litres of water each year. However, with the construction

of this gorge dam, we plan to reduce that extraction to around 2 million cubic litres annually.

The concept behind this design is to consider **SUSTAINABILITY IN MINING OPERATIONS**, allowing the facility to serve multiple purposes, including recreational use.

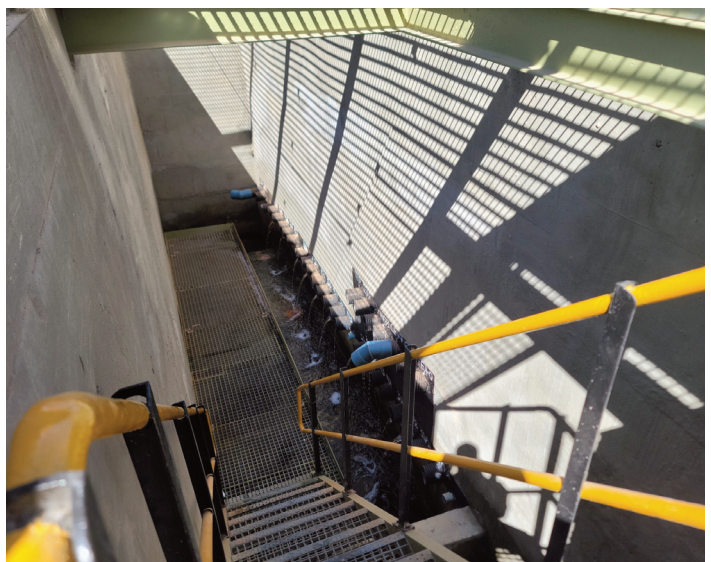
"We have wildlife in the area, which could be used for tourism both during the mine's operation and after its closure. We believe tourists can visit the mine, observe the wildlife, and enjoy activities such as boating on the gorge dam, which will also benefit the

local community," Eng. Chiguvare said.

Continued on the next page>>



Eng. Kennedy Chiguvare, Mimosa's Cluster Manager Projects





Earthworks and Drainage Systems

Eng. James Muramba, contract manager for Forit Contracting, said the construction of TSF-4 involved significant earthworks and the installation of a comprehensive drainage system.

"The tailings facility dam is a project with numerous activities, including earthworks and drainage, with pipes ranging from 160 mm to 900 mm in diameter, which is our penstock pipeline. We also constructed two penstock towers, each 40 meters high, made of concrete," Eng. Muramba said.

Eng. Muramba's team was responsible for the installation of the drainage system, which is crucial for managing the water and slurry that flow into the tailings dam. The pipes, which stretch over 42 kilometres, ensure that water is efficiently collected and directed to the gorge dam,

where it can be reused or safely discharged.

Safety and Risk Mitigation

According to Mimosa General Manager Eng Stephen Ndiyamba, one of the most significant risks in tailings management is the potential failure of a tailings dam. Such an event can have catastrophic consequences, including environmental contamination, loss of life, and extensive property damage. To mitigate this risk, the design and construction of TSF-4 followed stringent regulations and guidelines.

"To mitigate this risk, the design and construction of TSF-4 followed strict regulations and guidelines. The facility was designed by highly qualified engineers, with the design subjected to multiple peer reviews, including evaluations by independent experts and shareholder

representatives. The review process included assessments from a committee led by industry experts in tailings dam management, ensuring that all potential risks were addressed," Eng Ndiyamba said.

According to Mimosa Head of Engineering and Projects, Eng. Bryan Matingwina, in addition to the robust design, Mimosa has implemented extensive monitoring systems, including satellite technology, to detect any movement or changes in the tailings dam that could indicate potential failure.

"For ongoing operations, monitoring is crucial. The drains we installed, spanning 42 kilometres, are monitored every 100 meters. Over the next few years, this will help us manage and predict the dam's performance," Eng. Matingwina said.

Continued on the next page>>



Environmental Considerations

Eng. Brian Matingwina, Mimosa's Head of TSF, explained the environmental management strategy, saying environmental stewardship was a central consideration in the design and construction of TSF-4.

He said the facility was designed to minimize its environmental impact, both during its operational life and after the mine has closed.

"We refer to it as a dam because it serves as a crucial containment structure. It's actually meant to stand the test of time. Now, regarding why people don't just build dams anywhere—if you construct a slurry dam without properly managing the water, the dam could collapse. The whole purpose of these facilities is to ensure that no water is taken from the ground uncontrollably," Eng. Matingwina said.

Eng. Matingwina also highlighted the facility's water management system, which includes nearly 14 kilometres of drainage systems designed to capture and recycle water.

He said this system ensures that the tailings dam operates efficiently while minimizing its environmental footprint.

"When we pump our slurry to the tailings dam, we need to efficiently remove the water as soon as possible.

The solid material must be deposited in the dam, while the water is extracted and either recycled or discharged, depending on its quality. This process is essential to maintain the functionality of the dam and to ensure that it doesn't overflow or lose capacity. To give you an idea of the scale, we process around 8,500 tonnes of ore per day. Out of that, about 97% becomes waste, which needs to be managed effectively as tailings.

Managing wet tailings is more complex than dry tailings because they contain more water, which complicates both storage and water recovery.



Therefore, our engineering efforts are heavily focused on separating the water from the solid tailings to ensure the long-term sustainability of the tailings facility. Once the water is separated, it's crucial that it is clean enough to be either reused in the processing plant or safely released into the environment. Cleanliness here is subjective; clear water isn't necessarily free of contaminants, so we must ensure it meets environmental standards before release," Eng. Matingwina said.

Continued on the next page>>

MANAGING WET TAILINGS is more complex than dry tailings because they contain more water, which complicates both storage and water recovery. Therefore, our engineering efforts are heavily focused on SEPARATING THE WATER FROM THE SOLID TAILINGS to ensure the long-term sustainability of the TAILINGS FACILITY.



Men on the ground - Representatives from SRK, Forit and the Mimosa team pose for a picture

The Future of TSF-4

Even when Mimosa approaches the end of the mine's operational life, TSF-4 will continue to play a pivotal role in the company's tailings management strategy. The facility's design includes provisions for long-term stability and potential future expansions, ensuring that it can adapt to changing operational needs and environmental conditions.

The ongoing maintenance and monitoring of TSF-4 will be crucial in ensuring its continued effectiveness and safety. Mimosa plans to implement a robust maintenance schedule that includes regular inspections, updates to the drainage and monitoring systems, and continued community engagement. This proactive approach will help address any issues that arise and ensure that the facility remains a model of sustainable tailings management.

Mimosa's investment in TSF-4 is not only a commitment to managing tailings responsibly but also a testament to the company's dedication to environmental stewardship and community involvement. By incorporating advanced engineering practices, rigorous safety protocols, and local engagement, Mimosa has set a high standard for tailings storage facilities in the mining industry.

In conclusion

The construction of TSF-4 represents a significant achievement for Mimosa Mining Company, demonstrating a forward-thinking approach to tailings management and sustainability. With its state-of-the-art design, comprehensive safety measures, and commitment to community engagement, TSF-4 stands as a testament to what can be achieved when innovation and responsibility are at the forefront of mining operations.

As the facility becomes fully operational, it will not only support Mimosa's current mining activities but also contribute to the long-term sustainability of the region. The lessons learned from the TSF-4 project will undoubtedly influence future developments in tailings management, setting a benchmark for excellence in the industry and reaffirming Mimosa's role as a leader in responsible mining practices.



Eng. Bryan Matingwina, Mimosa's Head of Engineering and Projects

Local Community Involvement

Mimosa's TSF-4 project was not just an engineering feat, it was also a community-focused initiative. The company made a concerted effort to involve the local community in the project, both in terms of employment and resource sharing.

"We managed to build a relationship with the villagers and the local community. All the firewood we cut from here was chopped into manageable pieces and taken to the village for firewood. In addition to providing firewood, Mimosa also assisted local communities with requests for gravel, road clearing, and maintenance. This approach helped ensure that the community benefitted directly from the project.

"All contractors involved in this project were local, and while the design was completed by SRK, a South African engineering firm, the construction was managed locally. The \$75 million project cost reflects local expenditures, with exceptions for imported materials like pipes. Our procurement process was thorough, and we can provide a detailed analysis of the local procurement specifics upon request," Eng Ndiyamba said.

Environmental Considerations

Eng. Bryan Matingwina, Mimosa's Head of TSF, explained the environmental management strategy, saying environmental stewardship was a central consideration in the design and construction of TSF-4.

He said the facility was designed to minimize its environmental impact, both during its operational life and after the mine has closed.

"We refer to it as a dam because it serves as a crucial containment structure. It's

actually meant to stand the test of time. Now, regarding why people don't just build dams anywhere—if you construct a slurry dam without properly managing the water, the dam could collapse. The whole purpose of these facilities is to ensure that no water is taken from the ground uncontrollably," Eng. Matingwina said.

Eng. Matingwina also highlighted the facility's water management system, which includes nearly 14 kilometres of drainage systems designed to capture and recycle water.

He said this system ensures that the tailings dam operates efficiently while minimizing its environmental footprint.

"When we pump our slurry to the tailings dam, we need to efficiently remove the water as soon as possible. The solid material must be deposited in the dam, while the water is extracted and either recycled or discharged, depending on its quality. This process is essential to maintain the functionality of the dam and to ensure that it doesn't overflow or lose capacity. To give you an idea of the scale, we process around 8,500 tonnes of ore per day. Out of that, about 97% becomes waste, which needs to be managed effectively as tailings. Managing wet tailings is more complex than dry tailings because they contain more water, which complicates both storage and water recovery.

Therefore, our engineering efforts are heavily focused on separating the water from the solid tailings to ensure the long-term sustainability of the tailings facility. Once the water is separated, it's crucial that it is clean enough to be either reused in the processing plant or safely released into the environment. Cleanliness here is subjective; clear water isn't necessarily free of contaminants, so we must ensure it meets environmental standards before release," Eng. Matingwina said.

FORIT Successfully Completes Work on MIMOSA's TSF-4 Construction



Engineer James Muramba

Forit, one of Zimbabwe's leading building, civil, and structural engineering services companies, has successfully executed the construction of Mimosa Mining Company's US\$75 million Tailings Storage Facility Number Four (TSF-4), Mining Zimbabwe can report.

By Rudairo Mapuranga

The company has been commended for achieving set targets and adhering to designs that ensure a sustainable TSF.

Forit was contracted by Mimosa to construct TSF-4 as well as the gorge dam, with a primary focus on earthworks for the gorge dam and a combination of earthworks, concrete structures, and pipework for the TSF.

According to Forit's Mimosa TSF-4 Head of Construction, Engineer James Muramba, the company was tasked with constructing TSF-4 and the gorge dam. He explained that Forit's main focus is on earthworks. The gorge dam primarily involves earthworks, but there is also the intake tower, which is a concrete structure. They also completed some pipework.

"The tailings facility dam is a project with numerous activities, including earthworks and drainage, with pipes ranging from 160 mm to 900 mm in diameter, which is our

penstock pipeline. We also constructed two penstock towers, each 40 meters high, made of concrete.

"Additionally, we built stormwater channels at the tailings facility. Regarding our recruitment strategy, we made an effort to hire locals as much as possible. We recruited locals for most of our general labour positions, and even for skilled positions where we could find suitable candidates locally," he said.

He also noted that one of Forit's duties during the project was to ensure the empowerment of the country's junior engineering professionals through skills transfer, resulting in the employment of eight graduate trainees.

"We also had engineers and trained a significant number of them. We had about eight graduate trainees who were trained here," he said.

Muramba also mentioned that the company utilized a large amount of equipment, most of which they procured and hired from local equipment suppliers to ensure the country was empowered through 100 per cent local content.

"In terms of execution, we utilized a large amount of equipment. At the peak of the project, we had over 120 pieces of equipment, including about 45 trucks, graders, rollers (at some point there were about 18), and water bowsers. It was a machine-intensive project that required a lot of equipment. Currently, the equipment you see is about 10% of what we had at the peak of the project," he said.

Muramba emphasized that the team executed the project well, without any fatalities or lost-time injuries, and worked closely with Mimosa's Safety, Health, and Environment (SHE) Manager, who demonstrated Mimosa's commitment to zero harm.

He also stated that the company managed to rehabilitate all the pits created during construction to ensure that animals were not affected and that the environment could recover after the earthworks.

"Regarding safety, health, and environment (SHE), we were managed by our SHE manager, and we also had SHE officers who ensured we worked safely and protected the environment. We opened some borrow pits, and before leaving, we rehabilitated them to ensure there were no steep slopes where animals could slide and potentially get hurt," the Forit Head of Project said.

Muramba added that, through their corporate social responsibility efforts, Forit built a strong working relationship with neighbouring villagers, providing them with firewood from the trees cut during earthworks.

"We managed to build a relationship with the villagers and the local community. All the trees we cut down were chopped into manageable pieces and taken to the village for firewood. This was one way we interacted with the community.

Forit was contracted by Mimosa to construct TSF-4 as well as the gorge dam, with a primary focus on earthworks for the gorge dam and a combination of earthworks, concrete structures, and pipework for the TSF.

"We also received several requests from the surrounding communities. Some requested gravel, which we provided, while others requested road clearing and maintenance, which we also assisted with. We wanted to ensure that the community benefited from our presence on this project," Eng. Muramba concluded.

BUILDING STRUCTURAL AND CIVIL ENGINEERING CONTRACTORS.

FORIT CONTRACTING

Forit Contracting (Pvt) Ltd was formed in 1992 in Zimbabwe as a registered building, civil, and structural engineering services construction company. It has grown over the years to execute very big projects, and it boasts vast experience and expertise in design and building solutions, project management, civil engineering, and related works.

SERVICES

- Bulk earthworks.
- Industrial parks.
- Airport runways.
- Railway networks.
- Gravity sewer mains.
- Telecommunications.
- Irrigation schemes.
- Highways and bridges.
- Landing Bays.
- Structural steel works.
- Concrete structures.
- Slime Dams.
- Water reticulation and truck mains.
- Water treatment plants.
- Water storage tanks.
- Sewer reticulations and trunks mains.
- Sewage treatment works.
- Correct to read-Highways, bridges and services roads.



+263 242 741 371

+263 242 741 658

+263 773 424 498

admin@forit.co.zw



Forit Contracting (Pvt) Ltd No. 17773 Watermeyer Drive
Belvedere, Harare, Zimbabwe

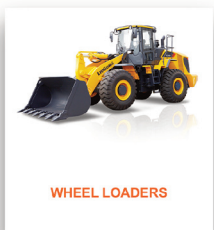
LIUGONG TOUGH WORLD. TOUGH EQUIPMENT.



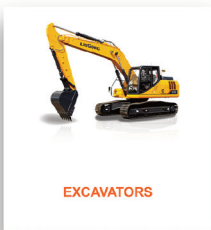
20 YEARS OF GLOBALIZATION



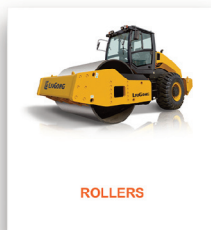
MINING TRUCK



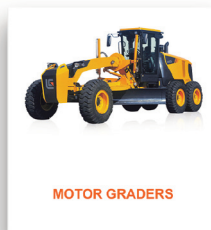
WHEEL LOADERS



EXCAVATORS



ROLLERS



MOTOR GRADERS



BULLDOZERS

AFTERSALES FOCUS

CUSTOMER ORIENTED

- iLINK
- Call Center
- One Stop Service

TIMELY ACTION

- Service commitment includes: response time arrival time mean time to repair

RELIABLE

- Service Center
- Parts Center
- Aftersales Support

EXPERTISE

- Service Qualification
- Parts Center
- Information Management

MINING & AGGREGATES

We have gathered insight from over 100 global mining workites and designed a range of tough equipment inspired by you, the owners and operators.

From open-cast mines to granite quarries, we know that delivering optimum performance is all about the detail; detail that can save valuable seconds and lead to greater profitability. For site preparation, extraction, material handling and re-handling, Liugong provides a full range of solutions to help you do more.

LIUGONG MACHINES EXCEL AT 3 KEY ESSENTIALS:

LOWEST COST PER TONNE	MAXIMUM OPERATIONAL UPTIME	1ST CLASS PARTS & SERVICE SUPPORT



INSIGHT FROM
100+
GLOBAL
MINING WORKSITES

GET IN TOUCH:

- ISRAEL: +263775894603
- NICOLE: +263772998782
- TENDAI: +263780283599
- VICTOR: +263713980641
- FARAI: +263777892017
- LEON: +263773057330

✉ info@liugongzw.com

☎ +263 782 511 555

📍 8385 Kirkman Road, Harare

ROAD CONSTRUCTION & MAINTENANCE

Liugong provides the full spectrum of construction equipment not only to build the world's best roads but also to maintain them long into the future.

ROAD CONSTRUCTION

We provide total road construction solutions that use flexible, intelligent technology, whether for the subgrade, base layer or surface layer. With a full line-up of earthmoving equipment, rollers and pavers, our machines can deal with all types of terrain and conditions, and give our customers the reliability they need for optimized performance and unparalleled efficiency.

ROAD MAINTENANCE

Once construction is completed, we provide the excavators, planers, rollers and loaders for every maintenance operation, building long-term success into every project.

LIUGONG MACHINES EXCEL AT 3 KEY ESSENTIALS:

END-TO-END SOLUTIONS	EXCLUSIVE PATENTED TECHNOLOGY	HIGH COMPACTION EFFICIENCY



ROLLERS FROM
0.9-40 TONNES
PAVERS FROM
2.5-40 METERS

Gold Sales to Fidelity now VAT-Free

Finance Minister Prof. Mthuli Ncube has announced new regulations that make the sale of gold to Fidelity Gold Refinery (FGR) exempt from value-added tax (VAT). These changes are outlined in Statutory Instrument 105 of 2024, under the Value Added Tax Act.

By Rudairo Mapuranga

The new rules are part of the Value Added Tax (General) (Amendment) Regulations, 2024 (No. 69), which introduce a zero-rating for gold sales to the refinery. Zero-rated goods are products that are exempt from VAT, meaning no tax is added to their sale.

According to a newly released Statutory Instrument (SI) 105 of 2024 "Second Schedule (Section 13)

"ZERO RATE: SUPPLY OF GOLD TO FIDELITY GOLD REFINERY (PRIVATE) LIMITED

1. Supply of gold to Fidelity Gold Refinery (Private) Limited." says the SI.

This exemption is significant because zero-rated goods, like gold in this case, play a crucial role in the production of other goods and are essential in the broader supply chain.

Typically, countries require VAT on most goods and services sold domestically. VAT is a type of consumption tax that is included in the total price of products and is charged in addition to sales tax in many transactions.

The decision to zero-rate gold sales follows a recent increase in Zimbabwe's VAT rate from 12% to 15%, which faced opposition from many quarters.

VAT is an indirect tax

applied to the consumption of goods and services. It is charged on transactions and the importation of goods, with the main legislation being the Value Added Tax Act (Chapter 23:12).



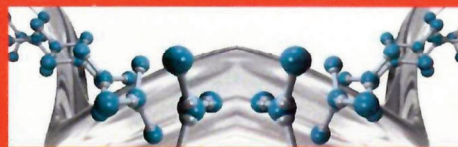
FIDELITY GOLD REFINERY
(PRIVATE) LIMITED



ACOL CHEMICALS

WE ARE SUPPLIERS OF

- Mining Process Chemicals
- General Industrial Chemicals
- Plastic & Packaging Raw Materials
- Agricultural Chemicals (TSA)
- Fibreglass Raw Materials
- Polyurethane Industry Raw Materials



ADDING SERVICE

TO THE FORMULA

ACOL CHEMICALS BULAWAYO:

37 Plumtree Road, Belmont
P.O. BOX 8268, Belmont, Bulawayo.
Tel: 086 7700 7425 / (029) 2470481 - 5
Fax: (029) 2470486
Email: acolbyo@acolchem.co.zw

ACOL CHEMICALS HARARE

Technical Services Africa:
670 Leyland Road, Ardbennie, Harare
P.O. Box W222, Waterfalls, Harare
Tel: 086 7700 7426
Cell: 0772 233 037/8 | 0772 232 440/1
Email: acolhre@acolchem.co.zw



DRILLING

BLASTHOLE - BOREHOLE - RC - CORE DRILLING

- **BLAST HOLE DRILLING**
- **BOREHOLE DRILLING**
- **DIAMOND CORE DRILLING**
- **REVERSE CIRCULATION DRILLING**

We offer surface and underground drilling services to meet our clients' unique mining and geological exploration requirements.



102 Norfolk Road, Mount Pleasant,
Harare, Zimbabwe



Tel: + 263 867 7700 7181 , + 263 788 660 919 ,
+ 263 787 280 092



Email: admin@smc.co.zw

Unearth Seamless Mining Operations with **RARE Blue Diamond** Connectivity

Experience **Robust, Available, Reliable, and Efficient high-speed internet connectivity** that accelerates digital transformation in mining,

Enhance safety | Improve Communication | Streamline Data Management.



Route Diversity



Quick turnaround time



24hr Multi-Layer Network Monitoring Centre



Limited interruptions

+263 8612 000000

www.dandemutande.africa

sales@dandemutande.africa


dandemutande
Your reliable ICT solutions partner

Mimosa Boosts Production by Over 4% Amid Operational Efficiency Improvements

Mimosa Mining Company, jointly owned by Sibanye–Stillwater and Impala Platinum Holdings Limited (Implats) on a 50/50 basis, saw its production in 6E concentrate volumes increase by over 4% during the financial year ending June 30, 2024, compared to the same period last year, as revealed in Implats' Production Update and Trading Statement for the year.



The 6E concentrate volumes were up by approximately 4.2% from 245,000 ounces produced in the financial year ending June 2023 to 255,000 ounces, benefiting from plant optimization.

The company also recorded an increase in tonnes milled, rising by around 5.8% from 2,735,000 tonnes in the previous financial year to 2,894,000 tonnes during the year ending June 2024.

“At Mimosa, 6E concentrate volumes rose by 4% to 255,000 ounces, benefiting from plant optimization, which supported milling volumes and recoveries,” Implats said in its statement.

This increase in production is part of a broader effort by Mimosa to improve operational efficiency across its value chain. Speaking at the 2024 Chamber of Mines of Zimbabwe Annual General Meeting and Conference held in Victoria Falls, General Manager Engineer Stephen Ndiyamba highlighted that the company had enhanced its operational efficiency by as much as 20%. He attributed this to significant investments made in optimizing the plant process, which was

commissioned in April 2023, leading to a substantial reduction in consumable costs and a major improvement in recoveries by about 3%.

Ndiyamba explained that these efficiency improvements were crucial as the company aimed to position itself in the lowest cost quartile of all PGM producers, a necessary step in response to the declining prices of platinum group metals.

The company has also taken stringent cost-cutting measures, suspending major expansion and capital projects, including a \$134 million new shaft project, and reducing capital expenditure by approximately 43%.

Furthermore, Mimosa undertook labour rationalization, which unfortunately resulted in the retrenchment of 33 supervisory management employees and about 300 contractors.

To further manage costs, the company

engaged its business partners and stakeholders in cost-sharing measures, achieving a net cost reduction of approximately 10% from contractors and service providers.

At MIMOSA, 6E concentrate volumes rose by **4% to 255,000 ounces**, benefiting from plant optimization, which supported milling volumes and recoveries

Despite these challenges, Mimosa continues to process about 2.8 million tonnes of ore annually, producing around 250,000 ounces of 6E PGM.

Located at the southern tip of the Dyke, the operation employs just over 3,500 people, including both permanent staff and contractors. The ongoing volatility in PGM prices, with the basket price dropping from around \$1,900 per ounce in October 2022 to just under \$1,200, has posed significant challenges.

However, Mimosa's efforts to improve production and efficiency highlight its resilience and adaptability in sustaining operations under these difficult market conditions.



"High performance, Excellence and Innovation"



OUR SERVICES

- ✓ **Construction of fuel and oil facilities**
- ✓ **Installation of fuel and oil handling equipment**
- ✓ **Repairs and maintenance services to fuel and oil handling equipment**
- ✓ **Pipework**
- ✓ **Calibration**

Your trusted brand since 1997!



www.garaquip.co.zw



sales@garaquip.co.zw



215 Willovale Road, Willowvale, Harare



0772 206 254 | 0771 205 260

Unki Achieves Over 11 Years of Fatality-Free Operations



Zimbabwe's third-largest platinum group metal (PGM) producer, Unki Mine, located in Shurugwi, has reached nearly 12 years without a fatality, Mining Zimbabwe can report.

This milestone makes Unki the first mine in Zimbabwe to achieve such an

impressive safety record.

The achievement reflects Unki Mine's unwavering commitment to Safety, Health, and Environmental (SHE) performance, underpinned by rigorous monitoring and adherence to Anglo American Platinum's safety protocols.

Unki's safety success is part of Anglo American Platinum's broader strategy, which focuses on embedding a culture of safety across all its operations. This culture is driven by continuous risk assessments, advanced technology deployment, and a zero-harm mindset.



In 2023, Anglo American Platinum, Unki's parent company, marked its second consecutive year without recording a fatality. The total recordable case frequency rate (TRCFR) reached a historic low of 1.61 per million hours worked, representing a year-on-year improvement of 31% and an 85% improvement since 2012.

Unki, together with the Mogalakwena and Mototolo mines, has maintained over 11 years of fatality-free operations, while the Amandelbult mine achieved 96 million fatality-free shifts.



Deutsche Industrie- und Handelskammer für das südliche Afrika
Southern African-German Chamber of Commerce and Industry

COMPETENCE CENTRE: MINING & MINERAL RESOURCES

YOUR EXPERIENCED PARTNER FOR BILATERAL BUSINESS RELATIONS

The Competence Centre for Mining & Mineral Resources (CCMMR) was commissioned by the German Federal Ministry for Economic Affairs and Climate Action and established by the Southern African-German Chamber of Commerce and Industry (SAGCC).

The CCMMR is aligned with the Raw Materials Strategy of the Federal Republic of Germany and focuses on Southern African markets in which mining features prominently; these markets will contribute to the security and diversity of the German resource supply and are also outlets for German technology, products and services.

INDUSTRY INTELLIGENCE AND MARKET SUPPORT IN THE SADC MINING SECTOR.

Contact us now!



Selleen Sewpershad

Head of Competence Centre:
Mining and Mineral Resources
Email: ssewershada@germanchamber.co.za



Thululela Pupuma

Project Manager of Competence Centre:
Mining and Mineral Resources
Email: tpupuma@germanchamber.co.za



Bernd Doppelfield

Regional Representative: Zimbabwe
Email: harare@germanchamber.co.za

#Partner In SADC



Competence in Mining & Mineral Resources



on the basis of a decision by the German Bundestag

Visit us on:
www.germanchamber.co.za/en



REMOTE RESCUE



AIR AMBULANCE



ROAD AMBULANCE



CALL CENTRE



Air & Ambulance (Pvt) Ltd

Out source all your emergency and health needs to ACE!

Offering:

1. ONSITE OFF-ROAD AMBULANCE



2. ONSITE CLINIC AND NURSE SERVICES



3. MOBILE CLINIC SERVICE



CONTACT:

marketing@ace-ambulance.com

Call or WhatsApp:

+ 263 775 370 004



**WE
SAVE
LIVES**

Hwange Achieves Over 2 Million Fatality-Free Shifts



HCCL HOLDINGS

HCCL Holdings, formerly known as Hwange Colliery Company Limited, has reached an impressive milestone of 2.3 million fatality-free shifts, a testament to the company's unwavering commitment to workplace safety.

By Rudairo Mapuranga

This achievement, highlighted in HCCL Holdings' recent presentation, showcases the coal mining giant's focus on protecting its workforce while maintaining high productivity levels.

In its statement, the company reaffirmed its dedication to zero harm. "We have achieved 2.3 million fatality-free shifts," HCCL stated, adding that this accomplishment aligns with their long-term safety goals.

Currently, the company's resource base stands at 945.3 million tonnes, with reserves of 800 million tonnes, ensuring a mine life of over 130 years.

HCCL further revealed its operational figures, noting that the current average processing rate is 1 million tonnes per year, while the average mining rate is 3.03 million tonnes annually. The company's sales performance remains strong, with an average of 2.9 million tonnes sold per year.

Hwange's focus on safety is a key part of its strategy for sustainable growth. By implementing robust safety protocols and investing in worker training, the company has managed to not only protect its employees but also optimize its mining operations. This achievement underscores HCCL's role as a leader in both safety standards and coal production in Zimbabwe.

Moreover, the company's long-term vision is supported by a commitment to responsible mining practices. HCCL continues to prioritize both environmental sustainability and the well-being of the communities surrounding its operations.

HCCL Holdings' achievement of over 2 million fatality-free shifts marks a significant step toward its goal of zero harm while ensuring the company's future in coal mining for generations to come.

NISSAN

NAVARA

Make your move in the **Nissan Navara 4x2 XE PLUS**

From	US\$ 30,500*	3-YEARS WARRANTY
		OR 100,000km**
		•Trailer Stability Assist
		•ABS,EBD,Brake assist
		•Knee, side and curtain airbags

CONTACT US FOR THE FULL NAVARA RANGE

NISSAN CLOVER LEAF MOTORS

Book A Test Drive Today!

📞 0733 988 335

📱 @nissancloverleafmotors

MSASA SHOWROOM. 82 Mutare Road, Msasa. Harare - Tel: +263 242 485522/6

Derreck: 0783219300, Rodreck:0772432882, Warren:0774553391

Donald: 0774771092; Patrick: 0772322238, Tatenda : 0772411143

BULAWAYO SHOWROOM. Cnr 6th Avenue/ R.Mugabe Way - T: +263 292 65401/4

Tawanda : 0772446501; Cydrine: 0774323355

www.nissancloverleafmotors.co.zw |

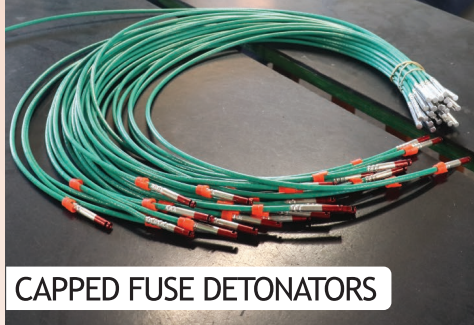
sales@cloverleaf.co.zw

Opening hours 08:00-16:30 Monday to Thursday, 08:00 to 16:00hrs on Friday. *Terms and conditions apply

SUPPLIERS AND MANUFACTURERS OF MINING EXPLOSIVES AND ACCESSORIES



BULK EMULSIONS



CAPPED FUSE DETONATORS



PACKAGED EXPLOSIVES



SHOCK TUBE DETONATORS



ANFO/EXPANFO



DETONATING CORDS



TECHNICAL SERVICES



IGNITOR CORDS

OUR RANGE CATERS FOR ALL SCALES OF MINING, QUARRYING, CIVIL WORKS AND CONSTRUCTION

AT INTRACHEM, SAFETY IS OUR 1ST PRIORITY. OUR UNWAVERING COMMITMENT TO QUALITY AND EFFICIENCY IS EVIDENT IN EVERY PRODUCT AND SERVICE WE OFFER.

Blanket Mine

to Commission Phase 1B of New TSF in 2024, Phase 2 Set for 2025

Gwanda-based gold producer, Blanket Mine, owned by Victoria Falls Stock Exchange-listed Caledonia Mining Corporation, is set to commission Phase 1B of its new Tailings Storage Facility (TSF) this year. This follows the successful commissioning of Phase 1A in 2023, with Phase 2 scheduled for completion in 2025.

By Rudairo Mapuranga

According to Caledonia, the new TSF is expected to have a lifespan of 20 years, spanning 65 hectares, with a planned deposition of over 14 million tonnes of solids. The TSF operations are managed by third-party contractor Fraser Alexander Tailings.

"The new TSF has an expected lifespan of 20 years, with a footprint area of 65 hectares, and the planned solids to be deposited amounting to 14.4 million tonnes. Construction is being undertaken in phases, with Phase 1A and the first slurry line completed and commissioned in October 2023. Phase 1B and the second slurry line will be completed in 2024, with Phase 2 and final commissioning in 2025. The TSFs are operated by a third-party contractor, Fraser Alexander Tailings (Pty) Ltd, and the Engineer of Record is Epoch Resources (Pty) Ltd," Caledonia stated.

As of 2023, Blanket Mine was operating two TSFs: the older facility, which is nearing the end of its operational life, and the newly constructed facility. The old TSF, constructed in 1995, saw the cessation of deposition towards the end of 2023. Monitoring of the dam continues, focusing on phreatic levels and stability, with plans for responsible closure and rehabilitation.

The new Blanket TSF, designed by Knight Piésold, adheres to the Global Industry Standard for Tailings Management (GISTM). A rigorous site selection process identified a location with minimal residential impact and lower risk to rivers and the Blanket Dam compared to other sites considered. The TSF area is upstream of residential developments and is not prone to landslides, flooding, or seismic activity.

Classified as Type 3 waste, the TSF includes a barrier system comprising a 1.5mm HDPE geomembrane over a 300mm compacted clay liner. According to the SANS 10286 Safety Classification, the facility is categorized as a medium hazard.

Tailings, a significant waste stream generated by the mining industry, consist of a slurry of fine mineral particles and water produced during

the ore milling and processing stages. Proper management of TSFs is critical to ensuring the stability of dam walls and preventing environmental contamination.

Caledonia emphasized its commitment to responsible tailings management, stating, "We take tailings management very seriously and are working to ensure our practices align with the requirements and recommendations of GISTM. Our approach to tailings management is set out in our Tailings Management Standard and includes:

- Monitoring technology, such as piezometers, to monitor stability. These are checked monthly through upset tests, with sensors installed on the TSFs for remote monitoring.
- Routine inspections: Daily walk-around inspections are conducted to check for cracks.
- Engineer of Record: We have an Engineer of Record (EoR) responsible for assessing the characterization of the TSF, facility capacity, and slope stability. An inspection by the EoR was conducted in March 2023, with no incidents reported.
- Regular surveys: Surveys are carried out annually," the company noted.



ZIDA
ZIMBABWE
INVESTMENT &
DEVELOPMENT
AGENCY

Unearthing Potential!

Get Started Today!

Be part of Zimbabwe's thriving investment landscape. Whether you are an investor seeking new opportunities or a project owner looking for the right partners, the ZIDA Mining Matchmaking Platform is your gateway to success.

Engage, Invest, and Grow with ZIDA!

- Investors:
- Explore prime opportunities in tourism and mining
- Grow your investment portfolio
- Earn Extra, Finance it
- Project Owners:
- Showcase your projects and attract serious investors.
- Convert your Asset to cash
- Your investment is a step away from being financed

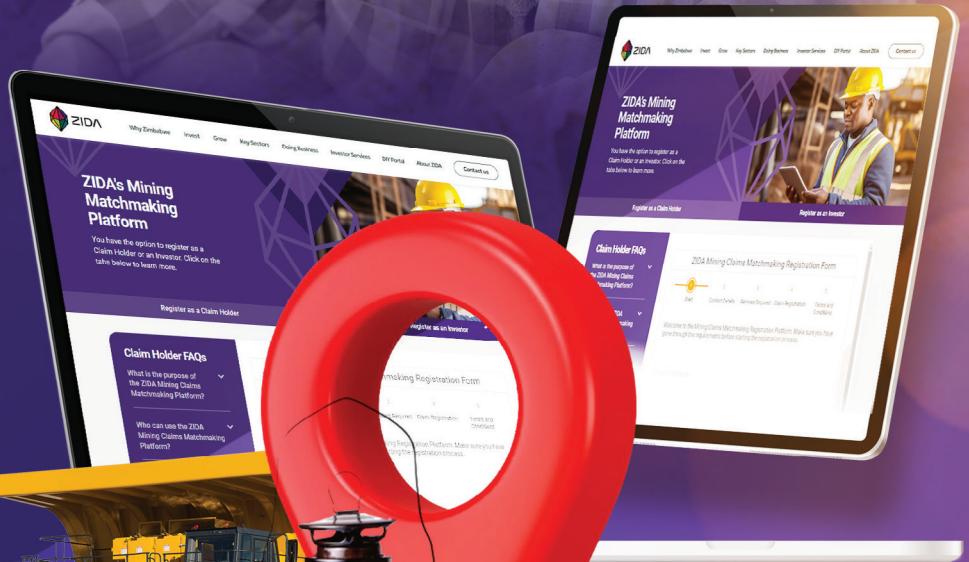
Discover promising opportunities and start your journey towards prosperity today!

Visit:

<https://zidainvest.com/mining-matchmaking/>
or, scan the QR code below for more information



Mining Claims
*Matchmaking
Platform*



zidainvest @zidainvest @zidainvest

Harare Tel: +263 86 880 02639-42, Bulawayo Tel: +263 29 226 5243/ 5

Email: info@zidainvest.com

www.zidainvest.com

#ZIDA
#Matchmaking
#MiningClaims
#InvestinZimbabwe

Caledonia to make US\$14.3 Million After Selling Solar Plant to CrossBoundary Energy

Victoria Falls Stock Exchange-listed gold miner, Caledonia Mining Corporation, will make US\$14.3 million after selling its 12.2 MWac solar plant that supplies power to Blanket Mine to CrossBoundary Energy Holdings.



Caledonia CEO Mark Learmonth

The gold miner announced that it will sell Caledonia Mining Services (Private) Limited (CMS), which owns and operates the 12.2 MWac solar plant, to CrossBoundary Energy Holdings (CBE) for US\$22.35 million, payable in cash. Power generated from the solar plant will continue to be sold to Blanket Mine under a power purchase agreement (PPA).

According to Caledonia, the company will realize a significant profit over the initial construction cost of US\$14.3 million by selling the plant for US\$22.35 million.

The sale will enable Caledonia to return capital at a crucial time in the company's growth, allowing it to focus on its core gold mining business.

Despite the sale, Caledonia retains exclusive energy offtake rights, ensuring that around 20% of Blanket Mine's daily electricity needs will continue to be met by renewable energy from the plant. CBE has also been invited to bid for an expansion of the solar plant, which could lead to further renewable energy provision for Blanket Mine.

The solar plant, commissioned in February 2023, has generated over 47,350 MWh of

power to date, significantly reducing Blanket Mine's reliance on diesel and grid power. Profits attributable to the solar plant for the year ended December 31, 2023, amounted to US\$728,023. The sale offers Caledonia an opportunity to reinvest the proceeds into higher-return mining projects, aligning with the company's strategy of maximizing shareholder value.

Commenting on the sale, Caledonia CEO Mark Learmonth expressed satisfaction with the deal, emphasizing both its financial and strategic benefits.

"We are pleased to have signed this agreement to sell the solar plant, which will allow us to redeploy capital to our core business of mining. While the sale generates immediate profit, it also marks the beginning of a strategic partnership with CrossBoundary Energy, a leader in renewable energy projects across Africa," Learmonth said.

He also noted that Caledonia is exploring additional renewable energy solutions for other development projects while collaborating with CBE on extending the Blanket Mine solar plant.

CrossBoundary Energy, a prominent player

in the renewable energy space, provides fully financed clean energy solutions to industrial and commercial clients across Africa. Their portfolio includes projects in over 14 African countries, with multinational corporations such as Diageo, Heineken, and Unilever among their clients.

Matthew Tilleard, Managing Partner at CrossBoundary Energy, emphasized the significance of the partnership, stating that the completion of the sale is subject to regulatory approvals and the installation of some upgraded equipment, expected to take a few months.

"CrossBoundary Energy's mission is to provide affordable, clean power solutions to underserved markets. Our partnership with Caledonia Mining demonstrates the value renewable energy can bring to the mining sector, enabling sustainable operations while supporting core business activities," Tilleard said.

The sale will allow Caledonia to concentrate on its primary gold mining operations while ensuring Blanket Mine continues to benefit from sustainable, renewable energy.



Providing quality hardware to the mining industry

- ✓ Booster, Submersible & Sump Pumps
- ✓ Cable & Accessories
- ✓ Distribution & Starter Boards
- ✓ Electrical Motors & Spares
- ✓ Electrical Switchgear
- ✓ Mining Hose
- ✓ Stainless Steel Fasteners
- ✓ Personal Protective Equipment
- ✓ Plumbing Accessories
- ✓ Power & Hand Tools
- ✓ PVC Piping & Accessories
- ✓ Underground & Plant Lighting

  | Visit www.electrosales.co.zw for more information

CALL CENTRE WHATSAPP NUMBER  +263771544227 | TEL  08677 222 000

Bikita Calls for Government Intervention Amid Falling Prices, Rising Costs, and US\$500M Investment Plan

Sinomine-owned Bikita Minerals has urged the Zimbabwean government to intervene in alleviating the high costs of doing business for lithium miners, calling for the reduction of taxes, electricity tariffs, and logistical expenses amid plummeting lithium prices and rising production costs.



Bikita Minerals General Manager Xuedong Gong

Despite these challenges, Bikita Minerals is set to invest between US\$400 million and US\$500 million in a lithium sulphide plant over the next three years, reinforcing its commitment to Zimbabwe's value addition and beneficiation agenda.

By Rudairo Mapuranga

Speaking during a visit by the Parliamentary Portfolio Committee on Mines and Mining Development, Bikita Minerals General Manager Xuedong Gong emphasized the need for government support to cushion the financial strain caused by the 90% drop in global lithium prices since late last year.

Gong warned that without significant relief, the company may be forced to scale back operations, potentially reducing production and staff.

"The lithium price has dropped dramatically since the end of last year—a 90% reduction. The current price is only 10% of what it was at its peak. As a result, Bikita Minerals is now losing money. If the price continues to drop, we may have to reduce production or staff, but so far, we have avoided doing so," Gong said.

Despite the current challenges, Bikita Minerals continues its ambitious investment strategy.

Over the next three to five years, the company plans to invest up to US\$500

million to build a lithium smelter, positioning Zimbabwe as a key player in the global lithium supply chain. The new plant will focus on producing battery-grade lithium, aligning with the government's push for value addition in the mining sector.

"We plan to invest an additional US\$400 to US\$500 million to build a lithium smelter here, helping us add more value to our resources and advance our technological capabilities for the battery industry. It is both a reflection of our current commitment and our long-term investment strategy in Zimbabwe," Gong stated.

In addition to this significant investment, the company is set to begin constructing a small flotation plant next year to process tailings, improving resource utilization and sustainability. This aligns with the company's goal of minimizing waste and fully exploiting its lithium resources.

Gong explained that, in contrast to other lithium-producing countries such as Argentina, Chile, and the Democratic Republic of Congo (DRC), Zimbabwe's high operational costs and burdensome taxes place the nation at a competitive disadvantage. In some regions, lithium companies have even placed their operations under care and maintenance due to the global price slump.

"Other countries benefit from lower

operating costs and less burdensome taxes, making Zimbabwe less attractive as an investment destination. Investors may be inclined to shift their focus to countries with more favorable business environments," Gong added.

Lithium miners in Zimbabwe face a 9% tax before exporting their products, with additional taxes imposed post-export.

Gong urged the Ministry of Finance to reconsider its tax policies to attract future investment in the lithium sector, particularly during such global market downturns.

"We are dedicated to investing in Zimbabwe, having already injected millions into expanding our production capacity. However, we cannot continue to absorb these losses indefinitely. The government must act swiftly to provide tax relief or risk chasing away investment in one of the country's most promising industries," he warned.

Since acquiring Bikita Minerals in 2022 for US\$180 million, Sinomine has invested an additional US\$200 million to upgrade and expand the mine's infrastructure. This expansion increased the processing plant's handling capacity from 700,000 tonnes to nearly 4 million tonnes annually. The planned lithium sulphide plant is expected to further elevate Zimbabwe's position in the global lithium value chain, contributing to the nation's mining ambitions.

As the global lithium market continues to face challenges, Bikita Minerals remains cautiously optimistic about its future. However, Gong stressed that without meaningful government intervention, the company's ability to sustain operations at its current level may be jeopardized.

With Bikita's planned investment in the lithium sulphide plant, Zimbabwe has the potential to play a significant role in the global lithium supply chain, provided that the government creates a conducive environment for investment in the sector. The future of the country's broader mining ambitions may depend on it.



MINING & INFRASTRUCTURE EQUIPMENT SOLUTIONS @ ZIMPLOW

ENGINEERING PERFORMANCE



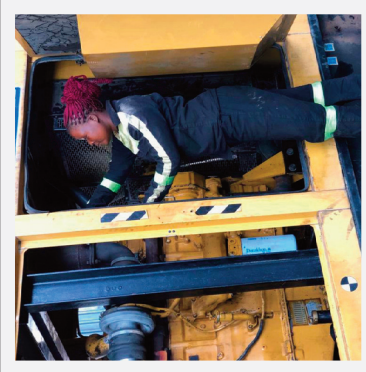
Earthmoving Equipment



Power Systems



OEM & After Market Parts



Component Repairs



Track & Undercarriage repairs



Bucket Repairs



Off the Road Tyres



Lubricants



GET



Specialised Fasteners

CALL OR VISIT US

08677 007 182 | 10 Harrow Road, Msasa | miningandinfrastructure@zimpflow.co.zw

