

MCL NEWS



Maamba Collieries Limited

Jan-April 2022
Issue 35



HIGHLIGHTS

GREEN BELT INITIATIVES

Page 3

UNIT-2 BACK TO OPERATIONS

Page 5

NEXT GEN ZAMBIAN ENGINEERS

Page 9

FIRST AID TRAINING

Page 11

GROOMING NEXT GEN ZAMBIAN ENGINEERS

Four more young Zambian Engineers join the MCL family after completing an intensive training programme. [Continue to page 9](#)



QUEST FOR EXCELLENCE



MR. ASHWIN DEVINENI
RESIDENT DIRECTOR

MESSAGE
.....

Dear Readers,

The recent visits by the ZESCO and ERB Boards is indeed a welcome sign of the collaborative approach being adopted by stakeholders of the Electricity Supply Industry.

MCL meanwhile must continue to meet all its commitments towards meeting its targets of coal and electricity production. This is particularly important in the coming months when hydro-power generation is expected to reduce – I am sanguine that at this juncture, we will continue operating at full capacity to help alleviate the likely energy deficit in the country.

I am happy to note that we have adopted mining-specific first aid practices at MCL – the need for ZERO HARM in the mine and power plant needs no reiteration. I also happy to hear that four more young Zambian engineers have joined our fold. We wish them good luck!

I once again reiterate the need for all of you and your families to stay safe!

Ndalumba kapati, Natotela saana, Dzikomo kwambiri.



DAVID VIJAY KUMAR
CHIEF OPERATING OFFICER

MESSAGE
.....

Dear Readers,

It is gratifying to note that we have continued to run the operations at the Pits and the Thermal Power Plant (TPP) with a clean safety record. The period under review witnessed the inaugural onsite training in First – Aid training, which was attended by most of our staff, organized by Hilburn Consultants in partnership with the Chamber of Mines. The training programme was tailor made, to address first aid requirements in mining operations. The training has given impetus to my team to run the operations even better. It is my sincere hope that all of us will continue enhancing safety measures in our areas of jurisdiction.

The development of new Kanzinze Pit is a great success. Our dedicated team has continued developing the Pit from strength to strength. We can confidently assure our customers, continued and timely supply of their coal requirements!

With the successful completion of first-ever major overhaul of the Thermal Power Plant last year, the plant is poised to contribute significantly to the ever growing national demand of electricity.

We have a number of key community development projects lined up for execution during the course of this year, all aimed at uplifting the living standards of people in our community. We hope that all key stakeholders will support this noble cause.

Finally, we call upon our readers to remain masked up and to strictly adhere to COVID 19 protocols and guidelines as outlined by the Ministry of Health in order to stay safe.

Best regards.



KANZINZE BRIDGE

PLANTING OF 104 SAPPLINGS BOOST MCL'S PLANNED 'GREEN BELT'



MCL STAFF AT THE PLANTATION SITE

MCL undertook a tree planting exercise at the Thermal Power Plant (TPP) as part of its continuing initiatives to protect the environment.

The trees were planted in pursuance of MCL's goal to create a 'Green Belt' at the TPP and comprised 44 flamboyant, 35 jacaranda, and 25 mango saplings.

The programme, which is an offshoot of the company's 'Clean and Green Maamba' project was initiated to inculcate a proactive and practical environmental protection approach among the employees.

The 'Clean and Green Maamba' project, through the Nursery had planted 45,000 trees planted in MCL's operational areas in and around Sinazongwe District so far, to help restore the local environment after years of neglect before the mine was privatized in 2010.

To supply the saplings required for this environmental mega-project, the firm maintains a Nursery that produces about 16 different tree species, most of which are indigenous to the region.





SAPLINGS IN MCL'S NURSERY TO BE USED IN THE GREEN BELT INITIATIVE

UNIT-2 BACK TO OPERATIONS



MCL ENGINEERS INSPECTING THE TURBINE

The second unit of MCL’s power plant is back online after undergoing routine maintenance.

The massive 150 MW generator was shut down from 25th January to 7th February 2022 for scheduled semi-annual repairs.

“The modern, eco-friendly coal-fired power plant operates highly sophisticated equipment and machinery, which require periodical and robust maintenance as well as specialised technical support to keep it running at optimal levels and ensure a consistent supply of electricity to the national grid,” said Maamba Collieries Plant Head, Mr. Ambarish Srivatsava.

“In January this year, Unit-2 was briefly shutdown to facilitate maintenance works by our team of specialised engineers.”

“During the 14-day maintenance period, inspection of the entire Boiler for coils, and tube erosion was conducted. We also inspected and undertook corrective repairs on various components of the unit including the steam turbine, electrical systems and related auxiliaries were carried out,” he added.

To ensure the maintenance was completed on time, MCL called in an additional 150 local and some expatriate engineers/technicians to work on the complex systems.

Being a key contributor to Zambia’s energy security, MCL works in close collaboration with ZESCO and other government agencies to ensure the timely shutdown of its two units for scheduled maintenance, while ensuring minimal disruption and optimal availability of power to the national grid.



Turbine Repairs



BACK TO OPERATIONS

QUEST FOR EXCELLENCE

UNDERSTANDING THE SOPHISTICATED QUALITY CONTROL PROCESS AT THE HEART OF MCL'S CUSTOMER-FOCUSED COAL PRODUCTION.



“The QA programme helps us monitor raw materials right from the pit to the designated stockpiling site”



One of the most notable characteristics of coal is its inherent tendency to have varying properties even when comparing samples from the same seam.

There are several reasons for this phenomenon, which could be due to the history of the rock's coalification, the location of the seam as well as the mining methodology being adopted.

This presents a unique challenge for mining firms like MCL whose clients require coal with specific and varying properties like an average ash content of about 20 percent.

To ensure clients get the specifications they need, Maamba Collieries has adopted a comprehensive system of quality control through its high-tech laboratory.

The mine categorises its coal seams into two classes i.e. High-grade, and Low or thermal grade-coal.

“We have different customers who have diverse requirements in terms of coal grade and to meet these requirements, we have a deliberate Quality Assurance Programme in place. The QA programme helps us monitor raw materials right from the pit to the designated stockpiling sites,” said MCL's Chief Chemist Nicholas Kalondo.

“Customer satisfaction is at the core of our activities. This is achieved through continual improvement of process performance which in turn enhances the quality of the product.”

“To produce quality coal that suits the customer requirements, the need for a strict quality control system and a well-equipped laboratory cannot be

overstated. The laboratory plays a key role in our operations as it helps us to separate and test samples right from the pit to the point of sale,” he added.

The raw coal from the pit is stockpiled at designated sites depending on grade.

2000 tonnes of high-grade coal is sold directly to consumers each day with some of it being processed in CHPP to improve the quality further.

Meanwhile, the thermal-grade coal is used for power generation in the TPP at a rate of 5000 tonnes a day, while operating at 100% capacity.

The separation of coal from waste, i.e. sandstone and mudstone is invariably done only in the mine pit to ensure only coal is transported to the stockpiles.



MCL's Chief Chemist Nicholas Kalondo (second from right), and his technicians analysing coal samples to determine their grade.



MCL utilises a plethora of sophisticated equipment like the Eltra Helios Autosampler to analyse samples.

While the nation's largest coal mine has invested heavily in state-of-the-art lab equipment, its highly skilled and specialized personnel are constantly working on ways to improve the quality control process to ensure clients consistently have access to the highest quality coal.

"We strive to exceed the expectations of our customers and remain at the forefront of technology. We attempt to add value at every operational stage and to achieve quality conforming to global standards.

And as such, we make sure we only produce the highest quality coal for our customer," explained Mr. Kalondo.

Maamba Collieries Limited (MCL) is Zambia's largest producer and supplier of coal. The company adopts an open pit mining method using scientific practices and modern Heavy Earth Moving Equipment. This method of mining ensures fast and precise extraction of this precious mineral resource.

GROOMING NEXT GEN ZAMBIAN ENGINEERS



New crop of local engineers ready to explore their potential at Zambia's largest IPP

Four more young Zambian Engineers have joined the MCL family after completing an intensive training programme.

The grueling training curriculum, which ran for a year from 18th January 2021 - 17th February 2022 is designed to ensure the new hires gain an in-depth knowledge and understanding of the TPP's equipment, operations and maintenance.

"The recruits joined Nava Energy Zambia in early January 2021, after which they underwent an intensive training programme to get them up to speed with the Thermal Power Plant's operations as well as its equipment and machinery. This prepares them for life at the TPP as they start a new chapter in their building careers," said Mr. Vasireddy Srinivasa Rao, the HOD – Training & People Development.

"The goal of the training programme is to put new engineers on a career development path that will ultimately enable them to independently carry out operations and maintenance of equipment and sections of the power plant," added Mr. Rao.

The training is not only theory based but also has a

robust practical element where the trainees get to work on actual plant equipment and projects under the mentorship of senior engineers.

"The importance of the training lies in the fact that being the first and only coal-fired thermal power plant in Zambia, most engineers are not very familiar with how such a complex plant operates because there are no schools in Zambia offering courses relevant to plants of this complexity," said Ms. Febby Bwalyambulo, Junior Electrical Engineer – Water Systems.





FEBBY BWALYAMBULO - JUNIOR ELECTRICAL ENGINEER – WATER SYSTEMS.



MAMBWE KUNDA - JR ENGINEER (MECHANICAL)



FRANK MUMBA - JUNIOR ENGINEER MECHANICAL



GODFREY MUMA MUMPUKA - JR ENGINEER (MECHANICAL)

“I was impressed with how MCL has designed the course, to fit various topics into a single concise training programme that lasted only one month. Any theory we learned in class, was complemented by a thorough practical exercise on actual functioning equipment, which I think helps cement the theoretical learning. Learning is key to career growth because today’s world is constantly changing hence the more you learn, the faster you grow and stay ahead of the curve,” she explained.

Junior Engineer – Mechanical, Frank Mumba noted that the mentorship aspect of the training coupled with the classroom training helped trainee

engineers quickly grasp techniques and skills that would ordinarily take months to completely assimilate, thereby allowing them to qualify for independent operations sooner than usual.

“The way the classroom-based training has been blended with on the job practical training allows young engineers like us, to learn skills and techniques required for one to qualify for independent operations in a very short time as opposed to how it would be if we were just thrown into the mix immediately after recruitment as it happens elsewhere,” he said.

“I am particularly thrilled with the quantum of knowledge shared during the mentorship stage of the training because the Senior Engineers freely shared knowledge without holding back. You get the sense they want you to learn as much as possible so you can be as competent as possible in your respective department. For a young engineer, this is cardinal for career development in that you are working with a team that wants you to be at your best, people who want you to seamlessly blend into the team and grow as far as your potential can take you – and that is rare to find,” he concluded.



Newly joined engineers interact with Mr. Vasireddy Srinivasa Rao, HOD – Training & People Development .

SHEQ SWITCHES FROM RED CROSS FIRST AID TO MINING FIRST AID

INAUGURAL TRAINING UNDER THE NEW MINE-SPECIFIC FIRST AID TRAINING A RESOUNDING SUCCESS



Practical hands-on first aid training.



Maamba Collieries Limited conducted its first ever mine focused training in April 2022 as it switched from the Red Cross' general first aid methodology to one that is more inclined to addressing the unique hazards and injuries likely to occur at a mine as well as the key first response treatment required.

A total of 15 people participated in the maiden training session, conducted in partnership with the Chamber of Mines, Hilburn, and MCL's SHEQ Department.

"We are proud of the 15 participants from MCL and our contractors for completing the mining-specific first aid training," said David Likwenga SHEQ Training Officer.

"The new training provides first aiders with top level training that is needed to determine, identify and assess the unique risks prevalent in the mine and thermal power plant and provide basic treatment where necessary. Applying

effective first aid soon after an accident is paramount to the outcome of a casualty," he explained.

The first class was conducted from 4th - 9th April 2022 at the MCL Training Institute.

Training was conducted by Mr. Fidelis Katontoka and Hilburn Director Mr. Martin Chongo, with support from training coordinators Mr. Likwenga David and Mr. Chansa Rabbson both from the SHEQ department while Mr. Muloongo Fence from Human Resource facilitated the training.

The examination was conducted by Dr. Stanislaus Lukonde Lubinda. He is a certified Mining First Aid Medical Doctor.

The examiner, Dr. Lubinda encouraged the training participants to put the knowledge they had obtained to good use and to always avoid loss of life by preventing further injuries and enabling casualties to reach points of treatment safely.

NEW LOOK MINE POLICE READY FOR DUTY



MCL's mine police parade in their new uniforms



MCL recently procured new uniforms and basic security equipment for the Mine Police to enhance the image and capability of its security personnel.

The new uniforms were approved by local law enforcement authorities.

MCL Chief Security Officer Mr. Henry Chaile was elated with the new uniforms and equipment, saying that they added an extra level of professionalism to the mine's first line of defense and illustrated what the company stood for.

"The new uniforms are very important because they represent MCL and what it stands for. Further, the uniforms set the police staff apart from the general populace as individuals in a position of authority," he said.

"Security guard uniforms are a symbol of protection,

discipline and order - something that makes people feel safer."

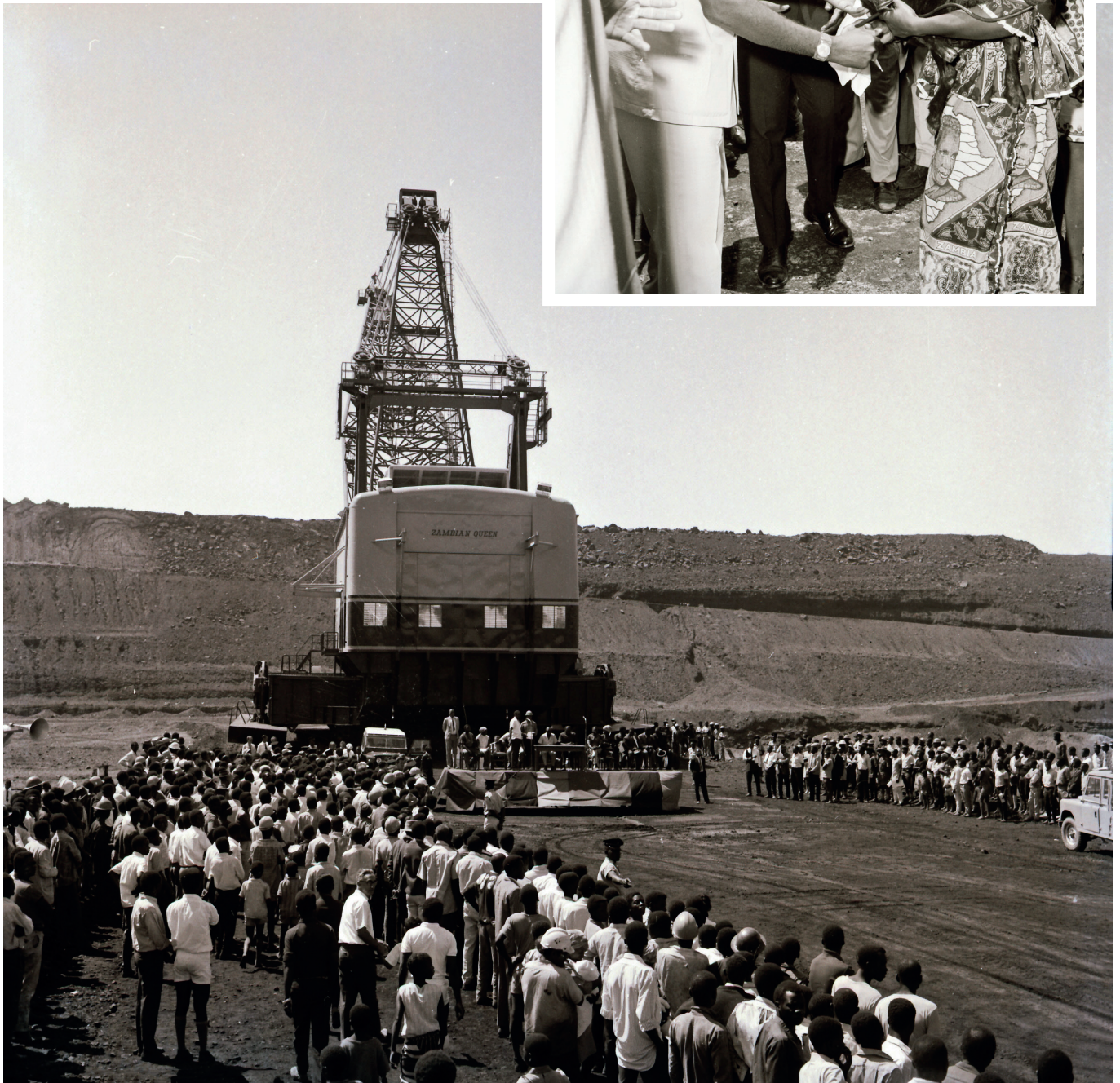
The security department procured the uniforms at a cost of over ZMW 70,000 with each of the nine members of the security unit receiving three sets of full uniforms, that included combat attire, work attire, and ceremonial uniform.

Each set of uniforms also came with security equipment that comprised a police whistle, flashlights, pepper sprays, baton sticks, and two-way radios.

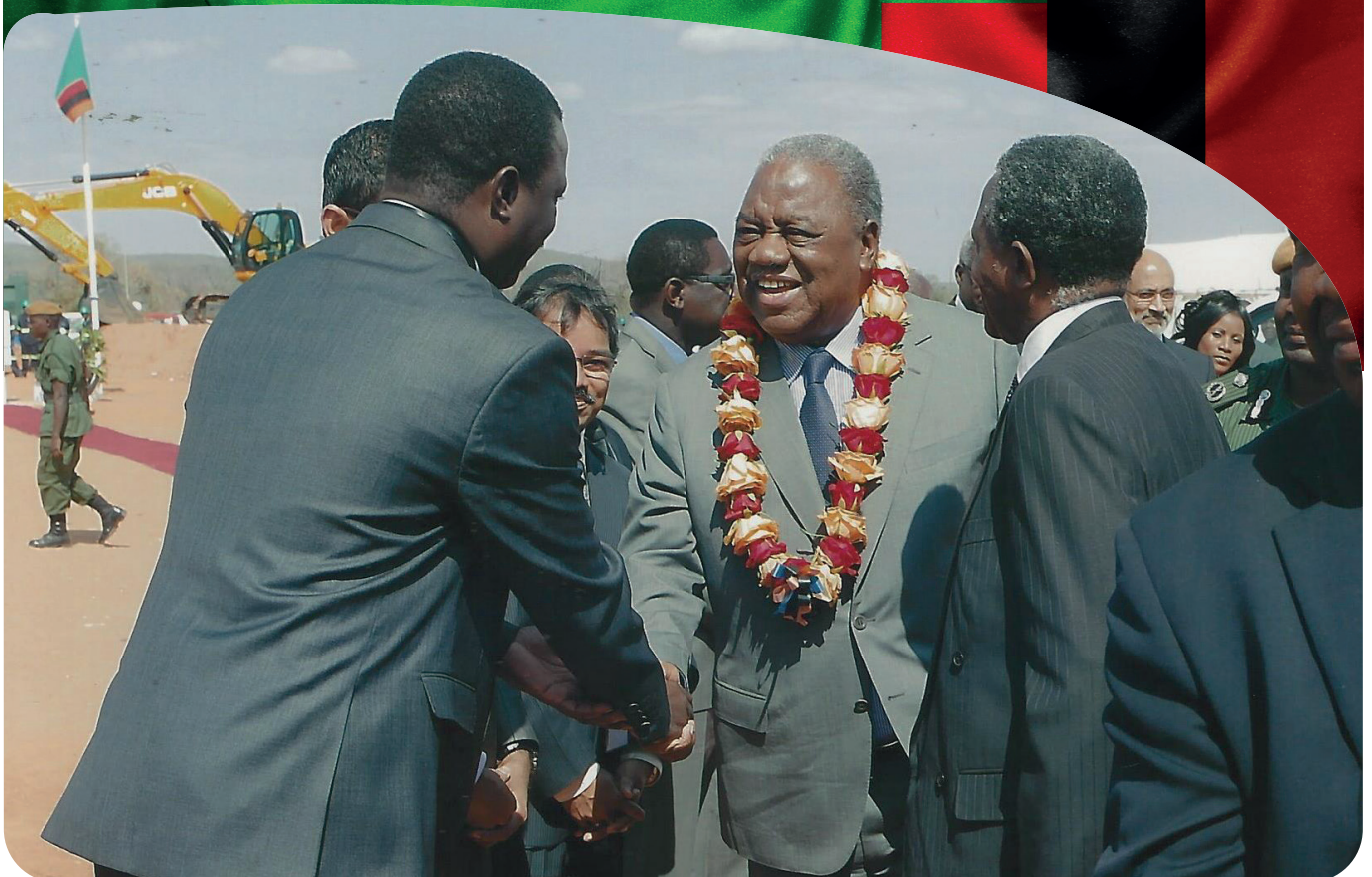
"Our security staff are highly motivated to work hard every day to make sure that the premises and property are protected well with zero margin for error. The new uniforms will reinforce a sense of pride while the basic security equipment will make sure their jobs can be done more efficiently," added Mr. Chaile.

KAUNDA DAY COMMEMORATION - DR. KENNETH KAUNDA AT MCL INAUGURATING THE ZAMBIAN QUEEN - 1971

.....

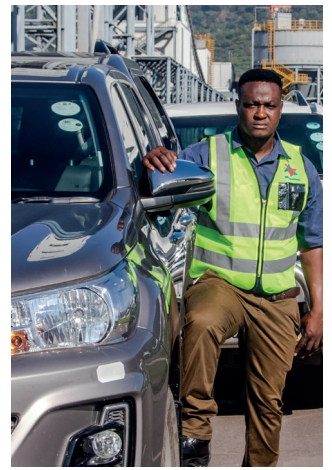


HIS EXCELLENCY MR. RUPIAH BWEZANI BANDA AT MCL - 2012



The Fourth Republican President H.E. Mr Rupiah Bwezani Banda was the Guest of Honour during the ground breaking ceremony for the construction of Maamba Collieries Thermal Power Project - which today is the most significant contributor to Zambia's energy diversification and remains the largest generator of base-load electricity, thereby contributing to the country's energy security.

DRIVING MCL'S GROWTH TRANSPORT TEAM



MCL REVERTS TO ORIGINAL PUMP STATION ON FAVOURABLE WATER LEVELS IN LAKE KARIBA



MCL was forced to use Pump Station B when water levels at Pump Station A on Lake Kariba dropped to unfavourable levels.



Back to Pump Station A



ZESCO MD TOURS ZAMBIA'S LARGEST INDEPENDENT POWER PRODUCER



ERB BOARD VISITS MCL



MUZ & MCL PARTNER TO EDUCATE STAFF ON THEIR RIGHTS

AS UNION PRAISES THE MINE ON ITS SAFETY RECORD AND THE HARMONIOUS RELATIONS BETWEEN THE STAFF AND MANAGEMENT.



MCL Union Chairman Mr. Gilbert Moono center in blue poses with the MUZ secretariat, MCL employees, and subcontractors during the training workshop.

Mine Workers Union of Zambia (MUZ) held a training workshop at MCL's Training Institute in April 2022.

The sessions focused on various subjects including the Industrial Labour Act, Employment Act, and leadership training for women and the youth.

Speaking on the side lines of the workshop, MCL Union Chairman Mr. Gilbert Moono said that, "This training was important because management and employee relationship needs to be always good. Staff should understand the role they play in a company and what is required of them to be professional."



"Maamba Collieries has been our all-weather partner here in Southern Province. The company has subcontracted other local companies and time to time they call us to unionise their staff."

The three-day workshop was divided into three separate sessions namely the women and committee formulation training, youth skills development, and the main session that covered local labour laws and employees' rights in the workplace.

Speaking at the event, MUZ Public Relations Officer Brenda Mufika applauded MCL's stance on prioritising Zambian professionals for all its vacancies.

"Maamba Collieries has been our all-weather partner here in Southern Province. The company has subcontracted other local companies and time to time they call us to unionise their staff," she said.

She added that, "Maamba Collieries is a company that puts workers' interests first, and we have seen this through the company's engagement, both with the union and its workers. We are happy to say that we do not have a lot of pressure when it comes to workers safety and MCL has a safe working environment."

Mrs. Mufika further noted that she was pleased that management at MCL had no issues with collective bargaining among its staff.

MCL employs over 1500 people most of whom are indigenous Zambians from all corners of the country – mainly Sinazongwe district.

MAAMBA CELEBRATES ACHIEVEMENTS OF WOMEN

Women employees of Maamba Collieries Limited women as well as other women groups within Maamba and Sinazeze gathered at Sinazongwe District Grounds to celebrate International Women's Day that took place on 8th March 2022 under the theme "Gender Equality Today for a Sustainable Tomorrow."

MCL has women in mining, electrical, mechanical, environmental, and other engineering fields, as well as female teachers in mathematics and sciences.

The achievements of women all over the world are celebrated on this day. It's a day when everyone shows appreciation, love, and respect towards women. It's a day when women are recognized and celebrated for playing various roles in different spheres of life.

During this year's celebrations, Maamba made extra effort to appreciate the role women play in society, in its workplace and highlighted the progress that has been made so far in making the changes that still need to take place to ensure the world is a fair and equal place for all its citizens.

Women came together at this year's events in Maamba to celebrate, remember their work, their resilience in male dominated fields and their role in the development of the community.

Later, after the mass celebrations that were filled with marching, singing, dancing, poetry, and exhibition activities, Maamba Development Trust and MCL women gathered at Liawa for celebrations organised by MCL Management.



MCL staff celebrate Women's Day

At the afternoon event, the guest of honor Mr Ernest Makasa Principal at Maamba Private School expressed his gratitude to the women present.

Speaking at the event, Mr Makasa said: "A woman is a beautiful creation of God and that it is a fact that all the great personalities are born from the woman's womb and have taken their initial teachings from a woman."

He further stated that women have a robust spirit which makes them excel in their fields and contribute massively to the lives of their family members and the country at large. He also stated that for gender equality to be achieved,

we will need more parents who believe their daughters can make it to the top.

After the ceremonial speeches, the women paraded for a modelling competition in different Chitenge attires that were provided by MCL Management. The winners were given prizes, and everyone, enjoyed the food and the event.

The women thanked MCL Management for the moral and financial support towards the International Women's day events and for employing women in fields that have been earlier seen as male dominated.

MWENDALUBI SIAMUNDYOLI: MAAMBA PRIVATE SCHOOL STUDENT TURNED TEACHER



“I’ve always loved to explain things to my friends. Everyone knew that about me.”

Someone once said, “When you’re in a position to have gotten so much, the gift at that point is giving back.” For Mwendalubi “Mwenda” Siamundyoli, Maamba Private School’s youngest teacher, no truer words have been spoken. Mwenda’s story begins at Maamba Private School where she began and completed her primary school education. The guidance and support she received from her teachers there paved the way for her eventual career in education. “I’ve always loved to explain things to my friends. Everyone knew that about me,” she says as she recounts the memory of her upbringing. “That’s why I went into teaching.”

After going to college and graduating in 2017, Mwenda worked in Lusaka for 2 years before applying to return to her beloved primary school as a Grade 6 teacher. “Because I was a pupil here, I knew that this was the best school in Sinazongwe district. I wanted to come back and give the students an even better education than I received.”

When asked about what she found most challenging and exciting about coming back to work at the place that shaped her childhood, Mwendalubi said, “Getting the older teachers to call me ‘Madam’ instead of ‘Mwenda’ in front of the pupils was the biggest challenge. Most of them taught me when I was a pupil here, so calling me by my first name comes naturally to them. However, it made it harder for me to command respect from some of the older pupils because I’m already so young.”

Despite the initial growing pains of her new role, Mwendalubi settled in and soon hit her stride. “I have found a lot of support from the more senior teachers here,” she shares. “If I am having a hard time, they will sometimes step in to help me. This makes my job here at Maamba, from creating lesson plans to making presentations, a lot more enjoyable. I’m happy that I have the opportunity to be a role model to these students. Getting positive feedback from them and their parents at the end of the day makes it all worthwhile.”

SCOTT STEVEN PHIRI: HEAD OF MINING OPERATIONS



To say Maamba Collieries' new senior mine manager has a wealth of knowledge and expertise would be an understatement. Scott Phiri takes on the role of Head of Mining Operations bringing with him 26 years of experience working in the mines on the Copperbelt, and a further 10 years here at Maamba Collieries.

Scott's mining career began in his second year of study at the University of Zambia in 1982 when the aspiring Mining Engineer joined the Zambia Consolidated Copper Mines (ZCCM) as an intern. Working at Mopani Copper Mine's SOB shaft in Kitwe gave him his first real world experience of mining operations.

Shortly after graduating with Bachelor's degree in Mining Engineering in 1986, Scott secured a job back at the SOB shaft. Within 8 months, he was appointed section boss and shifted to the Central Shaft.

"I ran many sections and gained experience working in several positions in my 15 years at the Central Shaft," he reminisces. "I remember taking over the newly introduced in situ leaching section and making it operational within 6 months after managing to combine two different mining methods."

"The Central Shaft was a very difficult area to work in because it was Kitwe's first mine. The workings were quite old and we were shifting from the old operations to new

methods. It took a lot of hardwork but I was eventually able to fit in and get promoted to underground manager. I was then shifted to Mindola North Shaft which was both an underground and open pit mine."

Through a few more shifts and new responsibilities, Scott Phiri finally found himself back at the SOB Shaft where he retired in 2012.

After only 6 months in retirement, Scott accepted the call to join Maamba Collieries Limited as Mine Manager. In this role, he witnessed the birth of the power plant, and mining operations being revamped and modernised by Nava Bharat.

"Now we have modern equipment like surface miners, dump trucks and excavators. We are able to empower people in our community, set up new infrastructure in the area like health facilities and roads while augmenting what was already existing," says Scott.

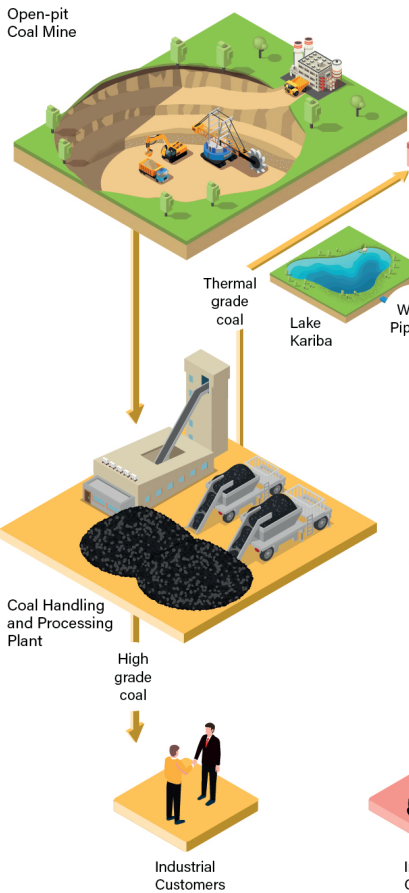
"We can now proudly say that we are able to meet the demand for coal here at the plant and within the country. Most importantly, we are addressing historic environmental damage, while we run this state-of-the-art operation."

When asked about what has been his biggest challenge at Maamba so far, Mr Phiri said, "Our goal here is to develop our workers into people who can contribute positively not only to the operations of the mine, but to their communities and the country's mining and energy sectors as well. Our biggest challenge is that the community expects us to employ everyone, which we simply cannot do. My hope is that there will be a ripple effect as the people we do employ go on to pursue successful careers and make their mark in the local mining sector."

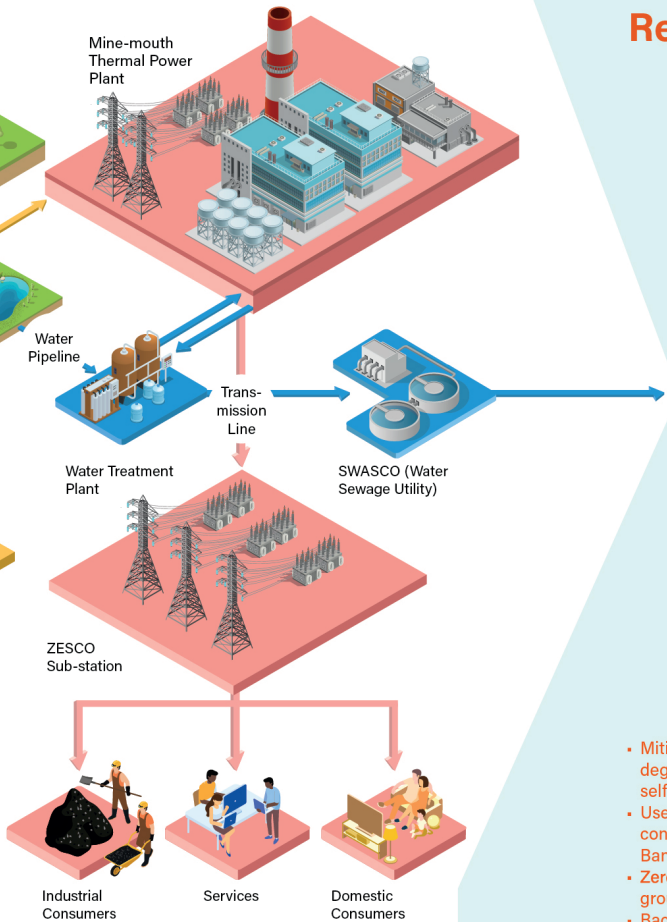
Finally speaking on his new job and what it meant for the operations at Maamba, Mr Phiri said, "This promotion comes from a lot of coordination with my team and colleagues. Yes, I have been at the centre of running this investment through my many years of dedication, but it is not just me. Mining is a team effort and I owe my team this honour."

"We will continue to encourage our people to keep learning, trying new things, and being innovative. I have learnt in my many years of service that when people see their ideas being implemented, they get encouraged to do more. Thus, I look forward to continuing the cultivation of the culture of innovative and ambition amongst our workers that has been the driving force behind MCL's growth."

Coal Mining



Thermal Power
Installed Capacity 300 MW



Corporate Social Responsibility



- Mitigate environmental degradation by use of polluting self-combusting coal in TPP
- Use of SOX/NOX/PM emission control technology *iaw* World Bank norms
- Zero-effluent discharge protecting ground water
- Back filling mine voids
- Dedicated arboriculture programme using re-cycled water
- 'Green Maamba' campaign – planting indigenous trees with community involvement

Outcomes...

...making a difference

- Conversion of polluting thermal-grade coal to high-value base-load energy
- Contributes 10% of Zambia's installed power generation
- Provides energy security and diversity in energy mix
- Sale of high-grade coal to domestic customers for construction industry and SMEs
- 100% by-product utilization
 - Unsellable coal as input for power plant
 - Fly ash for construction sector
 - Waste water for arboriculture
- Community Development

ABOUT MAAMBA COLLIERIES LTD

Maamba Collieries Limited (MCL), in Sinazongwe District in Southern Province, is Zambia's largest coal mine and the nation's biggest Independent Power Producer (IPP) with Zambia's only coal-fired Thermal Power Plant (TPP). The company operates a 300 MW (2X 150 MW units) modern, eco-friendly coal-fired power plant—the only one of its kind in Zambia—with the capacity to supply 10 percent of the country's currently installed electricity generation capacity. MCL is owned 65 percent by Nava Bharat Singapore Pte and 35 percent by ZCCM-IH, with some US\$919 million invested since 2010. The plant provides diversity in the nation's energy mix and contributes to the nation's base load electricity demand with high-availability power that is independent of climate change, thereby augmenting energy security of Zambia.



CONTACT US

- Corporate Park
Alick Nkata Road
Lusaka
- www.maambacoal.com
LinkedIn: maamba collieries-ltd
- +260 962608976