



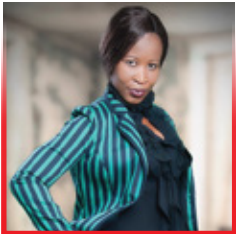
QUARTERLY NEWSLETTER

REBUILDING AND REGROUPING HSEC IN THE COAL MINING INDUSTRY

Q2 2021

MESSAGE FROM THE PRESIDENT

MRS PEARL NKOSI (TECHNICAL SIGNATORY – BLUGREY OHC PTY LTD)



The overall industry performance in terms of safety, health and Environmental Management, is both comforting and challenging. Comforting in that the on-going effort and collaboration by professionals is visible. The endurance and the zeal to continue doing what is best for the human and environment is eminent. However, the apparent stagnation in the overall performance, and in some cases, the stagnation challenges one to ask questions and propel professional to endeavour to do better.

We continue to extend gratitude to the members of council in the following disciplines Environmental, Safety and Health (***Ventilation and Occupational Hygiene Engineering***) for ensuring that we uphold the high level of work ethic and professionalism and that we impart the same to fellow professionals in the field.

Based on the latest available data the South African Mining Industry (SAMI) has shown a **33%** regression in overall fatalities with the Coal sector showing neither improvement nor regression. Injury statistics as well have an over **65%** regression compared to the same period last year, Coal contributing **5%** to the overall regression. This is not only a cause for concern but a probe by statistics to professionals in office to have a conversation on firstly what the root cause of this regression is, this challenges industry leaders and investors into considering overall investment in health, safety and environmental programmes in all spheres, employees, employers and regulators alike are prompted to have a conversation that will positively influence the overall HSEC performance curve.

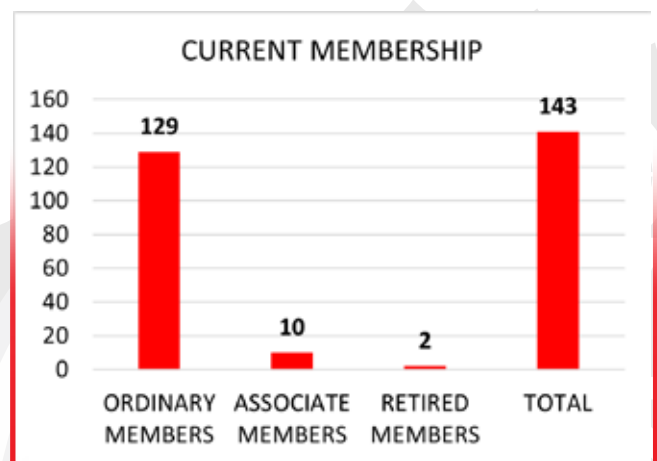
We encourage active participation and sharing of thoughts and ideas within the space of HSEC in order to foster change. It may be the same conversation, but is does not and should not get old because, the target population is evolving daily. Mining methodology and conditions as well as documentation may be of age, however we are

confronted with change daily in this industry which dictates that we cannot cease the dialogue of what went wrong and what could have gone better for all parties involved. The emphasis being on a preventative approach than that of remediation post incident.

We commend tirelessly all leaders and professionals in office for all efforts directed at creating and maintaining employment especially during these trying times. We pay homage to you for continued diligence in your work that makes certain that all employees, visitors and contractors return home unharmed.

From... Pearl Nkosi
SACESHA President 2021-2023.

MEMBERSHIP UPDATE



Welcome to the following new members who were accepted in Q2 2021:

1. Ms Fisile Mbatha – ZAC
2. Mr Siphonkosi – ZAC
3. Mr Msawenkosi Buthelezi - ZAC

We look forward to your positive contribution to the association.



A REFLECTION ON Q2 2021

ANNUAL GENERAL MEETING

The Annual General Meeting was held in Q1 2021. No subsequent meeting held in the second quarter.

COUNCIL MEETINGS

Three successful council meetings have been undertaken this year so far. This is in line with the plan and no meetings have been missed. Roles of Council and the plan for the year have been discussed and concluded. One of the most critical points discussed at this Council meeting is the requirement for current members to not only pay their membership fees, but also raise their voice. This is the time to speak and be heard. The professional contribution of members is of paramount significance. We cannot run a meaningful association unless we address the needs of the industry and we become an answer to industry questions.

EVENTS

HSEC ONLINE CONFERENCE

The SACESHA online conference was a resounding success. Our speakers invested themselves in the preparations of rich and sound presentations that more than sixty (60) devices logged in.

Well done to SACESHA Council for organizing such an energized event! We look forward to more events of this nature. We extend our gratitude to the following speakers who have served the association well:



Adriaan Oosthuizen

Director

Jones and Wagener Consulting

Mr Adriaan Oosthuizen is an expert in his field. At the SACESHA conference on the 30th of June 2021 he engaged with him as he takes us through Underground Stability and Risk Assessment. Mr. Oosthuizen has extensive experience in mine closure and rehabilitation, environmental risk assessments and material movement optimization.



Constance Kekana

Director – Occupational Hygiene

Department of Mineral Resources and Energy

Ms Constance Kekana is succinct in her knowledge and experience in Ventilation and Occupational Hygiene. She has extensive experience in hard rock underground mines and has spent the latter part of the career directing the industry in terms of legislation, leading practices and industry trends. Serving multiple boards and technical committees, she maintains current information within her field.



Inus Labuschagne

Senior Manager – Ventilation

Sasol Mining

Mr Inus Labuschagne is a seasoned expert in the field of underground mine ventilation. He has spent years in hard rock and coal mines focusing on reducing exposure to dust, minimizing overall dust liberation and explosion prevention, to name a few. He has been instrumental in the development of young professionals and has participated actively in the examination board of the MVSSA. He is a founder member and immediate past president of the association.

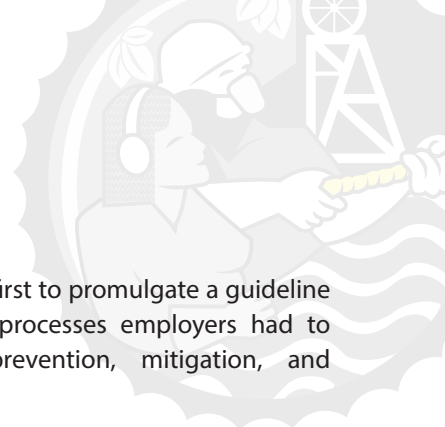


Lindiwe Ndelu

Chief Director - Occupational Health

Department of Mineral Resources and Energy

Dr. Lindiwe Ndelu has extensive experience in the field of Occupational Medicine. Has served on a number of boards and advisory committees. With the current state of affairs in lieu of the COVID-19 pandemic, she has played a critical role in providing direction to the mining industry in the overall management thereof. Dr. Ndelu is quite an academic as well. We can only be grateful to have her on the list of speakers. Do not miss the opportunity of first hand engagement on the developments regarding the COVID-19 pandemic.



Danie Otto
Operations Manager
Digby Wells Environmental

Mr. Danie Otto is a biogeomorphologist by profession. He specializes in ecology of wetlands and rehabilitation. He will engage delegates at the SACESHA conference on the topic of ecological rehabilitation. Danie has wetland experience across Africa, in various mining houses and commodities, such as coal, platinum, asbestos etc. He has more than 25 years in the field.



Jean-Jacques Verhaeghe
Programme Manager
Minerals Council of South Africa / Mandela
Mining Precinct

Mr Inus Labuschagne is a seasoned expert in the field of underground mine ventilation. He has spent years in hard rock and coal mines focusing on reducing exposure to dust, minimizing overall dust liberation and explosion prevention, to name a few. He has been instrumental in the development of young professionals and has participated actively in the examination board of the MVSSA. He is a founder member and immediate past president of the association.

If you are a member of SACESHA and you have a project that you would like to present, kindly send your request to the responsible Vice President (**Chair**) for your discipline. We look forward to learning from you and growing with you through your contribution.

FEATURED ARTICLES

NEW DEVELOPMENTS IN COVID-19



On 15 March 2020, The President of South Africa declared a national state of disaster on COVID -19, in terms of the Disaster Management Act (57 of 2002). This was followed by several restrictions (which include the COVID-19 risk adjusted strategy with different alert levels) aimed to curb the pandemic.

On the 26 March 2020, the Guiding Principles on the Prevention and Management of COVID-19 in South African Mining Industry (SAMI) was Issued by Chief Inspector of Mines (CloM), and on the 18th of May 2020 the Mandatory Guideline was promulgated.

The Mining sector was the first to promulgate a guideline which elaborated on the processes employers had to follow in relation to prevention, mitigation, and management of COVID-19.

Key elements addressed by the guideline were:

- Risk assessment and review
- Start-up and on-going procedure for mines
- COVID-19 Management Programme
- Monitoring and reporting
- Compensation for occupationally acquired novel corona virus (COVID-19)

After a few months of COVID -19 Guideline promulgation there were complaints from organised labour on how companies implemented different sections of the Guideline, this led to discussions amongst tripartite stakeholders (State, Organised Labour, and Employer) at the Mine Health & Safety Council (MHSC) which led to amending the guideline and development of explanatory notes on the provisions of the Guideline.

Amended in the guideline were the definition of vulnerable employees to align it with a circular on vulnerable employees issued by the National Department of Health (NDoH), the Risk Assessment section 8.1 which emphasizes that employer is required to conduct a risk-based assessment covering all workings at mines, the risk of vulnerable employees to SARS- CoV-2 while at work. Amendments also ensure that employers should put control measures to the review of Human Resource policies around business travel, sick leave, and other related policies to account for SARS-CoV-2 infection.

There are new inclusions in section 8.3 addressing issues of adequate, usable, and appropriate training, as well as providing information material on Employee Assistance Program and the process for employees to be able to disclose any pre-existing conditions prior to returning to work.

Amendments were affected after all tripartite stakeholders reached a consensus, then later the Board of MHSC recommended that employers must effect the changes on their COP to align with latest regulations issued in terms of section 27(2) of the Disaster Management Act, 2002, as it takes a considerable time to amend and promulgate regulations as issued by different government department.



Author: Dr. Lindiwe Ndelu Chief Director:
Occupational Medicine (DMRE)
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IDENTIFYING AND QUANTIFYING CLOSURE RISKS ASSOCIATED WITH UNDERGROUND MINES

The Minerals and Petroleum Development Act states that a mine has to be rehabilitated “to its natural or predetermined state”. The desired predetermined state is defined by agreed SMART closure objectives, which, if achieved should lead to successful mine closure. If the closure objectives cannot be achieved, mitigation measures will be required. Because we cannot see into the future, there are uncertainties/risks associated whether the closure objectives can be achieved.

Underground bord and pillar mining could potentially fail through either pillar collapse (due to scaling) leading to subsidence on surface, or intersection failures (loss of roof supports and/or tension cracks) leading to sinkholes. These events often occur post closure leading to significant impacts. At mine closure, mines are required to cede significant financial provision to the Government to carry out the rehabilitation on their behalf thereafter. A quantitative closure risk assessment is carried out by Engineers and Environmental Practitioners to determine the risks of not achieving closure as well as the associated mitigation measures and costs.

A quantitative risk-based approach is applied to each mine panel to predict whether a closure objective can be achieved. The probability of a pillar failure in an underground mine as well as the extent and magnitude of the subsequent subsidence on surface (i.e. the “post-failure state”) can be determined by Engineers using an underground mine stability assessment tool. The defined “post-failure state” is utilised by Environmental Scientists/Practitioners to determine its potential environmental impact if the event occurs.

Risk is defined as the product of impact and probability. If the inherent closure risk is unacceptable, mitigation measures can be designed and costed by Engineers and Environmental Scientists that will reduce these risks to acceptable residual closure risks.

By using this predictive tool to describe the post failure state of an underground mine and to determine its latent risks (in a quantitative manner) of not achieving the closure objectives, mining companies (executives) can make informed decisions even during the planning phases of a mine on how/where to mine and what the resulting liabilities could be in future.

Author: Adriaan Oosthuizen, Jones & Wagener
Engineering and Environmental Consultants.
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HEALTH AND SAFETY LEGAL FRAMEWORK IN SOUTH AFRICAN MINING INDUSTRY (SAMI) – SUMMARY

The Mine Health and Safety Act was established with the sole purpose of regulating and improving health and safety in SAMI. The legislative framework outcome is based - with the following main important provisions:

- Firstly it places statutory Health and Safety obligation to the Employer – with an incorporated principle that requires a detail risk assessment and response (reference can be made to section 11); also requires the employer to disclose and ensure access to information.
- The Second provision is on employees’ obligations on general health and safety and their rights – coupled with a principle to participate on matters of health and safety and refuse to work in dangerous places (references could be made with Regulation 23).
- Thirdly is the institution of Tripartitism– where engagements are held with the employers and organised labour for every piece of legislation through the Mine Health and Safety Council and then advice to the Minister, upon approval then gazetting/promulgation will follow.
- Lastly provision of investigations and inquiries when all strategies fails.

All this provisions and principles are – guided by sections of the act; regulations and the mandatory guidelines and guidance note as developed in line with section 49.6



Key to ensure full implementation of these prescripts in order to achieve zero harm is to:

1. To make proper appointments with qualified competent persons to assist the employer.
- These appointments should be in line with Chapter 2 where sections 4.1 is appointed and represent the employer. The section 4.1 in then makes the following appoints: -
 - the manager in line with section 3.1 for daily management and operations of the mine;
 - section 12.1 for occupational hygiene management and mine environmental control
 - section 13.3 for medical surveillance programme; and
 - the appointment in terms of regulation 17.2(a) on Survey management. Most mines makes a mistake of putting the accountability and responsibilities to the mine manager. The Act is clear in Chapter 2 section 3(2) that the appointment of the mine manager (section 3.1) does not relieve any duties imposed on the employer by the Act. (Therefore reference should be made in line with the statutory returns/reports that the employer is accountable for).
 - To capacitate and give these persons with suitable resources to execute strategies that mitigates the risks.
 - To have reporting lines/structure; roles and responsibilities that are unambiguous considering that some appointees' recommends and others execute recommendations.
2. To continuously identify and strategically respond to risks timeously.
 3. To provide proper awareness training for employees on identified hazards, the risk and precautionary measures thereof.

With regards to regulations and mandatory guidelines it is important to note that some regulations have minimum standards, however it requires risk assessment and professional judgement to go beyond the minimum requirements in order to strive for continuous improvement.

The critical point that needs to be considered in the preparations of mine COP's in line with Chief Inspector of Mines guidelines is the risk assessment. In most cases COP's are done per Mining houses and not regarding specific hazards and risks of the particular shaft or operation. At times they are copy and paste of the Chief Inspector's guideline. COP's should be customised for each operation in line with the identified hazards and risks. It should include a detailed plan of implementation on who will do what. Participation and consultation of employees' representatives and training personnel it's very important. COP's should be treated as living documents that talks to continuous risk management and should have buy in of employees.

Author: Ms. Constance Kekana Director Occupational Hygiene (DMRE)

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To be informed on the on health and safety issues in the industry, annual reports and legislative requirements the following websites www.dmre.gov.za and www.mhsc.org.za can be visited.

A SNEAK PEEK INTO Q3 2021

MEMBERSHIP

We have received new applications for membership in the beginning of quarter 3 2021. These applications are being considered duly by Council members and applicants will be notified on the state of their applications.

COUNCIL MEETING

The Council meeting for the third quarter of 2021 was on the 7th of July 2021.



GENERAL MEETING

The General meeting held during the second quarter was successful. Thank you to all SACESHA Members for making it a success. A special thank you to the following presenters for sponsoring their knowledge.

1. **Environmental** : Implementing a fully fledged underground oil recycling system
– **Melchior Joseph**
2. **VOHE**: Dust suppression and methane dilution on continuous miners
– **Inus Labuschagne**
3. **Safety**: Contractor management, and the talks to our processes to manage contractors from onboarding right through to verifications etc.
– **Wihan Marx**

EVENTS

SACESHA ANNUAL CONFERENCE – 30 JUNE 2021 & 18 AUGUST 2021



Due to the current state of affairs this event is now an online even split in two parts. Part one was held on the 30th of June and hugely successful. Do not miss the second part taking place on the **18th of August 2021**. For more information Email: elaineg@mpas.org.za. Keep abreast with new developments. Collaborate and share ideas with your peers in industry!

DO NOT MISS THIS!

SACESHA GOLF DAY

The SACESHA Golf Day is planned for **September 2021**. Please be on the lookout for dates and invitations which will come through your mail via secretariat.

ANNUAL PRESIDENTIAL FUNCTION 04 – 07 NOVEMBER 2021

It has been a long time since the association had a presidential function. This is influenced by several factors including, funding, and current situation. Please take note of the date that has been set for the presidential function. With your involvement we can turn things around and at this time next year reflect on a successful and positive year, in spite of present challenges!

AWARDS AND RECOGNITION

We value your contribution in recognising industry players. Kindly email us with information if you would like to have an industry player recognised.

GENERAL

Thank you for taking time to read this offering. We are excited to bring you this as the first newsletter from SACESHA from now until the end of time!

As SHE professionals we are working on a lot of projects and this is a great platform to safeguard our contribution to the industry and ensure continued learning and benchmarking on best practices.

We are on a drive to double membership by the end of the year. If you want to be counted amongst high performing and committed professionals who are driven by nothing short of excellent, then SACESHA is the association for you!

JOIN SACESHA TODAY!

WHO SHOULD JOIN?

- Environmental Officers/Co-ordinators/Practitioners/Managers
- Safety Officers/Chief Safety Officers/Co-ordinators/Practitioners/Managers
- SHE Officers/Co-ordinators/Practitioners/Managers
- VOHE Observers/Assistants/Officers/Supts./Managers
- Occupational/Industrial Hygienists/Exposure Scientists
- HSE Students/Learners/Interns
- Other professionals with recognized qualifications are welcome to apply.

FOR MORE INFORMATION

Contact **Elaine Govender**

E: elaineg@mpas.org.za **T:** 0115682052

W: www.sacesha.org.za

Follow us on Social Media: **Facebook** @SACESHA



THANK YOU TO OUR EVENT SPONSORS

SACESHA CONFERENCE 30 JUNE 2021

On behalf of the President and the Association we would like to thank each company and mining house for sponsoring and participating in the SACESHA Conference. We appreciate your contribution and we look forward to working with you again.

EVENT SPONSORS



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Department:
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