



SOUTH AFRICAN COLLIERY ENGINEERS' ASSOCIATION

**ANNUAL REPORT OF THE COUNCIL
FOR THE YEAR ENDED 31 DECEMBER 2016**

COUNCIL 2016

President

L D Turvey
Exxaro Coal South Africa

1st Vice-President

J Subermoney
Sasol Mining

2nd Vice-President

P E Mojalefa
Anglo American Coal

Immediate Past President

J W Nel
Exxaro Coal South Africa

Regional Chairpersons

Gauteng/Mpumalanga/ Free State Region

M Hyra
Coal Mine Management Services

Kwazulu Natal Region

E Bvumbi
Tendele Coal

Limpopo Region

B Mtshengu
Exxaro Coal South Africa

Elected Members

A Bezuidenhout
Sasol Mining

L D Botha
Sasol Mining

L Delport
Sasol Mining

G Q Gething
Glencore Coal South Africa
(Coopted)

J Diedericks
Glencore Coal South Africa

H Lombard
Exxaro Coal Mpumalanga

J Malan
Sasol Mining

J Nkosi
South 32
(Coopted)

A Prinsloo
Anglo American Coal

J Prinsloo
Boikarabelo SA
(Coopted)

G Robinson
Glencore Coal South Africa

H Zwart
Consultant

K La Grange
CTC
(Observer CTC)

Secretary

Mr S J Orchardson
Association Secretary

VISION STATEMENT

The vision statement is

To be a professional, dynamic, value-adding and influential body in our Industry

**REPORT OF THE COUNCIL FOR THE YEAR ENDED
31 DECEMBER 2016**

The annual report presented to members of the Association on the occasion of the Thirty eighth Annual General Meeting held at the Brunfelsia Lodge, Trichardt on Thursday 16 February 2017.

STRATEGIC PROCESS

Your Council has continued to focus on the Association becoming an effective role player in the Coal Mining Industry. This process is ongoing from previous years as the Council wished to ensure that the Association is effectively marketed and participates in the preparation of new legislation, Codes of Practice, compliance to newly promulgated legislation as well as safety targets set by the Mining Industry.

A strategic planning session was held in February 2016 to set out the Association's interaction with its various stakeholders during the year.

The strategic theme for 2016 is: ***“Leading in challenging times through efficient and innovative best practices”***, we will do this through Focused Workshops and Partnerships.

The President and Council representatives met with the Heads of Engineering from the major Mining Houses to discuss, get direction and inputs to the Associations' strategic plan for 2016. The Council furthermore invited the DMR's Principal Inspectors – Limpopo and Mpumalanga Regions to the Strategic session to get also inputs and direction from them.

The following priorities were identified and focused on during SACEA Business Cycle 2016:

- To Improve relationship with DMR
- Competency Thrust
- Improve communications
- To Add value to the members

The President and Vice Presidents gave feedback during the year to the Principal Inspectors, SACMA Councils and the Heads of Engineering from the Groups on the priorities and progress on the activities of SACEA during 2016.

These interventions continues to grow in importance and provides a unique opportunity to network with the Mining Houses representatives and the Department of Mineral Recourses.

FINANCE

The 2016 financial objective Council set itself at the Strategic session is to have a surplus of more than R500,000, to be cost conscious and further more to ensure SACEA's survival and sustainability in this tough economic climate.

The financial statements appended to this report indicate that income for the year amounted to R1,057,442 made up of Subscriptions received during the year from Full, Affiliate and Candidate members, Presidential function, interest received from investments, Mini Safety Workshops, GCC Workshop Technical Symposium, a Race day and the Golf day.

Expenditure amounted to R1, 143,927 giving a loss of R 86,485. Accumulated funds of R748, 139 will be carried forward to the new financial year.

The successful technical symposium in June 2016 continues to generate funds to the amount of R161, 868 for the Association and thanks go to Mr J Subermoney, and his small but highly motivated team for making it a continued success.

Two safety workshops were held during the year which raised R 55,428.

As part of the Association's objectives a successful golf day was held in November 2016 which generated a surplus of R 65,584 and the July race day which generated a total of R 37,368. These events also promoted fellowship amongst members. The Council thanks Mr L D Botha for his excellent work in making the golf day so successful and Mr G Q Gething for his hard work to make the Race day a success.

This year R 111,410 funds were required to fund the Presidential function in line with the Council's decision not to solicit sponsorship from outside organizations and to reduce the shared costs from each members attending for the Presidential function.

The accumulated funds have been used to fund the Association's initiatives as well as an amount donated to charity. The Council regularly strategies on how to make best use of the surplus for the general advancement of the Association.

SUBSCRIPTIONS

In terms of the Powers vested in it by the Association's Constitution and Rules, Council has agreed align the SACEA subscriptions with those of SACMA for 2017 for Full, Affiliate and candidate members, these will be at R1,100 (exclusive of VAT). This will be an R 20 increase for members.

MEMBERSHIP

The membership of the Association as at 31 December 2016 was 359(369), made up of 168 (179) Full members, 38 (41) Affiliate members, 126 (128) Candidate Members, 10 (8) retired members and 17 (13) Honorary Life members.

There has been a net decrease of 10.

Council records that the percentage registered with ECSA as full members (having voting rights) still complies with ECSA's requirement for SACEA to be recognized as a voluntarily Association with ECSA. However a number of members need to join ECSA and others to upgrade their ECSA membership from candidate to full members. There are 179 (228) members registered at some level with ESCA (109 professional engineers and 70 candidates).

MEETINGS

In addition to the monthly meetings of Council, regular Regional Meetings were held during the year and feed-back from members through their Regional Representatives and Council members, provided valuable assistance to the workings of Council. The increased involvement required by your Council in a number of important areas meant that ten Council meetings were held during the course of the year.

Each of the Regional and user group meetings had a theme aligned with the SACEA strategic focus for the year;

- Noise & Dust;
- PDS & Autonomous Haulers;
- Failure and Maintenance Learnings;
- Annexure E;
- New technology & Partnerships;
- Tyre Design and Maintenance;
- Gas safety.

During the year under review, Southern (Kwazulu Natal) Regional and Limpopo Regional meetings were combined with those of the South African Colliery Managers' Association. The Limpopo and

Southern Regions continues to gather momentum under the guidance of Mrs. B Mtshengu and Mr E Bvumbi.

The User Groups (Opencast, Underground and Plant) had a successful year with regular meetings and several technical visits. Each User Group has a Council appointed Chairperson who ensures regular meetings and visits of interest.

There were the following Regional and User Group meetings during the year:

- Norther Regional meetings 3
- Limpopo Regional meetings 3
- Southern Regional meetings 4
- Opencast User Group meetings 2
- Plant User Group meetings 2
- Underground User Group Meetings 2

The Council, Workshops, the Regional Meetings, a General Meeting and Joint Meetings with AMRE and SACMA were well supported during the year and shows the commitment by members to the Association.

Once again your President was invited to attend Council Meetings of the South African Colliery Managers' Association and wishes to thank its President, Mr L Mabuza for assisting in maintaining close ties between the two Associations.

YOUNG TALENT

The SACEA Young Talent forum which was established in 2012, through Mr L Delpont the forum was developed further during the year ensuring that SACEA is a prominent Association which created value to Engineering Professionals in training (PIT's) in 2016.

Mr Delpont arranged Technical visits during the year and Mr P E Mojalefa arranged a GCC workshop in May with more than 127 attendees and AMRE arranged a similar event in October with more than 120 attendees to assist PITs gaining exposure, signing off of their Annexure E requirements and networking. These events were well supported and beneficial to the members who participated.

MEETINGS OF PRESIDENTS AND VICE-PRESIDENTS

These meetings provide the management of the Mine Professional Associations Secretariat (MPAS) to manage and organize the day to day work of MPAS under the guidance of the Chairman, Mr A Brown of AMMSA, as well as a useful forum where matters of mutual interest and concern have been addressed with the meeting being held every third month of the year.

SAFETY AND HEALTH

MINE SAFETY ACHIEVEMENTS

The Association through Council continues to place a high priority on safety improvements, risk assessment and the elimination of accidents. Reports by members are made at all Association meetings and the DMR is invited to Regional meetings and Safety Workshops to address members.

Congratulations to the management and staff of all the mines who had safety achievements during 2016. These achievements will be acknowledged on 9 March at Coalsafe 2017.

MINI SAFETY WORKSHOPS

The Council agreed on mini safety workshops to focus on topics identified during the Strategic session.

Two mini safety workshops were held in May and November 2016, topics covered included:

- Section 54 on repetitive non compliance
- Feedback on electrical regulations
- Appointments and responsibilities to comply as an Engineer
- Hazards of risk associated with rotating equipment
- The Occupational Health and Safety Act as an exposure to mining operations
- Road map for the Mining Industry to zero harm

Comprehensive discussion sessions followed the presentations made at the workshops which was also very beneficial to delegates and were the foundation for greater understanding and networking.

2016 COLLIERY HEALTH AND SAFETY CAMPAIGN (COALSAFE)

Your Association has once again been actively involved in the 2017 Colliery Safety and Health Campaign launch which took place on 9 March 2017 and remains fully committed to the Campaign's ideals for the promotion of safety and health in the Mining Industry.

MINESAFE 2016

Your Association also took part in the Minesafe 2016 at Emperors Palace at the end of August 2016. Minesafe 2016 was the sixth joint collaboration of hard rock and coal mines on safety, occupational hygiene, environment and community, ending with presentations of safety achievements.

MINING QUALIFICATIONS AUTHORITY (MQA)

During the year the Council asked Mr K La Grange from Colliery Training College to be co-opted to the SACEA Council in order to provide expertise in training arena. Through Mr La Grange your Association continues to play an active role in MQA matters.

THE ENGINEERING COUNCIL OF SA (ECSA)

Your Association continues to keep abreast of developments at ESCA. Your representatives continue to participate in the ECSA registration committee.

The Association continues to meet its Voluntary Association (VA) status with ECSA and was granted its renewal of its VA status for a further 5 years in 2014.

OCCUPATIONAL, HEALTH AND SAFETY POLICY COMMITTEE (OH&SPC)

The Council would like to thank Messrs J Diedericks and J Malan for attending and their contribution.

The main focus of this committee is to represent employer bodies at a Chamber level on redrafting of legal requirements and other issues that may affect the Industry. The recommendations of the Committee are taken to the Mine Regulatory Committee and from there to the Mine Health and Safety Committee.

One of the focus areas was the representation of the Industry at the DMR to review various regulations which were subsequently gazetted during the year.

CERTIFICATED MECHANICAL AND ELECTRICAL ENGINEERS (CM&EE)

The Council would like to thank Mr H Lombard for attending and his contribution.

The main focus of this committee is to represent employer bodies at a Chamber level on redrafting of legal requirements and other issues that may affect the Industry. The Recommendations are then submitted to OH&SPC.

PAPERS, PRESENTATIONS AND TECHNICAL NOTES

Your Council would again urge that members offer technical papers for presentation at SACEA meetings, besides being a valuable source for the dissemination of information, also serve as an educational tool for future engineers.

The following technical presentation was made at the Association's General Meeting on 16 September 2016:

Underground services water pipeline incident by Mr R Phiri, Sasol Mining.
Importance of a systems approach to engineering by Miss S Janse Van Vuuren, Sasol Mining.
Communication strategy for SACEA by Mrs A Prinsloo

The following technical presentations were made at the Association's Limpopo and Northern Regional Meetings during the year:

Methane Explosion demonstration (Klopperbos) by C Nokwe, Exxaro
Arc flash analysis by P Heydenreich. Okusha
Collision avoidance solutions by H Lefawane, Exxaro
Lubrication Solutions by R Sonnekus, World Focus
Industrial Vacuum cleaning (Conveyor belts, Dams) by D Gade, High Point Mining and Engineering solutions
Electric motors by J Havenga, Transvaal Electric Motors
MOSH milestones and noise by Mr H Gumede (Chamber of Mines)
Coal safe experience by Mrs S Pheiffer (Grootegeluk Mine)
Feedback on coal safe by C Nokwe (Grootegeluk Mine)
Tripartite feedback by R van Staden (Grootegeluk Mine)
2016 vs 2015 safety stats for the industry by R van Staden (Grootegeluk Mine)
DMR by R van Staden (Grootegeluk Mine)
SACEA strategy session Feedback (SACEA 2016-2018 roadmap) by Ms B Mtshengu (Grootegeluk Mine)
Noise & Dust Safety Milestones by J Janse Van Rensburg (Chamber of Mines)
Dust emission control systems by J Human (Afri-Group)
The combination of an even pitched chain and dual sprockets provides better chain-sprocket interactions, which yields less noise and smother operation by T van Niekerk (Cincinnati Mine Machinery)
Development and manufacturing of components for integrated dust suppression systems used on continuous mining in underground coal mines. By G Dryden (CDC)
Road dust control, water evaporation, water treatment technologies & dredging solutions by J le Roux (Flowcentric)
Matrix Intellizone proximity detection system by J Hassett/B Davison
Autonomous coal haulers by M Brooks (Monitech /Pempek)
PDS five years later and thermal camera imaging by R Venter (Expert Mining Solutions)
Collision avoidance system underground and on surface by J van Niekerk (Becker Mining)
Vertical rescue capabilities for mining industry by C de Klerk (Mine Rescue Services)
Latest safety statistics in mining industry by A Zide (DMR)
Arc flash analysis by P Heydenreich (Okusha)
Collision avoidance solutions by J van Niekerk (Becker Mining)
WEG partnerships and solutions to the mining industry by F Hoogenboezem/James R Kuhn
FLSmith feeding and sizing technology by PC Kruger

The following technical presentations were made at the Association's workshops during the year:

- Feedback on Section 54 on Repetitive Non - Compliance by A Zide (DMR)
- Appointments and Responsibilities to Comply as an Engineer by J Swartz (Legislative Compliance Specialists Pty (Ltd))
- Hazards of Risk Associated With Rotating Equipment by S Naicker (Sasol Mining)
- The Occupational Health and Safety Act as an Exposure to Mining Operations
J Swartz (Legislative Compliance Specialists Pty (Ltd))
- A road map for the mining industry to zero harm by Stompie Nel (Exxaro)

MERIT AWARDS

Certificates of Merit were awarded to all the presenters (members of the Associations) who made presentations at General and Regional Meetings during the year.

The standard and quality of technical papers presented during 2016 continue to be of a high standard. The Editorial Committee has reviewed the 2016 papers presented at General, Regional, Users Group Meetings and the Technical Symposium is pleased to award a merit award to:

- Vertical rescue capabilities for mining industry by C de Klerk (Mine Rescue Services)
- Autonomous coal haulers by M Brooks (Monitech /Pempek)
- Noise Leading Practice by D Coutts (Chamber of Mines)
- Underground services water pipeline incident by Mr R Phiri, Sasol Mining.
- Hazards of risk associated with rotating equipment by S Naicker, Sasol Mining

AWARDS SCHEME

Your Council introduced an award's scheme in 2000 utilising the Association's surplus funds to promote the advancement of education within the engineering discipline of the Coal Mining Industry.

The best apprentice award for 2015/2016 at the Colliery Training College was awarded to Mr [WK Dinko](#) at a prize giving function in May 2016.

It has been decided that the 2016 Awards for the best certificated engineer and best junior engineer will be awarded at the annual GCC Workshop in May.

PRESIDENTIAL FUNCTION

The 2016 combined General Meeting and Annual Presidential Function was held at the Protea Hotel – Clarens on 15 – 18 September 2016. The function was attended by 45 members and provided an opportunity for members and their families to network and share information.

The successful Presidential function culminated with the traditional Black Tie banquet on 17 September 2016.

REPRESENTATION

The Council wishes to express its appreciation to all the representatives and alternates who continued to give their time to ensure that the Association was well represented and its views made known, in a most professional manner on various committees.

1. <u>Representation and Key Performance Areas</u>	
i) <u>Influencing Policy: Legislation and DMR collaboration</u>	
DMR Intervention (Limpopo, Mpumalanga)	President/L Botha/ J Subermoney
SACEA/ DMR liaison	J Nkosi (Team Leader)
Tripartite Forums	B Mtshengu/J Malan
Chamber of Mines - OH&SPC - CM&EE	J Diedericks/J Malan
Standard Formulation (SANS TC 65)	M Hyra/H Lombard
SAFA	A Bezuidenhout/H Zwart
MOSH Adoption and milestones	H Zwart/L Botha
	J Subermoney/
	G Robinson/J Diedericks
SANS TC 82 Mining Machinery	J Prinsloo
SANS TC 66 cables	J Malan
BeltCon & SafeCon	J Nkosi
MRS	L Delpont
SAIMM	P E Mojalefa
Coaltech	H Lombard
ii) <u>Skills Security: Competency defining & development</u>	
Young Talent Development	L Delpont
Commission of Examiners (GCC)	PE Mojalefa/L Delpont
ECSA – Registration/Administration	A Bezuidenhout/J Prinsloo
	H Lombard/PE Mojalefa
MQA (feedback from training)	CTC
CTC	K La Grange
GCC at small mines	PE Mojalefa
iii) <u>Communication: Strategy and Knowledge sharing</u>	A Prinsloo
Website	H Zwart/L De lport
Newsletter/Communication Sheet	A Prinsloo & L Delpont
HOE Engagement	President & representatives
iv) <u>Participation and Value: Build & Growth</u>	
Membership Model	L Botha
Regional Meetings	M Hyra/ B Mtshengu/E Bvumbi
Safety Workshops	L Botha
User Groups - Opencast	G Robinson
- Underground	J Malan
- Plant	J Diedericks
Small Mines	President/M Hyra
Golf Day	L D Botha
Presidential Function	President
Recognition and Awards	Vice-Presidents & Regional, User Group Chairmen

	Technical Symposium	J Subermoney/L Delpport
v)	<u>Technical Content Delivery (Excellence)</u>	
	CPD Administration (ECSA) Best Paper Coordinator	MPAS L Botha/S Van Wyk
vi)	<u>SACEA Governance</u>	
	Finance and Administration (Cash & Debtors)	President/L D Botha/S Nel
	Membership and Subscriptions Custodians	
	<ul style="list-style-type: none"> • Sasol Mining • South32 • Glencore Coal and Shanduka • Anglo Operations • Exxaro Coal • Mining Contractors • Service Providers 	L D Botha J Nkosi J Diedericks A Prinsloo S Nel/B Mtshengu M Hyra Regional Chairmen
	Mining House Payment facilitators	
	<ul style="list-style-type: none"> • Sasol Mining • South32 • Glencore Coal • Anglo Operations 	N Schneider C Sampson H Pearson A Nienaber
	Code of Conduct	L D Botha
	Constitution	L D Botha / President
	Annual General Meeting 2017	J Subermoney
	Annual Strategic Session 2017	J Subermoney
	Council Meetings	President
	MPAS Committee of Management	President/ Vice Presidents

WEBSITE and COMMUNICATION

The Association's website address is www.sacea.org.za. The website is functional and regularly updated. The website gives members valuable information on Association as well as contact details for representatives on Council and other Committees. All technical presentations, calendar, communication sheet and upcoming events are up loaded. Council want to thank Mr H Zwart for his hard work and dedication to ensure that the website is continuous updated.

A Newsletter was issued at the Presidential function in September 2016 part of the communication process adopted by Council.

GOLF DAY

The Association again hosted a highly successful golf day at Graceland on 5 November 2016. Council wished to place on record its thanks to Mr L D Botha for the organisation of the event and the sponsors who generously supported the occasion. More than 200 golf players attend this prestigious event.

RACE DAY

A fund raising event was held on 2 July 2016 at the Turffontein race course. The event was well supported by the Mining Houses and Sponsors and it turned into a fun filled day. The event is planned to be a fixture on the SACEA calendar in future.

JOINT SACEA/AMRE GENERAL MEETING

The annual joint SACEA/AMRE General Meeting, hosted by AMRE, was held on 18 August 2016 was hosted by SACEA at the Country Club Johannesburg. This is proving to be a popular interaction between the two Associations.

Mr C Sumter was the quest speaker and his addresses covered the future of the mining industry in Southern Africa.

A presentation was then made by Mr J Kruger on the Impala Rustenburg 14 shaft fire which was followed by a technical visit was held to the TSR Slew Rings.

JOINT GENERAL MEETING OF COAL ASSOCIATIONS

A Joint General Meeting was held on 1 December 2016 at which the following presentations were made:

- Mine Theft by M Elliott
- Competition Law by X Nsizwane
- Greenhouse Gases by A Cook
- Productivity by MCS

TECHNICAL SYMPOSIUM

The 11th technical symposium, “Leading in challenging times through best practice” was held on 23 June 2016. For the second year 15 OEM exhibitors attended the event to exhibit their mining products aligned with the Symposium’s theme.

The following papers presented were:

- DMR Safety statistics and best practice (E Letsoko)
- Underground Wi-Fi system at Thubelisha (J Schoeman – Sasol Mining)
- Noise Leading Practice (D Coutts– Chamber of Mines)
- Winder Incident (S van Wyk – Sasol Mining)
- MMD Crushers at Opencast mine (M Van Heerden - MMD)
- Overland belt design & conveyor network capacity simulations (C Andrade -DRA)
- Continuous miner innovation (JA Engineering)
- Hydrostatic tractor (Sello – Smat projects)
- Opencast mine collision avoidance project (D Naidu – Grootegeluk mine)
- Infrared fire detection (R Venter)
- Operator Training Simulators (A Menendes)

The Council wishes to thank Mr J Subermoney for sustaining this initiative.

The next annual technical symposium will be held in June 2017. This will be an ideal opportunity to showcase knowledge of members of the Associations and will give the opportunity to share knowledge and network. ECSA continuing professional development credits will be awarded.

TECHNICAL VISITS

Council will continue to seek out interesting and diverse technical visits for members, providing them the opportunity to experience other companies operations.

During the year a number of Technical visits (arranged by the User Groups and the Young Talent Forum) were undertaken by members, including:

- * Explolabs
- * Barloworld
- * Multotec
- * Babcock Facility
- * SCAW metals
- * Bridgestone
- * Afrox
- * TRS Slew Rings

CONCLUSION

In conclusion I wish to express my appreciation to all members for their continued support and invaluable input throughout the past year.

To the Council for the support and arrangements made for the SACEA golf day, the Race day and for the organization of the Technical symposium, Safety workshops, GCC workshops and Strategic session. To the various Chairmen of the regions and user committees. These events were very successful and a credit to the enthusiasm and passion of the Association.

To my wife and work colleagues and the Association's Secretary for their valuable assistance and guidance throughout the year and for the professional manner in which the affairs of the Association have been administered.

LD Turvey

PRESIDENT

Areport2016/sacea