



MINE VENTILATION

SOCIETY OF SOUTH AFRICA

NORTHERN BRANCH

THE OFFICIAL NEWSLETTER

*Promoting best practice in ventilation engineering
for a healthy, safe and sustainable future.*



MANAGING
THE INVISIBLE.



PROTECTING
PEOPLE.



SUSTAINING
OUR FUTURE.

OUR VISION

The vision of the Mine Ventilation Society of South Africa (MVSSA) is to promote safe and efficient mining practices through advancements in mine ventilation.



CONTROL DUST & FUMES

We are committed to reducing airborne contaminants to protect the health of all miners.



PREVENT FIRES

We advocate for effective ventilation systems that help prevent fire hazards underground.



MAINTAIN COMFORTABLE TEMPERATURES

We promote ventilation solutions that support safe, productive and comfortable working environments.



ADVOCATE SAFETY

We champion a culture of safety and health through ventilation excellence and industry advocacy.



SHARE KNOWLEDGE

We provide a platform for knowledge sharing, training and professional development to strengthen the industry.

ROOTED IN HISTORY. COMMITTED TO THE FUTURE.

The MVSSA's vision is rooted in its historical formation and the dedication of its members to the mining industry's future.

**Together, we strive for safer mines,
healthier people, and a **more**
sustainable mining industry.**





MINE VENTILATION SOCIETY OF SOUTH AFRICA

*Promoting best practice in ventilation engineering
for a healthy, safe and sustainable future.*

OBJECTIVES OF THE SOCIETY

To promote and advance the science and practice of ventilation engineering,
with particular reference to mine ventilation, air quality and associated problems by:

-  **1 Encouraging member co-operation** in activities necessary to produce and maintain a healthy and safe working environment.
-  **2 Providing a forum** where opinions and viewpoints in connection with mine ventilation engineering and occupational hygiene can be raised and discussed.
-  **3 Acting as a forum** where members' and industry's opinions concerning mine ventilation engineering, and occupational hygiene may be discussed, debated and communicated to regulatory authorities and the Industry.
-  **4 To propagate knowledge** amongst ventilation professionals through the dissemination of information using the best suitable means at the Society's disposal.
-  **5 To hold meetings** of members and interested persons or bodies, for the purpose of promoting discussion on matters relating to mine ventilation.
-  **6 To promote personal contact and co-operation** amongst ventilation officials and other professional associations, statutory bodies, interested and affected stakeholders and individuals.
-  **7 To gather and disseminate information** regarding all aspects concerned with and related to the mine ventilation engineering discipline by:
 - Promoting the professional development and proficiency of members.
 - Producing a Journal.
-  **8 To represent the interests** of the Society and its members both nationally and internationally.
-  **9 To uphold the status and the interests** of members of the Society and to consider, discuss and deal with all matters affecting the general professional activities of members.
-  **10 To do all things compatible** with the professional status and advancement of the Society which may be deemed necessary or desirable for the attainment of these above objectives.
-  **11 To empower the Council**, in terms of the Constitution and By-Laws, and where necessary with the special approval of members at an Annual General Meeting, to do all it shall deem necessary to achieve the objectives of the Society.
-  **12 To provide and promote the professional registration** of members in the interest of promoting best practice, high professional standards and to align the profession with statutory requirements as amended from time to time.

MEMBERSHIP

Membership of the Society is open to all individuals internationally who are interested in mine ventilation engineering and actively participating in the discipline.

THERE ARE SIX CLASSES OF MEMBERSHIP:



1. Student Members



2. Associates



3. Members



4. Fellows



5. Retired Members



6. Honorary Life Fellows



Persons or Institutions may subscribe to the MVSSA technical publications without enrolling as a member of the Society.



MANAGING THE INVISIBLE.



PROTECTING PEOPLE.



SUSTAINING OUR FUTURE.



MINE VENTILATION OF SOUTH AFRICA

NORTHERN BRANCH



AGM – NORTHERN BRANCH FEEDBACK



EDUCATION SUB COMMITTEE

Promotes learning, skills development and student engagement.
Organises workshops, bursaries and career development initiatives.



INFORMATION SHARING

Facilitates the exchange of knowledge, best practices and industry updates.
Strengthens communication and collaboration within the branch.



EDITORIAL COMMITTEE

Responsible for creating, reviewing and publishing quality content.
Produces newsletters, articles and technical publications.



TECHNICAL COMMITTEE

Focuses on technical excellence and innovation in mine ventilation.
Drives standards, research and solution sharing.



MEMBERSHIP COMMITTEE

Supports membership growth, retention and engagement.
Builds a strong, diverse and active professional network.



SOCIAL COMMITTEE

Plans social events and networking opportunities for members.
Strengthens relationships and fosters a sense of community.



KNOWLEDGE



COLLABORATION



INNOVATION



COMMUNITY



Stronger Together. Advancing Mine Ventilation.



MVS

MINE VENTILATION SOCIETY
NORTHERN BRANCH

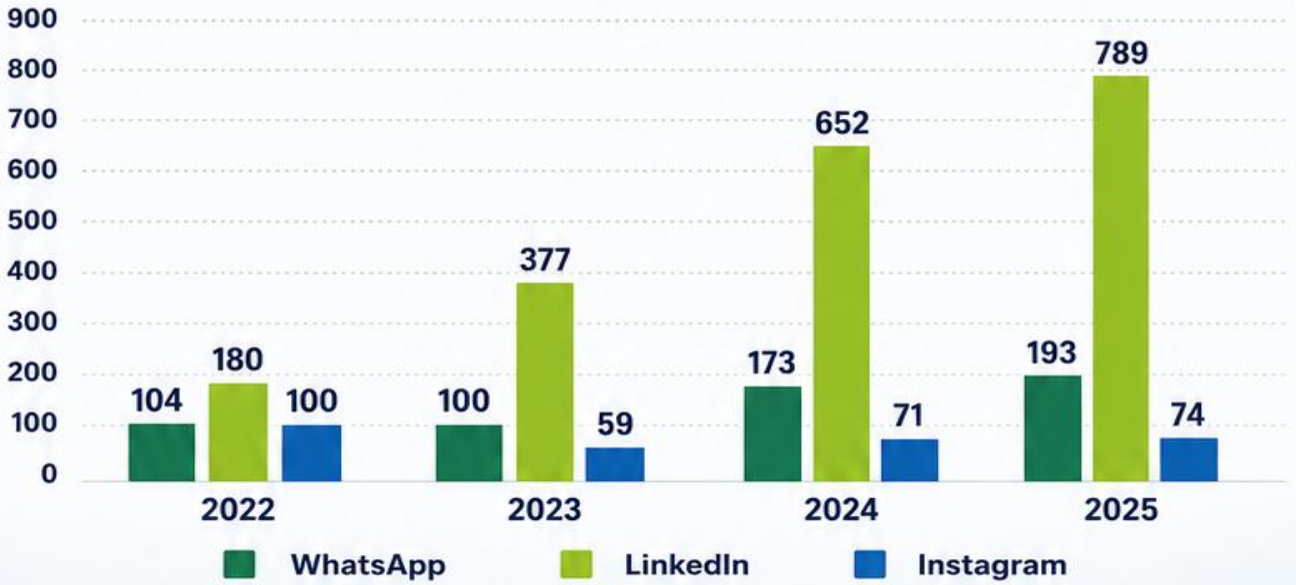


EDITORIAL COMMITTEE GROWING THE COMMUNICATION PLATFORM

Strengthening connections.
Sharing knowledge.
Driving the industry forward.



COMMUNICATION STATS



KEY INSIGHTS



193

WHATSAPP GROWTH

Members engaging and conversations growing.



789

LINKEDIN LEADS

The biggest platform growth in our network.



74

INSTAGRAM REACH

Building visibility and engagement.



LINKEDIN SHOWED THE
BIGGEST INCREASE IN
MEMBERS JOIN –

21%



OUR MISSION

Delivering relevant, impactful content
across the right platforms to connect,
inform and inspire our members.



ENGAGE
our members



SHARE
knowledge



AMPLIFY
our voice



TOGETHER, WE COMMUNICATE. TOGETHER, WE GROW.



MVS
MINE VENTILATION SOCIETY
NORTHERN BRANCH

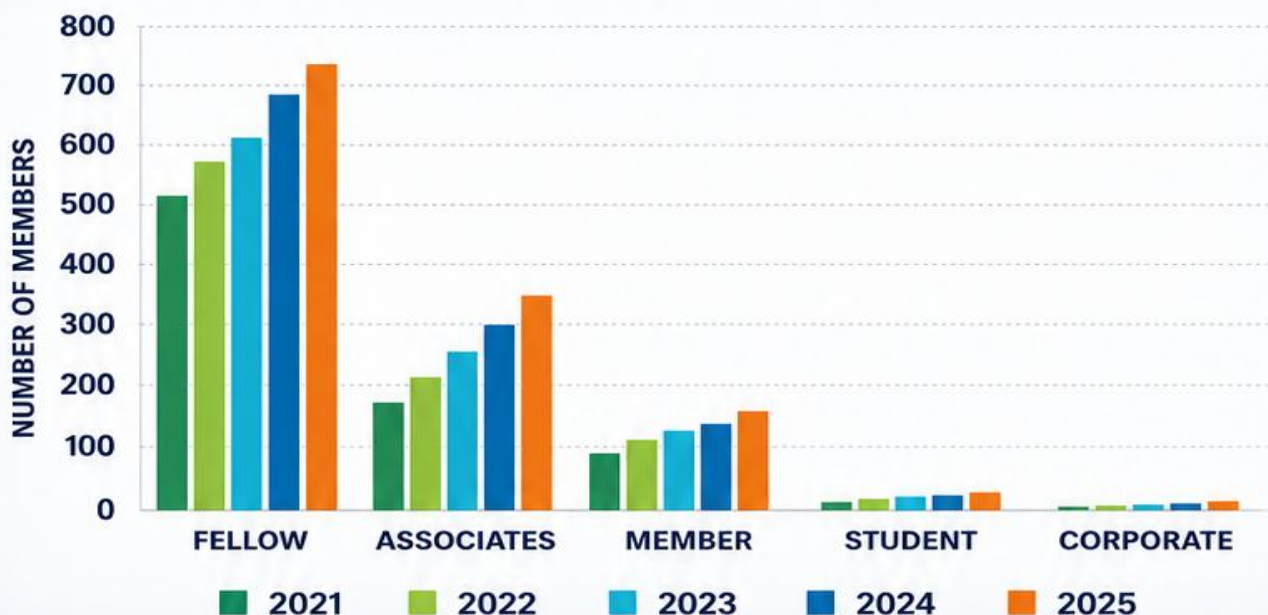


MEMBERSHIP COMMITTEE

**BIGGEST
INCREASE
IN HISTORY**

Stronger Together. Growing Forward.

MEMBERSHIP GROWTH OVERVIEW



A HISTORIC MILESTONE FOR MVS NORTHERN BRANCH

Thank you to every member who has been part of this remarkable growth journey.



FELLOW

6%

Fellow membership grew with **6%** increase, due to committees Fellowship motivation programme in place.



ASSOCIATES

15%

The associates **increased by 15%** due to new membership enrollment and transfers from other regions.



MEMBER

16%

Member status has **increased 16%** from the previous year, because of **associates** passing their MEC tickets and the committee's participation in membership database management.



OVERALL GROWTH

**STRONGER MEMBERSHIP.
STRONGER INDUSTRY.**



MORE
MEMBERS



MORE
COLLABORATION



MORE
IMPACT

TOGETHER, WE
CONTINUE TO MANAGE
THE INVISIBLE AND
SHAPE A SAFER,
SUSTAINABLE FUTURE.

TOGETHER, WE GROW. STRONGER TOGETHER.

MVS COMMITTEE INFORMATION SHARING & TECHNICAL COMMITTEE

Collaborating | Sharing Knowledge | Driving Excellence



MINE VENTILATION SOCIETY
OF SOUTH AFRICA

NORTHERN BRANCH



INFORMATION SHARING COMMITTEE

 DATE	 TOPICS	 PRESENTER	 ATTENDEES
 29 August 2025	A quality assurance programme for a system of Occupational hygiene and Ventilation engineering measurement	Marco Biffi Eon Dippernaar	 122 attendees
 12 September 2025	Impala – Siesta – Guidelines	DMPR Minerals Council OEM – Mike Hoffman	 86 attendees
 6 March 2025	Feedback on Training – new qualification framework and career path	Martinus van der Bank	 108 attendees
 20 May 2025	Radiation	Axxess EZT – Radiation ESH Training	 70 attendees



TECHNICAL COMMITTEE

 DATE	 TOPIC / PRESENTER	 ATTENDEES
 20 October 2025	 MineArc engineering and technical teams	 11 attendees
 17 October 2025	 Mine rescue services	 14 attendees
 18 March 2026	 Mogalakwena Open Cast Mine	 13 attendees



SHARE
KNOWLEDGE



DRIVE
INNOVATION



ENSURE
SAFETY



BUILD
EXCELLENCE

“ Working together to advance safe,
healthy and sustainable mining.”



MVS

MINE VENTILATION SOCIETY
OF SOUTH AFRICA
NORTHERN BRANCH

A Night to Remember!

CELEBRATING CONNECTION. RECOGNISING EXCELLENCE.

Stronger Together



SOCIAL COMMITTEE



NORTHERN BRANCH – BEST DANCERS OF THE EVENING



Party!



MVS

MINE VENTILATION SOCIETY
OF SOUTH AFRICA

NORTHERN BRANCH

MANAGING THE INVISIBLE

WOMEN'S DAY

CELEBRATING STRENGTH. INSPIRING GROWTH.
BUILDING TOMORROW.

Today, we celebrate the incredible women who contribute their knowledge, passion and perseverance to the mining and ventilation industry.

*Your impact is visible.
Your strength is unstoppable. ♡*



WOMEN ARE THE STRENGTH BEHIND PROGRESS



INNOVATORS

Driving ideas and solutions that shape the future.



LEADERS

Leading with integrity, courage and vision.



PROTECTORS

Prioritising safety, health and well-being.



BUILDERS

Creating positive change in our communities.



COLLABORATORS

Stronger together, achieving more as one.

HONOURING RESILIENCE.
EMPOWERING POSSIBILITIES.



Thank you to every woman who uplifts, inspires and empowers.

We see you.

We value you.

We celebrate you. ♡

“There is no limit to what we, as women, can accomplish.”

– Michelle Obama



HAPPY WOMEN'S DAY!

TOGETHER, WE KEEP
MOVING MINING FORWARD.



www.mvsnorthernbranch.co.za



secretary@mvsnorthernbranch.co.za



MVS Northern Branch



Dr. Rian Strydom

Educational

- Ph.D (Physics) Radon Daughter Aerosol Physics**
Potchefstroom University, South Africa
(Now Northwest University), 1989
- M.Sc (Physics) Cosmic Ray Physics**
Potchefstroom University, South Africa
(Now Northwest University), 1981
- B.Sc, Physics and Chemistry**
Potchefstroom University, South Africa
(Now Northwest University), 1979

BACKGROUND TO IONISING RADIATION IN MINING

Understanding the nature, measurement and limits of ionising radiation is essential for protecting workers and ensuring regulatory compliance in mining environments.



WHAT IS IONISING RADIATION?



High energy radiation, different to e.g radio waves or microwaves, capable of ionising atoms (stripping electrons). It breaks bonds in cells, particularly in DNA and causes radiation sickness, cancer, and tissue damage.



Electromagnetic waves of high energy
e.g. gamma and X rays.



Alpha particles (He nuclei), beta particles (electrons) and neutrons.



Accurately measurable with predictable penetrating and scattering properties. This makes it useful for various investigative techniques.



Emitted by unstable radioactive isotopes of elements which occur naturally or isolated by industrial techniques.



Energy measured in eV e.g. keV to MeV



DOSIMETRY AND UNITS

ANTHROPOGENIC SOURCES



Absorbed radiation energy deposited in tissue causes biological damage



Radiation type and affected organs determine the biological dose.



Absorbed radiation energy is measured as exposure rate in Röntgen/h, typically mR/h (older SI units) or Rad/h.



The equivalent dose is measured in Sievert (Sv), typically over a period of exposure mSv/a. (All organ dosimetry models)



Legal compliance is determined by exposure limits expressed in mSv/a.



NORM (NATURALLY OCCURRING RADIOACTIVE MATERIAL)



The SI unit of radioactivity is Becquerel (Bq).



Radon concentration is measured in Bq/m³.



Radon daughter level is expressed as potential Alpha Energy Concentration PAEC (mJ/m³).



The equivalent dose to lung tissue is measured in Sievert (Sv) over a period of exposure mSv/a. (lung dosimetry Models).



REGULATORY LIMITS



Worker exposure:

20 mSv/a



Public exposure:

1 mSv/a

with a discretionary level of 0.25 mSv/a



Radon concentration:

150 Bq/m³



**MEASURE. UNDERSTAND.
PROTECT.**

Safe mining starts with knowledge
and responsible radiation management.



NICO SPOELSTRA ERT RADIATION

Nico is a respected professional in the field of radiation protection and regulatory compliance, with extensive experience working within South Africa's radiation safety framework.

His work focuses on helping organizations align with the requirements of the **National Nuclear Regulator (NNR)**, particularly in industries where ionizing radiation and NORM pose operational and compliance challenges.

Through his involvement at **EZT Radiation**, Nico supports the implementation of **radiation protection programs**, assists with **authorizations and compliance processes**, and contributes to strengthening radiation safety practices across the mining and industrial sectors.

Today, Nico will be presenting on the **Radiation Protection Function (RPF)** requirements, giving us valuable insight into current regulatory expectations, legislative updates, and what these mean for operators and stakeholders in our industry.

DOSIMETRY AND UNITS

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Public exposure:
1 mSv/a
with a discretionary level of **0.25 mSv/a**

Radon concentration:
150 Bq/m³

NORM FACILITIES

These provisions apply to all NORM facilities and activities such as but not limited to the following:

- Mining and Minerals Processing
- Scrap Processing Facilities
- Oil and Gas Industries (where applicable)
- Fertiliser Production and Phosphate Industries
- Coal Mining Industries
- Refurbishers
- Scrap Smelters
- Service Providers
- Small Users
- Analytical Laboratories
- Mineral Sands
- Rare-Earths Processing Facilities
- Water Treatment Facilities
- NORM Waste Processing Facilities; and
- Any other NORM facilities and activities that may pose occupational radiation hazards

WHAT IS IONISING RADIATION?

High energy radiation, different to e.g. radio waves or microwaves, capable of ionising atoms (stripping electrons). It breaks bonds in cells, particularly in DNA and causes radiation sickness, cancer, and tissue damage.

Electromagnetic waves of high energy e.g. gamma and X rays.

Alpha particles (He nuclei), beta particles (electrons) and neutrons.

Accurately measurable with predictable penetrating and scattering properties. This makes it useful for various investigative techniques.

Emitted by unstable radioactive isotopes of elements which occur naturally or isolated by industrial techniques.

Energy measured in eV e.g. keV to MeV.

ANTHROPOGENIC SOURCES

Absorbed radiation energy deposited in tissue causes biological damage.

Radiation type and affected organs determine the biological dose.

Absorbed radiation energy is measured as exposure rate in Röntgen/h, typically mR/h (older SI units) or Rad/h.

The equivalent dose is measured in Sievert (Sv), typically over a period of exposure mSv/a. (All organ dosimetry models)

Legal compliance is determined by exposure limits expressed in mSv/a.

RADIATION PROTECTION FUNCTION (RPF) REQUIREMENTS

PRE - OPERATIONS PHASE	OPERATIONAL PHASE	POST - OPERATIONS PHASE
✓ Safety assessment to be completed as part of submission ✓ Application legal documents ✓ Appointments required as per Act ✓ Application fees ✓ Time frame for CoR to be issued	✓ Appointments ✓ Procedures and reviews ✓ Fees ✓ Inspections and enforcement by the NNR ✓ Audits from the NNR ✓ Legal requirements regarding communities, visitors and workers	✓ Pre-closure/demolition safety assessment to be completed as part of application to surrender ✓ IAP's ✓ Application legal documents ✓ Appointments required as per Act ✓ Application fees ✓ Time frame for CoR to be surrendered

MEASURE. UNDERSTAND. PROTECT.

Safe mining starts with knowledge and responsible radiation management.

PRESENTER:
Nico Spoelstra - EZT Radiation

CONTACT:
nico@ertrad.co.za
+27 83 445 5540

FOR:
MVSSA Northern Branch

LEGISLATIVE UPDATE

KEY ADDITIONS IN THE 2024 AMENDMENT

- ✓ New definitions for different types of "ACTIVITY"
- ✓ Administrative fines
- ✓ Aircrew descriptions
- ✓ Description of "authorization"
- ✓ Certificate of Registration
- ✓ Substitution of section 26 - "Responsibilities of authorisation holders"
- ✓ Public safety information forum (sec 2(2))
- ✓ Additional regulatory functions for the NNR
- ✓ Centralised database of radiation workers
- ✓ Financial provision for decommissioning and rehabilitation

Amendment signed on 10 December 2024 to the National Nuclear Regulator Act, 1999 (Act No. 47 of 1999).

THE BASIS FOR THE NNR'S REGULATORY PRACTICES

The NNR exercise regulatory control related to safety through the issuance of nuclear authorisations.

Nuclear installations as defined in the Act can only be sited, constructed, operated and decommissioned under a Nuclear Installation Licence.

Nuclear Vessels either propelled by nuclear power or carrying radioactive material on board and sojourning or entering the South African territorial waters can only do so under a Nuclear Vessel Licence.

Other actions with the potential of causing nuclear damage are authorized either by a Certificate of Registration or a Certificate of Exemption.

Furthermore, the NNR will define appropriate steps to be taken by relevant government institutions and advise the Minister of DOE of any exposure scenario where the provisions of the Act apply that is deemed not amenable to regulatory control.

RESPONSIBILITIES OF AUTHORISATION HOLDERS (SECTION 26)

- d Establish procedures and arrangements to maintain safety and security under all conditions.
- e Verify appropriateness of design and the adequacy of the quality of activities and facilities and of their associated equipment.
- f Ensure the safe and secure control of all radioactive material that is used, produced, stored or transported.
- g Ensure the safe and secure control of all radioactive waste that is generated.
- h Implement a self-inspection programme to ensure compliance with all conditions of the authorisation.
- i Provide information as required by the chief executive officer.

EXCLUSION AND EXEMPTION CRITERIA

- In dealing with NORM related applications, exclusion and exemption criteria are established.
- The removal of radioactive materials or radioactive objects within authorised actions from further regulatory control is based on defined clearance criteria. The clearance criteria specify either the alpha, beta or gamma activity levels and will not be higher than the exemption levels specified.

QUESTIONS FOR DISCUSSION

WILL THE REQUIREMENTS OF THE ACTS, REGULATIONS AND GOVERNMENT NOTICES BE COMPLIED WITH IN THE RPP QUALIFICATION?

Mr Henry Moorcroft : further discussion.



EZT



PROFESSIONALISING RADIATION PROTECTION IN MINING

QCTO OCCUPATIONAL QUALIFICATION PATHWAY (LEVELS 4-6)

Presented by Henry Moorcroft
ESH Training and Development Services

Develop Education to build legacy for health and safety



ABOUT HENRY MOORCROFT

South African occupational health and safety specialist with extensive experience in mine environmental control, occupational hygiene, and safety management. Managing Member at ESH Training and Development Services, a training provider focused on environmental engineering, mine ventilation, and occupational hygiene competencies for the mining industry.



Henry contributes to the development and delivery of accredited training aligned with MQA, QCTO, and the Mine Ventilation Society of South Africa (MVSSA). He advances structured skills development and professionalization in radiation protection and mine health disciplines, and is a training provider associated with MVSSA, supporting industry capacity building and knowledge sharing.

1. REGULATORY FOUNDATION



Governed by
NNR & DMRE



Compliance requires
structured competence

2. WHY THIS QUALIFICATION NOW?



NNR expectations include:

- Radiation Protection Programmes
- Dose monitoring & interpretation
- Reporting and regulatory submissions
- Incident response capability
- Competent Radiation Protection Officers



A formal
occupational
qualification
strengthens
compliance
assurance.

3. THE QCTO OCCUPATIONAL MODEL



Quality Council for Trades
and Occupations

- ✓ Registers occupational qualifications
- ✓ Aligns training to workplace roles
- ✓ Requires External Integrated Summative Assessment (EISA)
- ✓ Enables Recognition of Prior Learning (RPL)

4. STRUCTURED PROFESSIONAL LADDER



LEVEL 4

Radiation Monitor

Operational monitoring,
instrument handling,
basic reporting.

LEVEL 5

Radiation Protection
Technician

Technical monitoring,
data interpretation,
control implementation
& reporting.

LEVEL 6

Radiation Protection
Practitioner

Programme design,
risk assessment,
regulatory liaison,
strategic oversight.

Specialist / Advisory / Regulatory Liaison Roles
Advanced strategic and specialist leadership roles.

5. DETAILED COMPETENCIES BY LEVEL

LEVEL
4



RADIATION
MONITOR

Operational competence:

- Workplace radiation monitoring
- Instrument handling
- Basic recording & reporting
- Exposure data capture

Supports
NNR compliance
at operational
level.

LEVEL
5



RADIATION
PROTECTION
TECHNICIAN

Technical competence:

- Advanced monitoring techniques
- Data interpretation
- Technical reporting
- Implementation of control programmes
- Supervisory operational oversight

Closes the
historical gap
between monitor
and specialist.

LEVEL
6



RADIATION
PROTECTION
PRACTITIONER

Professional competence:

- Programme design
- Regulatory liaison
- Risk assessment & modelling
- Dose evaluation
- Governance integration
- Strategic oversight

6. VISUAL PROFESSIONAL PATHWAY

CAREER LADDER FOR PERSONAL DEVELOPMENT



7. THE FUTURE EXPERT'S CAREER PLANNING - 8 STEP PROCESS

- STEP 1 SELF-ASSESSMENT**: Assess strengths, interests, skills, work style, passions and personality.
- STEP 2 RESEARCH**: Brainstorm job options and majors. Learn about qualifications and descriptions.
- STEP 3 SET GOALS**: Define your goals and create a thoughtful educational plan.
- STEP 4 LEARN**: Gather information about networks, informational interviews, co-op, etc.
- STEP 5 PREPARE**: Prepare a resume, cover letter, and portfolio. Have digital and print copies ready.
- STEP 6 SKILLS BUILDING**: Grow and develop skills, and gain experience in a new career.
- STEP 7 JOB SEARCH**: Identify prospective employers, and indulge in professional networking.
- STEP 8 JOB ACCEPTANCE**: After research and interview, you will be offered a job.



12. WHY NNR INVOLVEMENT IS CRITICAL

- NNR defines radiation protection requirements
- Competence must align with regulatory expectations
- Qualification strengthens regulatory assurance

13. STRATEGIC BENEFITS

- Consistent competence baseline
- Reduced ambiguity
- Improved reporting quality
- Stronger compliance assurance

14. THE BIGGER PICTURE

Radiation protection is evolving from:
Appointment-based role
To Occupational profession.

15. FINAL POSITIONING STATEMENT

"The QCTO pathway does not replace experience. It recognises experience against nationally standardised occupational outcomes."

"RPL ensures that experience is respected, evaluated, and formally acknowledged."

Develop Education to
build legacy for
health and safety



Develop Education to build legacy for health and safety



Mine Ventilation Society
of South Africa

NORTHERN BRANCH

2026 – 2027 NORTHERN BRANCH COMMITTEE

MINE VENTILATION SOCIETY OF SOUTH AFRICA

ADVANCING
MINE VENTILATION,
OCCUPATIONAL
HYGIENE,
ENVIRONMENTAL
MONITORING &
WORKER HEALTH
AND SAFETY

LEADING THE FUTURE OF MINE VENTILATION

The Mine Ventilation Society of South Africa (Northern Branch) is guided by a dedicated committee committed to advancing mine ventilation, occupational hygiene, environmental monitoring, and worker health and safety throughout the mining industry.

Through collaboration, technical excellence and professional development, we strive to support a safer, healthier and more sustainable mining industry.

CHAIRPERSON



Willie Deyssel

OUR COMMITMENT



PROMOTE PROFESSIONAL
DEVELOPMENT



SHARE TECHNICAL
KNOWLEDGE



SUPPORT LEGISLATIVE
COMPLIANCE



ENCOURAGE INDUSTRY
COLLABORATION

VICE CHAIRPERSON



Angelique Trollip

SECRETARY



Vanessa Nelson

COMMITTEE MEMBERS



Bridget
Novolo

Committee
member



Billy
Letlape

Committee
member



Beaulah
Ferreira

Committee
member



Thapelo
Chakane

Committee
member

CO-OPTED COMMITTEE MEMBERS



Russel
Hattingh

Co-opted
committee member



Garth
Nelson

Committee member
(Co-opted)



OUTGOING COMMITTEE MEMBER



Monique
Janse van
Rensburg

Outgoing committee
member



secretary@mvsnorthernbranch.co.za



www.mvssa.org.za

FOLLOW US



ADVANCING MINE VENTILATION • OCCUPATIONAL HYGIENE • WORKER HEALTH & SAFETY



Mine Ventilation Society
of South Africa
Northern Branch

MINE VENTILATION SOCIETY OF SOUTH AFRICA

NORTHERN BRANCH

INVITES YOU TO AN

INFORMATION-SHARING SESSION

FOCUS ON LEAD



**17 JULY
2026**

SAVE THE DATE!

Understanding the risks. Protecting our people. Complying with the law.



Join us for an important information-sharing session focused on lead exposure in mining environments – the associated health risks, legal requirements and best practice control measures to protect our workforce.



EFFECTS OF LEAD EXPOSURE ON HEALTH

Lead is a toxic metal that can cause serious and irreversible health effects, even at low levels of exposure.



Nervous System

Headaches, irritability, poor concentration, memory loss, fatigue



Blood

Anaemia, reduced red blood cell production



Kidneys

Kidney damage and impaired function



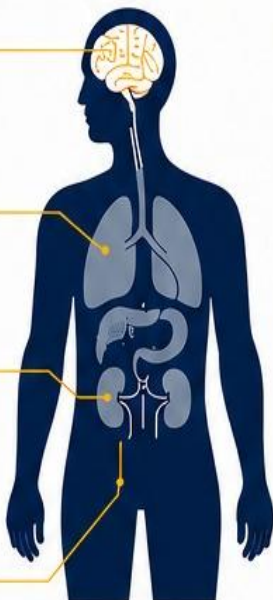
Reproductive Health

Reduced fertility, adverse pregnancy outcomes



Children (Most at Risk)

Impaired brain development, learning difficulties, behavioural problems, reduced IQ



Lead exposure is **CUMULATIVE** and there is **NO SAFE** level for lead in the body.



LEGAL LEGISLATION & LIMITS

Employers must ensure exposure to lead is controlled and monitored in line with legal requirements.

SOUTH AFRICA – OHS ACT (ACT 85 OF 1993)

Regulation 7: Hazardous Chemical Agents

No person may be exposed to lead and its compounds above the following limits:

Time-Weighted
Average (TWA)

Lead (as Pb)

0,05 mg/m³

ACGIH (2024) – REFERENCE LIMITS

Lead (as Pb) – 0,05 mg/m³ (TWA)

Biological Exposure Index (BEI):

Blood Lead Level – 10 µg/dL



EMPLOYERS HAVE A LEGAL DUTY TO:

- ✓ Identify and assess lead exposure risks
- ✓ Implement adequate control measures
- ✓ Monitor exposure and health
- ✓ Provide information, instruction & training
- ✓ Keep exposure monitoring and medical records



DATE: 17 JULY 2026



TIME: 10:00 – 12:00



VENUE: TEAMS ONLINE SESSION
(Link will be shared upon registration)



WHO SHOULD ATTEND?

Mine ventilation professionals, SHEQ practitioners, Occupational Hygienists, Managers, Supervisors and anyone involved in ensuring a safe and healthy workplace.



SESSION WILL COVER:

- ✓ Sources and behaviour of lead in mines
- ✓ Health effects and exposure pathways
- ✓ Monitoring and control strategies
- ✓ Legal requirements and compliance
- ✓ Case examples and lessons learned
- ✓ Q&A and discussion



LET'S WORK TOGETHER FOR ZERO HARM.

Protect our people. Control lead. Comply with the law.

**MORE INFORMATION TO FOLLOW.
RSVP & ENQUIRIES:**

✉ northern@mvssa.co.za

Advancing ventilation excellence for healthier, safer and more productive mining.

www.mvssa.co.za



MANDELA DAY

Take Action. Inspire Change.



**SATURDAY
18 JULY**



Give a hand



Uplift a life



Build a better
community

“

What counts in life is not
the mere fact that we have lived.
It is what difference we have
made to the lives of others
that will determine the
significance of the life
we lead.”

– Nelson Mandela

*Small actions, when multiplied by millions of people,
can transform the world.*





IS HOSTING AN EXAM PREP Workshop

FOR MEMBERS WRITING PAPER 4

Enhance your understanding, strengthen your knowledge and boost your confidence for **exam success**.



DATE:
18 SEPTEMBER 2026



TIME:
10:00



VENUE:
BBE OFFICE
(PIN LOCATION WILL BE SHARED
WITH MEMBERS WHO HAVE RSVP)



JOIN THIS
**INTERACTIVE
LEARNING
EXPERIENCE!**

“

Education is the most powerful weapon which you can use to change the world.

”

— Nelson Mandela

RSVP TO SECURE YOUR SPOT

Please RSVP using the link or QR code below:



RSVP LINK
<https://forms.gle/ExamprepP4Workshop>



or scan the QR code
to complete the form

- ✓ LIMITED SPACES AVAILABLE
- ✓ RSVP EARLY TO AVOID DISAPPOINTMENT
- ✓ REFRESHMENTS WILL BE PROVIDED

Let's prepare together. Let's succeed together.
WE LOOK FORWARD TO WELCOMING YOU!



YOU ARE INVITED TO OUR

Women's Day

• CELEBRATION •

Empowered **Women** • Stronger Together • Limitless **Futures**

GUEST SPEAKER

Marli Du Plessis



DATE

7 AUGUST 2026



VENUE

IMPALA BOWLING CLUB
RUSTENBURG



TIME

11:00

DRESS CODE:
WEAR SOMETHING

PINK! ♥

COLOUR PERSONALITY

Profile Workshop ♥



RSVP – 25 JULY 2026



LIMITED SPACE

*Don't miss out –
book your place today!* ♥

COMPLETE GOOGLE LINK FORM



NAME



SURNAME



E-MAIL ADDRESS



SCAN TO RSVP

Let's celebrate the incredible women who **inspire**,
lead and make a **difference** every day.



**MINE VENTILATION
SOCIETY
NORTHERN BRANCH**



TECHNICAL VISIT

SITE: AMANDELBULT

16 OCTOBER 2026

THEME

MISSING PERSON LOCATOR

You are invited to join the MVS Northern Branch for an informative technical visit focusing on the implementation, use, and impact of Missing Person Locator (MPL) systems underground.

This visit will provide practical insight into system technology, integration, emergency response, and compliance with South African legislation and industry guidelines.



LEGISLATION & GUIDELINES COVERED



Mine Health and Safety Act 29 of 1996

General duties of employers to ensure the health and safety of employees.



MHSR Regulations

Regulation 2.15 – Emergency preparedness and response.



MHSR Regulations

Regulation 16.7 – Tracking of persons underground

Requires employers to ensure that a system is in place to account for all persons entering and leaving underground areas and to locate any person in case of an emergency.



Guideline for the Implementation of Emergency Preparedness and Response Plans

DMRE Guideline, 2013.



Best Practice Guideline for MPL Systems

ICMM & SA Industry Recommendations.

NOTE:

Spaces are limited.
Preference will be given to
MVS Northern Branch members.

EVENT DETAILS



DATE

16 October 2026
(Friday)



SITE

Amandelbult
(Meeting point details
will be shared upon
registration)



TIME

08:00 – 14:00
(Includes site tour
and technical session)



WHO SHOULD ATTEND

Ventilation Officers
Managers & Supervisors
Safety & Security Personnel
Technical Practitioners
MVS Members

RSVP – ESSENTIAL

Please RSVP by
09 October 2026

CLICK THE LINK TO REGISTER:



[https://forms.gle/
MVSNB-MPL-2026](https://forms.gle/MVSNB-MPL-2026)

(Name • Surname • Email Address • Cell Number)

“ Working together to improve
safety underground. ”

For more information, contact the Branch Secretary

✉ secretary@mvsnorthernbranch.co.za