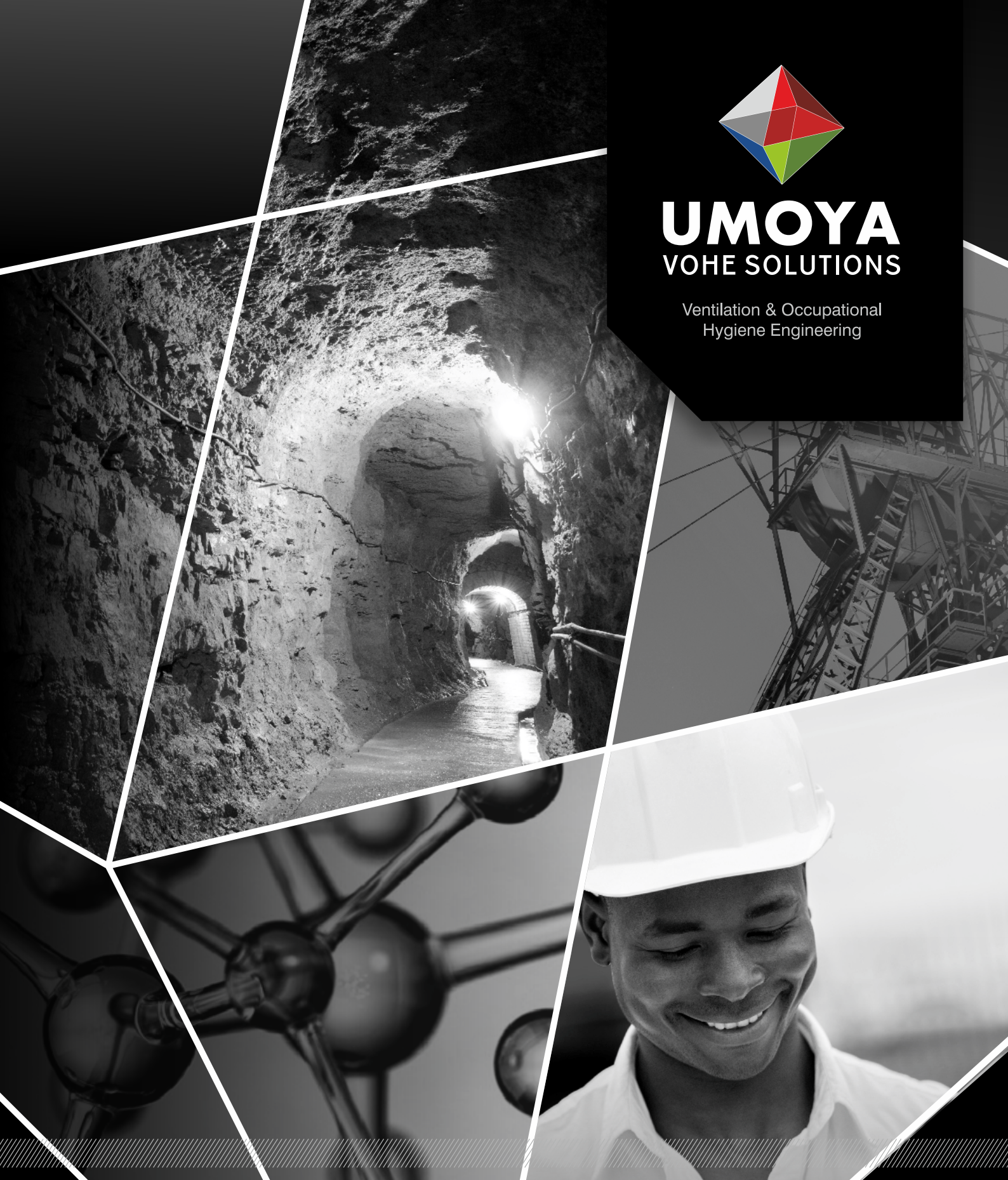




UMOYA

VOHE SOLUTIONS

Ventilation & Occupational
Hygiene Engineering



COMPANY **PROFILE**

www.umoyavohe.co.za



UMOYA **ABOUT US**

Umoya VOHE Solutions (Pty) Ltd is a Level 4 BEE Company, comprising of a team of experienced professional Ventilation and Occupational Hygiene Engineering (VOHE) Specialists in the Mining and Industrial & Engineering sectors. We pride ourselves in rendering an unmatched quality service to our clients.

Umoya VOHE Solutions provide an expert inclusive service, tailor made for each site and specialising in:

- Operational VOHE Service for Mining (12.1 appointment), or Occupational Hygienist for Industry and Engineering sectors;
- Process Plants, Refineries, Smelters, Concentrators, Quarries, Brick making, factories, manufacturing facilities;
- Environmental Measuring & Monitoring;
- Supply of Equipment and related Instrumentation;
- Specialised Service such as Ventilation Mine Planning and Refrigeration;

MISSION

To continually improve and evolve with the latest technological advances in the fields of Occupational and Industrial Hygiene with regards to ensuring that we safeguard the health of every employee associated within a specific working environment

VISION

To become the dominant service provider to the Mining and Industrial sectors by offering a professional service based on scientific principles, using the latest technology available, so as to provide our client base with accurate and unbiased information on matters relating to Ventilation and Occupational/Industrial Hygiene Engineering (VOHE).



COMPRISING OF, BUT NOT LIMITED TO:

- Section 12.(1) appointee of the Mine Health & Safety Act (Act 29 of 1996);
- Staffing of mine / project to measure levels of exposure to VOHE hazards;
- Baseline and continuous risk assessments, with specific reference to planning, design, implementation and management;
- Implementation of control systems and management thereof to reduce exposures below the stipulated OEL's (occupational exposure limits), whether it be available ventilating air, or gasses and vapours;
- Quality of potable and palatable water;
- Precautionary measures taken to prevent or suppress explosions of coal dust or flammable gas;
- Systems in place to prevent and detect mine fires;
- Escape and rescue procedures relating to explosions, fires and flooding;
- Compilation and revision of mandatory occupational health codes of practices;
- Exit Medical DMR 276 forms & Linkage of occupational hygiene measurements to the appointed Occupational Medical Practitioner - OMP (employees records of medical surveillance);
- Compilation and submission of Quarterly and Annual reports at the required reporting periods, through the employer to the principal inspector of mines, as required by the Department of Mineral Resources (DMR).
- Lamp room Management and Operation:
 - Management;
 - Audits to ensure compliance;
 - Staff management;
 - Lamps man appointee;
 - Staffing of Lamp room;
 - Training of Lamp room Staff;
 - Compilation and distribution of daily, weekly and monthly reports.
- Occupational Hygiene:
 - Occupational Hygiene Risk Assessment with regard to:
 - Chemical Stresses;
 - Biological Stresses;
 - Physical Stresses;
 - Ergonomical Stresses.
- Water Quality Sampling and Analysis:
 - Chemical;
 - Bacteriological.
- Swab Sampling and Analysis:
 - Canteens;
 - Kitchens;
 - Change Houses;
 - Hostels.





- Specialised Occupational Hygiene surveys, investigations and analysis:
 - Noise Induced Hearing Loss (NIHL).
 - Biological Monitoring (exposure to Carcinogen based pollutants and fumes)
- Ergonomics Surveys:
 - Vibration;
 - Noise;
 - Illumination;
 - Air Quality.
 - UV Monitoring (open cast mining, surface exploration drilling, construction sites, office's, quarries)
- Developing and/or monitoring an Occupational Hygiene Program with regard to:
 - Chemical Stresses;
 - Biological Stresses;
 - Physical Stresses;
 - Ergonomical Stresses.
- Occupational Hygiene Monitoring and analysis of:
 - Air Borne Pollutants (DPM, Dust, VOC's);
 - Noise;
 - Gasses/Vapours;
 - Thermal Stress.
- Annual Occupational Hygiene Reports to the DMR with regard to:
 - Air Borne Pollutants;
 - Noise;
 - Gasses/Vapours;
 - Thermal Stress.





PROCESS PLANTS, REFINERIES, SMELTERS, CONCENTRATORS:

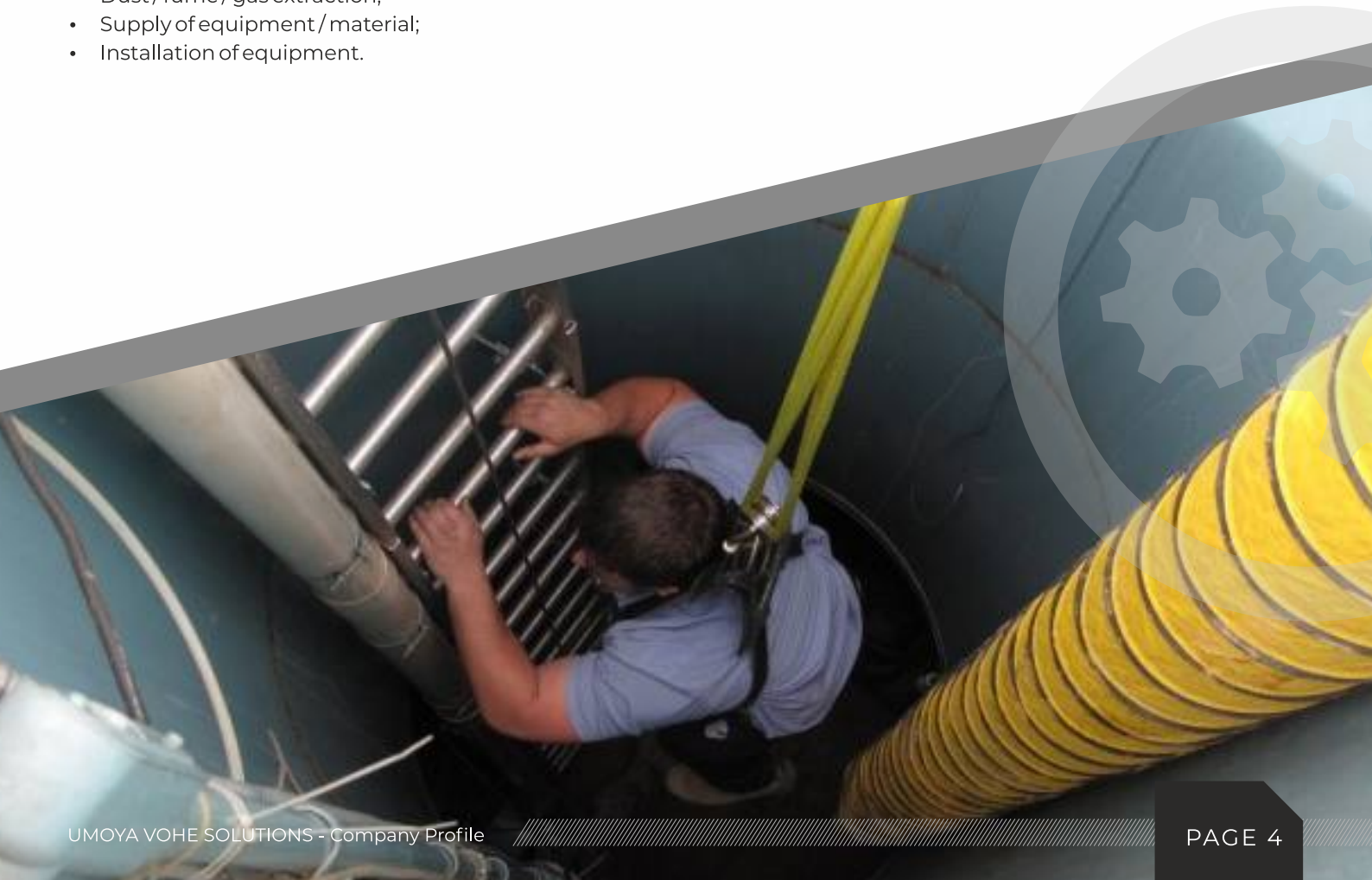
- **Potential Hazards associated with Confined Spaces** can be summarised as listed below. However, Umoya VOHE Solutions provide a complete program to be able to safely work in such an environment.
- Oxygen deficiency and or enrichment
- Combustion of accumulation of gasses
- Toxic Substances
- Electricity
- Mechanical Hazards
- Unventilated vessels

- **Confined Space / Vessel Entries**
- Gas Clearances (Engineering requirements with regards to hot work)
- Specialised Clearance with regards to Lead (Pb), Asbestos, HEPA filters
- Training with regard to clearance, gasses and ventilation
- Ventilation Design;
- Supply of specialised equipment (Designed / manufactured to custom fit site specifics)
 - Gas Detection Instruments;
 - Fans (Force and or Exhaust);
 - Ducting;
 - Fan monitoring device;
 - Gas monitoring device;
 - Recirculation of expelled air through HEPA filter systems (Lead and or asbestos)

Monitoring and measuring of Environmental and Occupational Hygiene Conditions (noise, dust, fumes and illumination).

Ventilation Design and Planning

- Design;
- Fans;
- Dust / fume / gas extraction;
- Supply of equipment / material;
- Installation of equipment.



ENVIRONMENTAL MEASURING & MONITORING



Environmental Noise

- Monitoring
- Analysis
- Supply of Equipment

Dust Fallout

- Monitoring
- Analysis
- Supply of Equipment

Weather Stations

- Supply
- Install
 - *Monitoring and data capturing of:*
 - Wet Bulb Temperature;
 - Dry Bulb Temperature;
 - Globe Temperature;
 - Dew Point Temperature;
 - Wind Chill Temperature;
 - Wind Speed;
 - Barometric Pressure;
 - Rainfall;
 - Humidity;
 - UV intensity.

Water Quality Sampling and Analysis (Service and Drinking water)

- Chemical;
- Bacteriological.



ADDITIONAL SERVICES OFFERED



With various agencies / distribution agreements in place with suppliers and manufacturers, Umoya VOHE (PTY) LTD can offer the following at very competitive rates. We also offer a full import facility on specialized equipment.

- **Flammable Gas Monitoring systems (Barometric Pressure)**

System is installed in the Lamp room or any other convenient area, and monitors the Barometric Pressure. Any sudden drop or rise in the Barometric Pressure will result in the system going into alarm, so as to give ample warning to be more vigilant with normal operational gas measurements underground/workplace.

- Visual and Audible Alarm
- GSM Network coverage
- Data Logging option

- **Supply of Ventilation and Occupational Hygiene Equipment**

- Noise Dosimeters;
- Sampling Pumps;
- Noise Meters;
- Lux Meters;
- Lux Meter Tunnel for daytime vehicle illumination testing;
- Full range of Ventilation equipment – Vane Anemometers, Kestrels etc.
- Vibration Monitoring
- UV Monitoring
- Noise Boards/ Signs (automated Noise calculation and Zoning)

- **Custom Fit Hearing Protection (HPD's):**

- Supply;
- Maintain;
- Monitor;
- Record Keeping;
- Compilation of a hearing Conservation Program.
- Noise Induced Hearing Loss Investigations

- **Welding Fume Extraction**

- Extraction systems for Workshops (permanent installation)
- Portable extraction system
- Exposure Monitoring – Welding Fumes and UV exposure





- **Supply of Confined Space / Vessel entry packages**
- Fans (force and or exhaust)
- Fan Monitoring Alarm units (fan failure)
- Flexible ducting
- Continuous Gas monitoring (built to site specific requirements i.e. sensors)
- HEPA Filters



- **Ventilation Construction and/or Supply of**
 - Ventilation Seals:
 - Brick;
 - Fibre Crete / Tunnel guard type;
 - PVC and wire mesh type.
- **Ventilation Doors**
 - Manual operated timber or steel;
 - Roll-up type;
 - Electrically operated;
 - Pneumatically operated;
 - Hydraulically operated
- **Refuge Chambers**
 - Supply and/or equip of complete Refuge Chamber.
- **Ventilation Brattices**
 - Supply and/or install.
- **Fan installation and Reclamation**
- **Ventilation Column Installation and Reclamation**
 - Galvanised;
 - Flexible Ducting.



SPECIALISED SERVICES SUCH AS:



- **Occupational Hygiene Risk Assessments with regard to**
 - Chemical Stresses;
 - Biological Stresses;
 - Physical Stresses;
 - Ergonomical Stresses
- **Compilation or Revision of Code of Practices as per the latest DMR guidelines with regard to**
 - Mandatory Code of Practice for an Occupational Health Programme for Noise;
 - Mandatory Code of Practice for an Occupational Health Programme on Personal Exposure to Airborne Pollutants;
 - Mandatory Code of Practice for an Occupational Health Programme on Thermal Stress;
 - Mandatory Code of Practice for the Prevention of Flammable Gas Explosions in Mines other than Coal Mines;
 - Mandatory Code of Practice on Minimum Standards of Fitness to Perform Work;
 - Mandatory Code of Practice on Emergency Preparedness and Response;
 - Mandatory Code of Practice for Fatigue Management
 - Mandatory Code of Practice for Prevention of Fire at Mines
 - Mandatory Code of Practice on Women in Mining
- **Consultation service relating to Ventilation, Refrigeration and Occupational Hygiene**
 - Modelling and software development for mine ventilation and cooling systems;
 - Mine ventilation, refrigeration, cooling and occupational health;
 - Conceptual investigations, pre-feasibility and feasibility design studies and implementation;
 - New mine / project design;
 - Expansion design for existing mine ;
 - Shaft sinking design;
 - Industrial design, Laboratory extraction system
 - Turn-key project execution and management (design, install, commission, operate);
 - Verification audits by means of measurements (performance testing of ventilation and refrigeration systems).



TRAINING

- Basic Training in Mine Environmental Control
- Training and Testing for Practical Letter in Mine Environmental Control
- Training for Intermediate Certificate in Mine Environmental Control
 - Paper 1;
 - Paper 2.
- Training for the Certificate in Mine Environmental Control (Advance Certificate)
 - Paper 1;
 - Paper 2;
 - Paper 3;
 - Paper 4;
 - Paper 5;
 - Paper 6.
- Mine Ventilation Training for Miners;
- Mine Ventilation Training for Mine Overseers;
- Mine Ventilation Training for Manager Tickets,
- Vuma Simulation Program Training,
- Environmental Fall Out Precipitant Dust Monitoring (Including Report Writing, Legislation etc),
- Issuing and Retrieving of Occupational Monitoring Instruments.

PREVIOUS & CURRENT CLIENT REFERENCE AND DETAILS OF WORK UNDERTAKEN

Umoya VOHE Solutions provides an inclusive consulting, training and operational service and both Umoya and the owners of Umoya VOHE Solutions have been involved with and carried 12.1 Appointments with various companies throughout South Africa and the rest of Africa which includes:

- Platinum Mining:- (Maseve, SIBANYE STILLWATER Everest and Kwezi Mines, ANGLO PLATINUM – Base Metal Refineries and Exploration sites, Impala Platinum, Anglo American);
- Chrome Mining:- (SAMANCOR Leside, Buffels, Mooinooi, Millsell Mines , Sky Chrome, Cronimet Chrome Mining, Lanxess Chrome Mining, GLENCORE Kroondal, Rietvly and Waterval Mines, GLENCORE Laboratories);
- Manganese Mining:- (Bushveld Manganese, Kalagadi);
- Diamond Mine (Underground Helam)
- Shaft Sinking:- (Ivanplats, Bakubung, Styldrift, Kalagadi, and for various Contracting Companies including Shaft Sinkers, Aveng Mining, Murray & Roberts);
- Tunnelling:- (Ingula Pumped Storage Scheme for Eskom);
- Crushers:- (Lesaka Crushers; Rustcrete);
- Training:- (Impala Platinum, Glencore, Assmang, Petra Diamonds, Cullinan Diamonds, Ekapa Diamonds, De Beers group of companies, African Resource Minerals, Dwarsrivier, South 32, Sasol and Anglo American International)
- Various Process Plants (Base Metal Refineries, TC Smelter)

Covering numerous mining methods, but not limited to the below:

Umoya VOHE Solutions expertise includes ventilation system and fan engineering. Umoya VOHE Solutions is dedicated to finding and implementing practical, economic, efficient, solutions to all ventilation/environmental engineering and associated occupational health and safety problems for existing mining operations and new projects.

Umoya VOHE Solutions specialises in audits and reviews of ventilation systems, life-of-mine exercises, technical feasibility studies and the analysis of alternative ventilation and cooling systems using latest computer simulation software (Vuma).

Umoya VOHE Solutions have experience in the preparation of detailed main fan station specifications, booster and secondary fans, duct systems, cost estimating and project execution and management. Umoya VOHE Solutions ensures a productive, healthy and safe work environment for all employees, by providing a specialist occupational hygiene service.

Umoya VOHE Solutions also undertakes Occupational Hygiene Risk Assessments, provides the services of full time and part time Occupational Hygienists, conducts audits on legal compliance, develops standards and systems and determines operational compliance interfaces with managerial standards, systems and procedures.

SHE POLICY

Umoya Occupational Hygiene and Laboratory Solutions is the leading occupational hygiene and laboratory service provider. Umoya VOHE Solutions believes that excellence in management of safety, health and environment (SHE) risk is integral to the way business is conducted. This SHE policy provides the foundation for commitment to continually improve SHE performance. Umoya Occupational Hygiene and Laboratory Solutions aspire to zero harm to people and environment.

- Umoya Occupational Hygiene and Laboratory Solutions are committed to providing a working environment that is conducive to the health and safety of all stakeholders.
- Umoya Occupational Hygiene and Laboratory Solutions are totally committed to this health and safety policy and will ensure that all stakeholders are aware of the policy and adhere to it.
- Umoya Occupational Hygiene and Laboratory Solutions believe that the management of SHE is the prime responsibility.
- Umoya Occupational Hygiene and Laboratory Solutions are committed to complying with all SHE laws, regulations and standards and will not tolerate breaches of these procedures.
- Umoya Occupational Hygiene and Laboratory Solutions will implement SHE management systems appropriate to the work performed and will assess the effectiveness of these systems through audits.
- Umoya Occupational Hygiene and Laboratory Solutions will comply with the SHE management systems of clients to which a service is supplied.
- Umoya Occupational Hygiene and Laboratory Solutions will meet and, where appropriate, exceed applicable legal requirements, always striving to follow leading industry practices.
- Umoya Occupational Hygiene and Laboratory Solutions will conduct risk assessments to anticipate, minimize and control SHE hazards.
- Umoya Occupational Hygiene and Laboratory Solutions are committed to providing the resources to ensure compliance with these principles and to empower people to comply with this policy.
- Umoya Occupational Hygiene and Laboratory Solutions will promote initiatives and revise process to continuously reduce the SHE risks associated with all business activities.
- Umoya Occupational Hygiene and Laboratory Solutions will set SHE objectives and will measure performance against these objectives.
- Umoya Occupational Hygiene and Laboratory Solutions will monitor the effects of its operational activities on the SHE of its employees and others and will conduct regular performance reviews.
- Umoya Occupational Hygiene and Laboratory Solutions will provide all personal protective equipment required.
- Umoya Occupational Hygiene and Laboratory Solutions will communicate openly on SHE issues with all stakeholders.
- Umoya Occupational Hygiene and Laboratory Solutions will ensure that employees are medically fit, trained and are competent to carry out their duties and responsibilities.
- Umoya Occupational Hygiene and Laboratory Solutions will maintain a system where all stakeholders are obliged to contribute and take responsibility for their own and others health and safety, by means of reporting at-risk behaviour and hazardous conditions, and taking corrective action.
- Umoya Occupational Hygiene and Laboratory Solutions will communicate with, and engage, clients, contractors, business partners, suppliers, visitors, and other stakeholders, to share the responsibility for meeting the requirements of this policy.

CONTACT US TODAY FOR MORE INFORMATION ON HOW WE CAN ASSIST YOU!

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