

Black Mountain Mining

BMM-HSE-SAF-SOP-0023-Personal Protective Equipment

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CHANGE HISTORY

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10/08/2022	3.0	F. Haefele	New Template Format
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DEFINITIONS AND ABBREVIATIONS

1. INTRODUCTION

The Mine Health and Safety Act 29 of 1996 Chapter 2- 6 (1)(2)(3) places an obligation on employers to ensure the adequate supply of health and safety equipment. Furthermore, the Mine Health and Safety Act 29 of 1996 **Section 11** places an obligation on the employer to assess and respond to risk. This includes elimination, control and minimize the risk, if the risk remains provide personal protective equipment.

Chapter 2-6 MHSA-1996 requires the employer to provide all necessary health and safety personal protective equipment, ensure sufficient quantities are available. The employer must take reasonable steps to ensure that the employees who are required to use the personal protective equipment are instructed in the proper use, limitations and appropriate maintenance of the equipment.

2. SUPPORTING CLAUSES

- **SCOPE**

The aim of this standard is to:

- Define the process of selection, issuing, use, care, maintenance and disposal of the personal protective equipment (PPE).
- Ensure that employees are trained and confident in the issuing, use, care, limitations, replacement and disposal of PPE throughout the business.
- Ensure that Black Mountain Mine complies with the applicable legislation and standards on the issuing, use, maintenance and disposal of PPE.
- Ensure that PPE is deemed and offered as the last line of defense against exposure to potential hazards.

- **APPLICABILITY**

This document shall apply to Balk Mountain Mine and Contractor Business Partners of Black Mountain Mine, Service providers and visitors.

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- **DOCUMENT REFERENCES**

No	SANS Standard	Protection
1	SANS 434	Body Protection (Protective clothing)
2	SANS 1397	Head Protection
3	SANS 20345	Foot Protection
4	SANS 420	General requirements for gloves
5	SANS 50325-1-2-3	Hearing protection
6	SANS 416	Chemical Resistant Gloves
7	SANS 1451-1-2-3	Hearing protection
8	SANS 275	Respiratory protection
9	SANS 50136	Compulsory specification for respiratory protective devices Full Face Mask
10	SANS 50140	Compulsory specification for respiratory protective devices Half mask and quarter mask
11	SANS 50143	RPE-Particle filters Requirements, testing and marking
12	SANS 50149	RPE Filtering half masks to protect against particles-requirements, testing and marking
13	SANS 61482-1-1	Live electrical work PPE
14	SSD-ENV-SOP-040	Handling, storage and disposal of waste
15	BMM-HSE-VOH-COP0009	The Provision of Personal Protective Equipment for Women in Mining
	BMM-HSE-SAF-POL-0001	Health & Safety Policy
	MHSA-1996-Chapter- 6 (2)	Provision of PPE

- **DEFINITIONS AND ABBREVIATIONS**

- **LEGISLATIVE REQUIREMENTS**

- MHSA 6(2) – states that: “every employer must ensure that sufficient quantities of all necessary personal protective equipment are available so that every employee who is required to use that equipment is able to do so.”
- MHSA 91(1) – penalties: “any person, including an employer, who contravenes, or fails to comply with, any- (a) provision of this act; commits an offence and is liable to a fine or imprisonment as may be prescribed.”
- Mandatory COP in terms of section 9(2) and (3) of the MHSA – The Provision of PPE for Women in Mining outlines requirements for the PPE for women in the South African Mining Industry.

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3. ROLES AND RESPONSIBILITIES

3.1 RESPONSIBILITY OF THE CHIEF SAFETY OFFICER

The Black Mountain Mine Safety Manager shall:

- Ensure compliance with Vedanta Corporate Standards, MHSA Legislative requirements, VSAP and ISO 45001: 2018.requirements.
- Ensure that enough quantities of all necessary PPE's are always available.
- Take reasonable steps to ensure that all employees, or contractors who are required to use personal protective equipment are instructed in the proper use, the limitations, and the appropriate maintenance of that equipment.
- Coordinate inspection(s) and internal audits to measure compliance with this Standard Operating Procedure.
- Investigate complaints received from employees regarding PPE and Share information with the BMM PPE Committee and Mine's Health & Safety Committee.
- Ensure that PPE provided meets Manufacturing, South African National Standards specifications and VZI requirements.
- The Chief Safety Officer shall monitor and audit users of PPE on this procedure quarterly or where a change in legislation dictates. This includes assisting the BMM PPE Committee, Safety Officers in their respective areas.
- The Chief Safety Officer shall ensure that the PPE Standard, the WIM PPE COP, and the PPE required per site, per occupation is included in the Red File of each contractor business partner.
- The Chief Safety Officer to assist the BMM PPE Committee in the PPE Specifications and requirements.
- The Chief Safety Officer shall conduct random inspections at the Change Houses and at the PPE Supplier stores and investigate complaints logged in the PPE Complaints book regarding PPE and investigate those complaints received from users and escalate the complaints for corrective action.
- The Chief Safety Officer and PPE Committee shall provide feedback to the main stores regarding the outcome regarding the complaint.

- **RESPONSIBILITIES OF MANAGERS AND SUPERVISORS**

All managers and supervisors are responsible for the effective day to day management, provision and correct use of PPE in their area/section of responsibility.

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This includes:

- Ensure that all employees, workers, or contractor business partner personnel working under their control are aware and provided with the correct PPE.
- Ensure that on receipt of PPE, the employees, workers, and/or contractor business partner personnel are trained in its use, inspection, maintenance, and reporting of defects and that such inspection is undertaken.
- Ensure that all employees, workers, or contractor business partners working under their control make use of all mandatory PPE required for the task.
- Issue an incident report where PPE is damaged because of an incident or accident to the Safety Manager/ PPE Supplier.
- Coordinate an inspection(s) of all employees, workers or contractor business partners using PPE ensuring compliance with this standard operating procedure.
- Report and investigate complaints received from PPE users and collaborate with the safety department and PPE Committee to find acceptable solution(s).
- Ensure that the PPE in their area/section of responsibility is disposed of properly in accordance with SS-ENV-SOP-040.
- Ensure that the full PPE drums is taken to the salvage yard and new drums with stickers marked hazardous waste, PPE is available in the section.

- **RESPONSIBILITY OF HSE DEPARTMENT**

The HSE Department shall:

- Provide support to line management with regards to the management of PPE.
- Assist with the development of training on the use of PPE and its limitations.
- Ensure proper risk assessment is performed.
- Ensure compliance with PPE documentation and the MHSA.
- Assist Chief Safety Officer in queries raised by employees.
- Conduct random inspections.
- Support the PPE supplier with the risk assessment, the review of the risk assessment.
- The Occupational Medical Practitioner shall assist, guide, prescribe and advise where special PPE requirements may arise.

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- The VOH/ Occupational Health department shall ensure that specialized PPE such as breathing apparatus sets, and cylinders are being maintained according to the manufacturer's instructions.

3.2 **RESPONSIBILITY OF PPE SUPPLIER**

The PPE Supplier shall ensure that:

- The PPE complies with relevant standards
- Perform quality checks on the PPE
- Provide the employer with laundering and maintenance guidelines in terms of the PPE.
- Evaluate the PPE against the risk assessment for PPE, including WIM PPE, at a minimum frequency of six months or where there are changes in legislation.
- Assist the PPE Committee with quality checks on the training material of PPE.
- Communicate any changes to PPE supplied, evaluate against relevant standards to ensure PPE meets the minimum standards and requirements as set out.
- They comply with the MHSA -1996 - Chapter 2- 21.

• **RESPONSIBILITY OF THE HR AND HRD DEPARTMENT**

The HR and HRD Department shall ensure that:

- All new appointments to be made are communicated to sections to ensure that the required PPE and change facilities is available.
- Employees are thoroughly trained in the correct use, maintenance, limitations and proper disposal of PPE.

• **RESPONSIBILITY OF CONTRACTOR BUSSINESS PARTNERS**

Contractor Business Partners and their subcontractors shall ensure that:

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- That they follow the **PPE** requirements of this Standard Operating Procedure
- The PPE they supply to their employees is of the same quality and specifications to that of BMM.
- **All their employee's fitness to work whilst using respiratory protection prior to employees commencing work on Black Mountain Mine. All their employees undertake a medical that includes an assessment.**
- They keep record of **specifications and** PPE issued to their employees in their own respective Safety Files.
- Contractor Business Partner Supervisors and managers shall ensure day to day use and compliance to the PPE procedures and standards.
- Examine employee's PPE condition at regular intervals and take the necessary corrective measures.
- where required, all employees are properly trained in the correct use and maintenance of PPE.
- Contractor business partners shall keep a logbook/complaints book for their employees to log complaints and shall whenever a complaint be logged investigate the complaint and file as evidence the solution.
- Contractor business partners shall collaborate with Black Mountain Mine Safety department and PPE Committee and shall conduct audits on PPE quarterly.

- **DUTIES AND RESPONSIBILITIES OF EMPLOYEES**

Employees shall ensure that they:

- Receive training on the use and limitations of PPE which they are required to use.
- Wear the PPE correctly, that is designed to reduce the risk of personal injury and not modify any PPE issued.
- Immediately report to their line supervisor or manager if PPE issued has been lost, damaged or stolen. In the event where the PPE is damaged, the damaged PPE must be hand in as proof to receive new PPE.

Employees have an obligation under section 22 (c) of the Mine Health and Safety Act to take proper care of Personal Protective Clothing. This includes:

- The correct use, maintenance, and cleaning of provided PPE in accordance with training, instruction and information received.
- Returning of PPE to the appropriate storage facilities after use where required.

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- Examine PPE before use and report any defect, damage, or loss to their manager/supervisor.
- Inform their manager/supervisor of any medical or other conditions that may affect their ability to wear or use PPE, in which case the Applicable Mine's procedure shall apply.
- Report to their manager/supervisor and log complaints in the complaint's book at the PPE Store any problems encountered with PPE or suggestions for improvements to this Standard Operating Procedure which may reduce the requirement for PPE or require improvements in design or application of PPE.

Note: Overalls and other lead contaminated PPE may not be taken home.

- **WORKERS (AD HOC)**

Workers other than employees including contractual work as per definition:

- Shall follow and adhere to this standard operating procedure under the guidance of their employer whether it's a contractor business partner or other stakeholder.
- Shall report issues with PPE immediately when it becomes known.
- Shall wear PPE as always prescribed.

4. PERSONAL PROTECTIVE EQUIPMENT REQUIREMENTS

- **GENERAL**

- Areas where PPE is required shall be identified through a risk assessment process.
- Occupational hygiene and relevant safety requirements shall be taken into consideration.
- In terms of the Mines Health and Safety Act, Section 24, Black Mountain Mine, and its Contractors Business Partners, shall provide employees with adequate Personal Protective Clothing and Equipment free of charge.
- PPE shall be replaced free of charge as per the PPE Matrix, or if it is damaged due to fair wear and tear or lost. Negligence, theft, or wilful damage shall not be acceptable.
- No person shall enter any working site/ workplace where PPE is required, if that PPE is not in good condition or is not suitable to provide maximum protection.

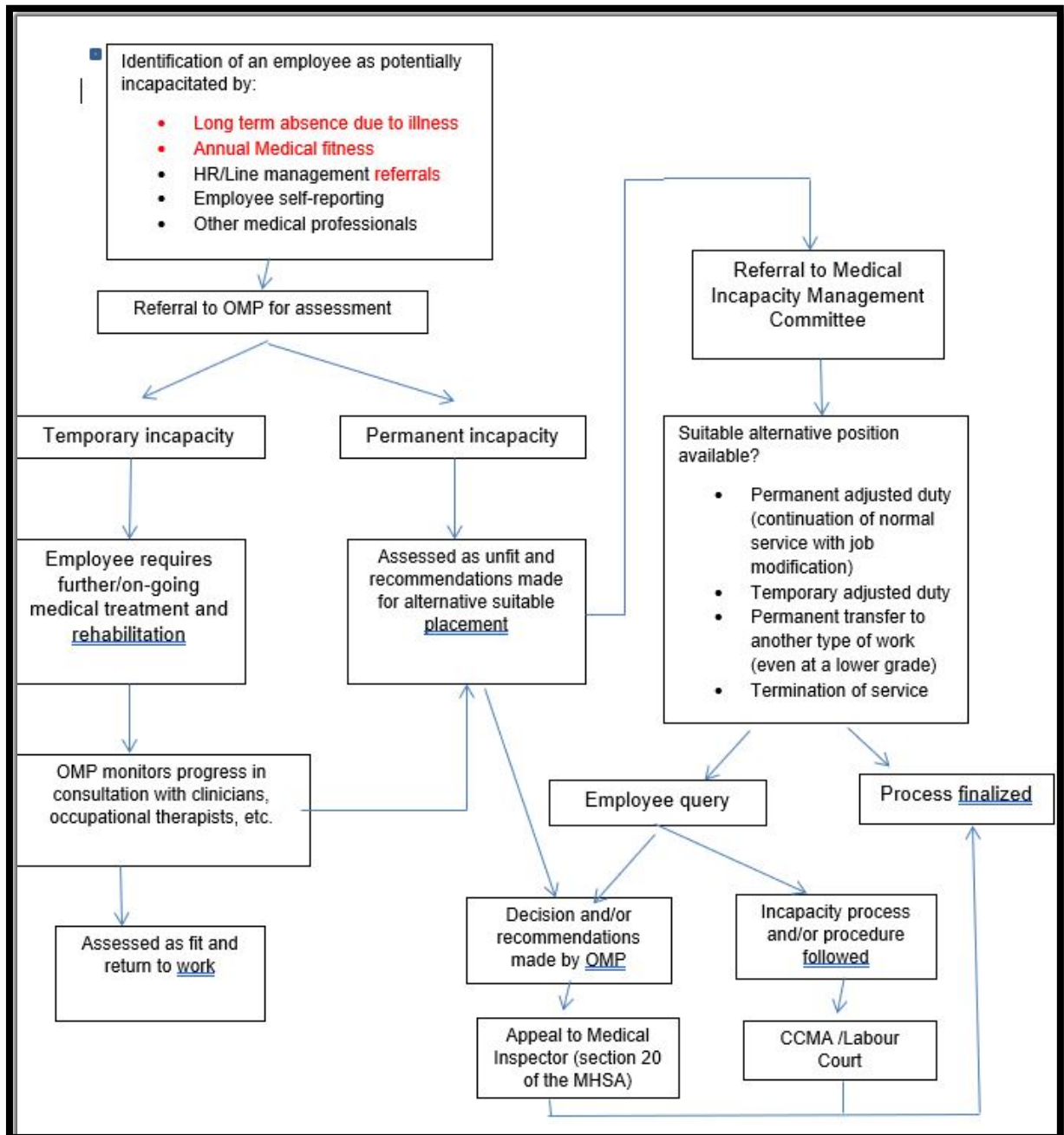
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- Visitors to the site, including management of contractor companies, are required to abide by the PPE requirements. Failure to do so may result in the removal from the mine area and a refusal for future re-entry.
- Contractor business partners and any contractors working in any area under Black Mountain Mine control will implement a procedure that complies with the requirements of this document.
- **SPECIAL CIRCUMSTANCES**
- Persons who are unable to use the standard issue of Personal Protective Equipment owing to medical, physical, or ergonomic constraints shall approach their direct line supervisor/manager to arrange for an appointment with the OMP with regards to constraints. The process is handled the same route as the Medical Incapacity process.

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- All queries or concerns regarding PPE shall be directed to the departmental supervisory personnel in the first instance. Concerns will be escalated to the BMM PPE Committee or directly communicated to the Safety Department for investigation and resolution.
- Failure to comply with the PPE requirements may result in disciplinary action that may in turn result in the termination of employment.
- Jewellery, such as watches, chains, bracelets, necklaces, earrings, and rings shall only be allowed if they do not represent danger of encountering electricity or atmospheric electrical discharges, mechanical devices which might catch or hook the jewellery, and chemicals.
- All PPE shall be issued in accordance with the PPE Issuing Protocol.
- Underground and surface PPE to be specified on a PPE Matrix corresponding to an occupancy.
- The PPE Supplier shall provide the Mine with a catalogue indicating all specifications and references to EN and SANS standards.
- **PROCUREMENT OF PPE**
- The Safety Department, Contractor/Supplier of PPE and the Procurement/Commercial departments shall collaborate to ensure correct PPE is supplied and used.
- All generic PPE shall be procured according to the Black Mountain Mine Personal Protective Equipment Specification.
- Specialised PPE such as security, firefighters, working at heights shall be procured according to the relevant specifications or procedures.
- The range provided at Black Mountain Mine will meet industry accepted and/ or legal requirements.
- **ISSUING OF PPE**
- PPE shall be issued in accordance with the approved PPE Matrix for Black Mountain Mine, that is based on the PPE risk assessment.
- This document prescribes the minimum amount of PPE to be issued per employee; additional needs shall be determined by risk assessment.
- PPE shall be issued to employees on an individual basis, unless the PPE can be disinfected or sanitised before use, should it be shared.

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- A record shall be kept by the PPE Supplier of all PPE to employees.
- The PPE is ordered through the mine's commercial system and a unique code is assigned for each type and size of PPE.
- PPE is issued through an electronic system from the PPE Supplier.
- **REPLACEMENT OF PPE**
- PPE replacements shall only be made based on exchanging unusable equipment for new items because of fair wear and tear.
- On replacement, the employee's line manager and/or supervisor shall dispose of the unusable equipment, old clothing to be handed in to prevent further use and serve as proof of wear and tear at the PPE Supplier.
- Damaged or old PPE shall be managed and disposed of according to the BMM-ENV-SOP-040.
- PPE is issued free of charge, where losses are due to negligence the appropriate disciplinary procedure shall be carried out.
- **MINIMUM AND MAXIMUM RE-ORDER LEVELS**

BMM Supply Chain and PPE Supplier shall respond to constantly changing demand and legislation while optimizing the total cost of PPE stock.

4.0.1 DEFINITIONS

- **Re-order points:** reorder points represent the points at which you need to order the correct quantity.
- **Safety stock:** safety stock is a buffer stock that cushions stock reductions due to peaks in demand and/or unforeseen supply delays.

4.0.2 BMM PPE INVENTORY MANAGEMENT

Black Mountain Complex PPE supplier is using SYSPRO an enterprise resource planning (ERP) solution to manage PPE stock supply and the issue thereof.

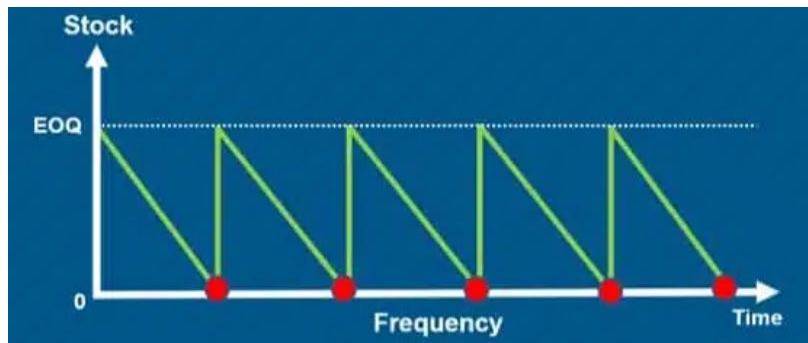
The issuing protocol serve as guideline for procurement to include in SYSPRO ensure minimum and maximum stock levels are maintained and is included in the stock issue list.

A Monthly report Outlining Costs, Exceptions, Top Spenders, and Bulk sales amongst others is issued from this system

- Re-order points is set at the following intervals: (Still need to confirm with Select PPE.)
- Beginning of each month
- Beginning of each week
- According to stock levels (min or max stock)

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Graph 1:

- Should the average sales/demand fluctuate, or delivery times lengthen, safety stock shall be incorporated.

Formula 1

Re-order point (RP) = Safety Stock + Average sales x total lead time.

- *Total lead time: Order lead time + delivery lead time*

Example: **Average sales:** 150 safety glasses/wee

Deliver time: 3 days

Security time: 1 day (reliability of delivery times/ proximity of suppliers)

Therefore, you will place an order when your stock level reaches 600 (example).



Graph 2:

5. PPE FITNESS AND PERFORMANCE TESTING

0 FITNESS AND PERFORMANCE TESTING

- Section 21 of the MSHA stipulates that any person who designs, manufactures, repairs, imports, or supplies any article for use at a mine must ensure, as far as reasonably practicable (i) that the article is safe and without risk to health and safety when used properly and (ii) that it complies with all the requirements in terms of this act.
- Black Mountain Mine relies on these performance and testing criteria from the PPE supplier to ensure products are safe to use on Black Mountain Mine Operations. Formal specifications of each type of PPE supplied to Black Mountain Mine is kept for reference.

Performance testing is carried out to ensure that:

- PPE equipment are safe and secure and can protect the wearer as intended.
- PPE includes clothing and other articles intended to protect the wearer from injury or other health-related risks.
- Conducting a PPE test helps R&D teams discover faults early and is normally done by the PPE equipment manufacturer.
- The testing required of PPE is as varied as an equipment's intended use and the potential risk to the user. Some specific types of testing may include:
 - Biological resistance testing – including penetration testing, as well as antimicrobial and antibacterial testing.
 - Chemical resistance testing – including chemical penetration and permeation testing.
 - Protective ensemble testing – such as testing for chemical, vapor or liquid splash resistance of full body protection systems and clothing ensembles.
 - Impact protection testing – for sports helmets and occupational headwear, as well as body protection equipment.
 - Protective hand and footwear testing – for gloves and shoes used in hazardous work environments.
 - Fall arrest equipment testing – for positioning belts and body harnesses used in construction and in working at heights.
 - Notwithstanding performance testing, Black Mountain Mine on-site conditions might necessitate the wearing of PPE for user review and feedback testing period ensuring suitability before placing a purchase order.

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0 PPE MANUFACTURING STANDARDS

0 HAZARD CONTROL

The “Hierarchy of Controls” is applied to determine the types of controls which are most effective in eliminating or reducing the risk of exposure to the hazard.

- Although PPE is the least effective method for controlling or preventing exposure to a hazard, it provides a barrier which protects an employee from potential exposure to hazards or source of danger.

0 THE COLOUR OF THE PPE

- The required colour of PPE is indicated in the specification and must be complied with, unless not specified.

0 PROTECTIVE CLOTHING FOR SURFACE EMPLOYEES

- Personal protective clothing for surface employees includes a:
 - High visibility Shirt
 - Long / full Pants
 - High visibility / Reflective vests
 - Or two-piece overall
- The shirt shall be of lime in colour at top half and navy blue in bottom half as per Vedanta colours with 50mm reflective tapes. The shirt shall have both Male and female design as per WIM requirements. The Pants shall be blue in colour with 50mm reflective tapes below knees. (See Annexure “3”).
- Issuing of a shirt and pants shall be done as per the procedure outlined below or on a case by case basis.
- Initial issue: 2 x shirts.
- After a Year: 1 x shirt
- After 2 Years: 2 x shirts
- See the PPE specifications below.

0 HEAD PROTECTION

- Hard hats protect the head of the wearer against impact of objects falling and penetrating objects. Hard hats are designed not to fracture when struck or to transfer the force of the blow to the wearer’s skull immediately below the point of impact.
- All employees are required to wear a hard hat where it is mandatory to so.
- Nothing shall be worn under the helmet as this prevents the hard hat from performing as intended, except a long hair cover worn under a hardhat in case of working closer to moving equipment.

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- Chin straps are compulsory to use at Black Mountain Complex.
- Persons with long hair shall ensure that it is suitably tied or tucked under the helmet to prevent entanglement.
- The helmet must be inspected before use by the employee for cracks and signs of impact and wear that may reduce the degree of safety originally provided.
- No alteration may be made to a hard hat that can cause a change in its strength or functionality.
- Hard hats could be combined with face protection and hearing protection products.
- Only GME approved hardhats to be used – must carry GME approval stamp.

0 FACE PROTECTION

- This equipment is designed to protect the wearer from physical hazards such as flying objects, chemical splashes, glare, and foreign bodies such as dust. Specialized face protection PPE also protects against UV, IR, and sparks.
- Face protection shall be evaluated for specific areas of application to ensure the correct protection level is applied.
- Safety spectacles protect the eyes against:
 - Dust and fine particles
 - Low energy impacts (mechanical resistance for an impact up to 45 m/s).
 - Harmful rays: Ultraviolet (UV) / Infrared (IR)
 - Employees using prescriptive glasses shall wear safety glasses over spectacles
- Safety Goggles (clear glass or mesh type) goggles protect the eyes against:

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- Medium energy impacts (mechanical resistance for an impact of up to 120 m/s).
- The risk of intrusion by dust, fine particles, or harmful chemical products (liquids, sprays, gas).
- Harmful rays (UV / IR).
 - Face shields protect the eyes and face against:
- Medium and high energy impacts from sparks or solid bodies, plus projections (liquids, molten metals) that can cause generalized facial injuries.
- Hazards from electric arc discharges caused by short-circuits.
- Harmful rays (UV / IR)
 - Face protection for areas shall be included in area specific risk assessments.

0 RESPIRATORY PROTECTIVE EQUIPMENT (R.P.E)

- Hazards to the lungs include oxygen-deficient atmospheres, dusts, gases, or vapours.
- Respiratory protective equipment (RPE) options include respirators which rely on filtering contaminants from workplace air. These can be simple filtering facepieces and respirators.
- All respirators or breathing apparatus should be of a type defined by the manufacturer, and in consultation with the Occupational Hygiene Department.
- All equipment, with the exception of disposable types, requires cleaning, disinfecting and inspection before and after each use.
- Respirators must be worn at all times in those areas designated as respiratory zones.
- EN95 or similar standard respiratory masks to be used.

0 HAND PROTECTION

- Hazards to the hands and arms include abrasion, temperature, cuts, impact, chemicals, electric shock, radiation, biological agents, or prolonged immersion in water.
- PPE options are gloves (including gloves with a cuff), gauntlets and sleeving that covers part or all of the arm.
- Gloves are classified according to their protection category and applicable to BMC are:
 - Mechanical Hazards.
 - Chemical Hazards.
 - Thermal (Heat and cold) Hazards.
- In the event where employees need to work with chemicals, the appropriate MSDS should be used to determine the correct type of glove to be applied.

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- Approved leather gloves are required for welding, burning with compressed gas, or when using electric arc welding equipment.
- Approved leather gloves are required whenever wire rope slings and cables are handled.
- All employees must be in possession of gloves which should be worn particularly when travelling in cages, inclined areas, climbing stairways and when manually handling any material.

0 HEARING PROTECTION

- Hazards to the ears from noise come from a combination of sound level and duration of exposure. Very high-level sounds are hazardous even with short duration.
- PPE options include earplugs, earmuffs, or semi-insert/canal caps.
- Only SANS approved hearing protection devices are allowed to be used
- The Occupational Hygienist shall determine which job assignments could expose an employee to noise levels greater than 82 dB, 8-hour Time Weighted Average (TWA).
- Hearing protection with the correct attenuation level shall be provided in order to reduce exposure to below the prescribed action levels.
- Area's where the noise level exceeds the prescribed levels shall be designated as 'Hearing Protection Zones' and shall be appropriately demarcated
- Use of hearing protection to be informed by the Hearing Conservation Programme developed by the OMP and the appointed Hygienist

0 SAFETY FOOTWEAR

- The intent of wearing safety footwear is to protect the feet (including the ankle) against impact, penetration, slipping and conduction in working environments and in addition to support the ankle.
- Hazards to the feet and legs include temperature, electrostatic build-up, slipping, cuts, falling objects, heavy loads, chemical splash etc
- Select appropriate footwear for the risks. It can have a variety of sole patterns and materials to help prevent slips in different conditions, including oil or chemical-resistant soles. It can also be anti-static, electrically conductive or thermally insulating.
- Safety footwear shall be worn by all persons exposed to the possibility of injury to the feet in the performance of their duties.

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- Safety boots shall be in accordance with national or international standard. They shall incorporate leather uppers and direct injected, lightweight, dual-density oil resistant soles and hardened toe inserts with mid sole protection and ankle support.

- Gumboots are designed to keep the feet dry in water and mud accumulations.
Specialized safety boots are to be worn when working with high voltage electricity.

- It is not a requirement to wear foot protection in the following areas:

- Designated office areas, inside the enclosed cabs of light vehicles, or other areas designated by the Risk Assessment
- Regular enclosed toed shoes can be worn when reporting to/from your work area at the start and end of shift.
- Employees must ensure that all casual shoes in office areas shall not cause unnecessary risks and must be full enclosed shoes only. Wearing of high heel shoes is discouraged.

0 OVERALLS

- Hazards to the whole body include environmental conditions such as heat, exposure to chemicals, dust etc.

- PPE options include overalls evaluated for wearing in this environment and specified in this document. The type of overalls will be provided based on the results of the risk assessment.

- Overalls must be worn correctly fastened to prevent ingress of contaminants.

- No overalls are to be removed from Black Mountain Mine.

- All electricians and electrical servicemen shall at all times wear an 8 or 12 CAL overall while conducting work on electrical equipment, entering MCC's, Mini-Subs and Substations.

- Only long sleeve overalls to be used. Employees are not allowed to shorten / cut the sleeves.

0 HEAT PROTECTIVE CLOTHING

- Protective clothing for use against heat and flame, are meant to protect the wearer's body and optionally, the hands, head or feet with gaiters, hoods and over boots.

- Typical clothing is a coverall /boiler suit or jacket and trousers.

- Leggings/Gaiters/Spats that conform to national or relevant international standard.

- Selection of the correct type of heat protective clothing is dependent on a risk assessment linked to specific tasks.

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0 FREEZER JACKETS

- This padded Freezer Jacket is designed to keep the heat in when working in very cold climate and is issued wintertime.
- The issue frequency is 1 x every two years for every employee or on a case by case basis

5.1 REFLECTIVE CLOTHING

- Wearing of high visibility reflective safety garments/clothing is mandatory for personnel working underground in active mining areas and in all areas while near mobile equipment.
- Wearing only one type of high visibility reflective safety garment is sufficient.
- The tape for the high visibility reflective garment/clothing can be of any colour as approved by the Health & Safety Committee
- There shall be reflective tape on both sides of the garment (front and back), which shall at a minimum meet the following requirements:

All sleeved garments shall have horizontal reflective stripes on the upper portion of sleeves.

- Types of high visibility reflective safety garments/clothing include vests, jackets, shirts, bibs, and overalls.
- Only reflective clothing complying with national or relevant international standard shall be issued to all persons who need to be visible and to be identified.

6. SELECTION CRITERIA

The Safety Department, Contractor/Supplier of PPE and the Procurement/Commercial departments shall collaborate to ensure correct PPE is supplied and used.

The range of PPE provided at Black Mountain Complex will meet industry accepted and / or legal requirements.

7. INFORMATION, INSTRUCTION AND TRAINING

The required PPE's for any work activity shall be indicated at every working place by a mandatory safety sign.

7.1. General Training will be provided at the training center and will include:

- When and why PPE is necessary to be used.
- The type of PPE required.
- The proper fitment, adjustment, wear, and removal of PPE.
- The limitations of supplied PPE.
- The proper care, maintenance, useful life, and disposal off PPE.

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7.2. Site Specific Training to be conducted by direct line supervisors will include:

- The type of PPE required for each job
- The proper fitment, adjustment, wear, and removal of PPE
- Where to obtain PPE
- Intervals for receiving each PPE
- The department requirements pertaining to cleaning, maintenance, and replacement procedures for PPE.

A mandatory PPE Symbolic Sign shall be displayed at all the working places where the wearing of PPE is required, and NO person shall be allowed to enter these areas without a PPE.

	Overall		Dust mask		Gloves
	Hard Hat with chin strap		Half Mask Respirator		Reflective vest
	Safety Shoes		Safety Harness		Face shield
	Gumboots		Hearing protection		Leather Apron
For illustration only, does not represent all required mandatory signage, refer to PPE Matrix for workplace and occupancy requirements.					

8. MAINTENANCE AND CLEANING OF PPE

All PPE shall be inspected prior to commencing the shift and defects reported immediately to the respective supervisor.

Replacement components, such as filters, will be issued by the stores.

All PPE shall be left in the Change Room at the end of the shift where it will be cleaned as per the laundry schedule.

Reflective strips will be provided on all mine supplied overalls / jackets. If, these strips become faded or where non personal reflective clothing may be worn over this, a reflective bib / vest shall also be worn.

9. MONITORING AND MEASUREMENT

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Management and the safety department shall monitor the use of PPE through:

- Internal Safety Audits.
- Safety Officers inspections.
- Behavior Based safety inspections.
- Planned Task observations.
- Line managers/supervisors will be responsible on a daily basis to monitor the effective use of PPE.
- It is the responsibility of each worker to make use of the provided PPE in the prescribed way.

10. RISK MANAGEMENT

Risk assessments shall indicate specific PPE for the areas/activity being assessed. This shall be logged in the risk assessment worksheet.

PPE Risks includes Injury/illness due to use of damaged /unfit PPE's.

11. RECORDS

Records to be maintained of PPE issuing by the PPE Contractor.

Personal protective equipment matrix.

12. VALIDITY AND DOCUMENT MANAGEMENT

14.1. Document Validity

This SOP is effective from 2019/07/20 and was last reviewed on 23-01-2025.
This SOP will be reviewed every 2 Years.

14.2. Document Management

14.2.1.This SOP replaces any other SOP issued earlier by BMM to the extent specifically covered here. This SOP should be followed in letter and spirit.

14.2.2.BMM is committed to continuously reviewing and updating policies and procedures, based on the Entity's risk assessment and shall incorporate for any regulatory requirement which is required to do so.

14.2.3.Any amendment to this SOP or issue of any guidance or circular etc. under this procedure must be approved in writing by the approving authority as listed in this document.

14.2.4.BMM reserves the right to withdraw, modify or revise the SOP as a whole / partial without providing any justification for the same. On revision, it should be duly communicated to the personnel involved.

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14.2.5.If compliance with this SOP ever conflicts with the applicable law, regulation, directives issued by the statutory and or regulatory authority, then compliance must be ensured with the law.

14.2.6.In order to ensure compliance or to address any known conflicts with the law or to address any specific local requirements, BMM may adopt local sub-procedures which shall be by way of addendum to this SOP and which shall be approved by the approver of this SOP. Proposing of such addendum shall be the responsibility of the respective Entity's competent authority who is at an equivalent level with the SOP owner as set out in this document.

14.3. Violation of Sop

14.3.1.BMM follow a "Zero Tolerance Policy" with respect to non-compliance with this SOP and/or any other SOP / guidance issued by BMM and its constituent Entities.

14.3.2.Violation of this SOP is subject to appropriate disciplinary actions which may include but not limited to termination of employment. This determination will be based on the facts and circumstances of each situation. Any accused of violation of this SOP will be given an opportunity to present their case prior to any determination of appropriate disciplinary actions. Violation of this SOP may also be subject to substantial civil damages, criminal fines and prison terms.

14.3.3.Each employee is responsible for ensuring that their conduct and the conduct of anyone reporting to them shall fully comply with this SOP. Compliances, both personal and by subordinates, will be a factor in periodic performance appraisals.

14.4. Disclaimer

14.4.1.This SOP issued by BMM is for internal compliance and does not create, nor shall it be construed to create, directly or implicitly, any rights, duties or obligations of BMM to any person, body or legal Entity.

14.4.2.This document and its contents are the copyright property of BMM. The release of this document to any third party outside BMM is strictly prohibited without prior consent.

13. REVIEW AND APPROVAL

Content Owner(s)

Eanthe Schrywer (Occupational Hygiene Officer | BMM) TimeStamp: 2025/02/19 4:48:11 PM ||

Content Reviewer(s)

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Content Approver(s)

Amelia V. Cloete (Mine Overseer | BMM) TimeStamp: 2025/04/17 10:32:46 AM ||

This document was approved (in sequence) by the individuals above using electronic approval in our Document Control System.

Final approval status: **Approved**

Approvals were done electronically.

ANNEXURE 1: APPROVED PPE ISSUE PROTOCOL

The below PPE Protocol is controlled by the BMM Safety Manager

ITEM	UNIT OF ISSUE	INTERVAL OF RENEWAL
Arc Flash Gloves -12.4cal/cm2	Each	3 months
Arch Flash balaclava -12.4cal/cm2	Each	3 months
Benji/Furliner socks	Pair	30 days
Boiler making Jacket-Flame Retardant	Each	Bi-Annual
Chinstrap	Each	3 months
Cutting goggle	Each	3 months
Earplugs	Set	each day
Eskimo Jackets	Each	Bi-annual(2-years)
Freezer Jackets	Each	Bi-Annual
Gloves	Pair	each day
Gumboots	Pair	6 months
Helmet	Each	3 months
Kidney Belt	Each	9 months
L.John	Each	3 months
Lamp Belt	Each	9 months
Overalls	Each	3 months
Overalls – Flame Retardant	Each	3 months
Overalls-Arc Protection 12.4cal/cm2-1 Piece	Each	3 months
Overalls-Arc Protection 12.4cal/cm2-2 Piece-Supervisory staff	Each	6 months
Overalls-Arc Protection 12.4cal/cm2-2 Piece-Women	Each	3 months
Rain suit	Each	6 months
Reflector Jacket/Vest	Each	6 months
Safety Goggles	Each	15 days
Safety Rep-Boiler Making-Flame retardant	Each	3-months
Safety shoe	Pair	1 year
Surface PPE – Shirts & Pants	Each	Initial issue: 2 x shirts and 2 x pants. Year two (2): 1 x shirt and 1 x pant. Year three(3): 2 x shirts and 2 x pants.
Vest	Each	3 months
Welding Apron	Each	Annual
Welding Caps	Each	3-months
Welding Glove	Pair	30 days
Welding Helmet	Each	Annual
Welding Spats	Each	Annual
Welding Yoke	Each	Annual

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ANNEXURE 2: PPE / OVERALL SPECIFICATION

- Approval documents must be supplied for all overalls, e.g.: SABS, ISO, Flame retardant, etc.
- Washing instructions must be supplied
- The table below list the minimum requirements and does not include items such as stitching, type of seam, etc.
- Two-piece overalls must be supplied not as a set, but as individual pieces allowing a person to select the size of each piece.

No	Item	Unbleached	Royal Blue – Male Navy Blue - Female	Arc/Flash Proof Electricians	Flame Retardant Boiler Makers
1	Specifications: • Compliance • Conformity	• SABS / SANS 434 • 100% Cotton (J54)	• SABS / SANS 434 • 100% Cotton (J54)	• SABS • 8 - 12 Cal Rating (or higher, e.g.: 15.4 Cal)	• SABS Type 1 • SABS 142 • BS EN 531 • BS EN 470 • SABS 434 • SABS 138 • SABS 142
2	Material Colour	Unbleached White	Royal Blue	Navy Blue	Navy Blue
3	Reflective Strips (see photos further below for examples)	BMC specification	BMC specification	BMC specification & Flame retardant	BMC specification
4	BMC Logo (see example below)	Yes	Yes	Yes	Yes
5	Long sleeve	Yes	Yes	Yes	Yes
6	Cuffs/elastic (end of sleeve)	Yes	Yes	Yes	Yes
7	Elastic band - waste	YES	YES	YES	YES
8	Zip	Yes	Yes	Yes + Velcro	Yes
9	Pockets	• 2 Breast Pockets with flap closure • 2 Hip Pockets • Right Rear Hip Pocket	• 2 Breast Pockets with flap closure • 2 Hip Pockets • Right Rear Hip Pocket	• 2 Breast Pockets with flap closure • 2 Hip Pockets • Right Rear Hip Pocket	• 2 Breast Pockets with flap closure • 2 Hip Pockets • Right Rear Hip Pocket
10	Ruler pocket (right leg)	Yes	Yes	Yes	Yes
11	Side slits at "trouser pockets"	No	No	No	No
12	Arc Flash information and rating	N/A	N/A	Displayed on "outside" 12 Cal Rating Arc/flash	Displayed on "outside" 12 Cal Rating Arc/flash
PPE for Women in Mining (WIM)					
1	One piece	Yes	Yes	Yes	Yes
2	Two piece	Yes	Yes	Yes	Yes
Respirators / Dust Masks – Silica & Lead Dust					
1	Dust masks (Disposable)	EN149:2001 (FFP2) and the harmonised specification is SANS 50149:2003			
2	Surgical Mask	EN 14683 and the harmonised specification is SANS 1866			
3	Half Face Mask	Respirator with appropriate filter- depending on risk assessment - SABS / EN 149:1991.			
1	Head Protection - Hard Hat	The standard industrial safety helmet standard: SANS 1397:2003.			
2	Eye Protection	Safety eyewear use in South Africa is now subject to EN166 (SABS adoption: SANS 50166:2018) The standard is easily identified by the EN-standard number (EN166) being changed to the prefix SANS 50- (SANS 50166:2018)			
3	Hearing protection	EN 352-2, SABS 1451 1998 compliant			

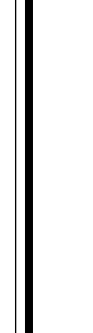
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4	Protective gloves	Working gloves shall be designed according to SANS 11193-1
		SANS 316- Industrial hand protective
		SANS 1297- Leather gloves
		SANS 11193 -1-2010 Gloves made from rubber latex or rubber solutions
		All glove selections shall be depending on risk assessments.
1	Logo Example	

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SANS approval and material of overall (examples)	
Royal Blue Overall	Acid Resistant / Repellent Overall
	

Reflective Tape - Example			
Incorrect Type Tape	Correct Type Tape	Correct Tape Placement – Front	Correct Tape Placement – Back
			

ANNEXURE 3: PROTECTIVE CLOTHING FOR SURFACE EMPLOYEES

MENS LONG SLEEVE SHIRT 100% COTTON UV LIME / NAVY SHIRT LONG SLEEVE - Three embroidered logos - Button to neck close 2 x Breast pocket - Pen section on right breast pocket - Button down cuffs with gauntlet - Large back vent 50mm silver reflective tape on arms and 2 strips around waist	
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LADIES LONG SLEEVE SHIRT

- 100% COTTON UV LIME / NAVY LADIES SHIRT LONG SLEEVE
- Three embroidered logos
- Button to neck close
- 2 x Breast pocket
- Pen section on right breast pocket
- Breast darts
- Curved waist
- Button down cuffs with gauntlet
- Large back vent
- 50mm silver reflective tape on arms and 2 strips around waist



UNISEX PANTS

- 1 Concealed 38mm hard pull elastic.
- 2 Ng5 Metal button 7 pin 17mm X 1.
- 3 Belt loops - size 28 - 32 5 loops,
size 34+ 7 loops.
- 4 Storm label, chest waist size label, production tag & J54 wash care label.
- 5 Back rise triple stitched.
- 6 Concealed YKK Navy Metal zip closed end size 28 - 34 14cm
size 36+ 16cm.
- 7 Storm sidewinder
- 8 Swing pocket with double needle top stitching.
- 9 Hip pocket with mitred corners & double needle top stitching.
- 10 Double fabric patch with double needle top stitching.
- 11 Front rise double needle top stitching.
- 12 Crouch double fabric patch with double needle top stitching
- 13 Inner leg triple stitch.
- 14 Ruler pocket with double needle top stitching.
- 15 Silver 25mm reflective tape round both legs.
- 16 Hem allowance 1.5cm.



JACKET FREEZER

- navy
- orange
- high visible reflective
- tape 50mm



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