



Health and Safety Specification for mine works

Technique / Method / SOP
SOP

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Potential hazards to environment and/or safety of persons:

None

1 PURPOSE

The purpose of this SHE specification is to ensure that any contractor which is appointed by Mintek to conduct any mine related work complies with the Mine Health and Safety Act No. 29 of 1916 as amended and any other occupational health, Covid19 requirements and safety requirements that Mintek may specify. An up-to-date copy of the Mine Health and Safety Act shall be available on site at all times.

The requirement contained in this document are the **ABSOLUTE MINIMUM** and the onus is placed on the contractor to ensure compliance to the requirements of the mine health and safety act and other applicable legislation.

2 SCOPE

The scope of this specification shall apply to contractors and any other individual contracted to provide service or carry out operational work related to Mintek's mining activities where work is carried out on mine premises whose operations and activities are governed by the following legislation;

- Mine Health and Safety Act No 29 of 1996
- Occupational Health and Safety Act and Regulations 85 of 1993
- Contract documents provided by Mintek
- Compensation for Occupational Injuries and Diseases (COID) Act No. 130 of 1993
- National Environmental Management Act 107 of 1998 and all Regulations
- Basic Conditions of Employment Act (Act 75 of 1997)
- Disaster Management Act
- Regulations For Hazardous Biological Agents promulgated by Government Notice No. 7233
- 27 December 2001;
- Facilities Regulations promulgated by Government Notice No. R. 2362 of 5 October 1990.;

3 DEFINITIONS

Refer to Glossary of Terminology (SHEQ-STD-000) for general SHEQ definitions

“COP” means Code of Practice in terms of section 9 of the MHSA;

“Contractor” A company or person (hereinafter referred to as an employer) contracted to Mintek to perform mine related tasks or projects.

“Construction work” Means any work in connection with:

(a) The construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure;

(b) The construction, erection, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or any similar civil engineering structure; or the moving of earth, clearing of land, the making of an excavation, piling or any similar civil engineering structure or type of work.

“COVID 19” means Corona Virus Infection Disease 2019

“CIOM” means chief inspector of mines

"Employee" means any person who is employed or working at a mine;

"Employer" means an owner;

"Health hazard" means any physical, chemical or biological hazard to health, including anything declared to be a health hazard by the Minister;

"Hazard" means a source of or exposure to danger;

“Health and Safety Plan” Means a site, activity or project specific documented plan in accordance with the client’s health and safety specification. The plan addresses hazards identified and includes safe work procedures to mitigate, reduce or control the hazards identified.

“Health and Safety File” Means a file, or other record in permanent form, containing the information required as contemplated in this specifications.

“Induction Training” Instruction provided to a Visitor, Contractor or employee prior to the commencement of work or any other activity.

“Isolation” means separating a sick individual with a contagious disease from health individuals that are not infected with such disease in a manner that aims to prevent the spreading of infection or contamination;

“Medical surveillance” means a planned programme of periodic examination, which may include clinical examinations, biological monitoring or medical tests, of employees by an occupational health practitioner or by an occupational medical practitioner.

“Method Statement” Means a document detailing the key activities to be performed in order to reduce as reasonably as practicable the hazards identified in any risk assessment.

"Mine" means, when-

used as a noun-

(i) any borehole, or excavation, in any tailings or in the earth, including the portion of the earth that is under the sea or other water, made for the purpose of searching for or winning a mineral, whether it is being worked or not; or

(ii) any other place where a mineral deposit is being exploited, including the mining area and all buildings, structures, machinery, mine dumps, access roads or objects situated on or in that area that are used or intended to be used in connection with searching, winning, exploiting or processing of a mineral, or for health and safety purposes. But, if two or more excavations, boreholes

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or places are being worked in conjunction with one another, they are deemed to comprise one mine, unless the Chief Inspector of Mines notifies their employer in writing that those excavations, boreholes or places comprise two or more mines; or

(iii) a works; and

used as a verb, the making of any excavation or borehole referred to in paragraph (a) (i), or the exploitation of any mineral deposit in any other manner, for the purpose of winning a mineral, including prospecting in connection with the winning of a mineral;

“Non Conformance” deviation from normal processes, regulations, procedures etc. resulting in the potential of, or actual, damage to plant, equipment or the environment, injury or illness to contractors, sub-contractors or their employees or any other person, or loss of quality.

“Notification of construction work”

“Occupational medical practitioner” means a medical practitioner who holds a qualification in occupational medicine, or an equivalent qualification, recognised by the Health Professions Council of South Africa;

“Occupational hygiene” means the anticipation, recognition, evaluation and control of conditions at the mine that may cause illness or adverse health effects to persons;

“Risk” means the likelihood that occupational injury or harm to persons will occur;

“Safety” means safety at mines;

“Risk Assessment” Means a program to determine any risk associated with any hazard or aspect at a construction site, in order to identify the steps to be taken to remove, reduce or control such hazard.

“Site” Designated area where approved work is carried out on behalf of Mintek.

“Substance” includes any solid, liquid, vapour, gas or aerosol, alone or in any combination;

“Sub-Contractors” A sub-contractor shall be regarded as a contractor and is subject to the requirements of this SHE specification.

4 RESPONSIBILITIES AND AUTHORITIES

The Contractor shall:

- Conduct all relevant risk assessments as applicable to their service offering scope of work
- Identify, implement and maintain preventative and corrective controls.
- Develop and conduct assurance mechanisms to verify the ongoing effectiveness of controls.
- Ensure that any risk related information provided by Mintek has been incorporated into their risk management framework and communicated to their employees.
- Ensure that their employees are trained in the work practices necessary to safely perform his/her job.
- Document training by keeping records that identify the employee, type and date of training, and include a means to verify successful completion and declaration of competence where applicable.
- Ensure that each of their employees follow the safety rules of the facility, including the safe work instructions and site procedures.
- Advise Mintek of any unique hazards introduced by the Contractor’s work, or of any hazards discovered in the course of their work.
- Establish expectations and means to empower employees to stop unsafe work.

5 PROCEDURE

5.1 INSURANCE

The contractor and all its appointed sub-contractor(s) shall be registered with an appropriate compensation commissioner and have a valid letter of good standing from the commissioner. The contractor is responsible for ensuring the Letter of Good Standing is valid for the entire duration of the project/contract. A copy of the letter of Good Standing must be kept in the SHE file.

5.2 COSTING OF THE SHE REQUIREMENTS

The contractor is responsible for ensuring that SHE costing is taken into consideration for the duration of the project as this will ensure they comply with the SHE legislative requirements.

5.3 NOTIFICATION OF CONSTRUCTION WORK

- The Contractor shall notify the local relevant Provincial Director of the Department of Labour, before commencing with construction work, of the intended work in the form of Annexure 2 of the Construction Regulations.
- A copy of the completed Annexure 2 of the Construction Regulations, as well as proof of notification shall be included in the Health and Safety Plan.
- A copy of the completed Annexure 2 is to be kept on site by the Contractor.

5.4 SUBMISSION OF THE SAFETY FILE

- Once appointed the contractor must submit their safety file for approval.
- Approval will be granted when the critical items have been sufficiently addressed.
- It is the contractor's responsibility to ensure all the documents stated below are up to date throughout the project.

The safety file will consist of the following; please note that additional project specific documents may be required.

1. Legal appointments with proof of training
 - Site manager
 - Site supervisor
 - Engineer/competent person
 - Safety officer
 - Incident investigator
 - Risk assessor
 - Health and safety representative
 - First aider
 - Fire fighter/coordinator
 - Operator of mobile machineries
 - Fall protection plan developer
2. Letter of Good standing. Proof of registration under COIDA
3. Public Liability
4. Employees particulars (ID copies/Passport, place of residence and next of kin)
5. Health and Safety induction
6. Medical surveillance
7. Health and Safety policy and ensure compliance with the content and intent
8. Safety Health and Environment plan
9. Copy of the Mine Health and Safety Act
10. Risk assessment
11. Code of practice

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12. Planned task observations
13. Toolbox talk
14. Risk register (e.g confined space, fall from height, explosives, hazardous substances...)
15. Method statement, standards and procedures (site specific)
16. PPE issue register
17. Incident reporting procedures
 - Annexure 1
 - WCL1 and WCL2 forms
18. List of hazardous substances accompanied by the relevant Material Safety Data Sheets
19. Emergency preparedness, contingency planning and response
20. Inspection registers/load testing certificates (all equipment, tools and machines to be used onsite)
21. Fall protection plan
22. Waste management and disposal plan

5.5 MEDICAL REQUIREMENTS (CERTIFICATE OF FITNESS)

- Contractor's employees, including his sub-contractors, shall undergo medical surveillance as required by the mine and the Mine Health and Safety Act No.29 of 1996 ("the MHSA") The contractor shall pay for the services provided.
- The contractor shall include in their Health and Safety files all copies of the worker's medical certificates of fitness conducted by an Occupational Health Medical/Nursing Practitioner.

5.6 APPOINTMENTS

- A legal appointment is not a paper exercise, it is a formal acceptance of legal responsibility. It is essentially a contract and requires that the appointed person understands the objectives of the legislation, and the requirements imposed by the mine health and safety Act.
- It is extremely important that the appointee has a clear understanding of the duties imposed on him by the letter of appointment.
- All legal appointments must be made on official company letterheads, dated and signed both by the appointee and the person making the appointment.
- All appointees shall be suitably trained and found to be competent for the responsibilities there are assigned for. Copies of all relevant appointments and the relevant competence certificates must be kept in the SHE file.

5.7 OPERATIONAL REQUIREMENTS

Training

- The Contractor shall ensure that all his employees are adequately trained and experienced to perform their work and are further trained on the OHS aspects relating to the work and that they understand the hazards associated with such work being carried out on the premises.

Induction

- The Contractor must ensure that all site personnel (workers, professional team and visitors) undergo a site-specific SHE induction training session before any worker starts work prior to commencing on the Project or Contract, as applicable.
- The induction must include the general duties of the employer and the employees, possible hazards and their associated risks that employees may be exposed to while on site as well as the control measures in place to mitigate the risks.
- A record of attendance shall be kept in the SHE file, as well as a copy of the contents of the said induction. The Contractor will be required to induct all contractors' employees.

Competence

- Without derogating from the foregoing, the Contractor shall, in particular, ensure that all his users or operators of any materials, machinery or plant equipment are properly trained in the use of such materials, machinery or plant equipment.
- The Contractor shall ensure that all its employees are in possession of valid licenses and/or certificates of the correct code where machinery, plant or equipment is utilized. Proof of these licenses and/or certificates will be kept in the Contractors Health, Safety and Environmental file. This must be assessed on a regular basis e.g. training, evaluation, and periodic audits by the Client, progress meetings, etc.

5.8 RISK MANAGEMENT

Risk Management is the process of:

- identifying hazards;
- estimation of the potential risk each hazard present;
- considering the effectiveness of current controls in place; and
- taking action to eliminate or control the risks.

In terms of Section 11 of the Mine Health and Safety Act 29 of 1996 (as amended) it is mandatory for the employer to identify hazards, to assess the Health and Safety risk to which workers may be exposed while at work, to record these findings and implement reasonably practicable measures to control the significant recorded risk.

Risk Assessments and Hazard Identification

- The Contractor shall cause a hazard identification and risk assessment to be performed by a competent person, appointed in writing, on the functions, activities and tasks relating to the work to be done, before any of the contract work can commence on site and a copy of the document must be presented by the contractor to Mintek for approval. The documented risk assessments shall form part of the OHS plan and must include all plans as may be applicable.
- The geographical boundaries of risk management in relation to the areas of where work is to be performed shall be clearly defined and authoritative precautionary measures implemented.
- Based on the Risk Assessments, the Contractor must develop a set of site-specific SHE rules that will be applied to regulate the SHE aspects of the construction or contractor work. All Contractor employees must be advised of the risks they will be exposed to and must be trained in the methods or procedures to be used to mitigate these hazards or risks.

The safe work procedures must address the following elements:

- The work method to be followed to conduct work safely
- Control measures implemented to mitigation & reduce the risks
- Responsibilities of competent persons
- Required personal protective equipment
- Correct equipment/tools/machinery to be used
- Completed Risk Registers
- Completed Risk Assessments
- A monitoring plan
- A documented review plan
- Site supervisor/ manager must compile method statement before work commences. This document details the way a work task or process is to be completed. It should outline the hazards involved and include a step by step guide on how to do the job safely.
- All method statements are to be signed by the contractor safety officer and approved by Mintek Project manager.

Any contractor shall cause the relevant risk assessment to be reviewed:

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- Where changes are made to the scope,
- When an incident has occurred,
- At intervals not exceeding one month.
- As recommended by Mintek based on random site inspections.

Hazard & Risk Control

The Contractor shall ensure that mitigation and control strategies for hazards and risks as per assessment are implemented. The implementation of any risk management strategies shall consider the **HIERARCHY OF CONTROLS** as well the concept of reasonably practicable when prioritising suitable controls. In terms of the hierarchy of control the following needs to be considered during selection;

Elimination

Elimination of a hazard results in elimination of the associated risk. While elimination is the most desirable it is often the least practical, but it's not impossible.

Substitution

Substituting a more hazardous substance with a lesser one reduces the risk.

Engineering/Isolation

Modifying the engineering of the exposure source or interrupting the path between the employee and the exposure source will mitigate the risk.

Administrative

Administrative controls include reduction of exposure times through shift rotation, training, scheduling work at certain low risk times and other measures.

Personal Protective Equipment (PPE)

Important to note that **PPE is the least desirable option** and should only be considered after all the above have been investigated or in conjunction with them. The contractor shall ensure that his responsible persons and employees are provided with adequate personal protective equipment (PPE) for the work they may perform in accordance to the HIRA outcomes and in accordance with the requirements of chapter 2 of **the mine health and safety act section 6** and the PPE is worn accordingly.

Such personal protective equipment shall be maintained in a good working condition and users shall be trained in the reason for wearing and the correct use and care thereof.

Code of practice

The contractor must in terms of chapter 2 of the MHS act section 9, prepare and implement a code of practice on any matter affecting the health and safety of employees and other persons who may be directly affected by activities at the mine

5.9 INCIDENT MANAGEMENT

Reporting of Incidents

- Incidents occurring onsite shall be reported immediately to Mintek.

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- The Contractor will be responsible to inform the relevant authorities (i.e. Department of Labour) of any Serious or Reportable Incidents as per chapter 23 of the **mine health and safety act** which may occur in terms of the applicable legislation. All correspondence of the (Relevant Authorities) regarding these incidents must be copied and kept in the OHS File.

Incident Investigation

- All incidents shall be investigated by a competent investigation team
- Mintek may conduct their own incident investigation into service provider incidents and request the presence or evidence from the service provider
- Incident investigations should indicate the relevant risk control failures and corrective actions aimed at improving such controls.
- The Final investigation reports should be made available upon request.
- Mintek may request the contractor to provide additional risk control measures.
- The contractor shall ensure that the recommended corrective and preventative actions are implemented and embedded in their risk control framework.

Non-conformance management

Non-conformances:

- Can result in work stoppages and possible expulsion from site
- May have a negative impact on future contract awards.
- In respect of life saving behaviours or critical controls are regarded as serious.
- Will be managed on a case per case basis, as per the potential risk.
- Costs related to non-conformance will be for the contractor's account.
- Mintek may require a service provider to provide an action plan for rectification of non-conformances within an agreed time frame.
- Mintek can also require a service provider to carry out a root cause analysis and provide preventative measures prior to closing non-conformances.

Consequence management

- Service providers are required to address contravention of health and safety rules and specifications in line with relevant labour legislation and/or disciplinary codes and principles.
- Mintek reserves the right to revoke access to any service provider employee for transgressions which in its view is justified.

Subcontractor management

- The service contractor shall provide a list of subcontractors beforehand, intended to be used for the duration of the contract. The list of subcontractors is to include the following:

- a) Name of Subcontractor Company,
- b) Name of subcontractor contact person,
- c) Contact number of subcontractor and
- d) Letter of good standing.

- Any changes to the list should be updated and resubmitted to Mintek project manager.
- All requirements in terms of Mintek, legal and other applicable to the contractor shall be applicable to subcontractor utilised onsite.
- The contractor shall, where subcontractors are to be utilised, develop an auditable subcontractor management process.

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5.10 PERSONAL PROTECTIVE EQUIPMENT (PPE)

- The contractor shall ensure that his responsible persons and employees are provided with adequate personal protective equipment (PPE) for the work they may perform in accordance to the HIRA outcomes and in accordance with the requirements of chapter 2 of **the mine health and safety act section 6**
- Contractor must issue their employees SABS approved PPE.
- A copy of the PPE issue register signed by the employee issued with the PPE must be kept in the SHE file.
- Contractor safety officer are required to conduct continuous inspections of the PPE issued to their employees to ensure that they are still in good condition to be used by the employee or they still comply with manufacture requirements.
- The contractor is responsible for ensuring that employees are trained on the safe use of the PPE issued to them, how to maintain it and the limitations of the PPE.

5.11 SITE REQUIREMENTS

Construction site signage

- Appropriate symbolic signage must be displayed where it is required by legislation.
- Appropriate warning, mandatory and information signs must be placed where required.
- All signs must comply to SANS/SABS requirements.

Site visitor

- A site visitor's register is to be kept on site and steps are to be taken to ensure that all visitors sign the visitors' register before entering the site.
- An induction must be given to all visitors entering the site and proof thereof must be kept in the health and safety file.
- Visitor's PPE must be made available and at the cost of the contractor.
- A sign should also be provided directing all visitors to report to the site office.

Welfare facility

- It is the contractor's responsibility to make provision of welfare facilities for employees under their control during the construction phase.
- The facilities should comply with the facility regulation

5.12 COVID 19

- Contractors have responsibilities to ensure the adequate personal hygiene and self-protection from COVID-19 infection procedures and precautions are established and maintained as necessary.
- Contractors to ensure SHE plan, Risk assessment and other procedures covers Covid 19 requirements.
- Contractors should comply with the department of employment and labour directives
- Measures to be implemented as per the directives includes;

Engineering controls

- Ventilation (natural and mechanical)
- Physical barriers

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- Adaptation of workstations to increase social distance

Administrative controls

- Screening/ reporting of symptoms/ sick leave
- Minimizing contact
- Rotation and shift work
- Work-at-home strategies
- Communication and information strategies
- Role of health and safety committees and representatives
- Education and training
- Reporting of incidents for regulatory purposes
- Reporting for purposes of public health, contact tracing, screening, testing and surveillance
- Healthy and safe work practices
- Disinfectants, sanitisers and personal hygiene

PPE

- Masks
- Gloves
- Facial shields

Mintek shall ensure that regular information pertaining to COVID 19 and or any Health and Safety matters is distributed to ensure that required measures / controls is timeously addressed.

There are various information platforms available to the Employer and or employee that can assist in keeping them informed: Local Authority / Legislation World Health Organizations Health Care Departments / Health Care Professional's / Centre's / Hospitals Public Service Announcements

In accordance with Section 9(2) of the Mine Health and Safety Act, 1996 (Act 29 of 1996), as amended (**MHSA**), an employer must prepare and implement a **COP** on COVID-19 viral pandemic present and spreading in South Africa. This **COP** must comply with any relevant guidelines and instructions issued by the **CIOM** [Section 9(3)

MHSA], including regulations and guidelines from Disaster Management Act (Act no 57 of 2002) and any other relevant guidance with regards to COVID-19. Failure by the employer to prepare or implement a **COP** in compliance with this guideline will be a contravention, a criminal offence and a breach of the **MHSA**.

5.13 COMPLIANCE MONITORING

Mintek will conduct periodic evaluations of Service Providers' safety performance in fulfilling their obligations.

- Progress meetings
- Monthly SHEQ audits
- Regular SHEQ inspections

5.14 GENERAL

Nothing contained in or omitted from this Health and Safety Specification, shall relieve the Contractor of any of its obligations or liabilities.

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Mintek shall not be liable for any civil claim because of anything contained in or omitted from this Health and Safety Specification

NB: Upon completion of the construction work, a principal contractor must hand over to the Mintek project manager, a health and safety file including a record of all drawings, designs, materials used and other similar information concerning the completed structure, in accordance to Construction Regulations 7(1) (e).

6 RECORDS

Health and Safety file, and other record in permanent form, containing the information required as contemplated in this specifications

7 CONTROLLED COPIES

Location/People: None