| Eskom | **SAFETY, HEALTH AND ENVIRONMENTAL (SHE) SPECIFICATION** | **Group Capital Division** |
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Title: **SAFETY HEALTH AND ENVIRONMENTAL (SHE) SPECIFICATION MATIMBA C& I REPLACEMENT PROJECT**

Document Identifier: **40-01T**

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Revision **01**

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| Date: 05/09/2022 | Date: 05/09/2022 | Date: 05 September 2022 | Date: 06/09/2022 |

**Content**

**1. *Eskom Project Manager:***

The discipline/contract manager is responsible for managing the contract with the Principal Contractor and ensures that the SHE specifications are developed and issued with tender enquiries and that the Principal Contractor's SHE plan is approved prior to commencement of work. He/she must ensure that all the statutory requirements, Eskom and SHE specification and SHE plan requirements are always adhered to by Principal Contractor and (if applicable) their contractors

**P. Mbolekwa**

Initial and Surname

***2. Eskom Construction Health and Safety Agent:***

Where a Construction Work permit is required as contemplated in terms of Construction Regulations 3(1), the Client must without derogating from his or her health and safety responsibilities or liabilities, appoint a competent person in writing as an agent to act as his or her representative., and where such an appointment is made the duties that are imposed by the Construction Regulations 2014 upon a client, apply as far as reasonably practicable to the agent so appointed.

**TBC**

Initials and Surname

***3. Eskom Engineering Manager:***

The Project Engineer is the person responsible for ensuring that the designer fulfils his professional and legal obligations with respect to the implementation of his design.

**TBC**

Initials and Surname

***4. Eskom Project/site Manager:***

He is responsible for the overall management of the project on-site.

**P. Mbolekwa**

***5. Eskom Health and Safety Manager/ Practitioner:***

The responsibility of the Health and Safety Manager/Practitioner is to provide assurance, as well as advice, assist and support to the **Project /Site Manager** in the management of the health and safety issues on the project which includes ensuring proper co-ordination amongst the various Contractors. The SHE Manager/Practitioner will also be responsible for assisting in the development of site and project specific SHE Specifications, and ensuring that SHE specification are issued with enquiry documents and that the Contractors SHE plans are

submitted; evaluated and approved. She/he will be responsible for auditing and ensuring compliance to legal requirements.

**TBC**

Initials and Surname

***6. Designer:***

The Designer is the person responsible for the overall management of the project design as well as ensuring the management of the compliance of the completed works to the design during and after construction on site.

The designer shall ensure compliance with the Occupational Health and Safety Act in terms of Construction Regulations 2014, Regulation 6.

**TBC**

Initials and Surname

***7. Eskom Environmental Manager/Advisor/ Officer:***

**Note:** This position may be a permanent position on the Project Organogram or it might be a service rendered by a line Division (which may be managed by a Service Level Agreement).

The responsibility of the Environmental Manager/ Advisor/Officer is to provide assurance, advice, assist and support to the Eskom Site/Project Manager in the management of the environmental issues on the project which includes ensuring compliance to the Environmental Authorisation (EA) and the Environmental Management Plan (EMP), Water Use License (WUL), Waste Management Licence (WML), Tree cutting permits, Atmospheric Emission License (EAL), Eskom standards and any environmental compliance obligation applicable to the Project.

**TBC**

Initials and Surname

## 1. Introduction

Eskom Group Capital Division is committed to achieving and demonstrating sound Safety, health and Environmental (SHE) management by controlling SHE risks/impacts consistent with its SHEQ policy and objectives.

Zero harm is one of ESKOM values. The aim of Eskom's adoption of Zero Harm as one of its values is to strive to, and achieve world class safety, health and environmental performance, where all Guardians (employees and contractors) return home safely every day and without harm done to the environment we operate in.

The aim of the Safety Health and Environmental (SHE) specification is to provide Contractor/s with:

- The overarching framework within which the Contractor is required to demonstrate compliance with certain high level requirements for SHE.
- Establishes the manner in which the Contractor is to manage SHE risks in the execution of the contract, and
- The mandatory high level project & scope of work specific SHE requirements that the contractor needs to adhere to in order to align & demonstrate commitment towards the zero harm of the persons during the duration of the contract.

The SHE Specification shall be included with the tender enquiry documentation to ensure that the tenderer is timeously made aware of:

- Eskom's requirements, including
- Eskom's compliance obligations (including Funders SHE requirements)
- Information that might affect the health and safety of any person at work whether directly or indirectly;
- Activities that may have an impact on the direct and surrounding environment.

The Principal Contractor and their contractors are expected to develop a SHE plan which meets these requirements as well as the applicable legislation.

This specification may not thoroughly address all hazards and aspects associated with any specialised activity or operation. In such situations, contractors shall be responsible for developing their own health and safety plans/procedures/manuals/work instructions to adequately address their specialised activities and scope of operation.

## 2. Supporting Clauses

### 2.1 Scope

This specification sets out the minimum legislative and organisational requirements for the C & I Replacement Project and it is applicable for the following stages of the project:

i. Basic and detailed design stage,

ii. Tender Enquiry and evaluations,

iii. Site establishment,

iv. Construction works and

v. Site de-establishment and rehabilitation.

**Project Background**

The Contractor is responsible for complete civil works which includes the refurbishment and modifications to the existing rooms (e.g. flooring, ceiling, internal walls, etc.), structural assessment and/or verification of the existing civil infrastructures and loading analysis (i.e. comparing existing equipment loads to new proposed loads).

The Contractor will be responsible for the procurement of all plant, equipment, materials and services required to execute the works necessary to fulfil all requirements in this project.

The following areas form part of the Contractor's scope of work:

- Design and construction of the Units 1-6 Control Suites (UCS).
- Design and construction of the three (3) Temporary Control Suites (TCS).
- Design and construction of the Units 1-6 Equipment Rooms.
- Design and construction of the Units 1-6 Engineering Rooms.
- Design and construction of the Units 1-6 Computer Rooms.
- Design and construction of the Common Computer Room.
- Design and construction of the entire Simulator Suite.
- Design and construction of the Engineering Test and Training System Room.
- Unit 1-6 LV Switchgear rooms.

The Contractor is responsible for the demolition and/or stripping of all the internal components/materials in order to convert the area to satisfy the need for the project This may include the ceiling, non-bearing partition masonry walls, floor tiles, etc. All pluming, fixtures, suspended ceiling and floor ties within the different areas are to be removed.

The Contractor ensures at all defects are repaired and makes good on all trades. The Contractor disposes of all rubble at a waste disposal site to be approved by the Employer. The waste disposal site is selected to suit the classification of the materials to be disposed of. Certificates of disposal are required to be submitted to the Employer.

**C & I Replacement Scope of Work**

The scope of work entails the engineering, design, procurement, manufacturing, factory acceptance testing, delivery, off-loading at site, storage, installation, testing, commissioning, optimisation, and as-built documentation for the Power Station's C&I System.

The Contractor will provide the Power Station's C&I system for the operation, control, protection, interlocking, and monitoring of the Power Station Units 1- 6.

## 2.2 Purpose

Indicate to all potential types of contractors the SHE requirements on the project, upon which their planning for the management of SHE will be based on and thus produce their SHE plan, i.e. The contractors SHE plan.

All contractors are required to execute their works in accordance with this document as well as other applicable legal documents.

### 2.3 Applicability

This specification is applicable to all Principal Contractors, Contractors, Service Providers, Suppliers and all the activities and processes carried out for and on behalf of Group Capital Division where C & I Project is performed Matimba Power Station.

For best practice reasons, where the work scope does not fall within the definition of Construction Regulations 2014, then this specification shall also apply as a minimum as long as the applicable Eskom and statutory SHE requirements are identified in relation to the scope of work.

### 2.4 Effective date

This specification shall be implemented from date of approval.

## 3. Normative/Informative References

Parties using this specification shall apply the most recent edition of the documents listed below.

The below list is not exhaustive of Eskom procedures, the Contractor shall be provided with other procedures as and when required and the Contractor must comply.

**Note:** Where the date for revision of a document on the Eskom Document Centre website has passed, the document is still current, irrespective of its revision date having passed.

### 3.1 Normative

[1] 32-727: Safety, Health, Environment and Quality Policy

[2] 240-62196227: Life-saving Rules Standard

[3] Occupational Health and Safety Act and Regulations No 85 of 1993 and its Regulations

[4] Construction Regulations of 2014 or latest edition as per government gazette.

[5] OHS Act 85 of 1993 and its regulations

[6] The Constitution of the Republic of South Africa (particularly Section 24 of the Bill of Rights)

[7] Civil and Building Work Act

[8] Compensation for Occupational Injuries and Diseases Act

[9] National Environmental Management Act 107 of 1998

[10] National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004)

[11] National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004)

[12] National Water Act 36 of 1998

[13] Minerals and Petroleum Resources Development Act, 2002 (Act 28 of 2002 )

[14] Animals Protection Act, 1962 (Act No. 71 of 1962)

[15] National Road Traffic Act, 1996 (Act No. 93 of 1996)

[16] National Heritage Resources Act No. 25 of 1999

[17] Fencing Act, 1963 (Act No. 31 of 1963)

[18] Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983)

[19] National Veld and Forest Fires Act, 1998 (Act No. 101 of 1998)

[20] Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947)

[21] 240-56927739- Group Capital Execution Assurance Construction SHEQ Operational plan 2017/18 - 2020/21.

[22] 32-95 Eskom Occupational Health and Safety Incident Management procedure

[23] The Vehicle and Driver Safety Management Procedure ( 240-62946386)

[24] 32-345 Eskom Vehicle Safety Specification.

[25] 32-126 Contractor health and safety requirements.

[26] 32-37 Substance Abuse Procedure

[27] All relevant South African legislation ( national, provincial, and local)

[28] Applicable South African National Standards (SANS) for the scope of work/Project.

[29] Applicable International Standards

[30] Environmental Management Plan

[31] Environmental Authorisation

[32] Licenses/Permits

[33] 32-245: Waste Management Standard

[34] 32-345 Eskom Vehicle Safety Specification

[35] 240-54937439: Fire Protection/Detection Assessment Standard.

[36] 32-124 Eskom Fire Risk Management

[37] 32-136 Contractor Health and Safety Requirements

[38] 240-43848327 Employees' right of refusal to work in an unsafe situation

[39] 32-418: Working from Heights Procedure

[40] 240-100979499: Personal Protective Equipment for work at Heights Specification

[41] 32-520: Procedure Manual for Performing Occupational Health and Safety Management and Environmental Management: Conducting EH&S Risk Assessment

[42] 32-123: Emergency Planning

[43] 32-407 Behaviour Safety Observation Procedure

[44] 32-726: SHE Requirements for the Eskom Commercial Process

[45] 39-98: Safe use of Lifting Machines

[46] 32-524 Manual, Developing a SHE Specification

[47] 32-1126 Eskom Smoking Policy

[48] 32-1134 Access Control at Eskom Premises

[49] 240-44175132 Eskom Personal Protective Equipment Specification (PPE)

[50] 240-56296995 Standard for Record Retention Periods

[51] 32-477 Safety, Health and Environment Training and Development Procedure

[52] 240-43921084- Fall arrester checklist

[53] Eskom Operating Regulations for High Voltage Systems

[54] Eskom Plant Safety Regulations (Low Voltage Regulations)

[55] 32-736 Eskom land and Biodiversity Policy

[56] 32-246 Work instruction for Reporting on Environmental Expenditure and Income

[57] 240-13307117 Environmental Incident Management Procedure

[58] 32-815 Land and Biodiversity standard

[59] 240-701725/32-247 Vegetation management and maintenance within Eskom Land, servitude and rights of way.

[60] Consolidated COVID 19- Direction on Health and Safety in the Workplace-GG 43400, GNR 639- 4 June 2020

[61] 240-155318598 Workplace Protective measures to be taken during the COVID-19 outbreak for GCD Workplaces

[62] Disaster Management Act 2002, Regulations issued in terms of Section 27(2) of the Act

[63] 240-150206274 Project Specific BRA

[64] 240-46569633 SACPCMP requirements

[65] 240-155373927 COVID-19 Health and Safety Policy Statement

[66] 240-155326818 Management of vulnerable Employees during COVID 19 Pandemic

[67] LBE22005PC Spill Management Procedure

[68] LBE22004PC Waste Management Procedure

[69] LBS00002MN Matimba Power Station Emergency Preparedness Station Response Plan

[70] 240-131838225 Occupational Health and Safety Incident Management Definitions and Classification Parameters

[71] 240-44175132 Eskom PPE Specification

[72] 240-142585644 Works Instruction _ Gx Coal Projects _ Environmental Requirements for Contractors and Suppliers

[73] 240-100979499 PPE for work at height specification

[74] 240-97834173 Construction Regulation Guideline

### 3.2 Informative

Note: The following is a list of documents that can be used as a guide in order to meet legal and Eskom requirements

[1] OHSAS 18001:2007/ ISO 45001:2018, Occupational Health and Safety Management Systems-Requirements (Contractor shall use as guideline)

[2] ISO 14001:2015, Environmental Management Requirement System

[3] Relevant South African National Standards for the task/Project.

## 4. Definitions

**Agent:** means a competent person who acts as a representative for a client.

**Aspect:** An activity, product or service of the organisation which can/or has potential to interact with the environment.

**Baseline risk assessment:** (32-520) baseline operational risks refer to the health and safety risks associated with all standard processes and routine activities in the business.

**Client:** any person for whom construction work is being performed.

**Competent Person:** means:

a person who has in respect of the work or task to be performed the required knowledge, training and experience and, where applicable, qualifications, specific to that work or task: Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000 (Act No.67 of 2000), those qualifications and that training must be regarded as the required qualifications and training; and is familiar with the Act and with the applicable regulations made under the Act;

**Construction Manager**: means a competent person responsible for the management of the physical construction processes and the co-ordination, administration and management of resources on a construction site.

**Construction site**: means a workplace where construction work is being performed

**Construction Work:** means any work in connection with:

- The construction, erection, alteration, renovation, repair, demolition or dismantling of, or addition to, Building or any similar structure.
- The construction, erection, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runaway, sewer or water reticulation system, or the moving of earth, clearing of land, the making of excavation, piling or any similar civil engineering structure or type of work.

**Contractor:** means an employer as defined in section 1 of the Act who performs construction work and includes principal contractors. In relation to this document, where the word “contractor” is used, it will mean all or some of the following: principal contractors, appointed contractors, suppliers, vendors, service providers and consultants

**Critical Lifts**: There are seven categories for which a lift can be defined as a Critical Lift; (1) any lift weighing in excess of 20 tons, (2) any lift involving a crane suspended work platform (man cage), (3) any lift over critical operating and/or process equipment and (4) any lift that exceeds 85 % of the crane’s load chart (5) any lift that utilises more than one lifting device (Tandem Lift).(6) Load transfers.(7) night lifting.

**Designer:** means any of the following persons:

A competent person who:

- Person who prepares a design
- Person who checks and approves a design

- Person who arranges for any person at work under his/her control to prepare a design, including an employee of that person where he or she is the employer, or designs temporary work, including its components,
- An architect or engineer contributing to, or having overall responsibility for, the design
- A Building services engineer designing details for fixed plant
- A Surveyor specifying articles or drawing up specifications
- A Contractor carrying out design work as part of a design and building project, or an interior designer, shop-fitter or landscape architect.

**Environmental risk assessment** means a systematic process of evaluating the potential risks that may be involved in a projected activity or undertaking.

**Eskom Requirements:** Eskom requirements which evolve from directives, policies, standards, procedures, specifications, work instructions, guidelines or manuals

**Fall Protection Plan:** means a documented plan which includes and provides for:

All risks relating to working from a fall risk position, considering the nature of work undertaken, the procedures and methods to be applied in order to eliminate the risk of falling, and a rescue plan and procedures.

**Hazard:** means a source of, or exposure to danger

**Hazard identification:** means the identification and documenting of existing or expected hazards to the health and safety of persons, which are normally associated with the type of construction work being executed or to be executed

**Impacts:** Any change to the environment whether adverse or beneficial, wholly or partial resulting from environmental aspects.

**Medical surveillance:** means a planned programme or periodic examination (which may include clinical examinations, biological monitoring, or medical tests) of employees by an occupational health practitioner or, in prescribed cases, by an occupational medicine practitioner

**Method Statement:** is a written document detailing work procedures and sequences of operations.

**On Site/Site**: Any workplace where the contractor or his employees performs contract related work.

**Planned Task Observation:** is an independent observation made during the planned period in which the task is being executed.

**Pre-Task Risk Assessment (DSTI):** a meeting which is held prior to the commencement of the day's work with all relevant personnel associated with the work task in attendance.

**Risk:** the probability that injury or damage will occur.

**Risk Assessment:** means a programme to determine any risk associated with any hazard at a construction site in order to identify the steps needed to be taken to remove, reduce, or control such hazard.

**Safety Health and Environmental file:** means a file or other record in permanent form, containing the information on the SHE management system during construction including all information relating to construction phase after the handover to Client.

**Safety, Health and Environmental Plan:** means a written plan that addresses hazards identified during the risk assessment process as well as the identified impacts in the SHE specification. This would typically include safe work procedures to mitigate, reduce or control the hazards identified and is specific to each construction project undertaken. This is usually compiled by the Principal Contractor or contractor and approved by the Client/Agent for which contracting work will be performed.

**Safety, Health and Environmental (SHE) Specification:** including the base line risk assessment means a documented specification of significant residual SHE requirements for a construction site, which a competent and resourced Principal Contractor or sub-contractor would not have been aware of. This is to ensure the health and safety of employees and the direct and indirect communities, as well as duty of care for the environment. The Client/Agent compiles the SHE specification which shall be specific to each construction project.

**Safe Work Procedures:** Safe work procedures are a series of specific steps that guide a worker through a task from start to finish in a chronological order. Safe work procedures are designed to reduce the risk by minimizing potential exposure.

## 5. Abbreviations

| Abbreviation | Explanation |
|---|---|
| **ASIB** | Automatic Sprinkler Inspection Bureau |
| **COID Act** | Compensation for Occupational Injuries and Diseases Act |
| **CR** | Construction Regulations 2014 |
| **CoC** | Certificate of Compliance |
| **DMR** | Driven Machinery Regulations |
| **DOL** | Department of Labour |
| **DSTI** | Daily Safety Task Instruction |
| **EA** | Environmental Authorisation |
| **ECO** | Environmental Control Officer |
| **EIA** | Environmental Impact Assessment |
| **EMPr** | Environmental Management Programme Report |
| **EMS** | Environmental Management System |
| **GCD** | Group Capital Division |
| **GSR** | General Safety Regulations |
| **HCS** | Hazardous Chemical Substances |
| **HIRA** | Hazard identification and risk assessment |
| **HV** | High Voltage |

| Abbreviation | Explanation |
|---|---|
| **CR** | Construction Regulations of the Occupational Health and Safety Act No. 83 of 1993 |
| **ISO** | International Organisation for Standards |
| **JSA** | Job Safety Analysis |
| **LTIR** | Lost Time Incident Rate |
| **LV** | Low Voltage |
| **MHS Act** | Mine Health and Safety Act (Act No. 29 of 1996) |
| **MSDS** | Material Safety Data Sheet |
| **NEC** | New Engineering Contract |
| **NEMA** | National Environmental Management Act |
| **NWA** | National Water Act (Act No. 36 of 1996), as amended |
| **NQF** | National Qualifications Framework |
| **OHNP** | Occupational Health Nursing Practitioner |
| **OHS Act** | Occupational Health and Safety Act No. 83 of 1993 |
| **OHS** | Occupational Health and Safety |
| **ORHVS** | Operating Regulations for High Voltage Systems |
| **PPE** | Personal Protective Equipment |
| **PTO** | Planned Task Observations |
| **SACPCMP** | South African Council for the Project & Construction Management Professions |
| **SACNASP** | South African Council for Natural Scientific Professions |
| **SANS** | South African National Standards |
| **SAQA** | South African Qualifications Authority. |
| **SAQCC** | South African Qualification and Certification Committee |
| **SDS** | Safety Data Sheet |
| **SHEQ** | Safety, Health, Environment, Quality |
| **SLA** | Service Level Agreement |
| **C&I** | Control and Instrumentation |
| **TETA** | Transport Education Training Authority |
| **WUL** | Water Use License |

## 6. Roles and Responsibilities

### 6.1 Commitment to SHE

Visible and felt Leadership commitment is essential in providing a healthy and safe work environment, Leadership from all stakeholders. Leadership must provide strategic direction and demonstrate commitment in terms of SHE issues both on strategic level and operational level. This must be done by being proactively involved in the day-to-day operations; in particular SHE aspects of any project / contract. Employees also are expected to demonstrate their commitment. Legislation and the Eskom requirements require that each employee must take reasonable care of themselves and their fellow workers.

## 6.2 Designers

Designers should ensure compliance with the Occupational Health and Safety Act in terms of Construction Regulations of 2014, Regulations 6 and all other applicable Regulations, standards and legislations.

The designer shall take into consideration the health and safety specification submitted by the Client. The designer shall then submit to the Client the receipt of acknowledgement of the health and safety specification document. (This shall serve as proof that the designer has taken the H&S requirements into consideration during the design stage).

Designers shall ensure that designs are accompanied by a report as required in terms of Construction Regulations 6 (1) (c)

The designer shall take into account the hazards associated with the current constructability as well as future maintenance of the designed structure (s) and make provision in the design(s) for the necessary maintenance work to be performed such that the associated risks are minimised.

The designer shall describe any matters that require particular attention by a contractor. Enough information should be provided to alert contractors and others to matters which they could not be reasonably expected to know about, and this will include inherent risks which the contractor will need to be aware of.

In cases where Eskom uses overseas designers, the appointed designers must indicate and submit to Eskom the legislative requirements/documentation with which they comply in order to verify whether they meet the South African SHE legislative requirements.

An overseas designer can appoint a local designer to conduct the inspections required by the construction regulations.

Designers shall communicate changes on designs, including any new identified risks associated with the particular change/s to the Construction Health and Safety Agent, Project Manager, Environmental Manager/Snr Advisor/Officer and Environmental Control Officer (ECO).

Layout maps depicting coordinates, all the activities (site camps, laydown area, workshop areas, access road etc.) and sensitive areas (such as heritage sites, wetlands, rivers, protected fauna and flora etc.)

Final Designs and layout maps must be approved by relevant Authorities before the commencement of construction.

## 6.3 Principal Contractor’s accountabilities for their Contractors

The Principal Contractor (PC) must adhere to the Construction Regulations, Regulation 7 and to GCD Matimba requirements, which include but not limited to:

- In the event that the Principal Contractor needs to introduce a new contractor, the Principal Contractor must first inform the Client at least a week in advance prior to appointing the Contractor. The PC must provide the contractor with the Client’s SHE Specification.
- Such contractors must, in every respect, meet the Client’s SHE requirements.
- The PC must the review and approve the contractor’s safety file in writing, then hand it over to the Client for review and acceptance, the Client must accept the SHE File in writing.

- The PC shall ensure that no work commences without the Client having accepted the contractor's SHE File.
- Should the Principal Contractor appoint a contractor, the principal contractor would then have the same role and responsibility in relation to the contractors, in a similar way as the Client has in relation to the principal contractor.
- The Principal Contractor is directly accountable for the actions of his contractors. The Principal Contractor will also be responsible for initiating any remedial action (recovery plan) that may be necessary to ensure that the contractor complies with all requirements.
- The Principal Contractor shall ensure that the contractors appointed have the necessary competencies and resources to perform the work safely.
- The Principal Contractor shall provide any contractor who is making a bid or appointed to perform construction work, with the relevant sections of the documented SHE specification, who would in turn provide the client/agent with a SHE plan for review.
- The Principal Contractor shall carry out audits on the contractor at least monthly to ensure that their SHE plan is being implemented and maintained.
- The Principal Contractor shall carry out audits on the contractor at least monthly to ensure that the Environmental authorisation, Water use license, waste management license, and other applicable permits conditions and Environmental Management Programme/ Plan is being implemented and maintained.
- The Client representatives/Agent and/or the Principal Contractor shall stop any contractor from executing construction work which poses a threat to the safety and health of persons or the environment or if it does not comply with the approved SHE plan and Client's SHE Specification.
- The Principal Contractor shall have a disciplinary process and an organisational structured procedure to deal with employees who have transgressed organisational and legal requirements.
- The Principal contractor's Construction Manager/Supervisor shall provide a list of names and contact telephone numbers of all his employees as well as the contractor employees on site. This list shall be updated as and when new contractors commence on site.
- The Principal Contractor's Construction Manager/Supervisor shall keep a record of all employees including the contractor employees, including date of induction, relevant skills and licenses, and be able to produce this list at the request of the relevant officials. These records shall be filed in the SHE File.
- The Principal Contractor shall ensure that his managers and supervisors give clear and unambiguous instructions for the work in hand to the personnel for whom they are responsible for. The instructions shall include, but not necessarily be limited to:
- Description of the objective/scope of work
- Sequence of work: risk assessments and method statements
- Hazard identification and risk assessment (prior to commencement of work)
- Precautionary/preventative measures that are to be taken.
- Identification of sensitive features that may be impacted upon by the project.

- Employees are responsible for their own health and safety and that of their co-workers in their respective areas of work on the project. They must be made aware of their responsibilities during induction and awareness sessions some of which are:
- Familiarising themselves with their workplaces and health and safety procedures.
- Working in a manner that does not endanger them or cause harm to others.
- Keeping their work area tidy.
- Reporting all incidents/accidents and near misses.
- Protecting fellow workers from injury.
- Reporting unsafe acts and unsafe conditions.
- Reporting any situation that may become dangerous.
- Carrying out lawful orders and obeying health and safety rules.
- Emergency procedure
- Declaring to the employer if taking medication which may have intoxicating effects.
- Every employee must undergo site induction provided by the Client, Generation and the PC before commencement of the contracted work. Only once this induction has been received, will each employee receive a site access permit.
- It must be highlighted to all employees, that anyone who becomes aware of any person disregarding a health & safety notice, instruction or regulation shall immediately report this to the person concerned. If the person persists, stop the person from working and report the matter to the Eskom Site/Project Manager and the Principal Contractor Supervisor immediately.
- The PC and its contractors shall develop and submit for acceptance a Covid-19 baseline risk assessment and Covid-19 Work Plan to the Client. The documents must be aligned to the Client's BRA and Work Plan. The PC and the contractor must update the Covid-19 risk assessment and work plan whenever the PC and / or contractor experience a Covid-19 incident or as and when the Client's representative and / or DoEL representative deem necessary. No cost implications shall be borne by the Client on the Covid-19 processes and documentation.

## 7. Management and Supervision of Construction Work

The Principal Contractor shall ensure that the performance of all specified work is managed and supervised in accordance with the requirement of OHS Act, construction regulations throughout the contract period.

The Principal Contractor and contractor shall ensure that the performance of all specified work is supervised throughout the duration of the Contract by a sufficient number of competent appointed representatives of the Contractor, who have experience in the type of work specified.

No work shall commence without the presence of an appointed competent Construction Manager, Construction Health & Safety Manager, Construction Health & Safety Officer, Construction Supervisor, first aiders and safety representatives during execution of the work. These supervisors shall be fluent in the language for communications as defined under the Contract.

The Construction Manager shall demonstrate competency in relation to work being performed and the ability to manage construction work which may include making all statutory appointments in terms of Health and Safety, refer to CR (8)(1).

The Principal Contractor and contractor require ensuring that resourcing is in accordance with Project Plan and Schedule for life of work. An estimation of key activities is required to be identified for the life cycle of the project and resource plan requires aligning accordingly. The number of appointed persons shall be determined by the size and the risk of the project.

### 7.1 Construction Health and Safety Manager/s and Officer/s

The Principal Contractor and contractor shall appoint a full-time Construction Health and Safety Manager and Construction Health and Safety officers for the project.

The Construction Safety Officers shall be responsible for the day-to-day coordination of site activities, which include but not limited to ensuring that the employee induction gets done, ensure daily task risk assessments are done by risk assessors and signs them off before start of tasks each morning and in the afternoon. Ensure toolbox talks are done daily, ensure PPE requirements adhered to by all employees on site, and ensure health and safety walk downs are done. Avail themselves for audits by the Client, develop health and safety documents for review and approval by the Contractor Construction health and Safety Manager, etc.

The Principal Contractor must appoint a Construction Health and Safety Manager who is registered with SACPCMP to provide assurance, as well as advice. Assist and support the Contractor Construction Project Management on all health and safety matters, these include but not limited to ensuring proper co-ordination amongst the various Contractors on site. Ensuring there is cooperation with the Clients and other Contractors on site, signing off audit reports on behalf of the Contractor. Be involved in Statutory Audits done by external parties on the Client, attend management meeting and management walk downs with the Client, ensure assurance of statistics provided by the Construction Health and Safety Officers to the Client on a weekly basis, evaluate ongoing work conditions to guarantee compliance on the Project, ensure legal compliance, ensure disciplinary processes are followed when Client SHE Spec is not adhered to, attend management meetings with the Client. The Contractor Construction Health and Safety Manager must also be responsible for the review and approval/sign off the site specific SHE Plan, baseline risk assessment and all other health and safety procedures and work instructions developed for the Project.

Any issues that cannot be resolved by the Contractor's Construction Safety Officers for the Contractor and its Contractors must be escalated to the person with relevant knowledge and experience on Construction Health and Safety to resolve, i.e. Construction Health and Safety Manager.

The Client may, based on the project risks, decide whether the Construction Health and Safety Manager must be full-time on site or not.

### 7.2 Construction Professional Registration

The Principal Contractor and all his/her appointed contractors shall be registered in their respective levels as professionals in terms of the requirements of the SACPCMP.

The SACPCMP web address is http://www.sacpcmp.org.za

Construction Health and Safety Officers, Construction Health and Safety Managers and Construction Managers are required to register as professionals with the SACPCMP.

## 8. Process for Monitoring

This document is valid for the duration of the works and will be amended, as and when necessary, as requirements are being amended and therefore it will be required for the Principal Contractor and contractor's plan to be amended accordingly.

Conformance to this document shall be via regular safety inspections and by Monthly Audits.

### 8.1 Related/Supporting Documents

Eskom OHS Act section 37 (2) agreement (to be completed by the Project Manager) (24077037682)

Acknowledgement Form for Eskom SHE Rules and other requirements (32-726)

Annexure A – Client non-negotiable OHS requirements

Annexure B – Client non-negotiable Environmental requirements

Annexure C - SHEQ Policy 32-727 and Covid-19 Policy

Annexure D - Form 75 Contractor Monthly Statistical Report

Annexure E – Safe Work Procedure and Job Observation Template

Annexure F- Requirements for identification lamps

Annexure G – Covid-19 BRA and Work Plan

Annexure H - Matimba Organogram

Annexure I - Client's Construction Work Permit Checklist

Annexure J - SHE File Layout

## 9. Document Content

### 9.1 Note to Principal Contractor and its Contractors

The SHE specifications are Eskom's minimum requirements. The Contractor is expected to establish a SHE Plan which meets these requirements as well as all the applicable legislation. Eskom in no way assumes the Contractors legal responsibilities. The Contractor as a legal entity, therefore an employer in their own right is and remains accountable for the quality and the execution of the health and safety program for their employees and contractor employees. This document reflects minimum requirements and should not be construed as all encompassing.

The Contractor is expected to have a recognised OHS Management system that will incorporate these requirements as well as all the applicable legislation.

Where ambiguity exists between the PC SHE Plan and the Client's SHE Specification, the Client SHE Specification shall take precedence. Where there is an oversight on the PC's SHE Plan by the Client during the SHE Plan review and acceptance, the Client's SHE Specification shall take precedence over the oversight noted.

The PC and contractor SHE Plans shall be updated as and when required.

## 10. SHE Specification

### 10.1 Project and Scope of Work Details

**Location:** Matimba Power Station is situated on Nelson Mandela Dr, Lephalale, 0555 within Lephalale Local Municipality that forms part of the Waterberg District Municipality in the Limpopo Province at co-ordinates 23°40'07.1"S 27°36'42.1"E.

The Power station comprises of six (6) of 665 MW generating units. Each unit comprises of one boiler, one steam turbine and one generator set. The power station was commissioned between 1988 and 1993. The station is the largest direct dry-cooled power station in the world.

The station's address is as follows:

Eskom Holdings SOC Ltd

Matimba Power Station

Nelson Mandela Dr

Lephalale

0555

**Project description/detailed scope of work**

The scope of work entails the engineering, design, procurement, manufacturing, factory acceptance testing, delivery, off-loading at site, storage, installation, testing, commissioning, optimisation, and as-built documentation for the Power Station's C&I System.

The Contractor will provide the Power Station's C&I system for the operation, control, protection, interlocking, and monitoring of the Power Station Units 1- 6.

**Program details:**

The Contractor must ensure the following are submitted to the Client:

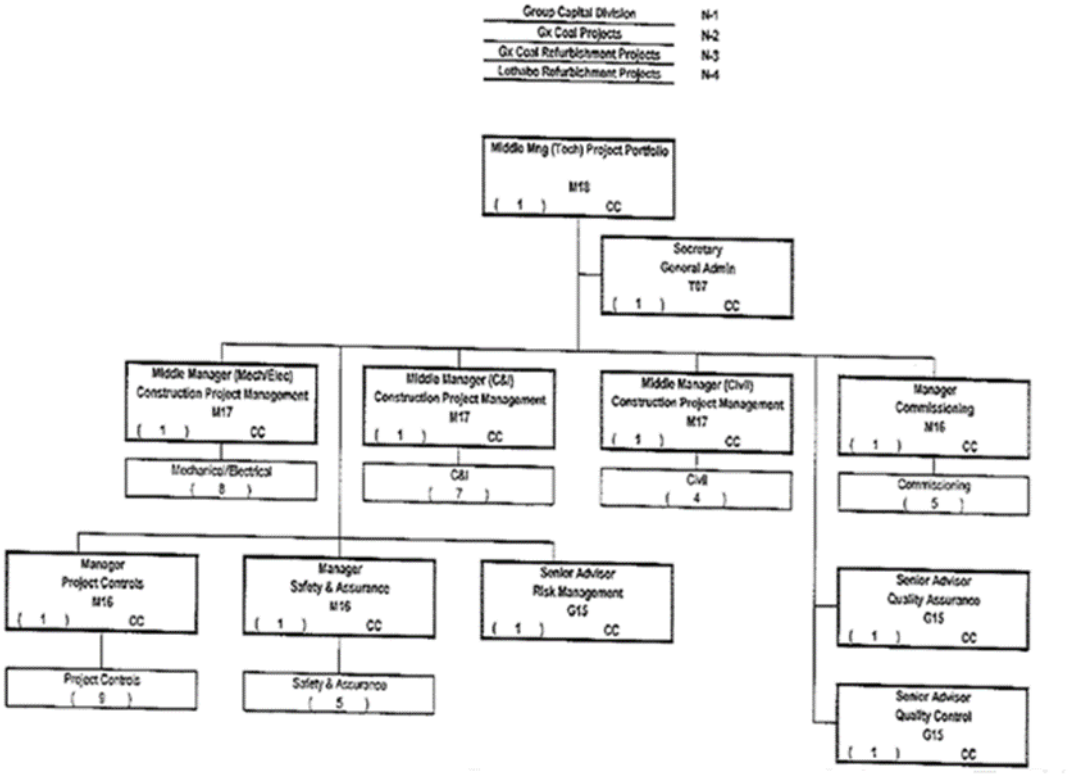
- Submission of documentation required by the Client as per the Client's requirements for application for the Construction Work Permit (CWP), see Annexure I, must be submitted 5 (five) working days after contract award.
- The above documents will assist in fast tracking the application of construction work permit.
- The Client must be given ten (10) working days to review the CWP application documents.
- The PC must submit the final SHE File ten (10) working days after contract award.
- The Client must be given ten (10) working days to review the file.
- Details on anticipated date for the commencement of work on site to be provided.
- Project completion date or project duration to be provided.
- Site Details (location of site offices with emergency response procedure; site personnel details; ablution facilities; eating facilities, etc.).

- Schematic layout of project site including site plans/services and surrounding land uses or any sensitive features to be provided by the Contractor.
- Notification of Construction Work to the DoEL by the Contractor must be in place for the PC and all its Contractors that it intends to have working in the Project to be indicated.
- PC's Rehabilitation Plan to be submitted to the Client's OHS Manager 60 days before rehabilitation take place for acceptance.

## 11. Client and Principal Contractor: Details, Accountabilities and Responsibilities:

The Eskom Matimba GCD Project Organogram.

11.1 The Eskom Project Organogram:




### 11.2 Principal Contractor OHS Accountabilities and Responsibilities Organogram including the OHS Functional Department Resource Plan

The Principal Contractor shall provide an organisational organogram related to this project, listing all the levels of responsibility from the Chief Executive down to the supervisors responsible for the project. The diagram must list the names of appointees. The appointee's roles and responsibilities must be indicated on their appointment letters.

Provide an OHS resource plan. For each position, stipulate the position titles, qualifications and competencies.

For the duration of the contract, the Principal Contractor shall ensure that competent persons are appointed in writing in terms of the requirements of the OHS Act 85 of 1993 and its Regulations; and or other statutory requirements and that all their appointees are made aware of their accountabilities and responsibilities and have been suitably trained in terms of their appointment, and advice and assist these appointees in the execution of their duties. All organograms' shall be updated timeously when appointments are changed and filed in the project SHE file.

Where there are multiple contractors on site appointed by the Principal Contractor, the Principal Contractor shall coordinate cooperation between contactors to ensure health and safety control.

The PC and its contractor must inform the Client at least three (3) working days in advance if there will be change on an appointed individual, i.e. change or appointees, together with the proposed individual's appointment letter and proof of competencies to the Client for review and acceptance. The PC must first review and approve any change or update in the appointees before providing the information to the Client.

### 11.3 Appointment of a Principal Contractor

The Principal Contractor will be appointed by Eskom Project Manager on the awarding of the contract and shall be responsible and accountable for all legislative and Eskom requirements for the duration of the contract.

PC and Contractor shall not commence with the project work until such time the below appointments have been made and are in place:

- Appointed in writing in terms of OHS Act Construction Regulation 5(1) (k), by Eskom Project Manager.
- 37 (2) Agreements

### 11.4 Appointment of Contractors

The Principal Contractor may appoint contractors to assist in the contract. All appointments shall be done in writing and will form part of the SHE plan that is required to be submitted to Eskom. Adequate training and instruction must be given to the appointees and the principal contractor must ensure that all appointed contractors understand their roles and responsibilities.

The Principal Contractor shall when selecting contractors to assist on this project carry out a selection process, and vet potential contractors. Once the selection process is completed, then such contractors shall be appointed in writing for the relevant period as required.

The PC must ensure that the Contractors working under it forms part of the Notification of Construction Work sent to the Department of Employment and Labour by the PC.

Each Contractor must ensure that it submits a Notification of Construction Work to the Department of Employment and Labour before commencing with any activities. The Notification must form part of the Contractor's SHE File. Contractors appointed by the PC's Contractor must ensure that the same process is followed when selecting and appointing their Contractors and the Contractor shall have the same duties as the PC to the Contractor it has appointed.

The PC must notify the Client at least five (5) working days in advance before appointing a new contractor. The PC must review the contractor's SHE File and approve it. Once approved, the PC must submit the approved SHE File, together with the evaluation report, to the Client for acceptance. The Client shall be given at least five (5) working days to review and accept the SHE File. The contractor shall not commence with any activities until the Client has reviewed and accepted the contractor's SHE File in writing.

### 11.5 Appointment and Competencies

The Principal Contractor shall in writing appoint as per the OHS Act requirements and shall ensure that all his appointees are made aware of their accountabilities and responsibilities in terms of their appointment and that they advise and assist these appointees in the execution of their duties.

The Principal Contractor shall ensure that, in accordance with the scope of work, competent persons are appointed in writing in accordance with the applicable appointments and shall demonstrate competency in relation to work being performed.

Copies of all the appointments shall be kept in the SHE File.

The Principal Contractor shall provide and keep up to date an outline organogram and a list of names and contact telephone numbers of all appointments as required but not limited to the table below:

| Reference | Description |
|---|---|
| Section 16(2) | Persons assigned functions to assist the Chief Executive Officer (if required) |
| Section 17 | Health and Safety Representative |
| Section 19 | Health and Safety Committee Member (if there are 2 or more H&S reps there will be a H&S committee) |
| GSR 3 | First Aiders |
| GSR 5(1) | Person that pronounces & certifies a confined space safe for the duration of work being conducted (applicable for confined spaces) |
| DMR 17(2) | Goods Hoist Inspector |
| GAR 9(2) | Incident / Accident Investigator |
| DMR18(11) | Lifting Machinery Operator (Appointment or Permit) |
| DMR18(5) | Lifting Machinery Inspector |
| DMR18(10)(e) | Lifting Tackle Inspector |
| EMR 9 | Portable Electrical Equipment Inspector |
| VUP 10 | Portable Gas Container Inspector |
| VUP 13(1)(b) | Pressure Vessels Inspector |

| | |
|---|---|
| HCS 3(3) | Hazardous Chemical Substances Co-coordinator |
| Asbestos Regulation 21 | Person registered as an Asbestos Contractor (Asbestos AIA) by the Department of Labour |
| CR 5(1)(k) | Appointment of the Contractor by the Employer |
| CR 7(1)(c)(v) | Subcontractors Appointment by the Contractor |
| CR 8 (1) | Construction Manager |
| CR 8(7) | Construction Supervisor |
| CR 8(8) | Assistant Construction Supervisor |
| CR 8(5) | Construction Health and Safety Officer |
| CR 9(1) | Person to Compile Risk Assessments |
| CR 10(1)(a) | Competent Person to compile Fall Protection Plan |
| CR 12(1) | Person to supervise temporary works |
| CR 13(1) | Person to supervise Excavation Work |
| CR 21 | Competent Person in the use of Explosives & Development of the Method Statements |
| CR 17(1) | Competent Person as Suspended Platform Supervisor |
| CR 17(8)(b) | Competent Person to Conduct Performance Test of Suspended Platforms |
| CR 16(1) | Competent Person as Scaffolding Supervisor |
| CR 19(8)(a) | Material Hoist Inspector |
| CR 20(1) | Competent Person as Bulk Mixing Plant Supervisor |
| CR 21(2)(b) | Competent Person as Explosive Powered Tool Inspector |
| CR 21(2)(g)(i) | Appointed Person responsible for issuing & collection of Explosive Powered Tools cartridges & nails or studs |
| CR 23(1)(k) | Construction Vehicle and Mobile Plant Inspector |
| CR 24(e) | Competent Person for Temporary Electrical Installation Inspections |
| CR 28(a) | Competent Person for Stacking and Storage Supervisor |
| CR 29(h) | Competent Person as Fire Fighting Equipment Inspector |

| | |
|---|---|
| Eskom Requirement | Emergency Planning Co-coordinator |
| Eskom Requirement | Fire Official |
| CR 18(1)(a) | Rope Access Supervisor |
| CR 8(1) | Construction manager |
| Sans 12480-1&3 | Crane coordinator – Tower crane operations /Appointed Person Mobile Crane operations |
| CR 8 (2) | Assistant Construction Manager |
| SACPCMP registration certificate | Construction Health and Safety Manager |

Notes to the appointments listed above:

Section 16(1) creates a legal presumption, and therefore no appointment is required. The Contractor shall provide the full names, contact telephone number and business address of the Chief Executive Officer.

**Health & Safety Representative Required Competencies:**

- General Health and Safety Training
- Health and Safety Representative Training
- Construction Regulations, GNR 84 of February 2014.
- Basic firefighting.
- Hazard Identification and Risk Assessment Training
- Incident Investigation and Root Cause Analysis Technique Training
- Auditing awareness training.
- Working at heights where applicable.
- Hazardous materials (HAZMAT) training

  Best practise:
- Legal liability training.
- Basic scaffolding erecting and dismantling training.
- Environmental legislation training.

**Construction Supervisor & Assistant Construction Supervisor Required Competency:**

- Three years applicable experience in construction management
- General Health and Safety course
- OH&S Act and Regulations course, as applicable (latest version of the Act and Regulations)
- Incident Investigation and Root Cause Analysis Technique Training

- Hazard Identification and Risk Assessment Training
- Job Observations Training
- Attended an accredited supervisor's safety course
- Construction Regulations (latest version of the Regulations)
- HAZMAT training
- Basic fire fighting
- Rigging awareness training.
- Rigging competency training (red sealed rigger) for Supervisors that will be supervising rigging activities
- Eskom PSR and ORHVS authorization training as and when required by the contract scope of works
- Working at Heights training.
- Chemical awareness training (internal)
- Basic firefighting.

**Construction Safety Officer (CR 8(5) Appointee) Required Competencies:**

- B-Tech or National Diploma in Health and Safety Management or Environmental Health or any other recognised Health and Safety Course
- SACPCMP registration as a CHSO
- HIRA training.
- Basic scaffolding erecting and dismantling training.
- Root Cause Analysis Technique training.
- OH&S Act & Construction Regulations training.
- Eskom PSR and ORHVS awareness training as and when required by the contract scope of work.
- Working at Heights training.
- Legal liability.
- COID Act.
- Construction Regulations. (latest version of the Regulations)
- HAZMAT training
- Basic fire fighting
- Rigging awareness training.
- Including any other training as deemed necessary by the Client's SHE Training Procedure.
- Chemical awareness training (internal)

**Construction Health and Safety Manager Competencies:**

- B-Tech or National Diploma in Health and Safety Management or Environmental Health or any other recognised Health and Safety Course
- SACPCMP registration as a CHSM
- HIRA training.
- Legal liability.
- COID Act.
- Basic scaffolding erecting and dismantling training.
- Root Cause Analysis Technique training.
- OH&S Act & Construction Regulations training.
- Eskom PSR and ORHVS awareness training as and when required by the contract scope of work.
- Working at Heights training.
- Construction Regulations. (latest version of the Regulations)
- HAZMAT training
- Basic fire fighting
- Rigging awareness training.
- Including any other training as deemed necessary by the Client's SHE Training Procedure.
- Chemical awareness training (internal)

Note: all employees on the project must be trained on basic firefighting.

**Construction Safety Officer Ratio**

The PC must employ the services of Full-time Construction Safety Officers during its term of contract.

The PC must ensure that there is at least one (1) full-time Construction Safety Officer on site for every 1 - 30 employees on site.

The Principal Contractor must ensure that each of its Contractors has a full-time Construction Safety Officer appointed for its employees for every 1-30 employees and part thereof.

The Client's OHS Manager/Officer must review and acceptance all CVs of all the Contractor's appointees before the PC or contractor appoints such a person for the project.

The PC and its contractor must inform the Client at least three (3) working days in advance if there will be change on an appointed individual, i.e. change or appointees, together with the proposed individual's appointment letter and proof of competencies to the Client for review and acceptance. The PC must first review and approve any change or update in the appointees before providing the information to the Client. The Client shall be given at least three (3) working days to review and provide response to the submitted documentation.

The PC must ensure that there is always a Construction Safety Officer and Contractor' Construction Supervisors on site as long as there are employees working on site, regardless of the number of employees working on site.

The PC must ensure that there is sufficient Safety and Supervisor's coverage on each shift work, weekend work, overtime work, emergency work, or whenever work needs to be done on site. The Client's OHS Department and Project Manager must decide whether the number of safety officers and supervisors are sufficient or not for the above mentioned working plan.

The PC must ensure that a working roster and overtime exemption from the DoEL are in place for all their contractors who intend to work overtime / extended hours.

The PC must send a request to the Client's Project Manager and Safety Manager for any overtime / extended hours of work at least a day in advance, or at least 4 hours in advance for any emergency work. The PC must submit the following with the overtime / extended hour's request:

- Exemption from the DoEL
- Fatigue management plan
- Roster for them employees working overtime

The PC may not continue with the overtime / extended hours until permission has been granted in writing, (or telephonically for emergency work and this must be followed up by confirmation in writing by both parties), by the Client's Project and OHS Manager.

### Environmental Officer

The PC and its Contractors must appoint a full-time Environmental Officer (EO) during its term of contract.

If the risk or the Client and/or an Inspector of the DoEL deem fit, the Contractor must appoint additional full-time or part-time Environmental Officers, as required, to manage environmental matters on site.

The CVs of the PC's and Contractor's Environmental Officer must be subjected to acceptance by the Client before appointing such persons to the project. This includes the change in the EO, if the PC or contractor needs to change an EO, the Client must be notified at least three (3) working days in advance, the relevant documentation for the change must be submitted to the Client for review and acceptance by the Client. The Client shall be given 3 (three) working days to review the documents and provide feedback to the PC. The EO must ensure adherence to all environmental requirements for the Project.

**Note:** The Contractor must ensure that persons with qualifications achieved through the Recognition of Prior Learning (RPL) standard, have their qualifications graded by the SAQA body in order to determine the overall level of qualifications and competency in terms of environmental management. Overall RPL Grading must meet the minimum level of grading equivalent to that of a National Degree or Diploma. All additional training in terms of environmental legislation is mandatory, over and above the SAQA grading. The PC shall ensure that all EOs appointed for the project are registered with SACNASP

## 12. SHE/Q Policy

The Principal Contractor and the contractor companies shall each have a SHE/Q Policy authorised by their Chief Executive (OHS Act Section 16(1) appointee) that clearly states overall SHE/Q objectives and commitment to improving Safety, Health, Environment and Quality performance and must be displayed and shared with all stakeholders.

Eskom has a SHEQ Policy that clearly states the policy principles by which Eskom operates and the commitment to SHEQ excellence and is authorised by the Eskom Group Chief Executive. (See Annexure C). The contractor shall also comply with the Client's Covid-19 Policy.

## 13. OHS Requirements

The Client expects the Principal Contractor and Contractor to adopt, comply and engage in safety culture and the safety culture initiatives in line with the Eskom SHEQ Policy and value, Zero Harm.

It is required that the Contactor comply with all the applicable legislation, specifications and standards in accordance with the scope of the project.

This Project will abide by all applicable legislative requirements and be aligned to Eskom OHS Policies, standards, and procedures.

The Contractor must develop a baseline risk assessment and a SHE Plan for the project.

A section 37(2) agreement must be signed between the Client and the Principal Contractor at the time of awarding the contract prior to commencement of any activities.

The Principal contractor must ensure that a section 37(2) agreement is signed between them and all their appointed contractors for the contract.

A Construction Regulations Section 5(1) (k) must also be signed between the Client PM and the PC before any work commences, whereby the Client formally appoints the PC as the Principal Contractor for the project.

A Construction Regulations Section 7(1) (c) (v) must also be signed between the PC and the Contractor, where the PC formally appoints the Contractor for to carry out work on the construction site. No work shall commence without the signed appointment letter for the Contractor. This appointment letter must form part of the SHE File to be submitted to the Client for review and acceptance.

The Principal Contractor, at all times, considers itself to be the "Employer" for the purposes of the OHS Act

The Principal Contractor is at all times responsible for the supervision of its employees and contractors and assumes full responsibility and accountability for ensuring they are competent, aware of the SHE Requirements and execute the works in accordance with the SHE Requirements and legislative requirements.

The Contractor shall ensure that all statutory appointments and appointments required by the Management system are in place, and that all appointees fully understand their responsibilities and are trained and competent to execute their duties. The Principal Contractor supervises the execution of their duties by all such appointees.

The Contractor shall prepare a suitable and sufficient SHE plan in accordance with the SHE Specification requirements, submitted with tender documents that will indicate to the Employer the level of compliance to the SHE Requirements.

The Contractor shall complete a suitable and sufficient project, scope of work and site specific SHE plan in accordance with the SHE Specification Requirements and submit to the Client before taking possessions of the works. The Principal Contractor's SHE Plan will be assessed for compliance so as to confirm compliance to the requirements in the Client SHE specification. Once compliance is confirmed, only then will the contractors SHE plan be approved by the Client for implementation. The Contractor is also required to submit a SHE File in accordance with the Client requirements. No work shall be done until the Client has accepted the Contractor SHE File.

The Principal Contractor on appointing any other contractor shall ensure that the Contractor provides and demonstrate to the Principal Contractor with a suitable, sufficiently documented and coherent site-specific health and safety plan based on the client's documented health and safety specifications. The Sub-Contractor's SHE Plan will be assessed for compliance so as to confirm compliance to the requirements in the Client SHE specification. Once compliance is confirmed, only then will the contractors SHE plan be approved by the Principal Contractor for implementation. The PC, after approving the Contractor's SHE Plan, must submit the Contractor SHE File its Client for review and acceptance prior to commencement of any work.

The Contractors must complete a suitable and sufficient project baseline risk assessment (BRA), that is in accordance with the SHE Specification and Client's BRA and submit to the Client before commencement of the works. No work must commence without an accepted BRA by the Client. The PC must ensure that all its employees are conversant with the contents of the BRA. Proof of communication must be kept in the SHE File.

The Principal Contractor and Contractor involved in Construction Work shall comply with the requirement stipulated in the Construction Regulations latest revision of the OHS Act 85 of 1993, including all the other applicable statutory requirements for their contracted scope of work.

The Principal Contractor and Contractor shall ensure that all their employees, contractors and agents undergo the relevant Eskom induction, Generations induction and Contractor induction prior to starting the works.

The Client, or any person appointed by the Client, may, at any stage during the execution of this contract refuse any Employee, Subcontractor, Contractor access to the premises if such person has been found to commit an unsafe act or any unsafe working practice or is found not to be qualified or authorised in terms of the SHE Requirements.

Contractors must ensure that a Person Job Specification (PJS) is submitted to and used by the Occupational Health Practitioner to determine what the employee is exposed to in order for the proper medical tests to be done. Contractors must produce valid Medical Certificates of Fitness to the Client before undergoing the induction sessions. The Medical Certificate of Fitness (CoF) must be issued by an Occupational Hygiene Practitioner and not a General Practitioner (GP).

All Contractors must have a toolbox talks (tbt) prior to the commencement of the day's work, and again directly after lunch time with all relevant personnel (safety officers, supervisors, project managers, etc.) associated with the work task to be performed. The toolbox talks must cover the risk and hazards of the activities to be done, safety measures, relevant procedures and any other SHE issues pertaining to the construction site. The toolbox talks must be presented by the Contractor SHE Officers and/or Contractor Supervisors. Principal Contractor representative must be present during the toolbox talk session of all of its Contractors.

All employees attending the toolbox talks must sign the session's attendance register. Each toolbox talk session must have its own attendance register with the relevant topics discussed at the session clearly indicated. These attendance registers must be kept in the SHE File.

Lessons learned

The PC must hold lessons learned session with its Contractors at the end of each outage and must invite the Client. The lessons learned must address the following as a minimum:

- Incident management,
- SHE File and RAMS review and acceptance,
- NCRs,
- Plant safety related issues, i.e. housekeeping, PPE compliance, environmental management, etc.

The PC must document the lessons learned, the final signed off document must be sent to the Client, and a copy kept in the PC's SHE File.

### Safety File

The Contractor provides a Health and safety File for their own works, as well as for all Subcontractors. The Contractors must structure their entire SHE File as per the Eskom GCD Matimba Specific SHE File index (Annexure I).

The Principal Contractor must notify the Client, a week in advance, of any Contractor/s it plans to bring on site and provide information of the name of the Contractor/s, how many employees are coming with the Contractor, nature of work/activities and the duration of the work to be done on site.

The Client be given at least ten (10) working days to review the Contractors SHE File. If the PC brings more than one Contractor, the Client must be given at least ten (10) working days for each Contactor's file. If two (2) SHE Files are submitted in parallel, then the Client shall be given five (5) working days extra to review all SHE Files. If the Contractor submits multiple SHE Files in parallel, the Client shall be given five (5) working days extra for each second SHE File. The Client shall given at least ten (10) working days turn around time for the SHE File comment the Contractor on.

After the initial SHE File review, the Client shall be given at least five (5) working days to review the Contractor SHE File, and the Contractor shall be given the equal number of days to return the reviewed file back to the Client. This shall be done until the SHE File has been accepted by the Client.

## 14. Compliance and Non-Conformances

As legislation forms part of any country's legal system, the Client requires all of its Contractors to comply with legislation as part of the contract. All expenses to the Contractor, which result from compliance with this legislation as well as special requirements specific to the site and project, will be for the Contractors account.

The PC and all its Contractors must conform to all Eskom, Legal and Other Requirements at all times.

Should the Principal Contractor appoint a contractor, the Principal Contractor would then have the same role and responsibility in relation to the contractors, in a similar way as the Client has in relation to the Principal Contractor.

The Client Agent or any Client representative reserves the right to stop work if there is an unsafe condition of act on site and issue a non-conformance report whenever safety, health or environmental violations are observed for both Principal Contractors and/or their contractors after engaging and making both aware of such. Expenses incurred as a result of such work stoppage and standing time shall be for the Principal Contractors account. Any non-conformances/findings/observations found in these audits/inspections on contractors shall be raised and discussed with the relevant Principal Contractor (with whom the contractor is contracted with).

The requirements within this specification should not be considered to be exhaustive and the Client reserves the right to add, delete or modify conditions where it is considered to be appropriate.

The PC must develop a procedure to address any non-conformity from their employees and Contractors.

**No claim will be accepted as a result of any costs or delays being incurred due to the Principal Contractor or his contractors not complying with legislation, applicable Eskom Procedures and Standards.**

### 14.1 Legal and Other Requirements

It is required that all Contractors on site comply with all the applicable legislation, specifications and standards in accordance with the scope of the project.

It is the duty of the Contractors to ensure that they are familiar with the necessary SHE legislation required.

The Principal Contractor must compile a legal register listing all applicable legislation and standards that may have an impact on the scope of work that they are performing on the construction project. The register must be made available to the Client upon request and must be updated at least biannually or as and when required. A copy must be provided to the Client after each update.

The PC must communicate all relevant legal updates to all its employees during the toolbox talk sessions and ensure all employees have access to the legal register.

### 14.2 Suspension of Activities under the Contract and work stoppages

Any person may stop an unsafe act or unsafe condition or activity that poses or may pose a threat to the health and safety of an individual, threat to plant or machinery or create a risk of degradation of the environment.

The Project Manager shall not be liable for any time and cost as a result of such work stoppage.

**Note:** A client or Eskom representative or Contractor representative who deems it necessary to stop an activity as a result of unsafe acts and/or conditions, must do so immediately and in the shortest possible timeframe notify the Eskom Project Manager, OHS Manager and appointed Client Supervisor.

Process:

- Eskom or Client representative must notify the direct contractor supervisor of the unsafe act or condition immediately and instruct them to suspend the activity.

- Failure of the contractor supervisor to stop activity, the Eskom or Client representative must immediately stop the activity.
- All workers must be removed from site if necessary, or from the working area where the unsafe act or condition has been observed.
- The Eskom / Client Agent, Project Manager, OHS Manager and appointed Client Supervisor must be immediately notified.
- A stand-down or safety talk regarding the unsafe act or condition must be discussed with the team members by the observer in the presence of the Contractor.
- A stand-down or safety talk regarding the unsafe act or condition must be discussed with the team members by the observer in the presence of the Contractor.
- No employee shall return to work or the activity shall not commence until a root cause, corrective and preventative actions have been identified and documented by the relevant Contractor.
- If in the opinion of Eskom Agent, Project Manager, OHS Manager and appointed Client Supervisor for the project, it is necessary for a formal investigation to be done in order to identify the root causes and preventative measures prior to commencement of the specific activity posing risk, a stop work notice must be issued by the Eskom Project Manager. The Eskom Agent can also issue an e-mail to stop the activities if in his / her opinion, the work must not commence until the investigation has been completed.
- The working area shall be cordoned off until such time the investigation has been concluded and the investigation report has been signed off by all relevant parties. Once the investigation has been concluded, the stop work notice must be revoked and work can commence.

### 14.3 SHE (Stand downs) Work Stoppages

The PC and its Contractors must have compulsory SHE stand-downs with all its Contractors at least every six (6) months within a twelve (12) month period. If an outage is less than 6 months, the PC and its Contractors must have one (1) stand down during the outage period. The Client must be invited to the stand-downs.

The PC and its Contractors must hold these bi-annual SHE work stoppages to reflect on the performance by the contractor since inception and to re-affirm the Gx Coal SHE Culture and provide feedback to all employees on SHE related performance achievements. The Contractor must prepare a SHE related performance presentation, to present to all Contractors and Client employees working at the project. The Contractor must ensure that all Contractor employees attend and actively participate. The PC and its Contractor's top management must present the stand down information.

The PC must ensure that the presentation is submitted to the Client OHS Manager, CM and PM at least 5 (five) working days in advance for review.

The Client Site, PM, CM and OHS Manager may instruct the PC and its Contractors to have a SHE stand down if there is non-compliance, continuous deviation from SHE Rules and requirements, major incident has occurred, continuous incidents occurring on site, etc. by the PC and its Contractor's employees. The safety related stand-downs and work stoppages from deviations by the Contractors, including the bi-annual ones, will have no financial implications. The Contractors must revise any procedure, risk assessment, SHE Plan, or any other relevant documentation should a deficiency be noted during the stand down, work stoppage or investigation held.

The PC and the Contractor must ensure that the proof of attendance and presentation is shared with the Client and the original attendance registers are kept in file.

## 15 Enforcement of SHE Requirements and Non-compliance

The Principal Contractor shall submit their procedure on how they would deal with enforcement and non-compliance to SHE requirements.

## 16 Hazardous Work by Children (Child Labour)

The constitution of the Republic of South Africa, in the “Bill of Rights” is clear on the rights of children, especially when it comes to:

- being protected from exploitative labour practices;
- not to be required or permitted to perform work or provide services that
- are inappropriate for a person of that child’s age; or
- Place at risk the child’s well-being, education, physical or mental health or spiritual, moral or social development; and the Basic Conditions of Employment Act, Chapter six Section 43 “Prohibition of employment of children”.
- Before resorting to the use of child labour, due consideration must be given to the rights of the child in terms of the constitution.

Where work is being performed which is not prohibited in terms of the constitution, then such work must be conducted in terms of the OHS Act “Regulations on Hazardous Work by Children in South Africa” with emphasis on paragraph 2 Purpose and Interpretation.

Eskom does not condone the use of child labour and therefore all efforts must be exercised to avoid it.

## 17. Notification of Construction Work

The Principal Contractor shall notify the relevant Provincial Director of the Department of Labour of the intention to carry out any construction work as defined in the Construction Regulation 4 of the OHS Act,

The notification form of construction work is listed as an annexure 2 to the Construction Regulations of the OHS Act.

A copy of the notification of construction work from DoEL (stamped by DoEL) must be forwarded to the Client’s Project and OHS / SHE department on the same day received from the DoEL. A copy of the approval must be kept in the Contractor SHE file.

No work shall commence without signed notification of construction work from DoEL.

## 18. OHS Act

All contractors must have an up to date copy of the OHS Act and Regulations at all work sites which will be available to all employees. (Reference GAR 4).

## 19. Cost allocation for SHE Compliance

The Principal Contractor shall ensure that the submitted tender adequately made provision for the broken down cost of Occupational Health and Safety measures.

**Note:** the costing for OHS must be detailed that is itemised based on the overall contracted scope of the project (i.e.) Medical surveillance (Medicals), provision of PPE, safety equipment purchases, resources and etc.

Environmental Bill of quantities must be submitted related to EMS, EMP, EA and other legal requirements.

Any omission of any requirement of the SHE Specification by the Contractor in terms of costs shall be for the Contractor's cost.

## 20. Training

The Principal Contractor and Contractor need to ensure that the resources to work on the project have the required related training, knowledge and experience specific to the scope of work/services. The Contractors must prepare and submit project specific training matrix for all its employees. An updated training matrix must be submitted by the Contractor to the GCD SHE Officers upon request.

The scope of the training includes but is not limited to the type of work being performed and the relevant procedures. In addition to the requirements, the Principal Contractor and contractor employees would require the appropriate qualifications, certificates and tickets, and be under competent supervision. Records of all training and qualifications of all contractor employees must be kept. The Contractor shall maintain comprehensive records of all employees under his control (including all employees of the contractor) attending induction training. Acknowledgement of receiving and understanding the induction must be signed by all persons receiving the induction respectively.

The contractor must ensure that the training providers are accredited and registered with SETA according to the relevant unit standards.

The contractor must have proof of this on site for verification.

The contractor must develop a training matrix for all their employees.

All Contractor trainings shall be in accordance with the Eskom's Safety, Health and Environment
Training and Development Procedure and training interventions as indicated in the specific Eskom procedures.

**When there is an amendment to the Acts and/or to the regulations or due to an incident investigation, the SHE plan must be reviewed, updated accordingly and changes must be communicated to all relevant employees.**

## 21. Site Induction

### 21.1 General construction site induction carried out by the Principal Contractor

The PC must submit to the Client its project specific Safety Induction presentation covering all the activities, hazards, risks and mitigating measures for review prior to presenting it to its employees. The Principal Contractor and its Contractors must ensure that all their employees, Contractors, agents, visitors, etc. undergo the relevant Eskom induction (Gx and GCD sessions) and the Contractor's project specific induction prior to starting the works.

The Principal Contractor shall ensure that all his employees and contractor employees undergo their company induction with regard to the approved SHE plan, general hazards prevalent on the construction site, construction risk assessment, rules and regulations, and other related aspects.

The PC must send a request of induction in writing to the GCD SHE Department at least two (2) working days in advance and indicate the approximate number of people that need to do the induction.

No Gx, Client nor Contractor Project Specific Induction must be done without a valid certificate of fitness.

Attendance registers for Induction and Life Saving Rules (LSR) Acknowledgement forms must be completed by all persons attending Safety Induction. The Contractor must furnish the Client with copies of Induction and LSR Acknowledgement Forms upon request.

Drivers for deliveries must also undergo Gx induction session only, provided that the driver does not disembark from the truck or delivery vehicle, if the driver disembark or intend to disembark from the delivery vehicle and assist with offloading of any material, full project specific inductions must be done for such a driver and they must have a medial CoF as he/she will be working.

Induction times are as follows:

- Gx: Tuesdays and Thursdays at 09:00am until 12:00pm (by appointment only).
- GCD: Mondays and Wednesday at 9:00am, unless agreed on by the relevant safety personnel (by appointment)

Proof of client site specific induction signed by Inductor and trainee must be submitted to the Safety department before an access permit will be issued.

Visitors who will not be conducting any work but are on site for site inspection must always be in the custody of their host and need to only undergo the Gx 15 minute induction.

## 22. Visitors to Site

A contractor shall ensure that all visitors to a construction site undergo health and safety induction in accordance with Construction Regulations 7 (6) and 7 (7).

All visitors must remain in the care and custody of a person (host) who has been properly inducted. No visitors are permitted to undertake any construction work, of any nature.

## 23. Access and Security Control

Access and Security control shall be done according to the Eskom Access Control Policies.

Employees, contractors and visitors shall be subjected to induction training and substance abuse tests when entering Eskom sites, or as and when required whilst on Eskom sites. The Contractor shall also undergo body thermal screening and may be required to complete a questionnaire for COVID-19 on a daily basis at the gate, of which they need to comply with.

The following are prohibited items and shall not be allowed on Eskom sites unless the necessary authorisation for possession has been obtained from Matimba Power Station Manager (PSM). These include but not limited to:

- Firearms and ammunition (excludes Eskom official firearms/ ammunition and firearms/ ammunition issued to the South African Security Forces)
- Liquor/ Alcohol
- Dangerous weapons
- Drugs
- Any other items that may be declared prohibited

The Principal Contractor and contractor shall provide suitable safety signs , including traffic routes signage's (traffic & pedestrian arrangement) & warning notices/ signs to indicate restrictions or prohibited items , where authorisation is to be obtained.

The Principal Contractor shall have system/ process to manage vehicle access to site, including a traffic management plan.

The Principal Contractor is be responsible for safety and security of its plant and machinery on site (day, night and on weekends).

The Contractor must prohibit unauthorised access to site laydown or construction areas by the public and non-employees. The Contractor must also prevent animals from entering its work areas where possible. Site camps, laydown and construction areas access control plan must be submitted with the site establishment plan to the Project Manager.

## 24. Traffic Management Plan

The Contractor shall develop and submit for acceptance to the Client and implement an adequate traffic management plan, taking into account the safe access and egress of all anticipated traffic, pedestrians and vehicles to all working areas of the site including the core construction area, the lay down areas and site offices. Such traffic safety measures shall include the separation of vehicle and pedestrian traffic to prevent injuries. All vehicles shall be operated by competent and authorized personnel

The Principal Contractor shall enforce the principles of road safety both on and off the site. This shall include the control of vehicles on site, road worthiness, vehicle maintenance programmes, signage, speed limits, flagmen, warning lights and high level flags if required.

Where access roads pass underneath overhead power lines, the Principal Contractor shall provide suitable height limitation barriers (goalposts) as agreed upon with the Client.

The Traffic Management Plan must be submitted to the Client for review and acceptance before any work commences on site.

## 25. Contractor's Site Facilities

Site facilities shall be established and maintained by the contractor or be maintained as agreed with the Site Manager and/or in accordance with the contractual agreement. The facilities comply with the OHS Act Construction Regulation 30 and Environmental Regulations for Workplaces requirements. These include but are not limited to the following:)

- Temporary Facility Layout Plan
- Sheltered eating facilities
- Change rooms
- Ablution facilities
- Site Sheds, Offices and Amenities
- Lay down and Storage
- Temporary Site Services

Reasonable and suitable living accommodation may be provided for employees who are far removed from their homes and where adequate transportation between the site and their homes, or other suitable living accommodation, is not available

The Principal Contractor must develop their site establishment procedure and this must be in line with the Client's SHE Spec, EMP, environmental authorisations and other permits and licenses.

The Contractor must submit a detailed site layout plan for acceptance by the Project Manager and Safety department after consultation with the Construction Health and Safety Agent/OHS Manager, PM, CM, Client Environmental Manager/Officer, the Matimba Power Station Environmental Manager.

No site establishment must take place prior to the acceptance of the plan by the Client PM and Safety department for temporary site offices and laydown areas.

The Contractor must provide information on the types of ablution facilities it plans to utilise on site and this must be included in the site establishment procedure, including when and how they will be maintained, their adequacy and suitability for the workforce size and work duration. The Contractor must ensure that these conform to the requirements of all applicable legislation. Ablution facilities must be gender sensitive. These portable ablution facilities must be kept stable, tidy and hygienic during the duration of the Project. Covid-19 protocols must also be implemented by the Contractor.

Where the Contractor makes use of existing facilities provided by the Matimba PS, the Contractor must ensure that employees keep these facilities clean and hygienic. This agreement must be in writing between the PC and the Client PM.

The Contractor must also highlight in the site establishment plan to the Eskom Project and OHS Manager if there are any intentions to perform excavation work in any area and request drawings (if available) showing underground services and/or other items installed underground i.e. cables, piping, etc. The Contractor shall be responsible to verify information provided by such drawings. The PC must depict dimensions of where the excavations will be done (schematic plan).

Prior to any excavation work, scanning must be done by the Contractor to determine the location of any existing underground services. Where possible, air driven shovels are to be used for any excavation work.

The Contractor is responsible for obtaining all permits related to excavations, working under power lines, hot work, etc. from Matimba Power Station personnel responsible for issuing the permits, prior to commencing with the work. Copies of permits must be submitted to the Client's Project and OHS department for review and acceptance at least 48 hours prior to the activity taking place and other copies must be available at the area where activity is taking place.

The Principal Contractor must ensure that its site establishment procedure is in line with the GCD EMP, SHE Spec, Gx procedures and all other relevant Gx Environmental Procedures, applicable permits and licenses.

Where top soil will be removed, the PC must include the area where the stock piling of the top soil will be, including a plan on how the top soil will be managed by the Contractor.

## 26. Public Safety

Legislation requires that employers shall be responsible, as far as reasonably practicable, for safeguarding persons other than those in their employment who may be directly affected by their activities so that they are not exposed to hazards to their health and safety (Section 9 of the OHS Act).

Contractors shall factor in, in their safety plan, how they intend safeguarding/ controlling any members of the public against their activities during the project.

## 27. Project and Site Rules (Zero Harm to People and the Environment)

The objective of this section is to define the rules that are over and above the internal regulations and procedures of Eskom and relevant legislation which will ensure zero harm to persons and the environment. These rules will be specific to the project and site.

**Eskom Life Saving Rules**

Five Life Saving rules have been developed that will apply to all Eskom Employees, agents, consultants, contractors and visitors. Failure to adhere to these rules will be considered a serious transgression. These rules are being implemented to prevent serious injury or death of any employee, labour broker or contractor working in any area within Eskom.

The rules are:

| RULE | DESCRIPTION OF RULE |
|---|---|
| Rule 1 | **OPEN, ISOLATE, TEST, EARTH, BOND, AND/OR INSULATE BEFORE TOUCH**<br>( That is plant, any plant operating above 1000 V) |
| Rule 2 | **HOOK UP AT HEIGHTS**<br>Working at height is defined as any work performed above a stable work surface or where a person puts himself/herself in a position where he/she exposes himself/herself to a fall from or into. |
| Rule 3 | **BUCKLE UP**<br>No person may drive any vehicle on Eskom business and/or on Eskom premises:<br>Unless the driver and all passengers are wearing seat belts. |

| | |
|---|---|
| Rule 4 | **BE SOBER**<br>No person is allowed to be under the influence of intoxicating liquor or drugs while on duty |
| Rule 5 | **PERMIT TO WORK**<br>Where an authorisation limitation exists, no person shall work without the required permit to work. |

**Eskom will take a stance of zero tolerance on these rules**

Any non-compliance to any health and safety requirement in this SHE specification is subject to discipline/removal of person from the project site.

Non-compliance to a Life Saving rule will be considered serious misconduct and will lead to serious disciplinary action, which may include dismissal.

This is to ensure that every person who works on or visits an Eskom work site returns home safely to his or her family

No person shall damage, alter, remove, render ineffective, or interfere with anything that has been provided for the protection of the site, or for the health and safety of persons.

No person under the influence of alcohol, drugs or medication (in a state of intoxication) or any other condition that may render him incapable of controlling himself or of other persons under his charge shall be allowed to enter the site.

All safety and warning signs shall be obeyed at all times.

Entering or leaving the Site will only take place at official access control points and may only be done via the official designated walkways.

All employees shall adhere to the SHE and other site specific rules.

The Principal Contractor must have a process in place to address employees that have contravened Health and Safety Requirements.

**Smoking**

Smoking is only permitted at designated areas in accordance with the requirements of the smoking policy (32-1126: Eskom Smoking Policy).

A Contractor that wishes to designate a smoking area around their offices must liaise with the Client OHS Manager or SHE Officer for approval before doing so.

The Contractor must ensure that there are adequate smoking facilities for the workforce. The smoking facility must consist of a covered area provided with:

- Fire Extinguishers,
- Sand buckets, and
- Health warning signs in accordance with the Tobacco Products Act, as amended.

**Cellular Phones**

Do not use Cellular phones in areas where cell phone usage is prohibited.

It is encouraged that no employee or Contractor uses their cell phones while walking or driving.

A contractor shall develop and implement a risk based cell phone policy for a particular construction site.

### Fire Extinguishers

All fire extinguishers shall be:

- Clearly labelled
- Placed in such a manner that they are not obstructed.
- Strategically hung on a bracket or placed on a stand where it is easily reachable and not pose a safety hazard
- Conspicuously numbered
- Entered in a register
- Inspected monthly by a competent person
- Tested and serviced at recommended intervals by an accredited supplier
- Results shall be entered in the register and signed by competent person.
- No open or unattended fires are allowed within the construction site.

A Principal Contractor shall have a layout plan of a site indicating where all his firefighting equipment is located which must form part of the Emergency Response Plan.

### Vehicles and Traffic Rules

Ensure that all drivers and passengers wear seatbelts, where fitted, while travelling in a motor vehicle. Vehicles not fitted with seatbelts must be retrofitted according to the vehicle manufacturer's specifications. Vehicles used by Contractors must satisfy the Eskom Vehicle Safety Specification, 32-345.

Ensure that no employees, including contractor employees, when performing work for Eskom, are transported at the back of bakkies / vans and trucks.

### Substance and Drug Abuse Management

The Principal Contractor shall provide a Substance Abuse management policy which is in line with the Eskom Procedure (Eskom Substance Abuse Procedure 32-37). This must be accompanied by the disciplinary procedure to be followed in a case of transgression. The PC must ensure that no employee or its Contractor's employee comes to work under the influence of intoxication this includes alcohol, cannabis, drugs, etc.

## 28. Hazard Identification and Risk Assessment

It is a legal requirement in terms of Section 8 (2)(d) of the OHS Act for an employer to carry out risk assessments, to establish which risks and hazards are attached to the health and safety of persons due to any work which is performed, any article or substance which is, handled, stored, transported.

The Principal Contractor shall prepare, provide, maintain and update (at defined intervals) a Risk Assessment in line with Construction Regulations 9 (1) (a-e), in alignment to Eskom 32-520 procedure. The Contractors are expected to have different types of risk assessments for their scope of work.

Emerging risks and hazards must be managed during construction work. This means that if there are significant changes to a process or activity, or any new process, then these should also be subjected to risk assessment. All risks must be rated.

All risks must be rated.

Risk assessments shall be conducted by an appointed competent risk assessor .Risk assessment shall be developed by cross-functional team and outcome shall be shared with employees

Attendance registers must be kept of all the employees involved in compiling the risk assessment.

Daily task specific risk assessments must be conducted by an appointed and competent risk assessor of the Principal Contractor and its Contractors in the morning prior to commencement of work and after lunch just before work recommences. Proof of communication of the Risk Assessments must be readily available at the working area also kept in the SHE File.

A task specific risk assessment (RA) must be conducted and accompany the method statements (MS) for each activity that a Contractor will undertake. .

The risk assessment and method statements must be developed and reviewed by the cross-functional team. The following people (for both the Client and PC and Contractor), as a minimum, must be involved when compiling, reviewing, accepting and / or approving the method statements and risk assessment:

- Project manager.
- Supervisors.
- Specialists.
- SHE officers.
- SHE Reps.
- Employees with experience of the task.
- Union representative if available.
- Engineer
- Safety Officer
- Environmental Officer

Acceptance and / or approval of the risk assessment and method statements must be done in writing by all parties involved in the process.

Attendance registers of all the employees involved in compiling the risk assessment must be kept in the Contractor SHE File.

Please refer to Annexure F (Risk assessment template), which may be used as a minimum guideline.

The Contractor must update its Baseline Risk Assessment at least annually, or when there is a need for it (e.g. after an incident, change or addition of scope, etc.) to be updated.

## 29. High Risk Activities

When the Principal Contractor and/or his contractors are working in an area where a high health and safety hazard exists, the Principal Contractor shall:

- Ensure that health risk assessment is done by a competent person
- Ensure that permanent and adequate on site direct supervision is available for the entire duration of the work that is being conducted.
- Ensure the use of safety standbys in areas of high risk activities, and activities that fall within the scope of the permit to work system.
- Provide, erect and maintain all the required barricading, lighting, flags, flashing lights, or other safety control equipment to enable operations to proceed in a safe manner;
- Maintain, at all times, defined access ways, which are clear of objects or obstructions, so as to allow for emergency vehicle entry ;and
- Provide any temporary protective shielding required for protecting nearby operations from the construction activities, at their own cost.
- When crossing roads , railway tracks and other power lines during operations, the contractor shall ensure that rugby poles are properly erected at all road crossings and that the public is warned, and flagmen placed at strategic positions to warn traffic/motorists. Principal Contractor shall ensure that whenever mobile cranes/ lifting machinery are operated onsite, the booms are retracted and safe clearances from overhead power lines, communication lines or other overhead obstructions are observed and maintained as per Electrical Machinery Regulations 19 & 21, Eskom Procedure "Operating Regulations for High Voltage Systems (ORHVS)-32-846" Section 5.03.6.3 (Work in close proximity to live conductors / apparatus). Supervisors shall be trained in the Eskom ORHVS (see above).
- Height restriction barriers/cross-bars must be erected on both sides of the overhead power lines, communication lines or other overhead obstructions. Establish the permitted safe clearances in consultation with the owner of the line.
- Ensure that there are effective plans and other SHE requirements when managing high risk construction activities which include but not limited to:
- Civil works
- Lifting and rigging operations (including night shift lifting)
- Crane Coordinator
- Construction traffic and vehicles etc.
- Working with or handling hazardous chemical substances.
- Hot work
- Work at height
- Electrical safety
- Working in areas with live electricity

**Note:** The list above is not conclusive. The PC is to ensure that the Client's Project Manager and SHE department is notified of all new activities not indicated in the list above or within this SHE Specification.

### 30. Pre-Task Risk Assessment (DSTI)

The Contractor shall on a daily basis and for every task to be performed, conduct a pre-task risk assessment with all employees involved with the task(s). The DSTI must be facilitated by a competent and appointed person. The DSTI exercise must be done at the area where the

activity will take place so that hazards can be easily identified by the team that will conduct the work. The pre-task risk assessment will form the basis of the daily pre-job brief/toolbox talks prior to the start of work. This will highlight critical steps from the safe work procedure to ensure that work is performed in a safe manner.

The risk assessor must ensure that the DSTI is updated at least before the shift starts, after lunch and whenever a new activity is added. The risk assessor must ensure that the team involved in the activities is involved when reviewing the DSTI at all times.

The PC and Contractor SHE Officer must ensure that they review the DSTI and sign it off to acknowledge that all possible risks and hazards have been identified and preventative measures have been put in place. Employees must not resume any activity until the SHE Officer signs off the DSTI. The SHE Officer must ensure that he/she reviews and signs off the DSTI before start of the shift, after lunch and whenever an activity has been added.

Proof of communication as well as confirmation that it was received and understood by all must be noted on a standard form, which will be kept at the job site during the job execution. The completed signed pre-task risk assessment form must be filed in the Principal Contractor or the Contractor's safety file.

### 31. Method Statement, Safe Work Procedures and Practices

The Principal Contractor shall compile project / site specific method statements and safe work procedures for all the high risk activities as identified in the risk assessment and scope of work. These shall be approved by the contractor and reviewed for acceptance by the Client.

**Note**: The acceptance will be qualified with the statement: "Acceptance does not relieve the contractor of his responsibility for ensuring safe working procedures in terms of the Construction Regulations.

The PC must review and approve the Contractor's method statements and risk assessments (RAMS) and submit them to the Client for acceptance before the Contractor commences with any work. The Client must be given at least five (5) working days to review the MS&RA. If the contractor submits at least two sets of RAMS, the Client shall be given at least seven (7) working days to review the two sets of RAMS. If more than two (2) RAMS are submitted by the Contractor, the Client shall be given at least seven (7) working days for each 2 sets of RAMS. The PC must submit at least two (2) sets of RAMS for review at least every seven (7) days.

Note: The Contractor is advised to submit the RAMS as soon as reasonably practicable, at least two weeks prior to that specific activity commencement in case the RAMS have comments from the Client and are not approved on the first submission.

The PC must review and approve the Contractor's RAMS and submit them to the Client for acceptance before the Contractor commences with any work.

The Client must be informed of the intent to appoint a new Contractor by the Principal Contractor; the Client SHE Department requirements must be submitted by the PC SHE Department to the Contractor for conformance. The PC must review and accept the Contractor's SHE File and the Client must review and accept the Contractor's SHE File before the Contractor commences work on site.

The PC employees must be inducted and commence work on site only after the PC SHE File have been accepted in writing by the Client.

Commencement of any work activity does not take place unless a method statement and risk assessment has been produced and submitted and accepted by the Client.

An accepted rigging study must be provided with the method statement and risk assessment for any lifting activities. The Contractor can only start working once these documents have been signed off by all parties from the Client and the PC side. The Contractor must provide the Client with the copy of the accepted MS and RA for each activity. The Contractor must ensure that the MS and RA for a particular activity are on site when the activity is taking place.

If there are any changes to the method of work, activity must be stopped, the working method must first be revised on the method statement and the risk assessment must be revised as well to cater for any new anticipated risks. These revised documents must be handed to the Client for review and acceptance before the revised method of work is implemented. The Contractor Construction Manager and SHE Manager and the Client Project Manager and OHS Manager must ensure that this is enforced.

The method statement, risk assessment and rigging study together with the risk assessment must be presented to all employees involved in the activity to be done.

The supervisor / team leader shall ensure that all employees are trained on all applicable safe work procedures**.** Records of training/ awareness shall be kept on site.

The method statement and risk assessments must be submitted to the SHE Department via transmittal by the Contractor in order to properly track turnaround time.

## 32. Planned Task Observations (PTO)

The Principal Contractor shall provide the planned task observation procedure or process covering but not limited to the following:

- Persons responsible for monitoring the task and carrying out the Planned Job Observation must be the supervisor;
- Planned job observations should be conducted in such a way that the employee is observed against the actual steps (of the written safe work procedure) to be followed when performing a task and be marked against compliance with each step. This will assist in determining employee competence and compliance. Record should be kept at all times.
- Frequency of the PTO to be done by the supervisor (minimum of two PTOs per month), and all records for observations must be kept in the SHE File at all times.
- Where the employee did not comply or did not follow the required steps, this should be indicated on the report and actions be taken to correct the deviation.

Please refer to Annexure E (Safe Work Procedure and Job Observation Template); it may be used as a minimum guideline.

## 33. General Walk-downs (Visible Felt Leadership)

The Construction Manager from the Principal Contractor must lead the site walk downs with the Construction Supervisors and SHE Officer. The PC must invite the Client SHE Officers, Construction Managers and Supervisors to the walk downs. These must take place on a weekly basis in order to demonstrate their commitment towards SHE matters. These site walk downs will be used to identify both strengths and areas for improvement regarding SHE issues. Site Walk downs will be documented and a report must be submitted to the Client SHE Department within 24 hours, inclusive of an action plan to close out all deviations noted during such a walk-down. To show commitment to Visible Felt Leadership, the management representatives from the Principal Contractors are expected to attend the walk downs at agreed intervals.

Measures to be taken by Senior Leadership to actively drive SHE with employees and contractors:

- Visibility on sites where operations take place.
- Interventions that leadership drive specifically on SHE matters.
- Monitoring mechanisms to be in place to verify the above.

### 34. Health and Safety Behaviour Observations and Inspections

The objective of behavioural safety observations is to assess and address the actual safe and unsafe behaviours of people in the workplace; as well as workplace conditions - which are caused by the actions or non-actions of employees, contractors or their supervisors.

The Principal Contractor must describe in their SHE Plan how their company would implement a behavioural safety programme.

### 35. Work at Elevated Positions and Roof Work

The Principal Contractor shall ensure that all work performed in a fall risk position shall conform the requirements of the OHS Act, the relevant SANS standards and Eskom Procedure 32-418 (Working at Height Procedure)

All employees working in a fall risk position shall use the appropriate fall protection equipment unless working from a solid platform protected by suitable barricading.

Whenever there is any potential of falling either from or into, a fall protection plan and risk assessment (which includes fall prevention) shall be compiled by a competent person, implemented and reviewed and every possible and practicable means shall be adopted to provide such persons with effective training and safeguards. This plan must be submitted to the Client for acceptance.

The Principal Contractor must compile the Fall Protection Plan and Fall Rescue plan. The PC must ensure that the plans are implemented, reviewed, communicated to all employees working at heights. The Fall Protection Plan must be as per the requirements of the CR, and must include but not limited to the following:

- A site and task specific risk assessment covering all work at elevated heights shall be carried out and appropriate mitigation measures to be put in place and communicated to all relevant employees.
- Appropriate training programme (according to the relevant SAQA NQF unit standards) of all employees working at height and records thereof.
- Legal appointments.
- The process of evaluation of the employees' medical fitness for each employee working at height.
- The procedure addressing the inspection, testing and maintenance of all fall protection equipment, the withdrawal process of damaged PPE and up to date inspection records.
- A rescue plan detailing the necessary procedure, personnel, and suitable equipment required to affect a rescue of a person in the event of a fall.
- Emergency drills on all developed rescue plans shall be held at least once a year, under the supervision of a competent person.

- Emergency preparedness procedures.
- The Principal contractor shall review their risk assessment and fall protection plan when changes are made to the design or construction that result in a change on the risk profile or when an incident occurs.
- The Contractors shall stop all persons working in elevated positions during periods of inclement weather, e.g. rain that can cause slippery surfaces, winds, etc.
- Working in elevated positions shall only be carried out under the supervision of a competent person in accordance with the appropriate unit standards for working at heights.
- Fall arrest/protection plan and equipment shall be implemented where fall prevention is not possible.
- Eskom Fall arrester checklist (240-43921084) must be used as a minimum guideline.
- All fall protection equipment shall comply with SANS Standards, other recognised international standards and Eskom Procedure 240-100979499 (Personal Protective Equipment for work at Heights specification).
- Safety belts are not allowed to be used in Eskom. An appropriate full body safety harness shall be worn when working at an elevated position, refer to SANS 50361 and Eskom Procedure 240-100979499 (Personal Protective Equipment for work at Heights specification).
- The Principal Contractor and/or his contractor shall compile a fall protection equipment, inspection, testing and maintenance procedure (Refer to SANS 50365 and manufactures requirements for safe use and for inspections).
- All employees expected to work at height must be competent to do so.
- The PC must ensure that it has employees are trained as rescuers for working at heights and have their own rescue equipment.

Provision must be made to prevent objects and or material from falling from elevated areas and the protection of persons working below. A drop zone shall be established with barricading and necessary signs.

The Fall Rescue Plan, Fall Protection Plan and Working at Height Risk Assessment with all accompanying documents as per the Construction Regulations must be submitted with the SHE File for acceptance.

The PC must ensure that for any activities taking place where there is a possibility of a fall risk, rescuers are readily available (at the working area) throughout the activity and the rescue equipment is also at the area where work is taking place.

### 35.1 Working at height training

The Principal Contractor shall ensure that all their employees working at height must be competent in working at height including the rescue team that will be utilised during emergencies. Training provided for working at heights should be in accordance with the relevant unit standards.

As a minimum, individuals who will be performing work at heights and are not responsible for rescues must undergo three days FAS training (Unit Standard 229998). The rescuers must further undergo rescue training in accordance with unit standard 229995. The principal contractor or contractor must identify further trainings (e.g. Advanced rescue US229999) applicable to the employees work area.

Once these employees have successfully completed classroom theoretical and practical training provided by the training provider, each employee must undergo on the job training on every task which is going to take place when working at height. These people need to be declared competent and fit to perform each task.

- The employee must work at least 40 hours with a mentor who has the knowledge and the experience (at least 1 year experience) to perform that specific task.
- The employee must keep a logbook of his work for the 40 hours with a mentor. The logbook will be signed of each day of mentorship, by his mentor.
- After completion of the 40 hours and the mentor is satisfied with the employee's progress, the Supervisor must conduct a planned task observation (PTO) on the employee. The Supervisor must indicate on the PTO that the employee is now fit to work on his own.
- The logbook and the planned task observation must be kept on the employee's file for the duration of the project, to prove his competency.
- A contractor shall ensure that the designated person for the development of a fall protection plan undergoes appropriate training based on unit standard 229994.
- The Contractor must conduct emergency drills for rescue from height at frequencies not exceeding twelve (12) months.
- The Contractor must notify the Client of the planned emergency drill at least two (2) days in advance.
- No employee shall work at heights without having a certificate of competence.

### 35.2 Scaffolding

- All scaffolding used shall comply with the OHS Act and Regulations as well as SANS 10085 and SANS 51004 (Aluminium and tower scaffold).
- Scaffolding erectors: Training is specified in SANS 10085.
- Scaffolding must be inspected at intervals not exceeding the legal requirements.
- No work shall be done on wet scaffolding.
- No work shall be done on scaffolding that has not been inspected by a competent person.
- All scaffolding shall be inspected by a competent person weekly before use and also before use following weather conditions that could have made the scaffold unsafe e.g. which could make ground conditions unstable, after a storm, mishaps, before dismantling and after alterations.

- Users of scaffolding must carry daily inspection basis before use. Results of inspections must be recorded on the Daily Safety Task Instruction (DSTI) by the competent supervisor or any other form provided by the Contractor. The daily form must be kept on site until the activity is complete. If unsafe conditions are found or suspected, the scaffold must be isolated (red tagged) until a thorough inspection is done and scaffolding declared safe for use. The footing or anchorage points for scaffolds shall be sound, rigid, and capable of carrying the maximum intended load without settling or displacement. Unstable objects such as barrels, boxes, loose brick, or concrete blocks shall not be used to support scaffolds or planks.
- Scaffolds that provide access to areas where personnel can fall into a hazard shall install a gate at the access point of the hazard that is affixed with a warning sign stating that 100% tie off required past this point.
- The Contractor must give preference to using scaffold stairs instead of ladders for all scaffolds. These scaffolds must be fitted with a kick place at the bottom of each stair section. The kick plate shall be able to prevent a member of contractors' personnel slipping down the staircase and sliding between the floor and the mid-rail.
- An appropriate scaffolding tagging system shall be used to confirm the status of scaffolding for use or not to be used, the inspectors name and surname , signature, date and telephone number must be written on the tag
- Scaffolding access stairs shall be fitted with toe boards at all landings to prevent a person slipping through.
- Only English must be used on scaffolding tags.
- When employees are working on a scaffold provided with trap doors it must be closed at all times to prevent a person from falling.
- A Team leader shall be appointed in writing for the erecting and dismantling of all scaffolding.
- Only use steel boards on scaffolding when working in the open.
- No loose material must be placed on the scaffolding.

### 35.3 Ladders (Portable)

- All ladders used on the site shall comply with the OHS Act and Regulations.
- All ladders shall conform to the relevant SANS standards or other recognised international standards.
- Damaged ladders shall be marked as "DAMAGED" and removed from the project site.
- Prior to work being performed, an adequate risk assessment shall be conducted, and work shall be conducted in accordance with General Safety Regulation 6 and 13A and Construction Regulation 10 of the OHS Act
- All employees using ladders must be trained on the safe use of a ladder. Proof of training must be kept in the Contractor's SHE File.

## 36. Occupational Health and Hygiene

All contractors are required to develop an Occupational Health and Hygiene program and conduct Occupational Hygiene Surveys as required by their scope of work. The program is

intended to ensure that the risks to health are identified and controlled. Copies of the surveys done together with an action plan shall be provided to the Client as soon as received from the Approved Inspection Authority (AIA) and drawn up by the Contractor respectively. The Contractor shall be granted at least one (1) calendar month after site establishment to develop and submit their Occupational Health and Hygiene program to the Client for acceptance. This plan must clearly stipulate when surveys shall be done, frequencies and by whom. Occupational surveys must include all regulated and non-regulated stressors based on the scope of work.

### 36.1 Occupational Hygiene Management Program

Principal Contractors and contractors shall develop, implement and maintain an occupational hygiene management programme to ensure that the occupational hygiene stressors are identified assessed (monitored) and controlled. The occupational hygiene should include, but not be limited to the following elements:

- Occupational health risk assessment as a background.
- Occupational health risk exposure profiles
- Occupational hygiene monitoring program and ensure that monitoring is performed by an approved Inspection Authority.
- Communication of occupational hygiene results and requirements
- Proof of awareness training.
- Documentation and control of records (Records to be kept for 40 years)

Where there are occupational hygiene stressors, Principal Contractors and contractors shall ensure that programs are developed and in place to address the said stressors. These programs may include but not be limited to:

- Hearing Conservation Program;
- Respiratory Protective Program
- Hazardous Chemical Substances Program
- Procedure for the use and management of radioactive sources
- Heat Stress Management Program

Principal Contractors and contractors shall report to the Department of Employment and Labour and Department of Minerals Resources on the occupational hygiene milestones (e.g. crystalline silica). Evidence of reporting to the department of labour and department of mineral resources and copies of such reports shall be made available to SHE Manager / officers.

Copies of all occupational hygiene surveys conducted by the Principal Contractor and contractor must be submitted to the Eskom SHE Manager and practitioners. The Contractor SHE Manager / Officer shall establish a database of contractor occupational hygiene surveys and corrective plans.

The Principal Contractor and contractors shall describe in detail how they would implement an Occupational Hygiene programme and provide an outline of the programme as well.

### 36.2 Employee Health and Wellness Programme

Principal Contractor shall submit details of their Employee Health and Wellness Programme as part of their Health and Safety Plan which should include a Medical Surveillance Program and an Employee Assistance Program as detailed below.

### 36.3 Medical Surveillance Programme

The Principal Contractor shall ensure that his employees and contractor employees are registered on a medical surveillance programme and are in possession of a valid medical fitness certificate. The certificate of fitness should be relevant to the type of work (risk based) that the employee will be exposed to. This will require each employee to have a risk based person job specification that will be used as a basis for medical examination.

The Principal Contractor must ensure that his employees and contractor employees have undergone pre-entry medical examination before starting work on site, **no employee will access site without a valid medical fitness certificate.**

A contractor must ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational Health practitioner in the form of Annexure 3.

The PC must produce Medical Certificates of Fitness to the Client before undergoing the induction sessions. The Medical Certificate of Fitness (CoF) must be from an Occupational Hygiene Practitioner and not a General Practitioner (GP).

Any person, including any visitor, supplier, etc. that will be going to site (i.e. workshop or where construction activities by the PC and its Contractors are being done) must produce a valid medical certificate of fitness CoF prior attending induction sessions. An exception for not producing a medical CoF must be for any person that will be limited to the PC or Contractor's offices.

The fitness certificate and a copy of the risk based person job specification shall be issued before commencement of work and shall be presented at induction. If the Principal Contractor does not provide proof of valid certificates of fitness and person job specifications for his employees and contractor employees, then Eskom will not give those employees site induction which will result in refusal to site access.

The frequency to renew the medical fitness certificate shall be determined by the risk profile and or as per the recommendation of the medical practitioner.

On completion of the project an exit medical examination shall be conducted, unless otherwise advised by the Occupational Health Practitioner.

All employees shall be issued with the required medical records to prove medical status at the time of exiting the construction project.

The Principal Contractor shall provide a documented process for managing those employees who are issued with a conditional certificate of fitness.

In instances where sick leave is taken for a period of one week or more, the contractor shall institute an arrangement that employees need to sign a declaration indicating that they did not suffer any illness or injuries which occurred in the period of absence, which may affect their ability to work on site.

**Note:** Eskom will only accept medical surveillances conducted by an Occupational Health Practitioner who holds a qualification in occupational health.

### 36.4 Emergency Care

A list of emergency numbers must be posted at phones and in every office. The Principal Contractor shall ensure that his employees and contractor employees are familiar with the emergency numbers and also are provided with stickers, with the emergency numbers printed on, to place outside their hardhats.

Emergency numbers will also be part of the SHE induction.

Eskom has established a contract with Net care 911 for all employees and its contractor employees for emergency medical assistance incurred whilst on duty anywhere in South Africa. The telephone number is **086 123 7566 (08612 Eskom)**. **Matimba Emergency number is 014 763 8311/ 8312.**

Contractors shall have one first aid box for the first 5 persons and thereafter one for every 50 or team of workers on site or part thereof.

More first aid boxes shall be provided if the risks, distance between work teams or workplace requirements require it (it should be available and accessible for the treatment of injured persons at that workplace).

Minimum contents of a first aid box: (Refer to GSR 3 Annexure of the OHS Act)

A prominent notice or sign shall be erected in a conspicuous place at a workplace (SANS1186 approved signs to indicate location of first aid boxes), indicating where the first aid box or boxes are kept as well as the name and contact details of the First Aider of such first aid box or boxes.

The Principal Contractor and Contractor must ensure that there are first aiders covering all shifts worked in the project.

The Principal Contractor and contractor shall ensure that alternative arrangements shall be made for possible incidents occurring after normal working hours.

Where services are not available from the medical centre or where there is no medical centre, the Principal Contractor shall investigate alternative arrangements to ensure access to adequate medical assistance in the event of emergencies.

The Principal Contractor shall provide a detailed plan as to how access to or provision of medical facilities, services and assistance is rendered on the project at all times. This shall form part of the Principal Contractor Health and Safety Plan.

The Principal Contractor shall establish and test the Emergency medical response component of the emergency preparedness plan.

The Contractor must provide a sufficient number of trained fire fighters on all shifts worked by its employees. Sufficient fire extinguishers and screens must also be available.

### 36.5 Employee Assistance Programs (EAP)

Where Principal Contractors and contractors do not have EAP service providers, then Eskom's EAP service provider is available to provide assistance. All costs shall be borne by the Principal Contractor. Details are: **ICAS – Tel. No.: 0800 611 059.**

### 36.6 Rehabilitation

Where any contractor's employee is injured at work to the extent that they require rehabilitation, then this must be given, using the services of an appointed rehabilitation organisation.

### 36.7 Compensation of Occupational Injuries and Diseases Act (COIDA)

The Principal Contractor shall submit proof of registration and letter of good standing with the compensation fund or with a licensed compensation insurer for his company and each of his contractors'; based on South African legislative requirements. This must remain valid for the duration of the contract. The Letter of Good Standing shall reflect the name of the Principal Contractor and/or Contractor Company.

### 36.8 Workplace protective measures to be taken during the COVID-19 outbreak

The Principal Contractor and Contactors shall ensure that measures required by the applicable COVID-19 directives, Eskom requirements; guidelines and work instructions are strictly complied with. The PC must develop a Covid-19 Work Plan and Baseline Risk Assessment in line with the Clients' Work Plan, Risk Assessments and all other related procedures for managing Covid-19 at a work place. The PC shall review and amend / update it BRA as and when required, e.g. if there has been an incident or if or when the regulations change. The Client shall not borne any financial implications on the above mentioned.

The PC shall ensure that reporting of Covid-19 incidents is done in accordance with Eskom 32-95 Procedure.

Any positive cases that the PC and its Contractors have, must be reported to Eskom at least within 24 hours after the affected employee has received their results. The PC is expected to forward the employee lab results to the Eskom medical centre for recording. An investigation must follow. Contract tracing must be transparent and must be done with the Client's (Eskom) Covid-19 compliance officer in order to ensure the health and safety of Eskom's employees.

The PC must immediately declare, once the contact tracing and initial information gathering session, or if necessary the investigation, whether the incident is work –related or not.

Investigation report for all work related incidents must be forwarded to Eskom for capturing on SAP – EHS. The PC has the responsibility of ensuring that incidents occurring at their supplier premises, where an Eskom representative had been invited for either a meeting / inspection, etc. are reported to Eskom immediately employee is regarded to be at work and if affected in any way, will be regarded as a work-related incident.

## 37. Emergency Preparedness and Response Plan

The Principal Contractor, together with his Contractor shall, using the Eskom Matimba Power Station Emergency Response Plan and Eskom GCD EP Plan, develop their own emergency response plan and submit it to the Client for review. It may be decided by the Client that one site specific Emergency Response Plan be used for all Contractors that are in one area as the PC, otherwise each Contractor arriving on site must develop an EP in accordance with the PC's EP. The Principal Contractor must ensure that his employees and his Contractor employees are trained on the plan. The Contractor must submit the Plan as part of the SHE File to the Client for review acceptance before implementation. A final PC EP must be submitted to the Client once site establishment is complete, this must be aligned to the Site establishment requirements checklist. It must depict, as a minimum, the below requirements, which include but not limited to the following:

- All assembly points
- Location of first aid boxed
- Location of fire extinguishers
- Access routes, etc.

A pictogram or sketch of the plan, must be displayed in all offices, boardrooms, bathrooms, kitchens, eating facilities, etc.

Pictures, names and contact details of all first aider, fire fighters, emergency coordinators, evacuation wardens, etc. must be displayed at strategic areas at the PC and Contractor offices, including the working areas.

The Principal Contractor and its Contractors must initiate their own annual emergency drills for all emergency types as per Eskom's EP, with permission from the Client. This request must be done in writing at least two (2) days in advance.

The Client must be present during the emergency drill conducted by the Contractor.

The Contractor must develop a report based on the EP drill conducted, and submit it to the Client all relevant supporting documentation, including but not limited to the action plan for close out of deficiencies noted during the drill, Client notification, roll call, etc. at least five (5) days after the drill is done.

All fire incidents must be reported to Eskom GCD as soon as possible (at least within 5mins of occurrence telephonically). 32-95 Procedure must then be followed for managing the incident.

When doing a task that requires standby emergency response, the contractor shall provide for this and Eskom Emergency Department will supplement.

The PC and its Contractors must have all the relevant personnel responsible for immediately responding to any type of emergency as stipulated on the Eskom GCD Emergency Preparedness and Response Plan.

### 37.1 Offices

The Emergency Preparedness plans must accommodate how to react to emergency situations such as, fires, work injuries, bomb threats, building evacuation, political unrest, the contacting of the various emergency services etc.

The Emergency Plan for offices must be conspicuously displayed and must form part of the Contractor induction.

The Contractor must also conduct emergency drills for offices.

### 37.2 Site plans

When preparing worksite Emergency Preparedness plans, cognisance must be made as to the locality of the site and the response time for the emergency services. Where sites are remote, contractor management shall ensure that a sufficient number of employees are trained in the various disciplines to be able to afford prompt response attention.

## 38. Forums for SHE Governance and Communication

Effective governance and communication structures shall be established on each project site where project SHE matters shall be discussed. Attendance registers and minutes shall be kept for all the health and safety meetings. The terms of reference shall be established for each governance structure on the project.

Eskom Project team shall define the project SHE governance and communication structures.

The Principal Contractor/s and their Contractor/s shall provide a communication plan outlining the discussions and decisions to their staff, the mediums they will employ and how they will measure the effectiveness of their SHE communication.

The Principal Contractor and its Contractors must hold a weekly SHE meeting and the Client must be invited to attend such meetings, alternatively, on decision by the Client (Eskom), the Client may hold weekly SHE Meetings with the PC and its Contractors where feedback on SHE must be provided by the Contractors. The PC safety officers, construction manager and supervisor and SHE Rep must be present in all meetings. Any apologies must be sent in writing to the Eskom chairperson / Contractor chairpersons facilitating the meeting, at least 12 hours in advance. A representative must be sent by the person submitting an apology. No PC representative is allowed to be absent for two consecutive meetings with the exception of training, person being on annual leave or sick leave.

Signed meeting minutes (by the chairperson of the meeting) together with the attendance register and action plan must be circulated to all meeting attendees at least 24 hours after the meeting has been held.

The PC and Eskom Project Manager must ensure that every meeting conducted on site includes SHE as a standing agenda point and minutes of these meetings must be available on site at all times.

**NOTE**: These meetings do not replace or act as a substitute for the required Health and Safety Statutory meetings.

Statutory OHS Committees in terms of Section 19 and 20 and General Administrative Regulations 5 of the OHS Act and Eskom requirements shall be established.

## 39. Asbestos Work (where asbestos work is part of scope)

- The Principal Contractor shall notify the relevant Provincial Director of the Department of Employment and Labour in writing of the intention to carry out asbestos work as defined in the Asbestos Regulation 3 of the OHS Act No. 85 of 1993 and Regulations;
- An asbestos contractor registered with the Department of Employment and Labour shall carry out the asbestos work;

- A detailed plan of work shall be submitted for approval to an approved Asbestos Inspection Authority.at least 30 days prior to commencement of such work. The Contractor must submit the plan and all supporting documents pertaining to the work to the Client for review before it is sent to the Department of Employment and Labour.
- A detailed plan of work must be submitted for acceptance to the Client at least 10 days prior to submitting to the Asbestos Inspection Authority for review.
- The Principal Contractor shall provide copies of approved standardised procedures for the removal of asbestos to the Provincial Director of the Department of Labour at least 14 days prior to commencement of work;
- Air monitoring shall be done during the removal, and the report must be sent to Client SHE Department for record keeping;
- A clearance monitoring shall be conducted post removal of the Asbestos material to declare the area asbestos free;
- The removed asbestos material shall be disposed of at an asbestos approved disposal site and a disposal certificate shall be submitted to Client's SHE Department.

### 40. Construction Vehicles and Mobile Plant

All construction vehicles and equipment shall meet the legislative requirements pertaining to the OHS Act Construction Regulations 23, the National Road Traffic Act, National Environmental Act and Eskom Vehicle Safety Specification Procedure 240-62946386.

**The following requirements are applicable to the use and operation of construction vehicles:**

- A Principal Contractor/ contractor shall ensure that all construction vehicles and mobile plant are operated by a person who has received appropriate training, is certified competent and in possession of proof of competency and is authorised in writing to operate those construction vehicles and mobile plant.
- A Principal Contractor/Contractor must ensure that the Client has inspected all construction vehicles and mobile plant coming to site prior to accessing site. The Contractor must inform the Client at least two (2) days in advance of any driven machinery coming to site and arrange for inspection. The Contractor must ensure that the inspection sheet is readily available when the driven machinery gets to site.
- No driven machinery shall be left parked overnight with no drip tray underneath or left parked on the grass.
- Where load test certificates are required for the machinery, they must be submitted to the Client during initial inspection.
- Designated drivers shall be in possession of an appropriate valid driver's licence, valid for the class of vehicle and authorised in writing to operate the Construction vehicles and mobile plants. The driver's license shall be kept by the person so authorised and shall produce such card on request.
- All construction vehicle operators, flagmen, banksmen, signalmen, or pointsmen are to wear high visibility reflector vests at identified high-risk sites and construction projects. All flagmen, banksmen, signalmen, or pointsmen at identified high-risk sites and construction projects are to be positioned with warning flashing lights and warning signs in such a way that they are visible to the operators at all times ( during the day and night).

- All employees moving between construction vehicles must wear high visibility vests. (Refer to Eskom Procedure 240-44175132). All flagmen must always have reflector vests and flags with while on site. No construction vehicle, (i.e. crane, truck, cherry picker, etc.) shall travel from one point to the next without a flagman (this must be practised with or without a load).
- Drivers or operators and construction vehicles at identified high-risk sites and construction projects should have a permit system for operating in that particular area.
- Heavy construction vehicle parking sites, driveways, or any site should be designed in such a way that no reversing is required. Where reversing is unavoidable, it shall only be done with the presence of a flagman or a banksman.
- A vehicle and pedestrian management plan must be developed by the contractor to be in line with the Clients plan.
- Ensure that all traffic signs are displayed.
- Reverse beepers shall be fitted on all construction vehicles.
- A flagman with a flag must be present whenever construction vehicles are in operation. They must be present even when the construction vehicle is being moved from one area to the next, with or without load.
- The speed limit within the bounds of the construction site is as displayed on the road signs.
- All drivers of construction vehicles and mobile plant shall have medical certificates of fitness to operate those construction vehicle and mobile plant, issued by an occupational health practitioner in the form of Annexure 3 of the Construction Regulations.
- No drivers or operator may text, talk on cell phones or two way radios whilst driving.

It is the responsibility of the driver to ensure that:

- He/she and their passengers wear seat belts whilst the vehicle is in motion.
- Comply with all traffic road rules, safety, direction and speed signs.
- Ensure that vehicle loads are properly secured and loaded onto vehicles; and
- Ensure that vehicles are not overloaded.

The Principal Contractor shall ensure that his employees and those of his contractors do not:

- Ride on back of bakkies, cranes or other mobile plant equipment.
- Leave vehicles unattended with the engine running.
- All vehicles shall be locked chock blocks fitted and keys removed; and
- Park vehicles in unauthorised zones/areas.
- Eskom reserves the right to search any vehicle on the premises or when entering or leaving the premises.
- The PC and its Contractors must ensure that all the controls and the features of the machinery are in good working order, i.e. headlights, beacon lights, indicators, tires in good condition, etc. non-complying vehicles must be removed from site by the Client.
- The Contractor shall be solely responsible for the safety and security of any of his vehicles (including private vehicles) on the premises.

- The Contractor shall attach identification markers on all of their vehicles that are permitted to enter the site.
- A current maintenance logbook is required for all cranes and large plant equipment, and shall be available for inspection at any time. The logbook shall be located in the cabin of the crane or plant equipment. Principal contractor is to ensure that visibility (e.g.: switching on of lights, reflectors, barricades equipped with lights, etc.) is enhanced on all Construction Vehicles and Mobile plants in order to identify the location of the vehicles or plant.
- The Contractor shall maintain his vehicles in roadworthy condition and a valid license. These vehicles shall be subject to inspection by the Client representative. Vehicles which are not roadworthy will not be allowed onto the site.
- In the event where the Principal Contractor and his contractor do not own the equipment, the Principal Contractor is still responsible for ensuring all conditions are complied with by all of his contractors or hire companies.
- Precautions shall be taken to lash all loads properly. Loads projecting from vehicles shall be securely loaded and in daytime a red flag and during darkness a red light or red reflective material shall be attached to the extreme end of such projecting material.
- Ensure that all construction vehicles and plant are maintained according to the manufactures specifications. All servicing and repairs must be carried out by the Contractor in a designated area.
- Records of maintenance must be kept on site
- All waste from servicing must be disposed of in accordance with the environmental legislation.
- All mobile operators must ensure that there is no obstruction in front of them, caused either by the load or any other existing condition when operating the equipment. They must at all times, ensure that the equipment is driven forward and not in reverse.
- Every mobile machine when reversing must have a siren/hooter, which beeps, when the machine is reversing. This includes trucks, cranes, loaders, etc.
- Display construction vehicle signs on all vehicles entering a construction site.

**The use of amber, rotating or flashing lights on construction vehicles:**

- The use of amber, rotating or flashing lights shall only be used in accordance with the requirements of the National Road Traffic Act , (Act no 93 of 1996)

  (Reference: Regulation 176 substituted by regulation 48 of Government Notice R846 in Government Gazette 38142 dated 31 October 2014 – See Annexure F (Requirements for identification lamps)
- No construction vehicle is allowed to use the amber light whilst driving on a public road.
- The construction vehicles fitted with amber rotating lights must have a manual operated switch. The amber rotating lights must be switched off when the construction vehicle enters a public road.
- The Contractor must account for abnormal loads. Measures for safe transportation must be put in place by the Contractor for transportation of abnormal load on site and on public road. The plan must be submitted to the Client for review and acceptance of the measures to be used by the Contractor before transporting any loads on public roads and on-site

takes place. Submission of the plan for review to the Client must be at least five (5) working days in advance.

## 41. Housekeeping

The Principal Contractor and his contractor shall maintain a high standard of housekeeping within the site. Prompt disposal of waste materials, scrap and rubbish is essential.

All Contractors are responsible for waste generation in their area of work / responsibility. The Contractors must have colour coded and correctly labelled wheelie bins (indicating the relevant waste streams as per Eskom's EMP) at the points of waste generation. The Contractors must dispose of their waste onto the existing Generation waste skips for disposing of their waste. The Contractors are responsible for disposing of any waste outside the waste streams stipulated in the Eskom EMP. Housekeeping must be done by the Contractors as they work. Housekeeping shall be monitored during daily plant visits by supervisors and safety officers and also during the weekly management walk downs by the PC, its Contractors and Eskom.

The Principal Contractor shall carry out regular safety/housekeeping inspections (at least weekly) to ensure maintenance of satisfactory standards. The Principal Contractor shall document the results of each inspection and shall maintain records for viewing. The Contractor must do housekeeping on a continuous basis. The PC management together with the Client management must be resent during the weekly walk down.

## 42. Signage

All symbolic safety signs that the Principal Contractor or his /her Contractors are to use/display shall comply with the requirements of SANS 1186.

The display of the following signage is mandatory:

- For Contractors with Site Establishment: The Contractor Company sign must be posted at their site offices to reflect the name and contact details of the: Construction Supervisor; Health and Safety Manager/Practitioner; First Aider; Health and Safety Representative and Evacuation warden and hours and LTI free days worked by the Contractor.
- The Contractors shall provide the signage where work is conducted and where unauthorised entry is prohibited and/or where alerting and cautioning passers-by to be aware of potential dangers
- The Contractors shall provide the signage in accordance with the scope and work area.
- The contractor shall provide signage in accordance with the EMP requirements.
- The signage must include but not limited to the emergency number and contact persons in case of emergency. This includes the supervisor, safety officer, first aider and SHE representative.

## 43. Hazardous Materials/Chemicals Management

HCS shall be managed in accordance with HCS Regulations of the OHS Act 85 OF 1993.

Prior to any HCS being brought onto the site or produced on the site, the Principal Contractor/contractor shall supply the Client with the following:

- Material Safety Data Sheets (MSDS) in accordance with the requirements of the OHS Act

- Regulations for Hazardous Chemical Substances;
- Proposed arrangements for safe storage;
- Proposed methods for handling/usage;
- Proposed method of disposal;
- Hazard communication / training plan.

The information is to be provided prior to the expected delivery on site. The Client representative shall approve the use of any hazardous substance after receiving the above information. No HCS are to be brought onto the site until the client representative approval is received.

The PC must also carry out a hazardous chemical risk assessment, and draw up an inventory of all chemicals that will be brought to site and these must be submitted to the Client for acceptance at least 30 days before the chemicals are brought to site. Any new chemicals brought to site must be added on the inventory, the HCRA must be updated and resubmitted to Eskom within five (5) working days.

All chemicals must be stored in accordance with the regulations.

The PC must seek permission from the Client prior to bringing in any new chemical to site, and the chemical risk assessment must be amended as required.

The Contractor must ensure that training on the MSDSs is done for all employees

Chemicals used on site must be kept in their original and appropriately labelled containers and be place on drip trays to contain possible spillages.

The PC must ensure that there is a chemical store on site that conforms to the legal requirements where all chemicals are stored.

### 44. Flammable and Combustible Liquids

Use and temporary storage of flammable and combustible liquids shall be managed in accordance with Construction Regulations (CR 25) and GSR 4 of the OHS Act 85 OF 1993.

Proposals to store fuel on site must have written approval from the Client. The volumes of fuel allowed to be stored will depend on site conditions and Statutory Regulations.

Proper bund walls and signage indicating the volume it can take +/- 10%.

The Client must be informed in writing at least 30 days in advance, if the Contractor needs to store flammable and combustible liquids. A proper plan, which includes but not limited to the handling, inspection, maintenance of bund wall, etc. must be submitted at least 30 days prior to liquids being brought to site.

### 45. Compressed Gas Cylinders

Use and temporary storage of Compressed Gas Cylinders shall be managed in accordance with the Pressure Equipment Regulations of the OHS Act 85 of 1993 and SANS 10263-2:2008.

## 46. Personal Protective Equipment (PPE)

In terms of Section 8 of the OHS Act, the duty of the employer is to take steps to eliminate or mitigate (hierarchy of control measures) any hazard or potential hazard to the safety or health of employees before resorting to PPE.

Principal Contractor's employees and his contractor employees at the construction site, including visitors, shall use the relevant internationally recognised authority approved risk based PPE at all times, as a minimum:

- Head protection hard hat (with chin straps)
- Steel toe capped safety boots.
- Eye protection. Wearing of impact Safety Spectacles with side shields. Prescription glasses must comply with the same standard or cover impact safety spectacles must be worn over them.
- Long sleeved and long pants protective clothing.
- High visibility vests.
- Refer to General Safety Regulation 2 of the OHS Act.
- Refer to Eskom Personal Protective Equipment Specification (240_44175132, latest revision). This specification applies to all activities where PPE is required. It sets out Eskom's minimum PPE requirement to be met by contractors with the exclusion of the requirements stipulated with regard to the Eskom Corporate Identity.
- Additional PPE must be determined by the daily task risk assessment for the specific activity being done.

The Contractor shall ensure that his employees understand why the personal protective equipment is necessary and that they use them correctly.

Strict non-compliance measures must be administered to any employee not complying with the use of PPE and that employee shall be removed from the Site.

### 46.1 Issue, Replacement and Control of PPE

The Principal Contractor must provide a detailed procedure with a matrix on the issuing, maintenance and replacement of PPE for all his employees and contractors on site.

The Principal Contractor is required to keep an updated register of all PPE issued, including that of his employees and contractors.

## 47. Machinery, Tools and Equipment

- The Contractor shall ensure that all machinery, tools and equipment are identified, safe to be used and are maintained in a good condition.
- All machines driven by means of belts, gear wheels, chains and couplings shall be adequately guarded. A machine is guarded when persons cannot gain inadvertent access to the moving parts.
- The Principal Contractor shall ensure that all machinery, tools and equipment shall be listed on an inventory list and handed to security with a copy kept on site.

- All machinery, tools and equipment to be regularly inspected at least monthly or as required by legislation and risk assessments, registers of tools shall be kept on the safety file. The equipment should be numbered or tagged so that it can be properly monitored and inspected.
- The PC shall ensure that all tools used at heights are fitted with lanyards
- The PC shall ensure that there are no loose tools or equipment left on site or if working from height is done, left at the edges of a fall risk position, all small loose tools must be in a bucket or container.
- All machinery, tools and equipment shall have the necessary approved test or calibration documentation where applicable prior to being brought onto the premises and the records shall form part of the SHE plan.
- The Client and Contractor SHE Practitioners must inspect all fuel driven equipment prior to mobilizing it onto site.
- All fuel driven equipment shall be properly maintained in accordance with the manufacturer's recommendations and legal requirements.
- The Client reserves the right to inspect items of plant or equipment brought to site by the Contractor for use on this Contract. Should the Client find that any item is inadequate, faulty, unsafe or in any other way unsuitable for the safe and satisfactory execution of the work for which it is intended, the Client/Agent shall advise the Principal Contractor in writing and the Principal Contractor shall forthwith remove the item from the site and replace it with a safe and adequate substitute. In such cases, the Principal Contractor shall not be entitled to extra payments or extensions of time in respect of delay caused by the Client's instructions.
- The Principal Contractor/contractor shall ensure that he has all the necessary registers to record all tools and equipment.

All employees operating or using machines and tools shall:

- Be competent.
- Have a valid certificate.
- Have proof of any form of task related training.

### 48. Machine Guarding

An assessment should be conducted in writing to ensure that all machines and tools are fitted with a guard and the assessment should be kept in the safety file.

All guards shall be inspected by a competent person on a monthly basis as well as by users prior to use. These inspections and proof of corrective action taken must be recorded and kept on site.

Record keeping

- A register shall be used which indicate the name, number of the machine or tool and the number of guards.
- The register shall be kept in the safety file.

## 49. Hand Tools and Pneumatic Tools

All pneumatic tools shall be numbered, recorded and inspected at least monthly as well as by users prior to use. The revolutions per minute measured shall be in accordance with the manufacturer specifications.

All hand tools should be inspected at least weekly as well as by users prior to use.

Tools with sharp points in tool boxes must be protected with a cover.

All files and similar tools must be fitted with handles.

The Principal Contractor shall have a policy on makeshift tools on site.

**Records**

- Check list for hand tools
- Check list for air tools including records of the measurement of revolutions on grinders
- Gas cylinder trolley checklist Register

## 50. Boilers, Pressurised Systems and Pressure Equipment

The Principal Contractor shall ensure that all pressure equipments are inspected by an Approved Inspection Authority in accordance with the Pressure Equipment Regulations 7.

All pressure equipment shall be provided with at least one safety valve and such safety valve should be kept locked or sealed in accordance with the Pressure Equipment Regulations 10.

The pressure equipment shall be provided with a manufacturer's plate in accordance with the Pressure Equipment Regulations 9.

The pressure equipment should be fitted with a pressure gauge in Pascal and the maximum permissible operation pressure marked with a red line on the dial.

**Records**

- Inspection registers for pressure vessel
- The certificate from the manufacturers
- Registration certificate of an Approved Inspection Authority.

## 51. Explosive Actuated Fastening Device

- Written permission to use these tools on site must be obtained by the Eskom Project Manager and safety department.
- Only certified, competent, appointed personnel (CR. Reg. 21 (1) (b)) are allowed to operate explosive powered tools on site.
- A valid permit must be obtained before commencement of work.
- Safety signs and barriers must be erected before explosive power tools are used.
- A protective guard around the muzzle shall be provided.
- Cartridges and explosive power tools to be stored separately and properly controlled by an appointed competent person.
- Refer to the requirements of the Construction Regulation 21 of the OHS Act.

### Records

- Register for the issue and return of cartridges.

### 52. Lifting Machines and Lifting Tackle

### (Mobile Cranes, Crawler Cranes, Tower Cranes, Chain Blocks and Lever Hoists)

- The Principal Contractor shall ensure that the use of lifting machines and tackles conform to the requirements of the OHS Act, the relevant SANS standards and Eskom Procedure 39-98 (Safe use of Lifting machines and lifting tackle).
- A method rigging study must be developed for any rigging that takes place on site and this rigging study must be submitted with the activity specific method statement and risk assessment before the commencement of the activity. If a rigging method changes, the Contractor must submit the revised rigging study and submit it to the Client for review, the Client must provide the Contractor with a reasonable turnaround time for the review.
- If it is the Principal Contractor's intention is to use lifting machines on site, it should be indicated in the Principal Contractor's SHE plan as well as the inspection so that the Client representatives can conduct an inspection when equipment is brought onto site. If his/her intention is to use a contractor he shall enter the name of the contractor into the notification letter to the Department of Employment and Labour. When equipment is brought onto site it must be inspected by the Client representatives, PC and Contractor representatives.
- The Principal Contractor shall ensure that every lifting machine as listed in the National Code of Practice is operated by an operator specifically trained for a particular type of lifting machine and the operator shall be in possession of a valid permit (although the code of Practice has been withdrawn, contractors shall use it as a guideline). The user shall not require or permit any person to operate such a lifting machine unless the operator is in possession of a certificate of training, issued by a service provider registered by the Department of Labour and TETA.
- The facilitator and the assessor must be registered with the TETA.
- Whenever making use of an external Contractor to do lifting work, the Principal Contractor must ensure that the operator is competent. The PC must inform the Client of his intention to use an external Contractor before the Contractor is appointed. The requirements for the external Contractor must be the same as any of the PC's Contractor, i.e. submission of SHE File, undergoing Induction, submission of MS, RA, rigging study, etc.
- The Principal Contractor should verify if all ropes, chains, hooks and other attaching devices, sheaves, brakes and safety devices forming an integral part of lifting machines have been thoroughly examined, as prescribed by the standard to which the lifting machine was manufactured. This must be carried out by a registered LMI (Lifting Machine Inspector), appointed by a registered Lifting Machine Entity who has knowledge of the erection and maintenance of the type of lifting machine involved at intervals not exceeding six months.
- All the lifting machine and lifting tackle operators should be in a possession of a medical certificate of fitness.
- Before using any lifting machines or tackle the operator should inspect it daily, refer to the requirements of the Driven Machinery Regulations 18 of the OHS Act 85 of 1993.

- All lifting machines shall be examined and subjected to a performance test by an accredited person/company at intervals not exceeding 12 months, in accordance with SANS 19.
- All lifting tackle should be examined at intervals not exceeding 3 months by a competent lifting tackle inspector, who shall record and sign of such examination, such lifting tackle shall be stored or protected so as to prevent damage or deterioration when not in use.
- Refer to the requirements of the Driven Machinery Regulation 18 and Construction Regulation 19 and 22 of the OHS Act, SANS and ISO standards.
- All lifting tackle should be recorded on a register, refer to the requirements of the Driven Machinery Regulations 18 of the OHS Act 85 of 1993.
- All hooks shall be fitted with a safety latch/catch, and be in a good operational condition.
- A lock out system should be implemented to ensure that only an operator that is competent can draw lifting machines and fork lifts.
- All lifting tackle should be conspicuously and clearly marked with identification particulars and the maximum mass load which it is designed for.
- No person shall be moved or supported by means of a lifting machine unless such a machine is fitted with a cradle approved for that purpose by an inspector of the Department of Employment and Labour.
- If the task method changes, the MS, RA and rigging study must be revised to indicate the new working method being carried out. The Contractor must ensure that the approval and acceptance process by the PC and Client is followed with the revised RA, MS and rigging study.
- A risk assessment should be conducted prior to starting the task.
- Lifting machines are erected taking into account a safe distance from excavations and power lines.
- With the erection of tower cranes, a tower crane application accompanied by a method statement, risk assessment and geotechnical study must be submitted to the Client's Engineer for approval.
- Account should be taken of wind forces. Lifting machines are erected taking into account a safe distance from excavations, and with the erection of tower cranes, a tower crane application accompanied by a method statement, risk assessment and geotechnical study shall be given to the engineer for approval.
- When working in close proximity to power lines, the contractor must apply for a permit. Refer to Eskom Plant Safety Regulations and/or Operating Regulations for High Voltage Systems and Electrical Machinery Regulation 15 of the OHS Act.
- Every employer shall ensure that the employee is adequately and comprehensively informed of the hazards when working in close proximity to overhead power lines and electrical installations
- Account should be taken of the bearing capacity of the ground, on which the tower crane is to stand, and the tower crane should be erected at a distance from excavations.
- Rigging study should be conducted for all critical lifts.

- Principal Contractors and their employees shall keep out from under suspended loads, including excavators, and between a load and a solid object where they might be crushed if the load should swing or fall. They shall not pass or work under the boom or any crane or excavator or barricading.
- The Contractors for any activity must use solid barricading only.
- Guide ropes to be used to prevent loads from swinging. (Manila ropes)
- Only loads of up to 5ton can be lifted by a person with basic rigging, depending on the complexity of the load. If it's a tandem lift or a complicated lift only a qualified rigger will do such lifts. Above 5Ton a qualified Rigger with a red seal will conduct all the lifts, and should the lift become critical a critical lift procedure will be completed accompanied by a rigging study and risk assessments.
- Hand signals will be displayed and visible on all cranes and the SANS 1029 standard must be used to ensure uniformity. All the crane operators, riggers shall be trained according to the SANS 1029.
- Permits shall be issued by an authorised appointed person when conducting maintenance and inspections.
- An illumination survey should be conducted prior to the start of work where lifting is performed at night.
- Tower Cranes should be earthed in accordance with SANS12480 and this includes crawler cranes.
- All truck mounted cranes and stringing machines shall be fitted with Equal Potential Foot plates when working in close proximity of power lines.
- The PC must ensure that the employee is adequately and comprehensively informed of the hazards before any work commences.

**Record keeping**

- Record books and test certificates of lifting machined and tackle should be kept on the safety file on site.
- A copy of the Site and Task specific risk assessment should be kept on the safety file
- The Principal Contractor shall provide maintenance records of all Cranes (Mobile, Tower, Crawler and Overhead Gantry) to Eskom before the equipment is allowed to operate on the site and these must be kept in the SHE File.
- A certificate of approval for man cages and mobile working platforms shall be obtained from the Department of Employment and Labour Inspector.
- Register of all lifting machines and tackle on site (for inspection purposes) must be kept in the SHE File.
- Training certificates and certificates of fitness for operators of the equipment) must be kept in the SHE File.
- Legal appointments for riggers, supervisors, crane co-ordinators and operators) must be kept in the SHE File.
- The Principal Contractor shall provide an emergency rescue plan to Eskom for all tower cranes and man-cages and these) must be kept in the SHE File.

## 53. Fire Safety

The Principal Contractor/Contractor shall develop a fire safety procedure for the specific construction site prior to commencing work. The procedure must take into consideration the size of the site, type of work being done (e.g. cutting, welding, grinding, etc.) and amount of combustible materials. It must be developed in accordance with the hot work permit of the Eskom Plant Safety Regulations, Eskom Fire Risk Management 32-124 requirements and all other applicable Regulations. All workers entering and working in the construction site need to be trained in fire safety and any duties they are required to perform. Pre-existing fire systems in buildings shall be maintained during construction whenever possible. Any changes must be approved by the Client.

### 53.1 Fire Safety Plan

The Principal Contractor shall develop and implement an adequate Fire Safety plan to ensure the overall fire safety, fire prevention and fire protection measures, deemed suitable and necessary for the project.

The fire safety plan shall include:

- The designation and organization of site personnel to carry out fire safety duties, including fire watch
- Service if applicable.
- The emergency procedures to be used in the case of fire, including.
- Sounding the fire alarm.
- Notifying the fire department
- Instructing site personnel
- Firefighting procedures integrating with existing emergency procedures.
- The control of fire hazards in and around the building.
- Maintenance of firefighting facilities.

### 53.2 Fire Alarm Systems Shut Downs

Contractors must inform the Client in writing 7 days prior to any part of a fire system being shut down. The Client in writing must grant approval before the system can be shut down.

### 53.3 Alternate Procedures

When required by the Client, contractors will develop alternative procedures to follow during a fire alarm shutdown.

#### 53.3.1 Occupied Buildings and/or portion

In the event that fire systems are removed from service a trained and qualified person will stand at the fire alarm panel and be in communication with the person(s) doing the work and capable of reinitiating the system in the event a fire alarm device is activated.

Or

Alternate warning device(s) will be used with procedures posted on all floors by elevators and entrances, stating:

- Fire alarm is out of service,
- The building/area affected,
- Duration of shutdown,
- Process to activate the alternate warning device(s),
- Call Fire Department and call Security.

Fire Panels must be tagged as to what has been removed from service and the Fire Department and Monitoring Station notified. Fire Watch personnel must be stationed in the building to patrol the affected area(s) and be in communication with each other.

In the event where smoke detectors and/or heat detectors or sprinkler systems are removed from service. Fire Panel must be tagged as to what has been removed from service.

Fire Watch personnel must be stationed in the affected area(s) and check the fire panel once per hour when the affected area is not occupied.

The Contractor must ensure that a sufficient number of trained emergency personnel are available on site at all times.

### 53.3.2 Unoccupied Buildings

In the event that fire systems are removed from service alternative warning devices will be used with procedures posted at each entrance, stating authorize personnel only, how to activate the warning device(s), call Fire Department, call Security. Fire Panels must be tagged as to what has been removed from service. Fire Watch personnel will patrol the affected area(s) and check fire panel(s) once per hour.

In the event smoke detectors and/or heat detectors or sprinkler systems are removed from service. Fire Panel must be tagged as to what has been removed from service. Fire Watch personnel will patrol the affected area(s) and check the fire panel(s) once per hour.

## 53.4 Cutting, Welding, and Hot Work

Prior to cutting or coring of concrete suspended slabs, cast in place or pre-cast walls, slab on grade the contractor must either X-ray the slab or if X-ray is not feasible provide other approved alternate method for determining live electrical concealed in slab or walls. Signage shall be posted to ensure no one enters the affected area during X-raying.

When welding or cutting work is performed, an adequate number of approved fire extinguishers shall be provided by the contractor. The contractor shall provide a thirty minute fire watch after the operations has ended to ensure that no fire starts.

- Hot work permit must be displayed.
- Employee must be competent.
- All oxy-acetylene welding equipment shall be fitted with a flash back arrestor
- All oxy-acetylene pipes must be clamped with the correct parallel hose clamps to separate it in an emergency.

All hot work must be done in a workshop intended for such purpose. The workshop must have adequate ventilation and extraction of any fumes that might be accumulated in the workshop, welding screens and workbenches with adequate working space between employees. The workshop must also be properly demarcated, have adequate fire extinguishers next to each working bench, and adhere to all workshop requirement regarding fire. Proper signage for PPE requirements in the area must be displayed at every entrance of the workshop. Adequate and proper bins, e.g. for metal offcuts, general waste, hazardous waste, etc. must be provided by the Contractor in the workshop.

When welding or cutting work is to be performed in an area outside the workshop, permission must be obtained from the Client. The Contractor must provide an adequate number of approved fire extinguishers and firewatchers per hot work activity taking place, unless agreement is made with the Client. The Contractor must provide a thirty-minute fire watch after the operation has ended to ensure that no fire starts. The following process must alwo be followed:

- The PC must inform the Client at least 24 hours in advance if they hot work needs to be done outside the workshop in order to arrange with the PC for a permit for the works.
- Hot work permit must be obtained via the Client, and it must be displayed in operation area.
- The PC must provide a method statement showing activities that need to be done and precautionary measures to ensure that fire does not break out and measure that will be taken should fire break out.
- Adequate firefighting equipment and firewatchers must be present at the work area. There must be at least one firewatcher with firefighting equipment per area of work. The risk assessment must provide guidance for determining the number of firefighting equipment and firewatchers required for the area.
- Employees carrying out the how work must be competent.
- All oxy-acetylene welding equipment must be fitted with a flash back arrestors and meet the requirements of cylinders with regards to storage and use.
- All oxy-acetylene pipes must be clamped with the correct parallel hose clamps to separate it in an emergency.
- No hot work must be done under or over gas cylinders unless they are covered with the fire blankets or any other form of material that will prevent them from being damaged by falling objects or hot slacks.
- Daily Inspection sheets for the cylinders and hot work equipment must be attached to the daily safety task inspection for the day.
- PPE required for the activity must be determined using the risk assessment.

### 53.5 Eskom Fire Safety Guidelines

#### 53.5.1 Fire Systems

Fire systems must not be impaired in an occupied building unless by a trained and SAQCC registered person, capable of reinstating the system after it has been inspected, tested or maintained. Alternative procedures may be taken to ensure that all persons in the building can be informed promptly should a fire occur, and the Fire Department including Eskom Security is notified.

Installation of fire systems should be carried out by an ASIB (Automatic Sprinkler Inspection Bureau) certified person.

### 53.5.2 Fire Watch

Except where the building is provided with a fire alarm system or similar equipment acceptable to the Manager, Occupational Health and Safety, fire watch patrols with tours at intervals of not more than one hour apart shall be provided while the fire alarm system is not in operation. Proof of these inspections must be kept in the SHE File.

### 53.5.3 Construction Sites

The Contractor must ensure the following concerning construction sites:

- Fire Safety Plan: Prior to the commencement of construction or building alterations, a fire safety plan and risk assessment shall be prepared for the construction site.
- Fire Warning: A suitable means of alerting site personnel to a fire shall be provided, and capable of being heard in all areas of the building.
- Portable Extinguishers: suitable extinguishers must be available on the construction site and in cases of hot work, be readily available at the location.
- Servicing of fire extinguishers should be carried out by a SAQCC certified person.
- Fire extinguishers should be maintained in accordance with the SANS codes.
- Combustible Liquid and Flammable Liquid Storage: storage of combustible and flammable liquid on the construction site is not permitted unless stored in approved flammable cabinets or outdoors away from the buildings.
- Fire Watch: fire watch (with tours at intervals of not more than one hour apart) shall be provided when a portion of a building is occupied while construction operations are taking place, with provision for the fire watch to sound the alarm, notify the Fire Department and Eskom Security, (except where the building and construction sites are provided with a fire alarm system or similar equipment acceptable to the Manager, Occupational Health and Safety)
- Smoking Restrictions: Smoking is not permitted indoors, at entrances to buildings or near air intake systems in accordance with Eskom Policy and legislation requirements.
- All sites shall be fitted with an alarm system.

## 54. Offices and Camp sites

The Contractor must ensure the following with regards to offices and campsites:

- Contractors must develop a fire safety procedure for the office / camp site buildings, which must meet the requirements of the local authority fire department and the OHS Act Environmental regulations for workplaces, regulation 9.
- The fire plan must include emergency escape routes, supply of appropriate fire extinguishing equipment, appropriate signage, maintenance of the extinguishing equipment, location of the equipment, appointments of fire officials.

- The storage of flammable substances within offices / camp site is prohibited. Such storage shall be done in the appropriate flammable liquid storage facilities located away from buildings.
- A suitable fire warning system for alerting office personnel to a fire shall be provided, and capable of being heard in all areas of the building.
- Smoking is not permitted indoors, at entrances to buildings or near air intake systems in accordance with the Tobacco Control Act. 83 of 1993 and Eskom Policy and legislation requirements.

## 55. Fire Protection System Shutdown Procedures

A risk assessment must be conducted prior to a fire system being impaired; the following persons must be informed of such impairment namely the project/site manager, the person responsible for fire safety on site as well as the local fire department.

In the event of any shutdown of fire protection equipment or parts thereof, the Manager of Maintenance and Operations and Electrical Foreman should be given 7 days' notice via email. Confirmation of the schedule should follow within 2 days of the original notice. Manager' of Security and Occupational Health and Safety should be given 3 days' notice via email for fire watch requests. The building occupants should be given 3 days' notice via email (all notes) of any shutdown of fire protection equipment or parts thereof.

An attempt to minimize the impact of inoperative equipment must be made (i.e. where portions of a fire alarm system, sprinklers, and standpipe system are taken out of service, the remaining portions will be maintained). Assistance and direction for specific situations should be sought from the Manager of Maintenance and Operations and Electrical Foreman, and should be in accordance with the accepted Eskom Fire Safety Guidelines and the Fire Safety Plan for the building.

In the event of bells and pull stations being removed from service in an occupied building, Facilities Management Staff (person in charge of the work) will be responsible to post procedures at affected pull stations, elevators and entrances. Assistance and direction for specific situations should be sought from the Manager of Occupational Health and Safety, and should be in accordance with the accepted Eskom Fire Safety Guidelines and the Fire Safety Plan for the building.

Procedures to be followed in the event of shutdown of any part of a fire protection system are as follows:

- Upon request, Electrical Staff shall verify in person that the work has been completed, contact the monitoring station if necessary, restore the fire protection system, remove the information tag and inform the Electrical Foreman that the system has been restored;
- Electrical Foreman will notify Security Supervisor to begin fire watch;
- Security Staff or other reliable person will patrol the affected area(s) at least once per hour;
- Upon request, Electrical Staff will verify in person work has been completed, contact the monitoring station if necessary, restore the fire protection system, remove the information tag and inform the Electrical Foreman system has been restored;
- Electrical Foreman will notify Security Supervisor to end fire watch.

## 56. Barricading (Guarding of Excavations, Trenches and Floor Openings)

In areas where the restriction or prevention of unauthorised persons/members of public/passers- by is required, barricading requirements shall be adhered to.

Requirements for Barricading (if risk assessments require more stringent mitigation measures then those stringent measures shall apply): -

- Name and contact detail of person and Contractor Company that is responsible for the barricading shall be posted on the actual barricading.
- All barricading shall be of the rigid type.
- All openings and edges must be barricaded with solid barricading to withstand an impact of at least 200 kg.
- Only solid (scaffolding or solid stand-alone) barricading with Orange “Snow Netting” will be allowed.
- Balard container (containers filled with liquid) can be used as solid barricading (exempted for use inside power plant units).
- Physical barriers to prevent persons falling into openings in floors, stairwells, staircases, open-sided buildings and any structure in the course of erection, where dangerous openings exist.
- Contractors must pre-plan the delivery of floor grating, stair treads, landings and handrails to ensure safe access and protection for persons working on structures.

No danger tapes are allowed for barricading purposes.

The contractors barricading standard must accompany the SHE plan.

## 57. Electrical Installations and Machinery on Construction sites

The Principal Contractor shall ensure that electrical installations and machinery on construction sites conform to the requirements of the OHS Act and the relevant SANS standards.

Before construction commences and during the progress thereof, adequate steps are taken to ascertain the presence of, and guard against, danger to workers from any electrical cable or apparatus which is under, over or on the site;

The Principal Contractor shall ensure that all parts of electrical installations and machinery are of adequate strength to withstand the working conditions on construction sites;

The control of all temporary electrical installations on the construction site is designated to a competent person who has been appointed in writing for that purpose;

All temporary electrical installations used by the contractor are inspected at least once a week. This must be done by a competent person and the inspection findings must be recorded in a register that's kept on the construction site; and a Certificate of Compliance (CoC) must be issued by a competent person for each installation.

All electrical machinery is inspected by the authorised operator or user on a daily basis.

The person inspecting the electrical machinery must use the relevant checklist when conducting the inspection. He must also record the findings and keep the register on the construction site.

An authorised operator or user must inspect all electrical machinery on a daily basis. The person inspecting the electrical machinery must use the relevant checklist when conducting the inspection. Permit to Work

Contractors must adhere to the approved Eskom Permit to Work System. Only Eskom's Permit to Work system must be used on site.

If the type of work to be done requires a permit, then Contractors must be trained, assessed and authorised in writing to perform the duties of an authorised supervisor or responsible person as contemplated in the applicable Eskom regulations e.g.

- Operating Regulations for High Voltage Systems.
- Plant Safety Regulations.
- Pulverised Fuel firing regulations.
- Hot work.
- Radiation.
- Confined space work.

## 58. Permit to Work

The Principal Contractor must adhere to the approved & Compulsory Eskom Permit to Work System to control identified high risk activities. There will be only one Permit to Work system (Eskom) on the construction site.

The Principal Contractor together with the appointed contactors on this project shall identify persons to be trained and authorised for the Electrical Permit to work systems. Eskom Regulations indicated below. After training the supervisors will be assessed for competence and authorised in writing to perform the duties of an authorised or responsible person as contemplated in the applicable Eskom regulations e.g.

- Operating Regulations for High Voltage Systems.
- Plant Safety Regulations.
- Pulverised Fuel firing regulations.
- Hot work.
- Radiation.
- Confined space work.

The Client is to provide more details on the permit to work system for the specific work to be conducted by the Principal Contractor.

## 59. Radiography, Ultrasonic, Non-Destructive Testing (NDT)

The Contractor carrying out radiography, ultrasonic or other non-destructive testing (NDT) on the site must comply with the requirements of the relevant legislation, codes of practice and any other applicable Client requirements. In particular, the Contractor shall ensure that:

- No radioactive sources may be brought onto site without prior written consent of the Client.

- Where a statutory appointment exists, the contractor shall appoint in writing, a suitably qualified and experienced Radiation Protection Officer to provide advice on the observance of the law and other relevant health and safety matters.
- Radiography areas are clearly identified by the erection of suitable barriers, sirens, warning notices and / or flashing lights. Vehicles transporting radioactive materials/isotopes shall be clearly identified.
- Radiation operators must submit proof of certification.
- Sources must be stored according to legal requirements.
- All contractors must be informed of X-ray activities.
- X-ray work may only commence with a valid permit to work.

**Refer to requirements in:**

- Eskom Standard: Radioactive sources for non-nuclear stations
- SANS code of practice: 100228: "Code of Practice for the Identification and Classification of Dangerous Substances and Goods". Published by the South African Bureau of Standards.

### 60. Excavations, Trenches and Floor Openings

- A contractor shall ensure that all excavation work is done in accordance with the requirements of Construction Regulation 13 of the OHS Act.
- Digging, excavation, or driving a peg, pile or spike into the ground operations by the Contractor may not commence without the written authorisation from the Client.
- Prior to commencing work on any excavation or trench, utility owners shall be contacted and advised of the proposed work and to determine the location of all underground installations; i.e., sewer, telephone, water, fuel, electrical, etc.
- Overhead hazards shall be assessed and dealt with prior to commencement of work.
- Adequate precautions shall be taken by the Contractor to prevent slumping of excavations, as well as to prevent rocks and loose material falling onto workers.
- All excavations done by the Contractor are to be clearly demarcated and barricaded to prevent accidental access.
- Only solid barricading will be used at areas where a fall hazard is present. Solid barricading and / or hole covers shall be provided around all holes or openings to prevent any person being injured as a result of a fall. Danger tape may only be used as a pre-warning to make the solid barricading more visible and to prevent persons from coming close to the danger area.
- Barricading must be placed as close (500mm from the edge) as possible to the excavation.
- If an excavation or trench endangers the stability of buildings or walls, shoring, bracing, or underpinning will be provided. Excavations and trenches that are adjacent to backfilled excavations or trenches, or which are subject to vibrations from railroad traffic, road traffic, blasting in open cast mining or the operation of machinery (e.g., shovels, cranes, trucks), must be secured by a support system, shield system or other protective systems (i.e., sheet pile shoring, bracing).

- Where it is impracticable to provide fixed guard railing, effective removable barriers shall be provided at all unguarded openings in guard railing or floors, and shall be maintained in position at all times until the hazard no longer exists.
- Warning signs and flashing warning lights at night shall be displayed in suitable positions to warn any persons approaching the area of the location and extent of any excavation.
- No material shall be placed within 3m of the excavation edges.
- All excavations must be on the register and inspected daily and declared safe by the contractor's appointed competent person before work commences and after inclement weather, and findings shall be noted in the said register.
- Client representative together with Contractor representative (management) to review the said register on a pre-determined frequency not exceeding seven (7) days.
- There shall be a supervisor present at all times while work is being performed in an excavation
- There shall be an escape ladder every twelve meters in all excavations
- No work shall commence in an excavation unless the excavation has been declared safe in writing by the appointed competent person.

### 61. Work Stoppage

The aim of the section is to outline the conditions under which work will be stopped and the process to be followed to ensure that the worksite is rendered safe.

The temporary stoppage of an activity/activities or task(s) may be due to SHE concerns, including the following circumstances which shall not warrant any financial compensation:

- Ad hoc safety intervention by Eskom management: All work of a similar nature may be stopped as the result of an occurrence of a serious incident. The relevant supplier shall be required to comply with, and/or verify, the conditions stipulated in the work stoppage instruction pack.
- Ad hoc safety intervention by any person, especially SHE functionaries, may be due to unsafe work or unsafe behaviour by the contractor. The conditions that gave rise to the work stoppage will determine the corrective measures to be taken urgently to protect the health and safety of employees and protect the environment and plant or equipment, etc.

Any person may stop an unsafe act or unsafe condition or activity that poses or may pose a threat to the health and safety of an individual, threat to plant or machinery or create a risk of degradation of the environment.

The Project Manager shall not be liable for any time and cost as a result of such work stoppage.

**Note:** A client or Eskom representative or Contractor representative who deems it necessary to stop an activity as a result of unsafe acts and/or conditions, must do so immediately and in the shortest possible timeframe notify the Eskom Project Manager, OHS Manager and appointed Client Supervisor.

Process:

- Eskom or Client representative must notify the direct contractor supervisor of the unsafe act or condition immediately and instruct them to suspend the activity.

- Failure of the contractor supervisor to stop activity, the Eskom or Client representative must immediately stop the activity.
- All workers must be removed from site if necessary, or from the working area where the unsafe act or condition has been observed.
- The Eskom / Client Agent, Project Manager, OHS Manager and appointed Client Supervisor must be immediately notified.
- A stand-down or safety talk regarding the unsafe act or condition must be discussed with the team members by the observer in the presence of the Contractor.
- No employee shall return to work or the activity shall not commence until a root cause, corrective and preventative actions have been identified and documented by the relevant Contractor.
- If in the opinion of Eskom Agent, Project Manager, OHS Manager and appointed Client Supervisor for the project, it is necessary for a formal investigation to be done in order to identify the root causes and preventative measures prior to commencement of the specific activity posing risk, a stop work notice must be issued by the Eskom Project Manager. The Eskom Agent can also issue an e-mail to stop the activities if in his / her opinion, the work must not commence until the investigation has been completed.
- The working area shall be cordoned off until such time the investigation has been concluded and the investigation report has been signed off by all relevant parties. Once the investigation has been concluded, the stop work notice must be revoked and work can commence.

## 62. Environmental Management

The Contractor must ensure adherence to the Client's Environmental Management Plan (EMP), permits, licenses, legal and other requirements. It is imperative that all applicable licenses and permits are valid.

The Contractor shall comply with all relevant laws, environmental legislation and regulations, conditions of environmental approvals, environmental management plans, and Employers Policies and Procedures.

The Contractor is expected to appoint the following environmental resources for the project where applicable. The contractor requires ensuring that resourcing is in accordance with Project Plan and Schedule for life of work. An estimation of key activities is required to be identified for the life cycle of the project and resource plan requires aligning accordingly. The number of the required resources must be depended on the magnitude of the project or the project scope.

Environmental Personnel Qualifications

| Name of resource | Minimum Qualification | Experience |
|---|---|---|
| Environmental Manager | BSc Environment /B-Tech Environment/ Applicable 4 year degree or approved Alternative<br><br>Professional Registration Body: SACNASP | 7years' Experience in construction, Environmental Legislation and Auditing experience |

| | | |
|---|---|---|
| Senior Environmental Advisor | 4 Year degree or Diploma or 3 year degree or Diploma plus Honours in Natural sciences/environmental management or related subjects<br><br>Professional Registration Body: SACNASP | 4years' experience in Areas of specialisation<br>(Land, Water, Air, Biodiversity, waste management and Construction management.) |
| Environmental Officer | Relevant B degree or National Diploma or B-Tech<br>Professional Registration Body: SACNASP | 3years' experience in Environmental Management |

The curriculum vitae and certificates for these resources shall be submitted to the Client.

Recognized professional registration documentation must also be provided by the contractor.

Refer the EMP document for additional resource requirements.

Rehabilitation Plan must be submitted by the Contractor within timelines agreed with the Client but no later than 60 days prior to commencement of the rehabilitation. The Plan must be reviewed and accepted first by the Client prior to commencement of any activity related to rehabilitation. The Client and Contractor's Environmental Officers shall drive the rehabilitation process from commencement until the areas have been handed over by the Contractor to the Client.

### 62.1 Environmental Management System (EMS)

The Contractor must provide a plan and demonstrate that they have developed, implemented and maintained an EMS.

### 62.2 Compliance Obligation

The Environmental Manager is to provide external audited proof that the project is meeting legal compliance, annually or based on legal changes or as agreed with the Client. Front end planning requires supplying in line with the future compliance checks for life of construction and commissioning. The scope of work of the contractor legal compliance audit must be site applicable and approved by the owner. The compliance obligation will require approved permits, licenses, certificate and authorisations. The contractor must submit permits and licenses related to the scope of work i.e. waste transportation, pest control certificates, and permitted landfill site in compliance with key licenses and permits etc. All external audit reports must be supplied to the owner.

The PC must carry out monthly EH&S Audits on its contractors as per the OHS Act and the PC must make keep the reports in the SHE File and be made available to the Client upon request.

The Contractor must, before commencement of any work, develop project specific EMP, Impacts and Aspects Register and Environmental Management Programs that must be accepted by the Client prior to commencement of work on site.

### 62.3 Construction Layout Diagram or Map

The Contractor shall provide a detailed final site construction layout diagram or map, for approval by the Client, prior to commencement of construction. All available biodiversity information and conditions set out in the EA, EMP and specialist reports shall be used in the finalisation of the layout. Existing infrastructure must be used as far as possible.

### 62.4 Site Establishment

The Contractor shall inform the Client of the intended actions and programme for site establishment and of the proposed location of the construction camp/s and provide him with a plan showing the fences, roads, construction area, yellow plant area, layout of the construction camp, ablution facilities including the positions of all buildings and infrastructure, stockpile and laydown areas, fuel storage for equipment areas, batching areas and other infrastructure. The Construction camp shall occupy as small an area as possible, and no site establishment shall be allowed within 100 m of any watercourse. The site layout shall be planned to facilitate ready access for deliveries, facilitate future works and to curtail any disturbance or security implications for neighbours.

### 62.5 No Go" Areas

Unless otherwise agreed to by the Client, the Contractor shall ensure that all activities are restricted to within the defined Working Area. The areas outside of the defined Working Area as well as any other areas identified by the Client or in this Specification shall be regarded as "no go" areas. Insofar as he has the authority, the Contractor shall ensure that no unauthorised entry, driving, stockpiling, dumping or storage of equipment, plant or materials shall be allowed within the "no go" areas.

Unless demarcated with other fencing, the boundary of the Working Area shall be demarcated using "no go" fencing.

The Client may also identify patches of natural vegetation or any other natural, sensitive or special features inside the Working Area as "no go" areas. These areas shall be demarcated using "no go" fencing.

Once construction within an area has been completed and the area has been rehabilitated, it shall be considered a "no go" area.

### 62.6 Site clearing

#### 62.6.1 Identification and Management of Sensitive Vegetation

At the commencement of the Contract, the Client will identify to the Contractor the areas of natural vegetation that may be disturbed during the execution of the Works as well as the areas of natural vegetation or any rare or endangered flora that shall be preserved. The latter areas shall be designated as "no-go" areas and treated as per the requirements.

Prior to the onset of construction activities within any areas occupied by natural vegetation, a search and rescue operation shall be undertaken by the Client as per the EA and EMPr, to collect rare and endangered plants identified for transplanting or use in the revegetation of affected areas. Search and rescue operations will occur under the direction of a suitable qualified botanical specialist.

No clearing of trees or vegetation shall occur prior to the Contractor obtaining written permission from the Client, who shall designate in detail the exact areas to be cleared and the time at which it shall be done.

The Contractor shall ensure that the clearance of vegetation is strictly restricted to that required to facilitate the execution of the Works. Any natural vegetation, particularly trees, within or immediately adjacent to the Working Area, which do not require removal, shall be fully protected against damage. Vegetation clearance shall be restricted to the construction camp, approved access roads, approved stockpiling and laydown areas, batching plant sites and portions of the Working Area where vegetation interferes with construction activities.

Site clearance shall occur in a planned manner, and cleared areas shall be stabilised as soon as possible. All cleared vegetation shall either be mulched and mixed into the topsoil stockpiles or disposed of at an approved disposal site.

Should fauna be encountered during site clearance, activities shall cease until such fauna have been safely relocated.

### 62.7 Protection of watercourses, water bodies and wetlands

The Contractor shall ensure that all watercourses and water bodies, whether on the surface or below ground, are protected from contamination or degradation as a result of his activities. All watercourses and water bodies shall be protected from direct or indirect spills of pollutants such as solid waste, sewage, cement, oils, fuels, chemicals, aggregate tailings, wash and contaminated water or organic material resulting from the Contractor's activities. In the event of a spill, prompt action shall be taken to clear the polluted or affected areas, and the Client shall be notified immediately.

The Contractor shall not work within the flood plain or 100 year flood line or any watercourses or waterbodies without the written approval of the Client as required for the execution of the work. The Contractor shall not permit his employees to make use of any natural watercourse or waterbody for the purposes of swimming, personal washing and the washing of machinery or clothes.

No excavation or construction shall be permitted within any wetland area.

The Contractor shall ensure that no construction equipment traverses any seasonal or permanent wetland. Where seasonally wet areas must be traversed, the Contractor shall obtain the prior approval of the Client and shall ensure that this only occurs during the dry season.

### 62.8 Spillage of Hazardous Chemical Substances

The Contractor must ensure the following with regards to spillage of hazardous chemical substances:

- Any spillages that occur shall be treated in accordance with the requirements indicated on the Material Safety Data Sheet (MSDS) and Eskom requirements (Spill assessment form)
- Identify appropriate storage areas for stockpiling of materials, storage of hydrocarbons and storage of hazardous substances and ensure that these areas are appropriately prepared for their purpose;
- Disposal of hazardous substances shall be done in terms of the relevant legal requirements;

- Limit spillage of hazardous substances or substances with the potential to cause contamination of the environment;
- Develop emergency protocols for dealing with spillages particularly where these pose a pollution risk or involve hazardous substances;
- Compile and implement the necessary Method Statements ; and undertake environmental awareness training of all staff;
- The PC must develop emergency protocols for dealing with spillages.
- All employees must undertake environmental awareness training and the training must include but not limited to housekeeping, spill response, SDS awareness, etc. Records of such training must be kept and provided to the Client upon request.
- The Contractor must communicate monthly themes received from the Client to its employees and proof of communication must be given back to the Client via transmittals.
- The Contractor must undertake any environmental awareness and training deemed necessary by the Client.
- The Contractor must ensure that the training matrix submitted to the Client has the relevant environmental training for all its employees.

### 62.9 Herbicide and Pesticide usage

The Contractor must ensure the following with regards to use of herbicides on site:

- Only herbicides registered as per the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act 36 of 1947 may be used by the Contractor during the control of pests and weeds. The manufacturer's specification shall be followed.
- Only registered Pest Control Operators (PCO) as per the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act 36 of 1947 may apply herbicides. The PCO registration certificate shall be available on site for verification purposes.
- No herbicides shall be used on site unless the Client has granted permission.
- Herbicide register must be kept detailing the chemical used, quantities on site and quantities used by the PCO. A copy shall be handed to the Eskom Project Manager / Environmental Advisor/ Manager on completion of the project / contract. The Contractor shall strictly adhered to the manufacturer's specifications regarding applications rates, storage and safety precautions.
- The leaching action, residual action, manner of application and the surrounding area (especially wetlands and crops) should be considered in the choice of chemical. This aspect must be carefully monitored when herbicides are applied as the slope of the ground together with the proximity of the stream to the substation site could cause leaching problems. Only registered pest control operators may apply herbicides on a commercial basis. All staff applying herbicides shall be trained in the application thereof, and shall be provided with suitable PPE.

### 62.10. Fire hazard

The Contractor shall develop emergency protocols for dealing with fires, which may include a Fire Management Plan in accordance with the National Veld and Forest Fire Act (No 101 of 1998) and ensure that all staff is educated in fire prevention and will be held responsible to avoid the risk of fire.

No area is to be denuded of vegetation to create firebreaks, to prevent or make fires. No open fires are allowed on site. The contractor shall ensure that operations are in compliance with statutory requirements at all times. The Contractor Environmental Officer shall ensure that in areas with a high fire danger rating, staff are made aware thereof. Smoking shall be restricted to designated areas or shall not be allowed, particularly in areas that have a high fire danger rating.

Contractor shall ensure that adequate Fire Fighting equipment is available on site, particularly near hot work.

No hot work shall take place where there is long grass that can pose as a fire hazard. The Contractor must ensure that the area where hot work is taking place is conducive for such activity. This must be done through a risk assessment.

### 62.11 Waste Management

All Contractors must adhere to the Matimba Power Station Waste Management Procedure, C & I Replacement EMP and all other relevant environments legal documents all times.

All waste generated shall be re-used, recycled and where not practical possible disposed of at a registered landfill site. A register of both hazardous and general waste shall be kept in the SHE File. A waste management plan shall be compiled before commencement of work. Records of waste disposal shall be kept and updated all the time. No waste, be it biodegradable or not, shall be left on site once work has ended.

Domestic and hazardous waste generated shall not be burned, buried, or disposed of on Eskom or Landowner property, but will be controlled and removed to a registered waste site on a regular basis (Daily / Weekly). The Principal Contractor and contractor working on site shall ensure that oil, fuel, and chemicals are confined to specific and secure areas throughout the construction period. These materials shall be stored in a bunded area with adequate containment for potential spills and leaks.

Waste may be collected by the relevant Municipality or alternatively taken by the Contractor to a registered landfill site. Where the Municipality does not have a weighbridge, the Contractor is responsible for obtaining a formal notification to this effect.

Contractors must ensure that sufficient waste bins/containers, with monkey proof lids are made available for waste control at their area of waste generation. The Contractor must inform the Client of all waste streams associated with the project on the EMP. If there is any waste stream that creeps up and was not initially anticipated, the Contractor must inform the Client about it immediately (same shift when the waste stream is identified). The Contractor must comply with the requirements of NEM: Waste Act 59 of 2008, other legal requirements pertaining to waste and Eskom waste management standards.

Quantities of disposed waste shall be recorded and reported on a monthly basis. The Contractor must set up system for regular waste removal to an approved facility and minimize waste by sorting wastes into recyclable and non-recyclable wastes;

Equipment maintenance and storage:

- Ensure that all plant is in good working order;
- Undertake maintenance within specified area (workshop); and use drip trays for all stationary or parked plant and when servicing equipment away from designated areas

### 62.11.1 Waste Management Plan

The Contractor must comply with the Eskom waste management standard and the C & I

Replacement Project EMP. The Contractor must develop and submit an Environmental

Management Plan in line with the Eskom GCD C & I Replacement EMP, the SHE Specification, and the plan must consist of the following but not limited to:

- Waste Register for the project,
- Waste management strategy – to prevent poor housekeeping,
- Programmes to minimise the generation of waste,
- The amount of waste that will be generated and disposed of (Register)
- Measures to prevent pollution or ecological degradation (Procedure/ Method statement)
- Targets for waste minimisation through waste reduction, re-use, recycling and recovery
- Measures or programmes to minimise the generation of waste and the final disposal of waste
- Measures or actions to be taken to prevent the use of specified substances (persistent organic pollutants, Polychlorinated Biphenyls (PCB), Ozone Depletion substances (ODS) and Asbestos
- Opportunities for the reduction of waste generation through changes to packaging, product design or production processes
- Mechanisms for informing the public of the impact of waste generating products or packaging on the environment
- The extent on any financial contribution to be made to support consumer based waste reduction programmes
- The period that is required to implement the waste management plan
- Methods for monitoring and reporting
- The waste class and rating in order to determinate correct disposal method for the waste and any other best practice that may be necessary to give effect to the requirements of National Environmental Management: Waste Act and regulations passed thereunder.
- Approved/licensed waste disposal sites to be used
- Audited Records of waste quantities disposed (Template)
- Compliance obligations

The Contractor must have wheelie bins at the point of waste generation. The Contractor shall

then utilise the existing waste skips, where they have been placed, to dispose of the waste

accumulated in the wheelie bins. The Contractor must also have a waste station at their offices, with wheelie bins of all the different waste streams accumulated in the area.

### 62.11.2 Material requirement

The use of any material or property belonging to any landowner shall not be permitted prior to arrangements with the relevant landowner. Written proof of such agreement shall be handed to project leader / co-coordinator for record keeping.

### 62.12 Dust and Noise

The Contractor shall monitor dust and noise caused by mobile equipment, generators and other equipment during construction. Factors such as wind can often affect the intensity to which these impacts are experienced.

To ensure that noise does not constitute a disturbance during construction activities, all construction works shall occur between specific working hours. This shall be stipulated in the contract.

Mitigation measures to be implemented as required / agreed upon with the project leader / environmental manager/advisor/officer or ECO.

Dust suppression measures shall be in place to reduce the dust caused by the movement of heavy vehicles and other contractor activities.

### 62.13 Environmental Incidents

All environmental incidents such as pollution (air, water, land, noise, etc.), bird kills, and animals killed, plants destroyed, public complaints etc. shall be reported to project leader and / or environmental advisor within 24 hours of its occurrence.

All environmental incidents occurring on site shall be recorded according to Eskom Environmental Management Procedure 240-133087117, detailing how each incident will be managed and rectified. Proof thereof must be kept in an incident register.

Eskom believes that all incidents are preventable. The Contractor shall therefore identify all hazards and risks on site that may result in an incident and control the risk accordingly to avoid incidents from occurring.

In the event of a chemical spill, the source of the spillage shall be isolated, and the spillage contained. The area shall be cordoned off and secured. The Contractor shall maintain spill kits on site at all times and shall ensure that there is always an adequate supply of absorbent material available in the spill kits to absorb/ breakdown and, where possible, be designed to encapsulate minor spillage.

The Contractor shall maintain a list of Emergency Response Contacts in case deployment is required for uncontrollable incidents.

### 62.14 Water Management

No construction shall be allowed within the 1:100 near flood lines. Should any pollution of the watercourse occur, reporting must be done immediately in terms of Section 20 of the National Water Act, and it must be done via Eskom to DWS.

Subject to the prior approval of the Client, water for construction purposes may not be abstracted from watercourses/ water bodies or agricultural sources in the surrounding area. Abstraction of water from a watercourse or water body will require a permit from the Department of Water, Sanitation and Human Settlements, and abstraction from an agricultural source will require the owner's permission. The Contractor shall be responsible for obtaining the necessary authority and landowner approvals prior to undertaking such abstraction. The Contractor shall absolve the Client of any and all legal obligation and risk in this regard.

The quantity of all water abstracted from any watercourses/ water bodies or agricultural sources shall be measured by way of water meter or other devices approved by the Client. The total quantity of water abstracted shall be recorded on a daily basis and reported to the Client each week in writing.

Water usage on site shall be verified with the project leader / environmental advisor to ensure compliance with legislation. Borehole water shall be verified as suitable for human consumption.

All incidents related to water contamination shall be reported within 24 hours. Records of water quantities abstracted should be kept. The contractor must have a water use programme that will measure water use and reduce consumption.

### 62.15 Energy Efficiency

The contractor must have energy efficiency programme that will measure energy consumption and reduce consumption.

### 62.16 Environmental Construction Method Statements

Applicable construction method statements specific to environmental management for the scope are to be provided before contract award unless deemed necessary for mandatory submission

### 62.17 Innovation

The contractor must suggest any innovation ideas to improve environmental performance such as technological improvements.

### 62.18 Climate change

The contractor must ensure that they will have programmes aimed at measuring Green House gases.

The monitoring and measurement will include but not limited to trending, developments of targets and plan for emission reduction.

### 62.19 Rehabilitation

The Contractor shall undertake rehabilitation of disturbed areas requiring revegetation as directed by a qualified botanist/ rehabilitation ecologist. The Contractor shall be responsible for appointing such a suitably qualified rehabilitation/ botanical/ horticultural specialist to compile a rehabilitation plan and oversee the rehabilitation process during and after the construction.

In general, topsoil from the site must be used for rehabilitation and the use of foreign soil/material must be avoided or minimised. Suitable indigenous vegetation must be used in areas where rehabilitation is required. This could be in the form of seeds collected from plants prior to their removal/ clearance, hydro seeding, relocation of rescued plants, on-site nursery plants, as recommended by the Botanist. Additional measures may be required for successful revegetation e.g. windshields, soil additives and soil indentations.

The PC must submit a rehabilitation plan at least 60 days prior to commencement of rehabilitation to the Client for review. The Client shall be given at least ten (10) working days to review and accept the plan.

### 62.20 General requirements

- Ensuring adherence to the environmental specifications;
- Ensuring that Method Statements are submitted to the ECO for approval before any work is undertaken. Any lack of adherence to this will be considered as non-compliance to the specifications.
- Ensuring that any instructions issued by the Engineer, on the advice of the ECO, are adhered to.
- Ensuring that there must be communication tabled in the form of a report at each site meeting, which will document all incidents that have occurred during the period before the site meeting;
- Ensuring that a register is kept at the site office, which lists all the transgressions issued by the ECO;
- Ensuring that a register of all public complaints is maintained.
- Obtain presentation of Key information pertaining to License and permits from the project/Environmental Manager.
- Budget for specialist studies/engineering changes for key risk areas
- Ensure that all employees, including those of sub-contractors receive training before the commencement of construction in order that they can constructively contribute towards the successful implementation of the environmental requirements of the Contract.
- The most important actions by the Contractor to ensure compliance with the environmental requirements, relates to the establishment of an adequate and appropriate organizational structure for ensuring the implementation and monitoring of the requisite environmental controls.
- Compile an Environmental monitoring plans outlining all the construction activities, associated environmental impacts and how they will be mitigated;
- Ensure that the project pricing makes provision for environmental costs and expenditure reporting.
- Contractor shall attach a company waste management plan including the typical waste inventory and templates used for keeping waste records.
- Contractor shall attach Environmental Management system documentation that is aligned to ISO 14001.
- Attend key meetings at Project level i.e. Center of Excellence, External specialist/experts, authorities (DEA, DWS, DMR) etc.

- Include environmental considerations as an item on the agenda of the monthly site meetings
- Undertake environmental awareness training of all site staff during the commencement of each Contract, with regular refreshers for the duration of the Contract.
- Environmental protection shall include, but not be limited to, the following issues:
- Noise pollution, gaseous emissions, noxious and/or offensive odours, liquid waste collection and solid waste separation and collection.
- In the event of any perceived conflict between the “environmental laws” and the contract documents, the contractor shall, prior to commencing the work, refer such conflict to the project management team for clarification. Without limiting the contractor’s responsibilities under the applicable legislation, the work shall be conducted in such a manner as to ensure that:
- No substance that can harm or is likely to harm the environment is allowed to leak, spill or escape from any container or storage area.
- No oil or other effluent is permitted to escape into the drainage system and/or local storm water system.
- No oil or other effluent is permitted to escape into the ground and cause soil contamination.
- All air borne pollutants generated during execution of the Work are contained to prevent air pollution.
- No sediment generated is permitted to escape into the drainage system and/or local storm water system.
- No harmful solids or liquids are permitted to spill from containers whilst in transit on the premises.
- All oil-based waste material shall be kept segregated and placed in sealed 200 litre drums. This material shall be disposed of through a recognized oil recycling company.
- All water-based waste material shall be kept apart. Small amounts shall be collected and stored in 200 litre containers. Large amounts shall be pumped into a bulk tanker for disposal. Prior to disposal, all water-based material shall be sampled to allow analyses to be carried out.

### 63. Signing off of the contract

No project shall be signed off before Business Unit or Department has given assurance that there is plan to address existing environmental liabilities. The responsible person, project leader or environmental advisor shall carry out a physical inspection before acceptance of work done.

No invoice shall be processed before work done is accepted.

The Contractor shall be conversant and in the course of carrying out the Works .The Contractor shall comply with the provisions of all Acts, regulations, ordinances, by-laws, Standards, Codes, Rules and requirements of public, municipal and other authorities.

The Project Team may, at any time, without notice to the Contractor, examine and investigate the Contractors’ compliance with all Applicable Legislation and the environmental management conditions.

At all times during the execution of the Works, the Contractor shall preserve and protect the natural environment in the general area of the site and the external areas that may be affected by his operations.

### 64. SHE Audits

Eskom reserves the right to monitor and conduct unannounced audits to ensure compliance and provide assurance to the Client representatives and their key stakeholders.

The Client shall conduct monthly audits on the PC, and can also select any one of the PC's Contractors and conduct audits on them when it deems necessary.

The PC must conduct monthly audits on all its Contractors.

The Client must provide the Contractor with the report of the audit at least 7 days after the audit has been conducted and the PC is expected to close out any findings raised by the Client on the date agreed to by both parties. Failure to do so, the Client's processes regarding such must be followed.

The PC must ensure that there are signed off audit reports to the Contractors. Any non-conformances (NC) raised must be closed out on or before timelines agreed to by both parties. Failure to close out any NCs by the Contractor, the PC's corrective action and procedure for closing out NCs must be followed.

The Contractor must ensure that there is a master register where all NCs are recorded and tracked for close out. This register must be submitted to the Client on a monthly basis to track compliance.

The Contractor must ensure that proof of close out of NCs is readily available upon request by the Client. The PC must share its update Annual Contractor Audit schedule with the Client on a monthly basis.

### 65. Compliance and Approval of Contractor SHE Plan

The Contractor's SHE Plan will be audited against a compliance checklist so as to confirm compliance to the requirements in the Eskom SHE specifications. Once compliance is confirmed, only then will the contractors SHE plan be approved by the Client for implementation.

### 66. Contractor SHE Performance Evaluation

Eskom shall evaluate contractor SHE performance on an on-going basis against the Eskom requirements.

### 67. Internal Audits

Contractors are required to conduct internal audits on both their employees and their contractors on the implementation of their SHE Plan on a monthly basis or when the scope of work changes. A summary of the findings and the proposed corrective actions shall be submitted to the Eskom Project/Site Manager on the last day of the audit. The report shall be submitted within one week after completion of the audit

### 68. Third Party Legal Compliance Verification Audits

If Contractors have a third party legal compliance verification audit that is to be conducted on the site activities, then a copy of the summary of the findings and the proposed corrective actions shall be submitted to Eskom Project/Site Manager. The written report shall be submitted within one week after the completion of the audit.

### 69. SHE Plan Audits

There will be monthly audits conducted by Eskom on the Principal Contractor/s and/or contractors. These audits shall be attended by the contractor's site manager or his representative.

### 70. Documentation and Records Management

The Principal Contractor shall establish and maintain a documentation and records management system where all project and scope SHE related documentation and records are kept and maintained.

The Client shall have access to this system.

### 71. Incident Investigation

The Principal Contractor and Contactors shall report all incidents/accidents as required in terms of the legislation.

All SHE incident reporting, classification and investigation will be done according to the requirements set out in the Eskom documents 32-95 (Occupational Health and Safety Incident Management Procedure) and 240-13307117 (Environmental Incident Management Procedure) (latest version).

The PC shall ensure that all incidents are immediately reported as soon as possible and by the end of the shift the latest.

The PC shall ensure that all incidents occurring on site, including NM incidents are investigated, root cases identified, corrective, and mitigations implemented. The Contractor shall not commence with activities / activity associated with the incident until root causes, recommendations and preventative measures have been implemented.

### 72. SHE Performance Status Reports

The Contractor must provide all SHE statistical and Non-Statistical Report, dashboards, presentations manpower and man-hour reports on weekly and monthly basis.

The template for submitting weekly statistical information must be provided to the Contractor once SHE File has been accepted. Weekly statistics (headcounts with hours and Contractor project days) must be submitted to the SHE Department every Wednesdays before 10am.

The contractor shall provide a SHE Statistical and Non-Statistical Reports, dashboards, presentations as per the Client requirements.

Reporting must not be later than the 2nd of every month. The reporting format is indicated on Form 75 :( Refer to Annexure D)

The Contractor must ensure that the manpower and hours are obtained from a reliable source (e.g. clocking machine printouts) where these can be verified. This headcount must be submitted daily (PC and its contractors) to the Client before 10am.

### 73. Contractors SHE Plan

All Contractors must use the applicable SHE information herein to develop a suitable and sufficient SHE plan, submitted with tender documents, which will indicate to the Client/Agent the level of compliance to the SHE requirements. The safety, health and environment plan shall identify each construction activity to be undertaken by the Contractor, the foreseeable internal and external hazards, the specific precautions and controls that shall be necessary to ensure that the works proceeds safely and without risks to health or adjacent operations.

All Contractors must use the site specific SHE Specification for the project in order to develop a suitable and sufficient SHE plan which forms part of the SHE File.

Whenever the PC intends on appointing a Contractor, the PC must ensure that the SHE plan is developed in accordance with the Client's SHE specification. The PC must review and accept the Contractor's SHE Plan, then submit it to the Client for acceptance before the Contractor commences with any work on site.

The plan must demonstrate management's commitment to SHE.

Where necessary the Contractor must amend the SHE plan as required by the Client.

### 74. Omissions of this SHE Specification

By drawing up these SHE requirements Eskom has endeavoured to address the most critical aspects relating to SHE issues in order to assist the contractor in adequately addressing the health and safety management of persons on site.

Should Eskom not have addressed all aspects pertaining to the work that is tendered for, the contractor needs to ensure that all applicable SHE requirements are identified and included in their management system.

### 75. SHE File

The PC must submit to the Client a Project Specific SHE File at least 10 (ten) working days for review. Submission of the Plan shall assist the Client in speeding up the CWP application process. No work shall commence without a CWP and an accepted SHE File from the PC.
The PC shall, where it intends to appoint a Contractor, ensure that the Contractor submits a SHE File to the PC for approval. Once the file has been accepted by the PC, it must be submitted to the Client for acceptance. No works shall commence if the Contractor's SHE File has not been accepted. The Client must be given at least 10 (ten) working days to review the Contractor's SHE File.
The following disciplines must review the SHE File before it is accepted: SHE Officer, OHS Manager, Supervisor, EO, CM, Engineer and PM from both the Contractor and the Client's side

The Contractor must have a SHE file in which records of this specification and the SHE plan are kept. All information required in the specification and plan, for the duration of the Principal Contractor and contractors contract, is to be recorded in the file.

- The SHE file that will be maintained will be per construction site.

The Principal Contractor must also record on the file:

- Information about removal or dismantling of installed plant and equipment
- Hands information about equipment needing cleaning and maintenance, for future purposes
- Nature, location and markings of services
- As-built drawings

The file must be kept on site and must be available on request for audit and inspection purposes.

The SHE file shall be handed over to the Client at the end of the Principal Contractor's contract.

The Client shall provide the Contractor with a site specific SHE file index that indicates how the Contractor SHE files must be structured. The Client SHE representative can, at any given time, provide the Contractor with updated requirements for SHE file and the Contractor must update its file within a period of 5 working days and submit to the Client.

The accepted SHE File must be updated daily or as and when required by the Contractor. The file must be easily accessible, readily available on site and must be produced upon request to the Client.

The SHE file must be handed over to the Client at the end of the Principal Contractor's and its Contractor's file. The documentation retention matrix must also be handed over by the PC to the Client.

### 76. Hours of Work

All work conducted on site shall fall within the legal requirements in accordance with the Basic Conditions of Employment Act.

The Principal Contractor will notify their Eskom Project Manager/Supervisor of any work that needs to be performed after hours according to the agreed arrangements. The application needs to be submitted timeously. Where applicable, the notification should include proof of application, for overtime, to the Department of Labour and /or the letter of approval form the Department of Labour.

### 77. Night Work

When night work is to be performed; contractors shall provide sufficient lighting to enable the entire work site to be illuminated to a degree that employees will not work in dark (un-illuminated) or dimly lit areas. Care must be exercised as not to use few lights with high light intensives as this will cause night blindness.

If work is continuing from day light into night, at dusk, a tool box talk must be held where all employees will be advised of the hazards of night work and the extra precautions which require to be taken, i.e. poor housekeeping, stepping on uneven ground, stepping into holes etc.

### 78. Overtime

The PC must ensure that there is sufficient Safety and Supervisor's coverage on each shift work, weekend work, overtime work, emergency work, or whenever work needs to be done on site. The Client's OHS Department and Project Manager must decide whether the number of safety officers and supervisors are sufficient or not for the above mentioned working plan.

The PC must ensure that a working roster and overtime exemption from the DoEL are in place for all their contractors who intend to work overtime / extended hours.

The PC must send a request to the Client's Project Manager and Safety Manager for any overtime / extended hours of work at least a day in advance, or at least 4 hours in advance for any emergency work. The PC must submit the following with the overtime / extended hour's request:

- Exemption from the DoEL.
- Fatigue management plan.
- Roster for them employees working overtime.

The PC may not continue with the overtime / extended hours until permission has been granted in writing, (or telephonically for emergency work and this must be followed up by confirmation in writing by both parties), by the Client's Project and OHS Manager. The PC must submit the request at least 24 hours in advance

### 79. Employees' right of refusal to work in an unsafe situation

Employees have a duty to take reasonable care of their own as well as other person's health and safety at work and to cooperate with the employer, carry out lawful orders, including reporting unsafe situations and incidents.

Refer to Eskom Procedure 240-43848327- Employees' right of refusal to work in an unsafe situation. The aim of the procedure is to ensure that an environment is created that promotes zero harm by empowering employees and contractors to take responsibility for their own safety and that of others.

### 80. Contract Sign Off

The PC shall ensure all the relevant documentation are submitted to the Client at least ten (10) working days after contract award.

On completion of the project, all appointed Contractors must submit their project SHE files to the Principal Contractor. The Principal Contractor shall likewise submit its SHE files to the Client. The must compile a SHE Project Closeout Report for the Project, the Client shall provide the PC with the template of the report and it shall include but not limited to:

- days worked for the project,
- hours worked for the project,
- incident statistics,
- LTIR,
- SHE lessons learned,
- highlights of the project,
- lowlights of the project,
- challenges, etc.

The PC must submit the SHE Project Closeout Report at least 30 days after project Closeout.

## 81. Annexure A: The Client's Occupational Health & Safety Requirements

**The following Minimum OHS -related requirements that bidders have to address and respond to when submitting their tender returnable are as follows:**

Please complete the following form, and where required, submit copies of the appropriate documentation.

| Ref. | Eskom Health and Safety Requirements Checklist | Proof required | Yes | No | N/A |
|---|---|---|---|---|---|
| 1 | **Organisational structure and contact details of key persons** | | | | |
| 1.1 | Provide a copy of your company organogram /structure. (Including roles, responsibility & Accountability in terms of the OHS Act 85 of 1993 and Regulations) | ✓ | | | |
| 1.2 | Provide an OHS resource plan for the proposed scope of work. For each position, stipulate the position titles; roles; responsibilities, qualifications and competencies that will be required for each position. | ✓ | | | |
| 1.3 | Provide CV's of individuals that will fulfil the role of the Construction Health and Safety Manager and Officers.<br>Please provide proof of registration with the SACPCMP for Construction Health and Safety Professionals as per CR 8 (6) | ✓ | | | |
| 1.4 | Provide CV's of individuals that will fulfil the role of the Construction Manager in terms of Construction Regulations 2014, CR 8 (1).<br>Please provide proof of registration with the SACPCMP for Construction Manager as per section 18(1) & (2) of the Project and Construction Management Professions Act 48 of 2000. | ✓ | | | |
| 1.5 | Provide CV's of individuals that will fulfil the role of the Construction Supervisor & Assistant Construction Supervisor in terms of Construction Regulations 2014, CR 8 (7) and (8). | ✓ | | | |
| 2 | **Occupational Health & Safety Plan** | | | | |
| 2.1 | Provide in terms of CR 7 (1) (a) Construction Regulations 2014, an OHS plan for the proposed scope of work in response to this OHS Specification. | ✓ | | | |
| 3 | **OHS Management System** | | | | |
| 3.1 | Does your Company have a recognised OHS Management System? Provide a copy of the certification. | ✓ | | | |

| | | | | | |
|---|---|---|---|---|---|
| 3.2 | Provide plan as to how you would establish the OHS Management system for the duration of the Project? | ✓ | | | |
| 3.3 | Provide a copy of your SHEQ Policy that is signed by your senior management? | ✓ | | | |
| 3.4 | Provide detailed information how the legal register of the applicable national statutes and codes of practices for this project scope of work will be managed. | ✓ | | | |
| 4 | **Occupational health and wellness** | | | | |
| | | | | | |
| 4.1 | Does your Company have an Employee Assistance Programme for employees? | ✓ | | | |
| 4.2 | Does your Company have a medical surveillance programme for employees? | ✓ | | | |
| 4.3 | Provide a detailed plan as to how you will ensure provision of medical facilities, services and assistance at all times on the project. How will you address medical emergencies? | ✓ | | | |
| 4.4 | Does your Company have procedures/work instructions in place to ensure that measures required by COVID-19 directives and guidelines are strictly complied with? | ✓ | | | |
| 5 | **Contractor management** | | | | |
| 5.1 | Explain how you would manage the evaluation and selection process of contractors to ensure that they have the necessary competencies and resources to perform the work safely. | ✓ | | | |
| 5.2 | Please provide a process/ procedure on how you would deal with companies/individuals that have transgressed OHS requirements. | ✓ | | | |
| 5.3 | Explain how you would manage multiple contractor company interfaces on the project. | ✓ | | | |
| **6** | **Hazard identification and risk assessment (HIRA)** | | | | |
| 6.1 | Does your Company have procedures in place for conducting hazard identification and risk assessments and for developing and implementing safe systems of work/method statements? | ✓ | | | |
| 6.2 | Does your Company have a competent person appointed to carry out hazard identification and risk assessments? | ✓ | | | |

| | | | | | |
|---|---|---|---|---|---|
| 6.3 | Does your Company have a standard/procedure on the hierarchy of control principles that is applied to the mitigation of risks? | ✓ | | | |
| 6.4 | Provide a copy of a typical Health and Safety risk profile for a project like this as well as high level interventions that will be implemented to mitigate the risk. | ✓ | | | |
| 6.5 | Provide baseline fire risk assessment and fire safety Plan. | | | | |
| 6.6 | **OHS Operational Controls**<br>What are your company's critical success factors, plans, and requirements in managing high risk construction activities such as (if applicable):<br>• Civil works<br>• Lifting and rigging<br>• Crane Coordinator<br>• Blasting<br>• Hot work<br>• Work at height<br>• Electrical safety<br>Please don't limit response to the above list. | ✓ | | | |
| **7** | **COID** | | | | |
| 7.1 | Is your company registered with COID or with a licensed compensation insurer based on South African legislative requirements and are you still in good standing?<br>If yes, please provide copy of current valid certificate issued by the Compensation Commissioner. | ✓ | | | |
| 8 | **Training** | | | | |
| 8.1 | Does the Company have an orientation and safety induction programme / policy? | ✓ | | | |
| 8.2 | Does the Company have implemented training arrangements in place to ensure that employees have sufficient skills and understanding to discharge their various duties? This includes refresher training that will keep employees updated on legislation and good health and safety practice. This applies throughout the Company, from top management to trainees.<br>Provide list of training interventions ( scope and content) | ✓ | | | |
| 9 | **Costing for OHS** | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 9.1 | Provide a detailed costing for OHS- based on the overall scope of work/services to be performed. | ✓ | | | |
| 10 | **Occupational Hygiene** | | | | |
| 10.1 | Describe how you would implement an occupational Hygiene programme | ✓ | | | |
| 11 | **Leadership Accountability to drive SHE culture within organisation. (Visible Leadership)** | | | | |
| 11.1 | Describe how and what measures are taken by Senior Leadership to actively drive SHE with employees and sub-contractors.<br>Consider the following Criteria:<br>• Visibility on sites where operations take place.<br>• Interventions that leadership drive specifically on SHE matters.<br>• What monitoring mechanisms are in place to verify the above? | ✓ | | | |
| 12 | **References – Provide references of the least two (2) clients** | | | | |
| 12.1 | Has your company managed OHS on a project/similar to this scope of work? If yes, please provide details of client's references and OHS safety performance on the work that your company performed. | ✓ | | | |

COMPANY SIGN-OFF

I acknowledge that the information provided in this Occupational Health and Safety Questionnaire, as part of the Eskom OHS evaluation process, is true and correct.

Company name: ……....

Name and surname: …….

Position: ……..

Signature: ……

Date: …….

| | | | |
|---|---|---|---|
| **FOR OFFICE USE ONLY** | | | |
| **SCORING:** | | | |
| | | | |
| A: Each question qualifies a maximum score of two (2) points. Total possible points | | | |
| Percentage Score = Actual Score<br>Possible Score x 100 = ___ % | | | |
| **1.1.1.1 Comments:** | | | |
| | | | |
| | | | |
| **OHS EVALUATION RESULT – Approved/Not Approved** | | | |
| | | | |
| **NAME OF ASSESSOR: ……** | | | |
| **SIGNATURE: ……..** | | | |
| **DATE: ……..** | | | |

**Evaluation criteria**

| **Legends** | **Rating** | |
|---|---|---|
| Meets Client's Requirements: | **2** | |
| Partial compliance | **1** | |
| Does not meet Client's Requirements: | **0** | |
| | | |

## Appendix A – Eskom Document Hierarchy

### Annexure C

SHE Policy.pdf

Eskoms COVID-19 Health and Safety Poli

### Annexure D

Form 75 Contractor register.doc

### Annexure E:

Safe Work Procedure & Job Observation.dc

### Annexure F:

Sec 176 _National Road Traffic Act, 199

### Annexure G:

TBC

### Annexure H:

TBC

### Annexure I:

HSE File Layout.xlsx