Eskom	**SHE SPECIFICATION** **Technical Work**	**Division/Department/ Section – KZN OU**

Title:
MAQHASHIYA SOLAR PV PROJECTS

Unique Identifier: **240-73198174**

Project Reference Number:

Compiled by	**Compiled by**	**Authorized by**
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…….	…….	…….
Date: 20.08.2026	Date: 21/08/2026	Date: 21 August 2026

ESKOM DISCIPLINE/CONTRACT PORTFOLIO MANAGER

NAME: Nolindo Ndzamela

PROJECT/SITE MANAGER:
NAME:

DESIGNER
NAME:

SIGNATURE: _____ **DATE: _____**

PROJECT ENGINEER:
NAME:

ESKOM: HEALTH AND SAFETY MANAGER
NAME: **Bongani Makhuba**

ESKOM: ENVIRONMENTAL MANAGER
NAME:

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1. INTRODUCTION

Eskom's responsibility and commitment is to ensure a safe working environment is in line with its Safety, Health, Environmental and Quality Policy, along with legislative obligations.

This SHE specification is Eskom's minimum requirements which are required to be met for the specific project and for the duration of the project period by contractors.

The principal contractor is expected to develop a SHE Plan which meets these requirements as well as all the relevant applicable legislation they conform to.

Eskom in no way assumes the principal contractors' legal responsibilities. The principal contractor is and remains accountable for the quality and the execution of his/her health and safety programme, for his employees and appointed contractor employees.

This SHE specification reflects minimum requirements and should not be construed as all encompassing.
Note 1: All the requirements listed hereunder are in relation to the contract and project and do not supersede or replace any organizational SHE requirements.

2. SUPPORTING CLAUSES

2.1 SCOPE

This SHE specification lists the legislative and Eskom requirements and where applicable, any requirements pertaining to Local Authorities / Municipal by-laws / Environmental legislation that must be met by contractors.

2.1.1 Purpose

This document will provide a standardised, approach to the compilation of SHE specifications throughout Eskom for projects and or contracts and NEC 3contracts.

2.1.2 Applicability

This SHE specification is applicable to principal contractors and their appointed contractors who intend in tendering for the project / contract.

2.2 NORMATIVE/INFORMATIVE REFERENCES

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

2.2.1 Normative

[1] 32-524: Developing a SHE Specification and a SHE Plan.

[2] 32-1034 Eskom Procurement and Supply Management Procedure

[3] Basic Conditions of Employment Act No 75 of 1997.

[4] Occupational Health and Safety Act and Regulations No 85 of 1993.

[5] National Environmental Management Act No. 107 of 1998.

[6] National Road Traffic Act 93 of 1996

[7] 32-37 Eskom Substance Abuse Procedure.

[8] Disaster Management Act 57 of 2002

[9] 32-95 Eskom Procedure manual for performing Occupational Health and Safety Management and Environmental Management: Conduct EH&S Incident Management.

1.1.1 INFORMATIVE

[1] 240-77858652 Operating a Vehicle Mounted Crane

[2] DMN 34-318 Road Crossing Overhead Lines (Intermediate Structures on both sides of the Road)

[3] DMN 34-307 Maintain Overhead LV Lines under Energised HV Lines (11kv up to including 132 kV)

[4] DMN 34-314 Road Crossing Overhead Lines (Strain One Side and Intermediate on the other side)

[5] DMN 34-1981 Excavations

[6] 32-345 Vehicle Specification

[7] DMN 34-183 Backfill and Compacting of Excavations

[9] DMN 34-185 Excavation for Lines & Substations

[10] DMN 34-276 Covering of Cable Trenches

[11] DMN 34-279 Barricading of Exposed Excavations

[12] DMN34-281 Installation of Pole-Mounted Transformer on a Reticulation Line

[13] DMN 34-288 Stringing of Conductors and Connections of Droppers

[14] DMN 34-293 Installation of Post Insulators

[15] DMN 34-294 Installation of Surge Arrestors

[16] DMN 34-295 Installation of Earthing on Sub-Transmission Line Structures

[17] DMN 34-1377 Task Manual for Mechanical Handling of Rural Line Poles and Cross arm On a Pole-Trailer and Truck

[18] DMN 34-1660 The use, care, Maintenance and Transportation of Crane Mounted Aerial Bucket

[19] 240-62946386 Vehicle and Driver Safety Management Procedure

[20] DGL 34-190 Access to Farms

[21] Constitution of the Republic of South Africa Act No 108 of 1996

[22] Tobacco Products Control Act 83 of 1993 (Updated 2001.11.19)

[23] 32-418 Working at Height Procedure

[24] DMN 34-96 Replacement of a Rotten / Broken Pole with a Vehicle Mounted Crane

[25] DMN 34-95 Replacement of Pole Dead End Assembly

[27] DMN 34-94 Replacement of Pole Mounted Transformer

[28] DMN 34-92 Replacement of a Rotten / Broken Pole Manually

[29] 240-76677057 Lifting, installing, and securing of LV and MV Cable onto vertical structures.

[30] 240-68701299 tensioning of Stay Wires on an energized Overhead Lines

[31] 240-66129387 Joining LV Conductor and Aerial Bundle conductor (Dead Work)

[32] DMN 34-102 Build LV under Dead MV Lines on the same structure

[33] DMN 34-106 Physical Material Handling

[34] DMN 34-107 Stay Assembly Maintenance and Repair

[35] DMN 34-222 Road Crossing Overhead Lines Strain Poles on both Sides

[36] DMN 34-313 Install / Replace Surge Arrestors (Up to and Including 33KV)

[37] DMN 34-1987 Replacement of Cross Arm

[38] DMN 34-2119 Working with Petrol Drilling Machine

[39] DMN 34-2249 Pulling / Strengthening of Leaning poles.

[40] 240-51065201 Operating a Hydraulic Auger attached to a vehicle mounted crane.

[41] 240-147749433 Working on suspect for unclassified poles.

[42] DMN 34-2120 and 240-77090523 Dismantling of Overhead Lines

[43] 32-123 Emergency Procedure

[44] KZN 16CSTI-168 Replacement Process for Working at Heights PPE Standard

[45] 34-380 Identifying, Analysing and Observing Tasks According to its criticality.

[46] 240-43921804 Driver Risk Profile

[47] 32-107 (240-148880755) Fire Risk Management

[48] 34-1475 / 240-75881496 Procedure for Handling, Auditing & Stacking of New Wooden Poles Standard

[49] 240-62196227 Life Saving Rules Standard

2.3 DEFINITIONS

Definition	Explanation
Appointed contractor	Means a contractor appointed by the principal contractor
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
Business unit (BU)	(32-296) means any defined unit within the Eskom environment, operating as a business under a particular cost-centre number. In the context of this document and in terms of health and safety, any reference to a BU includes a defined unit within any Eskom division and its subsidiaries
Client	(OHS Act) Eskom representative (Internal – Asset Owner), also referred to as the contract administrator/custodian or agent or project manager (as defined in the contract). He/she is the person responsible for ensuring that the works or services are executed in terms of the contract, as well as adherence to legislation pertaining to the contract.

Competent person	(OHS Act) means any person having the knowledge, training, experience, and qualifications, specific to the work or task being performed, provided that, where appropriate, qualifications and training are registered in terms of the South African Qualifications Authority Act, 1995 (Act No. 58 of 1995)
Contractor	(OHS Act) means an employer as defined in section 1 of the Act who performs contracted work and includes principal contractors
Consultant	means a person providing professional advice
Controlled disclosure	controlled disclosure to external parties (either enforced by law or discretionary)
Duty of care to the environment	(32-136) anybody who causes or has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing, or recurring. If such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, such person must minimise and rectify such pollution or degradation of the environment
Employee	(OHS Act) means, subject to the provisions of subsection (2), any person who is employed by or works for an employer and who receives or is entitled to receive any remuneration or who works under the direction or supervision of an employer or any other person
Employer	(OHS Act) means, subject to the provisions of subsection (2), any person who employs or provides work for any person and remunerates that person or expressly or tacitly undertakes to remunerate him/her, but excludes a TES (ex-labour broker) as defined in section 1(1) of the Labour Relations Act 1956 (Act No. 28 of 1956)
Environment	(32-94) means: a) the land, water, and atmosphere of the earth; b) micro-organisms and plant and animal life; and c) any part or combination of (a) and (b) and the interrelationships among and between them, and the physical, chemical, aesthetic, and cultural properties and conditions of the foregoing that influence human health and well-being
Environmental Management plan	A detailed plan of action prepared to ensure that recommendations for enhancing or ensuring positive impacts and limiting or preventing negative environmental impacts are implemented during the life-cycle of a project. This Environmental Management Plan should preferably form part of Eskom's Environmental Management System

Definition	Explanation
Eskom requirements	Eskom requirements flowing from directives, policies, standards, procedures, specifications, work instructions, guidelines, or manuals
Fall protection plan	(OHS Act) means a documented plan of all risks relating to working from an elevated position, considering the nature of work undertaken, and setting out the procedures and methods to be applied in order to eliminate the risk
Hazard	(OHS Act) means a source of, or exposure to, danger
Hazard identification	(OHS Act) 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
Health and safety file	(OHS Act) means a file or other record in permanent form, containing the information required in relation to the contract.

Health and safety plan	(OHS Act) means a document plan that addresses hazards identified and includes safe work procedures to mitigate, reduce, or control hazards identified
Health and safety specification	(OHS Act) means a document specification of all health and safety requirements pertaining to associated to a contract, so as to ensure the health and safety of persons.
Health and safety requirements	means comprehensive health and safety requirements for a contract, project, site, and scope of work. This specification is intended to ensure the health and safety of persons, both workers and the public, and the duty of care to the environment. The health and safety requirements must be specific to each contract, project, site, and scope of work
Lifesaving Rules	(240-62196227) a rule that, if not adhered to, has the potential to cause serious harm to people
Medical Certificate of fitness	(OHS Act) means a certificate valid for one year, issued by an occupational health practitioner, issued in terms of the regulations, whom shall be registered with the Health Professions Council of South Africa
Medical surveillance	(OHS Act) 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	(OHS Act) means a written document detailing the key activities to be performed in order to reduce, as reasonably as practicable, the hazards identified in any risk assessment
Organisation	may be defined as a group of individuals (large of small) that is cooperating under the direction of executive leadership in accomplishment of certain common objects
Pre-job meetings	(34-227) means a meeting that is held prior to the commencement of the day's work and that is attended by all the relevant employees associated with the work task
Principal contractor	(In the text of this document) Means an employer, as defined in section 1 of the OHS Act, who intends to tender for or has signed a contract with Eskom for services rendered.
Provincial director	(OHS Act) means the provincial director as defined in Regulation 1 of the General Administrative Regulations under the Act
Responsible Manager	Is a Manager of a department, section or operating/business unit who has been appointed as part of the Eskom delegation of authority process with the aim to assist the applicable 16(2) assigned person in executing his/her duties in terms of the Occupational Health and Safety Act

Definition	Explanation
Risk assessment	(OHS Act) 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.
Site	(34-228) means an Eskom department, unit, complex, building, specific project, work site, or the site where agents, clients, principal contractors, contractors, suppliers, vendors, and service providers provide a service to Eskom, directly or indirectly
Service provider	any private person or legal entity that provides any service(s) to Eskom for compensation
Subsidiary	(32-94) an enterprise controlled by another (called the parent) through the ownership of greater than 50% of its voting stock

Supplier	(32-1034) means a natural or legal person who renders a service and may include the following current or potential supplier vendor, contractor, consultant
Task	(34-227) a segment of work that requires a set of specific and distinct actions for its completion
Toolbox talks	(34-227) where the team leader, after conducting pre-task planning, shares all the tasks at hand and discusses task allocation, the identified risks, and the control measures with all his/her team members on site before commencing a specific task and documenting the agreed strategy. (This shall be done to ensure common understanding of the tasks, risks, and control measures required.)
The Act	(OHS Act) means the Occupational Health and Safety Act No. 85 of 1993, as amended, and the Regulations thereto
Visitor	any person visiting a workplace with the knowledge of, or under the supervision of, an employer.

2.3.1 CLASSIFICATION

a. **Controlled disclosure:** controlled disclosure to external parties (either enforced by law, or discretionary).

2.4 ABBREVIATIONS

Abbreviation	Description
AIA	Approved Inspection Authority
BU	Business Unit
CE	Chief Executive
CNC	(Eskom) Customer Network Centre
CR	Construction Regulations of the OHS Act
COID	Compensation for Occupational Injuries and Diseases Act
DMR	Driven Machinery Regulations
DEL	Department of Employment and Labour (Inspection and Enforcement services)
EP	Emergency Preparedness
GAR	General Administrative Regulations
GSR	General Safety Regulations
HCS	Hazardous Chemical Substances
LDV	Light Delivery Vehicle
LV	Low Voltage
LoGS	(COID) Letter of Good Standing
MSH Act	Mine Health and Safety Act (Act No. 29 of 1996)
SDS	Safety Data Sheets
NEMA	National Environmental Management Act
OHS Act	Occupational Health and Safety Act and Regulations, 85 of 1993
ORHVS	Operating Regulations for High Voltage Systems
OU	Operating Unit
SACPCMP	South African Council for the Project & Construction Management Professions

SABS	South African Bureau Standard
SANS	South African National Standard

2.5 RELATED/SUPPORTING DOCUMENTS

Eskom OHS Act section 37(2) agreement. 5(1) k Contractor appointment (to be communicated and completed by the project manager and the appointed Principal Contractor).

3. DOCUMENT CONTENT

3.1 SCOPE OF WORK

The project provides off-grid Solar Home Systems (SHSs) as an electrification solution for 59 households and Maqhashiya Primary School in Mashaqiya Village.

The Contractor shall procure, supply, deliver, install, test, commission, document and hand over the complete Solar Home System works, including all associated civil, structural, earthing, lightning protection, equipment installation, quality control, health and safety, environmental management and rehabilitation requirements needed to provide a complete and compliant installation at each approved installation site.

Civil and structural installation scope

- Clear and grub all vegetation and organic material within 1.5 m of the foundation footprint.
- Strip topsoil to a minimum depth of 150 mm in areas to be excavated. Stripped topsoil shall not be used as backfill unless approved for later use by the Environmental Control Officer where applicable.
- Prepare excavations for new foundations so that the bottom is flat, level and horizontal. Where solid rock is encountered at founding depth, clean and dry the surface and implement stepping or dowelling where required to prevent lateral movement.
- Place all backfill in 150 mm layers and compact to 93% Modified AASHTO density. Backfill within 500 mm of the foundation footprint shall not contain organic matter or stones larger than the lesser of 150 mm or two-thirds of the layer thickness.
- Install a 50 mm thick Grade 15 concrete blinding layer before placing reinforcement.
- Prepare suitable steel shuttering / formwork for foundation concrete pouring in accordance with the applicable foundation drawing.
- Accommodate structure earthing within the foundations, in line with the electrical specification and applicable foundation drawings.
- Protect newly placed concrete from rapid drying and extreme temperature changes and cure for at least seven days using accepted curing methods such as water spray, plastic sheeting or approved curing compounds.
- Ensure all structural foundations match the dimensions, positions and engineering details shown on the foundation design drawings.
- Erect all structural load bearing elements in strict accordance with the engineering documentation and structural design drawings.
- Install all structural members and connection systems in accordance with the structural connection design drawings.
- Mount and place Solar PV panels in accordance with the engineer’s provided design and drawing specifications.

Electrical, earthing and lightning protection scope

- Install and connect all equipment detailed in the design in accordance with the relevant Eskom and/or manufacturer specifications, applicable detailed design drawings, project specifications and sound engineering practice.
- Install the Type A earth termination arrangement consisting of two 3 m long, 16 mm diameter copper-clad steel earth rods interconnected using 10 mm diameter round copper conductor.
- Install the round copper conductor at a depth of 0.6 m below finished ground level and concurrently with the earthworks to minimise disturbance of final formed and compacted surfaces.
- Install and bond the conductor within foundations to the steel support structure to provide equipotential bonding and connection to the common earthing system.
- Complete all joints, crossings and interconnections of the earthing system using Silbralloy brazing to achieve permanent, low-resistance and mechanically robust electrical connections. Sample joints shall be approved by the Clerk of Works before brazing proceeds on site.
- Complete joints between round copper and copper-clad steel earth rods using exothermic welding.

• Bond all four corners of the PV carport structure and the equipment enclosure support structure to the main earthing system.
• Install the enclosure earth busbar within the equipment enclosure and connect it to the main earthing system. The busbar shall provide termination points for the inverter, battery system, AC and DC SPDs, equipment enclosures, support structure and associated bonding conductors.
• No earthing or bonding is required for the pole-top box structure where it is non-metallic and does not introduce exposed conductive parts.
• Earth LV cable armouring at both ends through the cable gland where the gland plate is conductive, or by adding an earth ring where the gland plate is non-conductive. Bond earth rings and gland plates to the earth bar/stud where necessary.
• Earth all spare cable cores at the panel end by lugging and bolting the cores together per cable, connected to the earth bar/stud using a single green earth core with ferrules numbered to the cable number.
• Use only brass or stainless-steel bolts, nuts and washers for electrical connections. Galvanised or electroplated bolts are not acceptable for these electrical connections.

3.2 LEGAL COMPLIANCE

3.2.1 Section 37(2) (Legal) Agreement

A section 37(2) agreement must be signed between Eskom and the principal contractor / Joint Venture leader at the time of awarding the contract.

The principal contractor / Joint Venture leader must ensure that a section 37(2) agreement is compiled between the principal contractor / Joint venture leader and all their appointed contractors for the project / contract.

A copy of the section 37(2) agreement must be retained by the project manager and principal contractor. A

copy all the agreements must form part of the respective contractors SHE File.

3.2.2 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:

1. being protected from exploitative labour practices.
2. not to be required or permitted to perform work or provide services that,
   - *i.* are inappropriate for a person of that child’s age; or
   - *ii.* 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 condones the use of child labour and therefore all effort must be exercised, and child labour should not be used.

3.2.3 Notification of Construction Work

Unless otherwise contractually agreed upon, the principal contractor must notify the relevant provincial director of the Department of Employment and Labour of the intention of carrying out any construction work as defined in Construction Regulation 4 of the Act.

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

A copy of the notification letter sent to the DEL shall be forwarded to the project manager on the same day as sent to the DEL. A copy of the letter and their approval must be kept in the SHE File. When the DEL provide a letter of approval, a copy of the approval must be sent to the Eskom project manager and a copy filed in the SHE File with DEL stamp.

3.2.4 OHS Act

All contractors shall 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).

3.2.5 Legislative Compliance

The principal contractor and all appointed contractors will comply with all the legislation pertaining to this project being:

- The Constitution of the Republic of South Africa (particularly Section 24 of the Bill of Rights).
- Occupational Health and Safety Act 1993 (Act 85 of 1993) and its Regulations.
- National Environmental Management Act 1998 (Act 107 of 1998).
- Environment Conservation Act 1989 (Act 73 of 1989).
- National Water Act 1998 (Act 36 of 1998).
- Conservation of Agricultural Resources Act 1983 (Act 43 of 1983).
- Disaster Management Act 57 of 2002
- Civil and Building Work Act.
- National Road Traffic Act 93 of 1996.
- Compensation for Occupational Injures and Diseases Act.
- Applicable South African National Standards (SANS).
- Applicable international standards.
- Eskom Operating Standard for Low Voltage Reticulation Systems.
- SANS Standards –Contractor shall use the relative standards applicable to the project.
- Eskom standards and procedures relative to low voltage work.

3.2.6 Eskomrequirements

Note: All contractors shall, before commencement of work in an allocated Eskom CNC area of responsibility, visit such CNC at least one (1) week prior to entering, advising the CNC supervisor of their intention to perform work in the area.

3.2.7 Appointment of a Principal Contractor

The principal contractor will be appointed by Eskom or Agent on the awarding of the contract and will be responsible and accountable for all legislative and Eskom requirements for the duration of the contract.

Contractors shall not commence with the project work until such times as he/she has been appointed in writing in terms of OHS Act Construction Regulation 5(1)(k), by Eskom or Agent.

3.2.8 Appointment of contractors by Principal Contractor

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 shall carry out a selection process, and vet potential contractors. Once the selection process is completed, then such sub-contractors shall be appointed in writing for the relevant period as required. The specific form from the NEC 3 document should also be filled with the details of the sub-contractor to be used. The sub-contractor to be used should fulfil the Eskom commercial process requirements.

3.2.9 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 as per the Construction Regulation.

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

SHE professionals (which include Construction Safety Officers) are required to register as a professional with the SACPCMP.

Construction Managers are required to register as a professional with the SACPCMP once the new Construction Regulation come into effect.

3.2.10 SHE Policy

A SHE policy is a statement of intent and a commitment by the organisation's CE and senior management in relation to the relevant SHE roles and responsibilities, the achievement of their strategic objectives, values of integrity, customer satisfaction, excellence, and innovation.

Principal Contractors and all appointed contractors, if already not in place, will be required to compile an organisational SHE policy in line with their SHE responsibilities. The policy must be signed by the organisation's CE or the appointed assistant to the CE Section 16(2). Where possible, the policy must be displayed in a prominent place within in the workplace.

3.2.11 COID

The principal contractor and all his/her appointed contractors shall be registered with an appropriate employment compensation commissioner and have available a valid letter of good standing from such commissioner. The obligation lies with the contractors to ensure that the LoGS remain valid throughout the contract period. A copy of the LoGS must be filed in the entire contract SHE files and as an annexure to the SHE Plan. The nature of Business is in line with the Scope of work to be performed.

3.2.12 APPOINTMENTS

1. The principal contractor and appointed contractors must make the relevant legislative and non-statutory appointments, which will be required to remain valid throughout the life of the project.

2. The responsibilities of the individual appointments made must reflect the requirements as listed in the respective Acts and form a part of the appointment.

3. All appointees shall be suitably trained and found to be competent for the responsibilities assigned.

4. Copies of all the appointments must be kept in the relevant SHE files.

5. The under mentioned appointments are required:

6. Relevant statutory appointments shall be made in accordance with the requirements of the OHS Act which includes the requirement of a competent person being appointed in the relevant roles.

3.2.12.1 Statutory appointments

Note - All those that are applicable to the project

- OHS Act, Section 17 – Health and Safety Representative.
- OHS Act General Machinery Regulation 2(1) – Supervision of Machinery
- OHS Act General Machinery Regulation 2(7)(a) – Assistant Supervision of machinery
- OHS Act Construction Regulation 8(1) – Construction Manager
- OHS Act Construction Regulation 8(2) – Assistant Construction Manager
- OHS Act Construction Regulation 8(7) - Construction Supervisor
- OHS Act Construction Regulation 8(8) – Assistant Construction Supervisor
- OHS Act General Administrative Regulation 9(2) – Incident Investigator
- OHS Act Construction Regulation 8(5) – Construction Health and Safety Officer (SACPCMP Reg,)
- OHS Act General Safety Regulations 3(4) – First Aider/s
- OHS Act Section 19 (3) - Health and Safety Committee Member
- OHS Act Section 19(6)(a) – Co-opted Health and Safety Committee member
- OHS Act Driven Machinery Regulation 18(11) - Lifting Machinery Operator (Appointment or Permit)
- OHS Act Driven Machinery Regulation 18(5) & 18(6) - Lifting Machinery Inspector
- OHS Act Driven Machinery Regulation 18(10) (e) - Lifting Tackle Inspector

- OHS Act Electrical Machinery Regulations 10 -Portable Electrical Equipment Inspector
- OHS Act Construction Regulations 5(1)(k) Principal Contractor Appointment
- OHS Act Hazardous Chemical Substances Regulation 3(3) Hazardous Chemical Substances Co- coordinator
- OHS Act Construction Regulation 5(3) (b) Appointment of a Contractor (if appointing subcontractors)
- OHS Act Construction Regulation 9(1) – Risk Assessor
- OHS Act Construction Regulation 10(1) – Fall Protection Developer
- OHS Act: Pressure Equipment Regulations 11 & 12 Portable Gas Container Inspector
- OHS Act: Construction Regulations 13(1) Excavation Supervisor
- OHS Act: Construction Regulations 12(1) Demolition Work Supervisor
- OHS Act: Construction Regulations 14(2) - Scaffolding Supervisor
- OHS Act: Construction Regulations 19(2)(b) Explosive-powered Tool Inspector
- OHS Act: Construction Regulations 19(2)(g)(i) - Person Responsible for Issuing and Collection of Explosive-powered Tools Cartridges and Nails or Studs
- OHS Act: Construction Regulations 22 - Cranes
- OHS Act: Construction Regulations 23(1)(k) - Construction Vehicle and Mobile Plant Inspector
- OHS Act: Construction Regulations 24(d) & (e) -Temporary Electrical Installation Controller
- OHS Act: Construction Regulations 28 - Stacking and Storage Supervisor
- OHS Act: Construction Regulations 29 - Firefighting Equipment Inspector

3.2.12.2 Non statutory appointments

- Eskom requirement – Emergency Planning Co-coordinator
- Eskom requirement – Fire official
- Eskom requirement - Chairperson of Health and Safety Committee

3.3 CONTRACTOR ORGANISATIONAL STRUCTURE

3.3.1 Principal Contractor Organogram

1. The principal contractor must provide an organisational organogram related to this contract, depicting all the levels of responsibility from the CE down to the supervisors responsible for the contract. The relevant positions held names of appointees and legal appointments must be listed and correct referencing used for each appointee as per OSH-ACT 85 of 1993.

2. The principal contractor must ensure that all appointed contractors comply with this requirement. The principal contractor is responsible for keeping copies of all of the organograms' as well as submitting them with the SHE Plan. All organograms shall be updated timeously when appointments are changed, and the responsible client project manager must be informed in writing.

3. This diagram must be kept up to date and filed in the project SHE Files.

4. Resource schedule must align with the Task Order employee list, employee that is not included or reflecting in the resource schedule list will not be regarded as part of the principal contractor / contract employees.

3.3.2 Appointed Contractor/s Organogram

1. Appointed contractors are required to compile their company organogram for the project, listing the reporting structure from their CE down to their project employees. The diagram must list the names, positions held, and any appointments made which need to be site specific and be referenced in line with the OHS- ACT (Act 85 of 1993).

2. This diagram must be kept up to date, a copy of which must be given to the principal contractor and a copy filed in the relevant project SHE Files.

3. This diagram must be kept up to date and filed in the project SHE Files.

4. The Organogram needs to be approved by the CEO / CE of the contacting partner.

3.4 ROLES AND RESPONSIBILITIES

Commitment

Visible commitment is essential to providing a safe work environment. Managers, supervisors and employees at all levels must demonstrate their commitment by being proactively involved in the day-to-day operations, in particular SHE of any project / contract. Legislation requires that each employee must take reasonable care of themselves and their fellow workers, being it management down to the lowest level employee.

3.4.1 Principal contractors and appointed contractors

Note 1: Most of the roles and responsibilities listed apply to both principal contractors and any appointed contractors. Where any are listed do not apply to both, then the specific responsibilities will be listed and titled.

1. Carry out all duties as listed in section 8, 9 and 10, the various other regulations that form part of the OHS Act and Regulation 5 of the Construction Regulations.

2. The principal contractor must notify the provincial director of the Department of Labour in writing of all construction work if it falls within the scope of Regulation 3 of the Construction Regulations (if this has not been arranged and or done by the client/agent);

3. Carry accountability and responsibility for the safety and health of their employees and their appointed contractors within their working area, as contemplated by section 37(2) of the OHS Act;

4. Shall keep a record of all employees including the appointed contractor's employees, including date of induction, relevant skills and licenses, and be able to produce this list at the request of the Eskom Project Manager.

5. Ensure that all their 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.

6. Ensure that the minimum legislative, regulatory, and Eskom SHE requirements are complied with on all work sites.

7. Give the Eskom project managers and line managers (16(2) appointees)/responsible managers their full participation and cooperation.

8. Compile a SHE (health and safety) file where all relevant health and safety records must be kept for each work site which should be compliant with all the OHS Act 85 of 1993 and its regulations requirement.

9. The principal contractor must hand over a consolidated (to include any appointed contractors' files) health and safety file to the Eskom project manager on completion of the project. This is to include all drawings, designs, lists of materials used, and other applicable information about the completed project, as well as the list of appointed contractors, the agreement, and the type of work completed.

10. Contractors must hand over a consolidated (to include any appointed contractors' files) health and safety file to the principal contractor on completion of the project. This is to include all drawings, designs, lists of materials used, and other applicable information about the completed project, as well as the list of appointed contractors, the agreement, and the type of work completed.

11. The principal contractor must provide the project manager with a certified copy of his/her Compensation Commissioner's valid letter of good standing before the commencement of work and any future renewal letters obtained during the project for record-keeping purposes. The letter of good standing shall reflect the name of the contractor's company. Similarly, the principal contractor must provide the Eskom project manager of all the valid letters of good standing from their appointed contractors.

12. Contractors must provide the principal contractor with a certified copy of his/her Compensation Commissioner's valid letter of good standing before the commencement of work and any future renewal letters obtained during the project for record-keeping purposes. The letter of good standing shall reflect the name of the contractor's company and nature of business.

13. Appoint competent staff to perform the project work and ensure that all employees are trained in the health and safety aspects relating to such work and that the employees understand the hazards associated with all other work being carried out on the project.

14. Ensure that all employees are conversant with all relevant work procedures and that they adhere to such procedures. Similarly (without removing the appointed contractors' responsibilities), ensure that their appointed contractors and their employees are conversant with all relevant work procedures and that they adhere to such procedures.

15. Co-ordinate the activities of all the appointed contractors in the interests of safety and health.

16. Ensure that potential contractors (whom they intend appointing) submitting tenders have made detailed provision for the cost of safety and health measures during the construction process.

17. Stop his /her employees and any appointed contractors if construction work is not in accordance with the health and safety plan or if such work poses a threat to the health and safety of persons or a risk of degradation to the environment.

18. Take reasonable steps to ensure cooperation between all their appointed contractors.

19. Only appoint contractors to do work, if satisfied that the contractor has the necessary competencies and resources to perform the work safely.

20. Appoint full-time competent employees in writing to supervise the performance of all specified work throughout the contract period.

Note 2: No work may commence and or continue without the presence of appointed construction.

Supervisors during execution of the contracted work and approval of the site-specific file by the Eskom Safety Officer.

21. Ensure that construction supervisors do not supervise construction work on any site other than the site for which such supervisor has been appointed.

Note 3: In determining the number of appointed competent supervisors, the nature and scope of work being performed, shall be taken into consideration.

Note 4: If enough competent employee(s) have been appointed to assist the construction supervisor, the construction supervisor may supervise more than one site.

22. Appoint a full- or part-time construction safety officer in writing.

23. Not victimise or dismiss employees, by virtue of the employee's divulging health and safety information or suspecting such information has been divulged, in the interests of health and safety requirements.

24. Follow a process of disciplinary action if any of their employees or their appointed contractor employees have transgressed any of the requirements of the health and safety specification, safety and health plans, site rules or any other requirements.

25. Ensure that all appropriate precautions are taken to protect persons (visitors, members of the public, and other contractors) present at work or in the vicinity of a construction site against all risks that may arise from such site.

26. Before the commencement of any construction work, conduct risk assessments which shall include public safety. This should be done by a competent person appointed in writing with a view to identify hazardous and potentially hazardous work operations.

27. Ensure that pre-task risk assessments are conducted and documented daily and prior to the starting of any new task, irrespective of whether it is a repetitive task.

28. Take prime responsibility for all aspects of environmental management associated with the project activity for which they are responsible.

29. Provide any appointed contractor who is making a bid or is appointed to perform construction work with the relevant sections of the documented safety and health specification.

30. Principal contractors are required to approve appointed contractor's health and safety plans if they meet all the requirements.

31. Contractors are required to approve their entire appointed contractor's health and safety plans if they meet all the requirements.

32. Must ensure that an organisation medical surveillance programme for the duration of the contract is in place.

33. Ensure that pre-employment, periodic and exit medicals are carried out on their employees. Medicals must be conducted by an Occupational Health Practitioner. During the pre-employment medical, where employees will be required to work at heights, they will also be required to undergo the required employee physical and psychological fitness examinations.

34. Prior to having pre-employment and periodic medicals fitness examinations conducted, person/man job specifications must be compiled and handed to the occupational health practitioner.

35. Ensure, prior to the commencement of construction work, that all persons involved in the project work, as well as the appointed contractors, have received a health and safety induction training session. Similarly, ensure that all visitors to site undergo the site's induction training.

36. Ensure, prior to the commencement of construction work, that all their employees involved in the project work, as well as the appointed contractors, have received task-specific training.

37. Issue risk-based personal protective equipment (PPE) as a measure of last resort to their employees, inspect such equipment regularly and ensure recipients of PPE be trained in the proper use and care and, where necessary, the maintenance of PPE;

38. **Note 5**: should the principal contractor or his/her appointed contractors entertain visitors to the site, they will be held responsible for the provision and wearing of appropriate PPE of their visitors.

39. Erect their own site huts, temporary buildings, storage areas, toilets, fencing, and any other structure as may be required. Any such structures shall be positioned and erected in compliance with any instructions from the Eskom project manager and the relevant site safety and fire prevention requirements.

40. On completion of the work remove all structures erected by them, and where required by law rehabilitate the environment.

41. Where performing work with the environment, ensure that minimal damage is done and that where an Environment Management Plan is in place, then adhere to the plan.

42. Respect the rights of landowners/lessors and the preservation of their registered activities.

43. Must have a substance abuse program which must be in line with the requirements of the OHS Act.

44. Ensure that no alcohol or other intoxicating substances are brought on to or remains on the work sites.

45. **Note 6:** Eskom will not tolerate the presence of anyone who is or who appears to be under the influence of alcohol or any other intoxicating substance whilst performing work for them or on any work site. They will be requested to immediately leave site, a formal inquiry investigation carried out by the principal contractor. Eskom may initiate a work stoppage on site.

46. Contractors must ensure their and their contractor employees make themselves available for breathalyser and drug testing by Eskom while entering and/or being on any Eskom work site.

47. Develop an organisational substance abuse program and conduct random breathalyser testing.

48. Develop a site emergency preparedness plan for each site and communicate the plan to all employees and contractors.

49. Ensure that all equipment and tools used comply with OHS Act requirements with respect to condition, use, care, storage, maintenance, and the management of these.

50. Ensure that all incidents are reported and investigated timeously by competent incident investigators.

51. Be involved in all their appointed contractor's investigations.

52. Establish health and safety committees, hold such committee meetings on all sites, and ensure that appointed contractors participate in their health and safety meetings.

53. Chair their own health and safety committee meetings and record such meetings.

54. Appoint enough health and safety representatives in terms of legislative requirements and ensure that the appointed contractors appoint health and safety representatives for their work sites.

55. When appointing contractors, advise the project manager in writing timeously and obtain his/her approval prior to them commencing work.

56. Shall keep a record of all employees including the appointed contractor's employees, including date of induction, relevant skills and licenses, and be able to produce this list at the request of the Eskom Project Manager.

57. Stop any employee or contractor from performing construction work which is not in accordance with the principal contractor's and or appointed contractors' health and safety plan which poses a threat to the health and safety of persons.

58. The Principal Contractor must ensure that they comply with the **latest updated guidelines, legislation and Municipality By-Laws** provided by the Government Officials in terms any Disaster and or diseases that might be present at any point in time.

3.4.2 Construction supervisors

Note 1: No work may commence and or continue without the presence of appointed supervisor appointees during performance of the contracted work.

Note 2: It must be noted that the required appointed Construction supervisor (OHS Act CR 8.7) may not leave the site unless there is enough appointed competent subordinate supervisors (OHS Act – CR 8.8) on site to assist with supervision.

1. Not supervise construction work on any construction site other than the site they have been appointed to supervise.

2. Assist the contractor and/or the appointed safety officer in conducting site induction training for new staff and site visitors.

3. Instruct and train all employees under their control on any hazardous and related work procedures, before any work commences and thereafter, at such times as may be determined by a risk assessment.

4. Ensure that the minimum legislative and Eskom SHE requirements are complied with on all work sites.

5. Stop any construction work that is not in accordance with the safety and health plan or if such work poses a threat to the safety and health of persons or a risk of degradation to the environment.

6. Ensure that risk-based personal protective equipment (PPE) has been issued and that employees wear/use the PPE as instructed;

7. Inspect such PPE on a regular basis and record the inspections.

8. Ensure that all incidents are reported to and are investigated by the principal contractor.

9. Be involved in all investigations that occur within their area of responsibility and any others, where required.

10. Carry out audits and or inspections on their contractors at least monthly and any appointed contractors on instructions of their contractor.

11. Carry out frequent behaviour observations of employees under their control at least monthly and any appointed contractors on instructions of their contractor.

12. Ensure that employees under their control are conversant with all relevant work procedures and that they adhere to such procedures.

13. Before the commencement of any construction work, where possible, assist in the conducting of risk assessments and ensure that appropriate mitigating measures have been considered and implemented.;

14. Ensure that pre-task risk assessments are conducted and documented daily and prior to the starting of any new task, irrespective of whether it is a repetitive task. Ensure that the team are involved in the abovementioned risk assessments.

15. Hold toolbox talks at the start of each day/ task to discuss health and safety issues as well as confirming the requirements of the daily risk assessments.

16. Ensure that all appropriate precautions are taken to protect persons (visitors, members of the public, and other contractors) present at work or in the vicinity of a construction site against all risks that may arise from such site.

17. Ensure that no alcohol or other intoxicating substances are brought on to, or remains on, the premises / work sites and that no employee remains on site if he/she is under the influence. Furthermore, report such instances to contract management.

18. Make themselves available and ensure co-operation of employees under their control to undergo breathalyser and drug testing while entering and/or being on any Eskom work site by Eskom;

19. Conduct own organisation's substance abuse program by conducting random breathalyser testing.

20. Ensure that all equipment and tools used on site comply with OHS Act requirements with respect to condition, use, care, storage, maintenance, and the management of these.

21. Ensure that they and their contractor managers give clear and unambiguous instructions for the project work, to the employees for whom they are responsible.

22. Not victimise their employees by virtue of their employee's divulging health and safety information or suspecting such information has been divulged, in the interests of health and safety requirements (reference – section 26 of the OHS Act);

23. Where any work is performed which involves the environment, ensure that minimal damage is done to the environment and that where an Environment Management Plan is in place, then the plan adhere to the plan.

24. Stop any employee or contractor from performing construction work which is not in accordance with the principal contractor's and or appointed contractors' health and safety plan which poses a threat to the health and safety of persons.

3.4.3 Contractor site supervisors/ managers/ foreman / clerk of works

Must:

1. Be competent to perform the required supervisory tasks.

2. Ensure their employees and all appointed contractors comply with the required statutory and Eskom project requirements.

3. Inspect all work done by the Contractors to ensure adherence to Eskom's standards and specifications

4. Conduct follow-up inspections to ensure findings are closed out and preventative action is in place.

5. Monitor contractors for adhere to statutory requirements and safety standards.

6. Monitor contractors overall SHE performance on site to achieve excellent results

7. Ensuring a Safe working environment is established and maintained by the contractor for the elimination of unsafe acts by all people whilst on the project site.

8. Discuss all SHE related problems with the relevant contractor management timeously in the first instance and thereafter the Eskom project manager in the second instance relating to procedure requirements, non- conformances identified, corrective actions, audits and inspection schedules.

9. Ensuring that quality records are maintained in accordance with legislative and Eskom requirements.

10. Continual liaison between the principal contractor, appointed contractors and employees.

11. Ensures that employees and appointed contractors are aware of latest standards, procedures, work instructions and safety regulations issued by Eskom:

12. Conduct site Inspections for compliance to SHE requirements and compiles the relevant inspection reports.

13. Conduct regular behavioural observations on own employees and those of the appointed contractors.

14. Submit the observation reports to the relevant management.

15. Have meaningful participation in the project statutory health and safety committee meetings.

16. Participate in there and their appointed contractor incident investigations.

17. Participate in the principal contractor's emergency preparedness planning.

18. Ensure that their own employees and those of any appointed contractor are competent to perform the tasks assigned.

19. Issue site instructions on behalf of the principal contractor where and when the appointed contractors deviate from safety requirements

20. Assist the principal contractor with the handing over process, in particular the SHE File and relevant documentation.

21. Stop any employee or contractor from performing construction work which is not in accordance with the principal contractor's and or appointed contractors' health and safety plan which poses a threat to the health and safety of persons.

22. Ensure that no alcohol or other intoxicating substances are brought on to, or remains on, the premises / work sites and that no employee remains on site if he/she is under the influence. Furthermore, report such instances to contract management.

23. Make themselves available and ensure co-operation of employees under their control to undergo breathalyser and drug testing while entering and/or being on any Eskom work site by Eskom.

24. Conduct own organisation's substance abuse program by conducting random breathalyser testing.

25. Not victimise any employees, by virtue of them divulging safety and health information in the interests of safety and health requirements or be instructed to do so by any contractor management (reference – section 26 of the OHS Act).

26. Take care of the environment in and around the workplace and prevent ant degradation as a result of any activities performed.

3.4.4 Employees

Must:

1. Be responsible for their own safety and health and that of their co-workers.

2. Co-operate with their employer to meet all of the employer's (client) rules, standards, specifications, procedures and legislative requirements;

3. Familiarise themselves with their responsibilities during induction and awareness training sessions, some of which are:

a. familiarising themselves with their workplaces and safety and health procedures.

b. working in a manner that does not endanger them or cause harm to others.

c. ensuring that the work area is kept tidy.

d. reporting all incidents and near misses.

e. protecting fellow workers against injury by performing job observations.

f. reporting unsafe acts and unsafe conditions.

g. reporting any situation that may become dangerous; and

h. carrying out lawful orders and obeying safety and health rules.

4. Who become aware of any person disregarding a safety notice, instruction, or regulation, immediately report this to the person concerned. If the person persists, stop that person from working, and report the matter to contractor management and/or Eskom's project manager or supervisor immediately.

5. Not damage, alter, remove, render ineffective, or interfere with anything that has been provided for the protection of the site or for the safety and health of persons this includes any guarding of machinery or equipment.

6. Obey any safety signs and always adhere to any site demarcation.

7. When entering or leaving the site, do so via the official designated access/departure routes. Where reflective jackets/bibs are required to be worn, wear them.

8. Be subjected to any disciplinary action, if having transgressed any of the requirements of the health and safety site rules, Eskom requirements, company requirements, or legislative requirements.

9. Avoid any act that may endanger their own health and safety or that of fellow employees, members of the public, or visitors who may be affected by their acts and/or omissions at work.

10. Have the right to obtain proper information from their employer regarding health and safety risks and measures related to the work processes.

11. Use facilities placed at their disposal and not misuse anything provided for their own protection or that of others.

12. Have the right to remove themselves from danger when they have good reason to believe that there is an imminent and serious danger to their health and safety and have the duty to inform their supervisor immediately of such danger.

13. Report to their supervisor (in the first instance), the principal contractor (in the second instance), and/or the Eskom project manager, any substandard acts and/or conditions that have come to their attention and that have not been rectified or acted on by their contractor management timeously.

14. Have the right and the duty at any workplace to participate in ensuring healthy and safe working conditions, to the extent of their control, over the equipment and methods of work adopted.

15. Maintain the surrounding area of the work site in a neat and tidy condition.

16. Have meaningful participation in regular health and safety meetings.

17. Have the right to refuse to perform or continue to perform any task/job on the grounds of health, safety, and environmental concerns.

18. When given instructions, understand the instructions and be permitted to clarify those instructions.

19. Carry out daily pre-task risk assessments and document them, also prior to the starting of any new task, irrespective of whether it is a repetitive task.

20. Ensure that they are not under the influence of alcohol or other intoxicating substance when reporting for work at any Eskom site or be on site if they are under the influence of alcohol or intoxicating substances. Eskom will not tolerate the presence of anyone who is or who appears to be under the influence of alcohol or any other intoxicating substance.

21. Make themselves available for breathalyser and/or drug testing while entering and/or being on any Eskom work site.

22. Ensure that all equipment and tools used comply with OHS Act requirements with respect to condition, use, care, storage, maintenance, and the management of these. No makeshift tools will be permitted to be used during the project.

23. Be provided with risk-based personal protective equipment (PPE) as a measure of last resort, after the risks have been identified and the associated measures for the work have been mitigated as far as is reasonably practicable.

24. Be trained in the proper use and care and, where necessary, the maintenance of PPE.

25. Wear the PPE always provided where the requirements exist and be subjected to any company disciplinary measures for non-compliance.

26. Not victimise any employees, by virtue of them divulging safety and health information in the interests of safety and health requirements, or be instructed to do so by any contractor management (reference – section 26 of the OHS Act); and

27. Shall take care of the environment in and around the workplace and prevent ant degradation as a result of any activities performed.

3.4.5 Contractor safety and health officer

Note: The Part time SHE Officer must be available on sites for a minimum of two days per week and specific days on the week must be agreed upon by the Project Manager who is the project stakeholder.

1. Promote a SHE cultures within the organisations involved in the project / contract

2. The contractor's safety and health officer shall assist in the control of all health and safety-related matters on the sites.

3. Be involved in the developing the project SHE Plan and SHE policy.

4. Be in constant liaison and cooperate with Eskom's SHE professionals responsible for providing them with a health and safety service.

5. Ensure that this SHE specification is adhered to by his/her principal contractor and is submitted to any appointed contractors.

6. Conduct audits and inspections of all work sites for the duration of the project.

7. Be involved in the organisations incident investigations when required.

8. Participate in the organisation's statutory and non-statutory health and safety committees' meetings.

9. Conduct organisational, site and visitor induction training.

10. Stop any employee or contractor from performing construction work which is not in accordance with the principal contractor's and or appointed contractors' health and safety plan which poses a threat to the health and safety of persons.

11. Ensure that no alcohol or other intoxicating substances are brought on to, or remains on, the premises / work sites and that no employee remains on site if he/she is under the influence. Furthermore, report such instances to contract management.

12. Make themselves available and ensure co-operation of employees under their control to undergo breathalyser and drug testing while entering and/or being on any Eskom work site by Eskom.

13. Carry out audits and or inspections on their contractors at least monthly and any appointed contractors on instructions of their contractor.

14. Carry out frequent behaviour observations of employees under their control at least monthly and any appointed contractors on instructions of their contractor.

3.5 HAZARD AND RISK MANAGEMENT

The intent is Zero Tolerance of unsafe acts and conditions on the construction site through the assessment of risk of each operation executed by the Principal Contractor and the provision of the necessary means to eliminate or minimise the risk to ensure a healthy and safe working environment. This needs to be a site specific/ activity-based Risk Assessment for all the work areas. Risks and hazard identified shall also comply and conform to the **latest guidelines and legislation** regarding any type of the Disaster and or disease that might be present at any point in time.

3.5.1 Existing / potential hazards

Refer to the Risk Analysis provided with tender returnable and formulate the Baseline the Risk Assessment in response of the identified risks including those that have not been identified.

3.5.2 High-risk activities

Baseline Risk Assessment will be provided with the Tender documentation.

3.5.3 Risk assessment

1. Activity based risk assessments have been conducted by an appointed and competent person and are included in the project scope of work / if it is not included, the contractor should liaise with the Project Manager about the area risks where the project will be performed.

2. The principal contractor and appointed contractors are required to conduct and document detailed risk assessments along the projected construction line to establish further risks before the commencement of construction work site and during continued construction work, to ensure its relevance to changing scope and/or circumstances.

3. The principal contractor shall demonstrate that the site hazards and the contractor's activity risk and the mitigating measure have been considered in his risk assessments.

4. All emerging risks and hazards shall be managed during construction work.

5. Job/task risk assessments shall be conducted on every task prior to start of that job/task

Guidelines for actual steps involved in a job/task specific risk assessment are:

- Each activity is listed;
- Specific hazards are identified and listed against each activity;
- The magnitude of each risk is rated as Low. Medium or High;
- All known documentary and supervisory controls are listed. For instance: What safe work procedures exist for ladders;

- The relevance, effectiveness and sufficiency of these controls are assessed;
- In the event of insufficient or deficient controls for the particular activity, steps to be taken to rectify this shall be recorded, and safe working procedures drawn up;
- Persons responsible for implementing and supervising the task shall be identified nominated and duly assigned;
- Persons responsible for monitoring the task and carrying out the planned job observation must be nominated;
- Completed risk assessment shall be handed to the Eskom project manager representative for comment and approval;
- The relevant section of the risk assessment shall be issued with a Transmittal Note to the Supervisor nominated as the responsible person; and
- The names of workmen who have received instruction on the work content and the sequence of the activities listed in the risk assessment shall be recorded, and their competence established. This instruction shall be done through an interpreter if required and recorded on the Pre-Job Brief (Daily Safe Task Instructions), with reference to applicable Risk Assessments.

3.5.4 Safe work procedures / method statements

Method statements are a form as to how to prevent an incident occurring during execution. A written safe work procedure is how to execute the task safely.

Contractors work method statements must be required to be meet mandatory standards for designated hazardous activities. These activities must be subjected to ongoing review of the project / contract hazards and risk profiles.

1. Written safe work procedures or method statements must be compiled for the risks and hazards that have been identified during the risk assessments indicating procedures to mitigate reduce or control the risks and hazards.

a. A safe working procedure should be written when:-
b. Designing a new job or task;
c. Changing a job or task;
d. Introducing new equipment or substances; and

2. Reviewing a procedure when problems have been identified, e.g. from near miss incidents or an accident / incident investigation.

a. The safe working procedure should identify:
b. The supervisor for the task or job and the employees who will undertake the task;
c. The tasks that are to be undertaken that pose risks;
d. The equipment and substances that are used in these tasks;
e. The control measures that have been built into these tasks;
f. Any training or qualification needed to undertake the task;
g. The personal protective equipment to be worn;
h. Actions to be undertaken to address safety issues that may arise while undertaking the task.

3.6 WORKING AT HEIGHTS

Note 1: It is the duty of the principal Contractor to ensure that the service provider they are using to train their employees on working at height training requirements complies with the SANS standard and is accredited.

3.6.1 Fall protection plan

1. The requirements of CR 10 and Working at Height Procedure **(32-418)** shall be conformed with and applied.

2. The principal contractor shall compile a fall protection plan (which includes fall prevention where possible) for the task, implement and reviewed such plan.

3. The fall protection plan must be specific to the work that is being conducted. The plan must be compiled by a competent person. Provision must be made for employee rescue. The requirements of Eskom's working at height procedure must be taken into consideration. The drop zone must be established and barricaded whenever there is someone working at height.

4. Where required, conduct specific risk assessments to determine the suitability of climbing methods to be used.

5. Cognisance must be made into all the different climbing methods to be used on the project.

6. Ensure that the relevant training in the use, care and maintenance of the appropriate fall protection and rescue equipment is provided and must be available on site with each climbing team having a Rescue kit at their work site. Trained rescue must be available in the team where there is someone working at height.

3.6.2 Work in elevated positions

All employees working above ground level shall use the appropriate fall protection equipment unless working from a solid platform protected by suitable barricading. **Note 1 –** It is the responsibility of the Principal Contractor to ensure the accreditation of the suppliers that provides the Working at Height trainings for all their employees.

Note 2 – In the event that the scope of work includes the dismantling of structures, it is the duty of the Principal Contractor to ensure that they comply with **Dismantling of Overhead Lines Procedure** (240-77090523).

3.6.3 Pole climbing

All the requirements related to the climbing of poles shall be observed, that is to say, the testing before climbing, the stability of the pole, condition of the pole, the security of any hardware attached to the pole etc. Proper risk assessment must be applied in taking the required control measures that will prevent any measure incident for an employee that will be performing working at height.

The appropriate Distribution task manuals / instructions related to climbing poles shall be used throughout the project.

3.7 INCIDENT MANAGEMENT

1. All incidents relating to the contract (fatalities, lost time, medical treatment, first aid, vehicle accidents, damage to equipment near misses and environmental issues) shall be reported and investigated in terms of the section 24, 25, GAR 8 and 9 of the OHS Act. Compliance **to 32-95** Incident Management procedure is also required. The **latest Guidelines, By-laws and legislation provided by the Government** shall be complied with by the Principal Contractor and its employees regarding the management of any incidents and reporting to the client sites.

2. Copies of the investigation reports must be filed in the contract SHE File.

3. All incidents of a serious nature shall be reported to the Eskom contract responsible manager as soon as practicably as possible.

4. Ensure that all incidents are reported and investigated timeously by competent incident investigators.

Note: Eskom has the right to be involved in any contract related serious incident investigations.

A clear incident management procedure to include any related Biological Hazardous Agent information or any related disaster management information where required.

3.7.1 Reporting

All incidents including near misses occurring at work shall be reported to the relevant site supervisor / manager as soon as practicable but before the end of the shift (i.e. within 24 hours – refer to **Annexure A** and 32-95 Incident Management procedure.

[9] Note 1: If it is found that the Principal Contractor or his appointed contractors are hiding/not reporting incidents then steps (which may include disciplinary action) would be taken against the Line Management of the Principal Contractor and appointed contractor in terms of **32-1034** Eskom Procurement and Supply Management Procedure.

All section 24 incidents shall be reported to the provincial inspector of the Department of Employment and Labour (DEL) section 25 incidents shall be reported to the chief inspector of the DEL.

3.7.2 Investigation

1. All incidents related to work being performed for Eskom shall be investigated in terms of the OHS Act sections 24 and 25 and conducted in terms of document **32-95 Eskom Procedure Manual for conducting EH&S Incident Management** (full title is listed in Normative References).

2. Investigations shall be conducted by a appointed competent investigator who will compile the appropriate incident report form as listed in the OHS Act Annexure 1. Investigation must be initiated within the period of 48 hours and concluded within a period of 30 days.

3. A comprehensive and detailed investigation report shall be submitted to the Eskom project manager within 7 -14 days after the incident.

4. All incidents that were in contravention of any one of Eskom's lifesaving rules must be presented by the relevant contractor manager to the project manager and where required to the OU responsible manager.

Eskom must be permitted to participate in investigations if the incident is directly linked to any activity within the scope of the construction project.

3.7.3 Close out

All incident investigation reports shall be closed out once all the recommendations to prevent further incidents have been carried out and a copy of the investigation report must be handed to the OU Risk Manager. Close out procedure ideally must be done as soon as practicable (i.e. investigation completed or concluded within 30 days period). Undue time delays must be avoided.

3.8 PERSONNEL HEALTH / HYGIENE FACILITIES

3.8.1 Dining areas

1. Where employees are required to consume food and refreshments at the workplace, this must be done in a humane manner.

2. Where meals are consumed in the field, then appropriate shaded areas and clean water to be provided for washing of hands and eating utensils.

3. If the consumption is done in the contractor's camp, then adequate dining facilities must be provided and kept hygienically clean.

4. Dining areas shall have suitable and sufficient tables and chairs for seating whilst eating.

5. Adequate provision must be provided for washing cooking and eating utensils.

6. Dining areas shall be kept in a clean and tidy manner.

3.8.2 Ablution facilities

At the workplace, where possible, all contractors must provide sufficient portable ablution facilities for the employees. Such facilities must be serviced regularly and should be separated for each gender.

3.8.3 Drinking Water

All contractors shall provide suitable drinking water for all their employees I (free of charge) whilst working in the field. Every effort must be made to keep the water as cold as possible.

3.8.4 Changing areas and Lockers

All contractors shall provide suitable changing facilities for employees, irrespective if they change at the premises or at the workplace. Once again, cognisance must be taken of the dignity of fellow workers and members of the public.

3.8.5 Camp / Office Welfare

1. The following welfare facilities must be provided for in a clean and suitable condition, unless agreement with the Client/Agent's representative has been confirmed regarding the use of existing facilities (Refer to Construction Regulation):

a. Shower facilities.

b. Sanitary facilities.

c. Changing facilities.

d. Eating areas.

e. Drinking water at strategic locations on site.

f. Safe pedestrian's walkways.

2. Water for drinking/consumption purposes shall be drawn only from taps in dining areas and ablution blocks and at points on Site marked “drinking water”.

3. No equipment or system shall be connected onto the drinking water system without prior approval of the Client/Agent’s representative.

4. All contractors must supply enough (cool) potable water on each worksite and in vehicles

5. The Contractor will be required to provide their own accommodation for the workers.

3.9 FOOD HANDLING HYGIENE

3.9.1 Storage

Where camps are established, adequate cold storage must be supplied for the storage of food.

3.9.2 Transportation

Where bulk purchasing is carried out, all food must be transported in appropriate sealable containers.

3.9.3 Handling

Where camp cooks are employed the appropriate hygienic conditions within the kitchen and utensil washing facilities must be maintained.

3.10 OCCUPATIONAL HEALTH, HYGIENE AND REHABILITATION

All contractors are required to develop an Occupational Health, Hygiene and Rehabilitation program. The program is intended to ensure that the risks to health are identified and controlled.

3.10.1 Medicals

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

1. Principal contractors must ensure that their and their appointed contractors have a medical surveillance program whereby their employees undergo entry, periodic and exit medical fitness examinations.

2. In order for the appropriate medical examinations to be conducted, each employee must have a person job specification (profile), which must indicate the description of work, list of hazards and potential occupational exposure limits, physical hazards and required physical attributes.

3. For employees working on the contract, medical fitness certificates shall be renewed annually for employees who are not office bound including drivers and once every 3 years for employees that are office bound. This shall be maintained until completion of the contract.

4. The Principal Contractor must ensure that his / her employees and sub-contractor employees have undergone pre-entry medical examination before starting work on the contract, should it be for longer than three (3) days.

5. The principal contractor shall provide a documented process for managing those employees who are issued with a conditional certificate of fitness.

3.10.2 Health and wellness HIV / Aids / Any Biological Hazardous Agent diseases

Contractors shall submit details of their Employee Health and Wellness Programme as part of their Health and Safety Plan which should include awareness training, support for contracted illness and sharing knowledge with members of the public in the immediate work environment.

3.10.3 EAP

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

3.10.4 Occupational Hygiene

The principal Contractors must ensure that they comply with the latest Government guidelines, By-laws and legislation in terms of managing and reporting any Occupational Disease within their workplace.

3.10.4.1 Thermal Conditions

1. Contractors must protect their employees against the natural thermal conditions, by providing sufficient and suitable cold weather gear for the winter months and suitable rain wear for the rainy seasons.

2. In hot conditions, contractors must prevent the effects of heat fatigue and heat exhaustion by providing sufficient rest periods, shade cover and re-hydration mineral replenishment fluids. Where the heat index and the humidity levels reach the required dangerous levels, contractors shall stop work for that period.

3. Suitable drinking water as listed in paragraph 3.8.3 shall be provided

3.10.4.2 Noise induced hearing loss

1. Where mechanical and or electrical devises are used which emit a noise, then a risk assessment and noise survey shall be conducted to establish the noise levels and determine as to what type of hearing protection must be supplied.

2. Contractors shall provide the appropriate hearing protection, train the users in the use, care and maintenance of such equipment.

3.10.4.3 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.

3.11 ENVIRONMENTAL MANAGEMENT

Note 1: 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.

Note 2: Environmental protection shall include, but not be limited to, noise pollution, gaseous emissions, noxious and/or offensive odours, liquid waste collection and solid waste separation and collection.

1. One of Eskom's environmental strategies is the development and implementation of an environmental management system (EMS). Linked to this is a requirement for the development and implementation of environmental management programmes (EMPs).

2. Contract organisations are expected to develop strategies in order to prevent any environmental impact in relation to the type business they conduct.

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

4. The Eskom audit team may at any time without notice to the contractors examine and investigate the contractors' compliance with all applicable legislation and the environmental management conditions.

5. 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/her operations.

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

3.11.1 Duty of care

1. Where the project involves working directly with the environment, contractors shall take care in preventing environmental degradation, throughout the project. Where tasks involve damaging the environment, then the contractor shall rehabilitate such damage to the satisfaction of the landowner.

2. All construction work shall require an environmental management plan (EMP) that sets out what actions will be taken for what activities, to ensure environmental impact is avoided, reduced and impacted areas rehabilitated and restored.

3. Commencement of construction activities may only commence once there is confirmation that all required environmental approvals (e.g. environmental authorisation, water use license, tree cutting license, atmospheric emissions license, records of decisions from relevant heritage agency). If no environmental approvals are required, this must be confirmed and signed off by the project manager.

4. Where required the principal contractor must appoint an Environmental Control Officer who will be responsible to ensure that all the project environmental legislative and Eskom requirements are adhered to.

3.11.2 Spillage of Hazardous Chemical Substances

1. Where any type of spillages occur which will be detrimental to the environment, such spillage will be cleaned up immediately, rehabilitation of the area carried out and the incident reported and investigated.

2. No servicing of mobile equipment and any vehicle is permitted at the worksite.

3. No substance, which can harm or is likely to harm the environment, is to be allowed to leak, spill or escape from any container or storage area.

3.11.3 Fire hazard

1. Contractors shall ensure that staff are educated in fire prevention and will be held responsible to avoid the risk of fire.

2. No area is to be denuded of vegetation to create firebreaks, to prevent or make fires.

3. No open fires are allowed on site.

4. The contractor must ensure that operations are in compliance with statutory requirements at all times.

3.11.4 Dust and Noise

1. Contractors 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. Where there are complaints from the landowner, then these must be acted upon.

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

3. Mitigation measures to be implemented as required / agreed upon with the project leader / environmental advisor.

4. Dust suppression measures must be in place to reduce the dust caused by the movement of heavy vehicles.

3.11.5 Environmental Incidents

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

2. All environmental incidents occurring on site must be recorded, detailing how each incident was dealt with. Proof thereof must be kept in an incident register.

3. The Contractor will be held liable for any infringement of statutory requirements of the Environmental Conservation Act, No 73 of 1989, or any other relevant legislation.

3.11.6 Herbicide application

1. If herbicides are to be used for the clearance of servitude, the application of herbicides are to be in accordance with the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act No. 36 of 1947. Only approved and tested herbicides with a low environmental risk shall be used.

2. Only registered pest control operators may apply herbicides on a commercial basis. All staff applying herbicides must be trained in the application of herbicides.

3. Herbicide register for usage to be compiled and maintained, and a copy handed to the project leader / environmental advisor on completion of the project / contract.

4. Care must be exercised when working and or residing near any water course. The pollution of such water course will be viewed in a serious light.

3.11.7 Waste management

1. All contractors must compile a waste management plan before commencing of work.

2. A register of hazardous waste must be kept which will include a record of disposal.

3. No waste, whether it be biodegradable or not, is to be left on the worksite once work has ended for the day.

4. All waste, including domestic and hazardous waste generated will not be burned, buried, or disposed of on any landowners' property. All waste must be removed to a registered waste site on a regular basis. (Daily / Weekly) and where material waste is to be returned to a storage facility, this will be done in terms of the disposal procedure for such material.

5. The contractor and sub-contractor working on site must ensure that oil, fuel, and chemicals are confined to specific and secure areas throughout the construction period. These materials must be stored in a bounded area with adequate containment for potential spills and leaks.

6. All oil-based waste material shall be kept segregated and placed in sealed 200 litre drums. This material shall be disposed of through a recognised oil recycling company.

3.11.8 Water Environments

1. No construction is allowed within the 1:100-year flood lines. Should any pollution of the watercourse occur, the Department of Water Affairs and Forestry must be notified immediately.

2. Water usage on site to be provided by the respective contractors. If bore hole water is to be used, this must be verified for human consumption fitness. All incidents related to water contamination to be reported within 24 hours.

3. Chemical toilets may not be within close proximity of the drainage systems or close to water ways (rivers etc.).

4. Ablution wastewater may not run or leach into any water courses. Appropriate soak pits / septic tanks must be utilised, being located in areas allocated by either the local authorities or the project manager or SHE functionaries.

3.11.9 Existing environment

Where there is a valid reason to damage any part of the environment / landowner's property, consultation must be made first with the landowner and a contract be drawn up between the landowner, project manager and the principal contractor. In the agreement, a section must address rehabilitation of the land.

3.11.10 Environmental signing off of the contract

The project must not be signed off before the OU has given assurance that no environmental liabilities exist. The responsible person, project manager or environmental advisor shall carry out a physical inspection before acceptance of work done. No invoice to be processed before work is accepted.

3.12 EMERGENCY MANAGEMENT

1. The art of emergency preparedness and response is to minimise the effects of any emergency and to restore normal activities as soon as practical.

2. If using an Eskom site, then the contractor's emergency plan must compliment the Eskom sites, emergency plan.

3. The Principal Contractor, together with his appointed contractors, will develop their own emergency response plan for both their worksites and offices. Where any office and or site is located within any Local Authorities area, then the plans must include their involvement. **Note-** Refer to procedure 32-123 as a guide.

3.12.1 Emergency preparedness

Periodic emergency drills must be undertaken to test the effectiveness of the plan. This must be recorded and provided on request.

3.12.2 Offices

The EP plans must accommodate on 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. and to include the **GPS co- ordinates** which must be made visible for all employees.

3.12.3 Site Plans

When preparing worksite EP 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 must ensure that sufficient numbers of employees are trained in the various disciplines to be able to afford prompt response attention.

3.13 FIRE RISK MANAGEMENT

Contractors shall ensure that staff are educated in fire prevention and will be held responsible to avoid the risk of fire. Ideally, all employees should receive basic training in fire prevention and use of fire equipment.

3.13.1 Building fire plans

No work will be done in any buildings.

3.13.2 Offices and camp sites

1. 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.

2. 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.

3. 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.

4. 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.

5. Smoking is not permitted indoors, at entrances to buildings or near air intake systems as per the Tobacco Control Act and Eskom Policy and legislation requirements.

3.13.3 Construction Sites

Note1: 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 must ensure that operations are in compliance with statutory requirements at all times.

1. Contractors must 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/s, type of work being done (e.g. cutting, welding, grinding, etc.) and amount of combustible materials. Cognisance of **OHS Act CR 29** must be made.

2. It must be developed in accordance with the hot work permit of the, Eskom **Fire Risk Management (Refer to 32-107)** 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.

3. A suitable fire warning system for alerting site personnel to a fire shall be provided, and capable of being heard in all areas of the site.

4. Appropriate portable extinguishers must be available on the construction site and in cases of hot work, be readily available at the location with sand filled in buckets.

5. Storage of combustible and flammable liquid in the construction site is not permitted unless stored in approved flammable cabinets or outdoors away from the buildings. Cage must have a bundle wall able to contain and prevent any leaks of the contained flammable material.

6. Site Smoking Restrictions must be enforced. No open flames are permissible and where hot work is performed then the work areas must be cleared of any combustibles prior to start work.

3.13.4 Fire Equipment and maintenance

1. All firefighting equipment that has been provided shall:

a. Be clearly labelled

b. Conspicuously numbered

c. Entered in a register

d. Inspected monthly by a competent person

2. Tested and serviced at recommended intervals by an accredited supplier

3. Results entered in the register and signed by competent person.

3.13.5 Flammable and Combustible Liquids

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

2. A maximum storage of 40 litres of fuel is allowed to be stored. Anything greater than 40 litres to be stored a flammable / combustible liquid store.

3. Adequate numbers of dry chemical fire extinguishers, each with a minimum capacity of 4.5 kg, shall be provided, installed and maintained.

4. All fuel storage areas must comply with the following requirements: -

a. Storage should be well clear of buildings.

b. Storage areas must be kept free from all combustible materials.

c. All danger signs must be prominently displayed, i.e.

d. Flammable Liquid.

e. No Smoking.

f. No Naked flames.

g. Hazchem identification.

h. Adequate firefighting equipment must be available.

5. Diesel tanks will be installed in a bounded area; bounded area must be able to contain 110% of tank capacity.

6. Bounded area shall be of a concrete or steel construction and lined with a leak proof sealing material.

7. Bounded area shall have a drain valve.

8. No other material/equipment shall be stored in the bounded area.

3.13.6 Refuelling

With the exception of construction vehicles and mobile equipment, before a machine is refuelled, the motor must be stopped. Refuelling shall take place at designated safe areas and appropriate warning signs installed. Suitable drip trays must be used to prevent spillage at the filling nozzle.

3.14 FIRST AID AND EQUIPMENT

1. The requirements of the OHS Act GSR 3 must be observed.

2. First aid appointments must be made to meet the requirements; this includes construction sites. Appointees must be trained to level 2. It is good practice for all employees to be trained to at least level 1.

3. When appointing employees for work sites, cognisance must be taken into account the type of work performed, the distance teams are working apart and the terrain to be covered if an emergency should arise.

4. A list of emergency numbers must be posted at phones and in every office and available in vehicles and if practicable, provided employees with stickers, with the emergency numbers printed on, to place inside their hardhats.

5. Principal Contractor must ensure that his /her employees and appointed contractor employees are familiar with the emergency numbers

6. 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, again taking into account the type of work performed the distance teams are working apart and the terrain to be covered if an emergency should arise.

7. More first aid boxes shall be provided if the risks dictate. Boxes must be available and accessible for the immediate treatment of injured persons at that workplace.

8. For offices, signs 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 shall be erected.

9. The appropriate stick-on signage must be placed on the outside of vehicles and or mobile equipment to where first aid boxes are located as close as to where the box is located.

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

3.14.1 Boxes and equipment

The following is a list of minimum contents of a first aid box:

- tem 1: Wound cleaner/antiseptic (100ml).
- tem 2: Swabs for cleaning wounds.
- tem 3: Cotton wool for padding (100 g).
- tem 4: Sterile gauze (minimum quantity 10).
- tem 5: 1 Pair of forceps (for splinters).
- tem 6: 1 Pair of scissors (minimum size 100 mm).
- tem 7: 1 Set of safety pins.
- tem 8: 4 Triangular bandages.
- tem 9: 4 Roller bandages (75 mm X 5 m).

- tem 10: 4 Roller bandages (100 mm X 5 m).
- tem 11: 1 Roll of elastic adhesive (25 mm X 3 m).
- tem 12: 1 Non-allergenic adhesive strip (25 mm X 3 m).
- tem 13: 1 Packet of adhesive dressing strips (minimum quantity, 10 assorted sizes).
- tem 14: 4 First aid dressings (75 mm X 100 mm).
- tem 15: 4 First aid dressings (150 mm x 200 mm).
- tem 16: 2 Straight splints.
- tem 17: 2 Pairs large and 2 pairs medium disposable latex gloves.
- tem 18: 2 CPR mouth pieces or similar devices.

A content check list must be available with all boxes and boxes shall be checked on a regular basis, kept clean and dust free. The latest updated content should align to all first aid requirements within the legislation.

3.15 SHE COMMUNICATION SYSTEMS

1. Principal Contractor/s and their appointed contractors must develop a communication strategy outlining how they intend to communicate SHE issues to their staff, the mediums they will employ and how they will measure the effectiveness of their SHE communication. Below is a brief on how communication should take place.

2. Where project meetings are conducted on site, SHE shall include as a standing agenda point and minutes of these meetings shall be available on site at all times.

3. Minutes of meeting must be compiled and filed in the relevant SHE files. All employees shall have access to these minutes.

4. Attendance lists shall be kept for all the health and safety meetings.

5. It is a requirement that all employees attend and are involved in health and safety committees.

3.15.1 Statutory Health and Safety Committees

1. The principal contractor shall establish statutory health and safety committee in terms of Section 19 of the OHS Act, Act.

2. Similarly, appointed contractors shall establish their own statutory health and safety committee.

3. All appointed contractors shall be members of the principal contractor’s safety committee.

4. The Committee shall meet to discuss SHE issues concerning the current work being performed, training, upcoming work and SHE requirements, incidents and lessons learned specific SHE problems, safety performance, action plans and other relevant SHE issues. Listed below is a preferred agenda.

5. SHE representatives for a workplace shall be members of the relevant workplace safety committees (Refer to Section 19 (2) (a) of the OHS Act).

6. The number of persons nominated by employer must not be more than the Health and Safety Representatives on that specific statutory health and safety committee. (Refer to Section 19(2)(c) of the OHS Act)

7. A statutory health and safety committee meeting shall be held at least 3 monthly (where medium to high-risk work is involved, more frequent if required), and all appointed members of the committee shall attend the meeting.

8. Statutory health and safety committees may make recommendations to the principal contractor and the project manager and the Inspector at the DEL.

9. All health and safety committees shall discuss all project relevant OHS Act Section 24 and 25 incidents and other notified serious incidents.

10. All health and safety committees shall follow up on incident investigation recommendations and shall keep record of all recommendations made by the committee.

11. Statutory health and safety committees may, where appropriate, make recommendations for the revision of current standards, procedures and practices.

12. The principal contractor and appointed contractors shall ensure that statutory and non-statutory health and safety committees carry out their duties.

13. The chairperson of all health and safety committees shall be selected and appointed by the contractor. The appointed chairperson must be competent to chair meetings and be able to make informed decisions.

3.15.2 non-statutory health and safety committees

1. Where there are large worksites, then non-statutory sub-committee must be established within that worksite to assist with the communication of health and safety related matters between the statutory health and safety committee and the workplace.

2. The duties and responsibilities of the non- statutory health and safety committees will be the same as the statutory safety committee.

3.15.3 Agenda

1. All health and safety committee meetings shall be covered by an agenda that is circulated or posted on a notice board at least three days before the meeting is scheduled to take place.

- List of agenda items:
- Matters arising from previous minutes
- Matters arising from Contractor's SHE meetings.
- Audit results and feedback
- Review Health and Safety Representative Inspection Reports
- Review
- Incident investigation reports
- Non-Conformances
- Announcements (near miss/injury/damage)
- Follow up on recommendations made by the employer in incident investigation reports
- Accident Prevention – Safety Promotion
- Behavioural Observations / Planned Job Observations
- SHE Training
- Protective clothing and equipment
- Incident Announcements / Recall
- Forthcoming High hazard activities.
- Non-conformances.
- Housekeeping.
- Work permits.
- Work procedures.
- Hazardous materials / substances.
- Fire Prevention
- Occupational Hygiene Assessments, Health Risks and Actions
- Security
- Construction vehicles and mobile equipment
- Rules, Instructions
- Public Safety
- Environmental Management
- Emergency Preparedness
- Statistics report

- Closure

3.15.4 Management committees

Where management meetings are conducted, SHE shall include as a standing agenda point and minutes of these meetings shall be available on site at all times.

3.15.5 Minutes and action items for all health and safety committee meetings

1. Minutes and record of action items shall be kept of all health and safety committee meetings.

2. Action column with target dates and responsible person shall be clearly visible on the minutes and shall be completed during the meeting.

3. Statutory health and safety committee meeting minutes and record of action items shall be kept for the duration of the project or a minimum period of three years.

4. Non–statutory health and safety committee meeting minutes shall be kept for the duration of the project or a minimum period of 12 months.

5. All other meeting minutes where SHE is on the agenda, shall be kept for a minimum period of 12 months.

6. The original copy of the minutes and record of the action items must be signed by the chairperson.

7. For principal contractor's meetings, a copy must be forwarded to the project manager within 7 calendar days. For appointed contractors, a copy must be forwarded to the principal contractor within 7 calendar days.

8. The relevant project manager and principal contractor shall endorse the relevant minutes with his/her recommendations and return the minutes to the relevant contractor's chairperson within 14 calendar days of the meeting.

3.15.6 Toolbox talks / Daily team talks / pre job meetings

1. A meeting must be held prior to the commencement of the day's work with all relevant personnel associated with the work task in attendance. The job, relevant procedures, associated hazards, safety measures, i.e., the task risk assessments shall be discussed. Each employee who attends the briefing shall sign an attendance list of that pre-job brief form undertaking that they have an understanding of the tasks, risks and control measures required.

2. Where possible, toolbox talks can be included in the pre-job brief meetings. If this does not occur, then weekly toolbox talks must be conducted. The toolbox talk topics will be based on SHE issues pertaining to the construction site and or the project. The topic contents shall be in writing. Attendance registers with the topic listed shall be kept.

3.16 SHE TRAINING

NB. Please ensure that all training certificates are provided with the Stamped Accreditation Certificate by the Service Provider.

1. The principal contractor, when making a bid for this project shall provide a breakdown list of the SHE training requirements and the costing of such requirements. Similarly, appointed contractor must provide the same requirements when bidding with the principal contractor.

2. The scope of training includes but is not limited to the type of work being performed and the relevant procedures. Additional to the requirements, will be that the principal contractor and sub-contractors must have the appropriate qualifications, certificates and employees are under competent supervision.

3. Where legislative and Eskom recommended appointments are made, the relevant training shall be given to those appointees prior to the accepting their appointment.

4. When there is an amendment to the Acts and/or to the regulations, SHE specification and SHE plan, all affected staff shall undergo the relevant re-training.

5. The principal contractor shall ensure that all his / her employees and their appointed contractors' employees working on the site are adequately trained in the type of work/tasks to be performed. The training shall extend to include relevant procedures, hazard identification and risk assessment.

6. Appropriate time must be set-aside for training (induction and other) of all employees.

7. Records of all training and qualifications of all contractor employees must be kept.

3.16.1 Induction training

1. The principal contractor shall ensure that all his / her employees, appointed contractors and their employees have undergone the client induction and principal contractor project safety induction programme prior to commencing work on site.

2. Attendance registers must be completed of any induction training given, which must indicate that they are receiving and understanding the induction training

3. Prior to induction all employees must undergo a pre-employment medical examination and found fit for duty. A copy of the certificate of fitness must be presented for permanent record at the induction centre and kept at site offices for permanent record.

4. All employees and visitors on site shall carry the proof of induction training.

3.16.2 Site specific induction training

The principal contractor shall ensure that all his / her employees and appointed contractor employees undergo general work induction with regard to the approved project SHE Plan, general hazards prevalent on the construction site, construction risk assessment, rules and regulations, and other related aspects. The induction should also include identification of sensitive features such as wetlands areas, red data species, graves, etc.

3.16.3 Visitors to site induction

1. Visitors to the site shall be required to undergo and comply with the principal contractor's site-specific safety induction prior to being allowed access to site.

2. 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.

3. Visitors who have completed site induction must be provided with a record of proof of attendance.

3.16.4 Additional guide on the required Competencies / Training

Specific certificates within these competencies are mandatory as part of fulfilling the requirements. Additional training within these competencies will enable the staff to perform his / her duties at his /her best.

a) OHS Act, GSR 3 – First Aiders

Staffing

One first-aider trained to Level 2 per team (as per OHS Act or project risk profile of workers.)

Competencies / Training

In possession of a valid level 2 first aid certificates issued by any one of the following: The SA Red Cross Society; the St John's

Ambulance; the SA First Aid League; or a person or organization approved by the Chief Inspector for this purpose.

b) OHS Act, CR 8 (7) Construction Supervisor (appointed by the Contractor OHS Act Section 16(2) appointee)

Competencies / Training

· Training in the Construction Regulations

- MV / LV Line Construction

· Emergency preparedness coordination training and experience

· OHS Act and Regulations course (latest version of the Act and regulations)

· Incident Investigation and Root Cause Analysis Training

· Hazard Identification and Risk Assessment Training

· Job Observations Training

· Attended an accredited supervisor's safety course

For appointees that do not meet the minimum competencies: full compliance to the above competencies would be expected before commencement of any work on site. Construction site supervisors must be authorised in terms of Eskom's Operating Regulations for High Voltage Systems.

c) OHS Act, CR 8(8) – Assistant Construction Supervisor (appointed by the Contractor OHS Act Section 16(2) appointee.

Competencies/Training

· General Health and Safety course

- MV / LV Line Construction

· Training in Construction Regulation

· Incident Investigation and Root Cause Analysis

· Hazard Identification and Risk Assessment Training

· Job Observations training

· Attended an accredited supervisors safety course

d) OHS Act, CR 8(5) - Construction Health and Safety Officer

Staffing

In determining the number of appointed competent Health and Safety practitioners to the number of employees, the nature and scope of work being performed shall be taken into consideration. The full-time safety officer is required in this project. The minimum number of days **per week** for the **part time SHE Officer** is **two days** per week.

Competencies/Training

· A recognised safety certification (minimum: of 2 weeks training) (e.g. SAMTRAC / Modern SHEQ Management course/SHERMTRAC / NEBOSH) or the National Diploma in Safety Management.

· Registration and accreditation from a recognised statutory Health and safety professional body (SACPCMP)

· OHS Act and Regulations (latest version of the Act and regulations)

· COID Act (latest version of the Act) awareness training

· Incident Investigation and Root Cause Analysis Training

· Training in Construction Regulations

· Hazard Identification and Risk Assessment Training

· Environmental Law Training Course by Eskom (Awareness)

e) OHS Act, Section 17 – Health and Safety Representative.

Staffing

· One trained Health and Safety Representative for every project site or part thereof.

· To be elected and appointed per work area and discipline and comply with OHS Act Section 17 and 18 and GAR Section 6.

Competencies/Training

· General Health and Safety Training

· Accredited Health and Safety Representative Training

· Hazard Identification and Risk Assessment Training

· Incident Investigation and Root Cause Analysis Training

3.16.5 General training

The principal contractor will be required to ensure that before an employee commences work on the project that the supervisor in control with responsibility for the employee has informed the employee of his scope of authority, any hazards associated with the work to be performed as well as the control measures to be taken. This will include man-job specifications, the discussion of any standard task procedures or hazardous operational procedures to be performed by the employee. The Principal Contractor is to ensure that the supervisor has satisfied himself that the employee understands the hazards associated with any work to be performed by conducting task/job observations.

3.17 CONTRACTOR SITE ESTABLISHMENT

1. Principal contractor's site facilities should be managed at all times.

2. Prior to establishing a project site, a site plan is required to be drawn listing position of all buildings, amenities, storage and stacking areas. The appropriate colour coding and demarcation of storage and stacking areas must be carried out.

3. Where, working in the field and material is stored at the work sites, then proper stacking and storage shall be carried out.

4. When compiling the site plan, cognisance must be taken in the placing of sleeping, ablutions and dining buildings in relation to one another and away from stacking and storage areas.

3.17.1 Site layout

1. When establishing a work site, sufficient area must be designated for stacking and storage in alignment to procedure 34-1475. Sufficient fire breaks of 7.5m outside and 7.5m inside as per the procedure 34-1475.

2. Storage of any hazardous liquids and substances must be at a sufficient distance from buildings and must be kept in the cage with the bundle wall which will prevent any leaks of the contained stored liquids. It must be locked and have all the required signage.

3. Dining and ablution facilities to be within separate buildings. If accommodation is to be provided, then ablutions to be located close to accommodation buildings, if not in the same building.

3.17.2 Site roads

1. When planning, sufficient areas must be allocated for parking for construction vehicles and mobile equipment as well as roadways for ease of manoeuvrability of these vehicles.

2. Sufficient width roads to be provided and adequate space is to be allowed for large vehicles traversing

3.18 TRANSPORT / MOBILE PLANT EQUIPMENT

Note: Crew Cabs for trucks must not be used to carry and transport employees. A sign must be attached stating not to carry employees to those trucks that still have Crew Cabs built in within their vehicles.

1. All motor vehicles driven / operated by contractors within the project shall, in all respects, comply with the National Road Traffic Act. **Note -** Also refer to Eskom Vehicle Specification (32-345).

2. Designated drivers shall be in possession of the relevant driver's licence, valid for the class of vehicle.

3. The driver's license shall be kept by the person so authorised and shall produce such card on request.

4. When driving on rural roads, care and caution must be exercised due to rough and uneven terrain and reckless third party drivers.

5. Drivers of construction vehicles and mobile equipment must respect for landowners property and roads.

6. Where possible the landowner's access roads must be used. If deviations from the access roads need to be made, then permission shall be obtained from the landowner before making such a deviation.

7. No drivers or operator may text, talk on cell phones or two way radios whilst driving, unless a hands free kit is used.

8. It is a driver's responsibility to ensure that the vehicle and or equipment they drive on any road is road worthy and complies with the requirements of the National Road Traffic Act.

9. Whilst on the Eskom project, contractors are not permitted to transport passengers in the back of LDV's and construction trucks. Proper passenger carrying vehicles must be used.

10. The speed limit within the bounds of the construction site must be determined by the principal contractor or the contractor manager for that site.

11. Contractors shall be solely responsible for the safety and security of any of their vehicles (including private vehicles) on their or landowners premises.

12. All Contractor vehicles shall have organisational identification markers on their vehicles that are permitted to enter the worksite and landowner's property.

13. Where vehicles, mobile plant and equipment has to be refuelled on site, this will be done under caution, and every effort must be made to prevent any spillage and the starting of fires. The vehicles, mobile plant and equipment must be bonded to prevent static build up.

14. Driver Risk Profile should be conducted by the Principal Contractor to all employees that drives their vehicles (240-43921804)

15. Driver authorization by the Principal Contractor indicating the type of the vehicle the employee is allocated or allowed to drive.

16. Latest Government guidelines, by-laws and legislation should be complied with regarding any disaster and or disease that might present at any point in time.

3.18.1 Construction vehicle safety

1. It is the responsibility of the driver to ensure:

a. He/she and their passengers wear seat belts whilst the vehicle is in motion.

b. Comply with all traffic road rules, safety, and direction and speed signs.

c. Ensure that vehicle loads are properly secured prior to moving off.

d. Ensure that vehicles are not overloaded.

2. No drivers or operators may text, talk on cell phones or two-way radios whilst driving, unless a hands-free kit is used.

3. All drivers of construction vehicles are to have valid medical fitness certificates.

4. Each Project site that is enclosed by demarcation will have system/ process to manage vehicle access to site.

5. Contractor must maintain their vehicles in a roadworthy condition and a vehicle license is valid.

6. Drivers of light vehicles must avoid stopping or parking in the vicinity of machines. At least 30 (thirty) meters must be left clear between such a vehicle and such a machine.

7. Contractor vehicles can be subject to inspections by the Client/Agent's representative. Vehicles which are not roadworthy will not be permitted to be used on the project.

8. Drivers/operators shall be responsible for the travel-worthiness of all loads conveyed by them.

Precautions shall be taken to secure 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.

9. Where construction vehicles have seating for passengers, then seats are required to be firmly affixed to the vehicle with seat belts adequate for the number of passengers being transported.

10. Contractors are to ensure that visibility (e.g. switching on of lights, reflectors, rotating lights etc.) is enhanced on all construction vehicles in order to be easily seen and the location of the vehicles.

11. Construction vehicles over 2 ton, when reversing must have a hooter/beeper, which sounds, when the machine is reversing.

3.18.2 Organisational Transport

Covered in the above paragraph.

3.18.3 Mobile plant equipment

1. All drivers of construction mobile plant are to have valid medical fitness certificates.

2. The principal contractor shall ensure that his / her employees and those of his subcontractors do not ride on back of mobile plant equipment that is not designed for the conveyance of passengers.

3. Drivers / operators must not leave vehicles unattended with the engine running unless the engine power is required for ancillary equipment.

4. Where engines are left running, then the vehicle park brake shall be engaged, and the wheels chocked.

5. Drivers / operators must not park vehicles in unauthorised zones/areas unless they are performing work.

6. 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.

7. Contractors are to ensure that visibility (e.g.: switching on of lights, reflectors, rotating lights etc.) is enhanced on all construction mobile plant in order to be easily seen and the location of the plant.

8. All servicing and repairs to mobile plant shall be carried out in a designated area. Care shall be taken to prevent ground pollution.

9. All waste from servicing must be disposed of in accordance with the environmental legislation.

10. Every mobile machine when reversing, must have an audible hooter/beeper, which emits loud sounds.

This includes trucks, cranes, loaders, dumpers back hoes etc.

3.18.4 Hired plant, machinery and vehicles

In the event where contractors do not own the equipment and have hired such, they are still responsible for ensuring all the above requirements for that plant, machine or vehicle is complied with.

3.18.5 Hired plant, machinery and vehicles

In the event where contractors do not own the equipment and have hired such, they are still responsible for ensuring all the above requirements for that plant, machine or vehicle is complied with.

3.19 HAZARDOUS CHEMICAL MANAGEMENT

1. Hazardous chemicals and substances are to be stored in accordance to local authority requirements.

2. Where HCS are brought onto the site, the appropriate Safety Data Sheets (SDS) shall be available at that site.

3. The Contractors to have and maintain a register with all the HCS that they have on site.

3.19.1 Handling

1. All HCS containers to be clearly labelled. Containers that are not marked will not be allowed to be brought on to site. No HCS to be stored in food or drink containers.

2. Users of HCS to wear/use the correct PPE as per the HCS material safety data sheet and risk assessment.

3. Users of HCS to be adequately trained in the HCS that they are handling.

4. Where flammable liquids are used, caution must be exercised of the effects of health risks associated with such liquids.

3.19.2 Storage

1. All HCS must be stored in terms of the supplier requirements and as listed on the respective SDS.

2. Caution must be taken into the hazardous situations (gasses given off, fires and or explosions erupting) that could arise from incorrect storage. Lockable Ventilated Storage Cage with deep tray (Signage posted) to cater for the amount of liquids carried in the cage.

3.20 HOUSEKEEPING AND ORDER

1. All contractors shall maintain a high standard of housekeeping within their sites and vehicles for the duration of the project.

2. Prompt disposal of waste materials, scrap and rubbish is essential.

3. Materials/objects shall not be left unsecured in elevated areas –falling objects may cause serious injuries/fatalities.

4. Nails protruding through timber shall be bent over or removed so as not to cause injury.

5. All packaging material including boxes, pallets, crates, etc. to be removed from the work area immediately.

6. On completion of his / her work, the contractor is responsible for clearing his / her work area of all materials, scrap, temporary buildings and building bases to the satisfaction of the client/agent.

7. In cases where an inadequate standard of housekeeping has developed, compromising safety and cleanliness, anyone has the responsibility to bring it to the attention of the principal contractor in the first instance and the Eskom project/site manager in the second instance.

8. The Eskom Project/Site Manager has the right to instruct the principal contractor and appointed contractors to cease work until the area has been tidied up and made safe. Neither additional costs nor extension of time to the contract shall be allowed as a result of such a stoppage. Failure to comply, will result in site cleaning by another cleaning contractor company at the cost of the principal contractor.

9. 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.

3.20.1 Stacking

1. Before stacking any material, the contractors or their employees must consult the contractor management for authorisation to use such an area for stacking purposes. This is to prevent haphazard arrangements.

2. Adequate care must be taken by the contractor to ensure that storage and stacking is correctly and safely carried out (Refer to 34-1475).

3. Correct shelve stacking must be carried out, heavy and bulky on the bottom and light and small on top.

3.20.2 Storage

3.20.2.1 Camp and Yards

1. Equipment storage areas must be established, demarcated and signposted.

2. No materials, tools and equipment is permitted to be left lying around areas.

3.20.2.2 Worksites

1. Site supervisors are to identify and establish a storage area for equipment and material.

2. All work areas must be kept clear

3. No tools, equipment and or material is permitted to be left behind on completion of work.

4. Housekeeping on / in vehicles is paramount, this includes

5. The perimeter fence needs to have a fire break of a minimum of 1m around it on both sides.

3.20.2.3 Demarcation

The correct colour coding must be used to identify stacking and walkways and appropriate signage erected to identify the storage area where possible and feasible.

3.21 MATERIAL AND EQUIPMENT

3.21.1 Material management

1. The aim of this section is to outline the process used by Eskom project management team to ensure that all equipment brought onto site by the principal contractor and their sub-contractors is appropriate to the task being performed and in good condition.

2. When ordering or receiving equipment and materials, principal contractors and appointed contractors have an obligation to ensure that equipment is provided with the appropriate warnings and safeguards.

3. The use of any material or property belonging to a specific landowner will not be undertaken prior to arrangements with the applicable landowner. Written proof of such agreement to be obtained handed to the project manager and a copy kept in the site SHE file.

3.21.2 Material requirement

Any form of materials used throughout the project shall be in terms of the requirements of the designs and as listed in the scope of the contract.

3.22 PERSONAL PROTECTIVE EQUIPMENT REQUIREMENTS

1. The principal contractor, when making a bid for this project shall provide a breakdown list the PPE requirements and the costing of such requirements. Similarly, appointed contractor must provide the same requirements when bidding with the principal contractor.

2. The principal contractor must provide a detailed programme on the issuing, maintenance and replacement of PPE for all his employees and subcontractors on site.

3. All contractors shall comply with the requirements of GSR 2 of the OHS Act.

4. A PPE matrix must be compiled detailing the types of PPE that is required to be issued to employees performing the respective tasks.

5. Where there are unusual instances where activities require additional type of PPE, then a risk assessment must be conducted where such PPE requirements will be identified, and the issuing be carried out.

6. All contractors shall ensure that their visitors wear and or use the correct PPE whilst on worksites.

7. Where PPE is required and visitors are not in possession of, then it is the individual contractor's responsibility to provide the PPE.

8. All PPE purchased and used by all contractor employees including visitors at/to the worksites, must comply with the relevant SANS or the relevant internationally recognised authority standards. No inferior PPE will be accepted during the project approved risk-based PPE at all times, as a minimum. **Note –** Refer to PPE Technical Instruction for Working at Height (KZN 16CSTI-168 – Replacement Process for Working at Heights PPE Standard).

9. Where employees work in the field and are exposed to the sun rays, then sun block with an SFP factor of no less than 15 must be issued free of charge.

10. Where deemed as a requirement, then high visibility vests shall be worn.

3.22.1 Issuing / Wearing

1. All contractors are required to provide free of charge all the necessary PPE required for the tasks within the project.

2. Strict non-compliance measures must be administered to any employee not complying with the use of PPE and shall be removed from the site until such times as they are in possession of the required PPE.

3. Safety belts are not allowed on site. Only double lanyard safety harnesses are permitted and must be used when conducting work at elevated positions.

4. Welders, braziers, cutters and aiders shall wear suitable eye protection, gloves and apron spats and screens shall be provided to protect onlookers and passers-by.

5. Suitable impact resistant eye / face protection shall always be worn for grinding, chipping and chasing, and screens shall be provided to protect onlookers and passers-by.

6. When working with hazardous chemical substances, (e.g. acids or caustic), suitable eye protection, gloves and special overalls shall be worn.

7. Suitable eye protection shall be worn by all persons including visitors, to any designated eye protection area.

8. Appropriate ear protection shall be worn in any designated noise zone.

9. Suitable respirators shall be provided where gas and/or dust could pose a hazard.

10. All equipment, brought onto the construction site, (including motorised equipment, e.g. bobcat) that requires PPE to be worn during operation, must have the relevant PPE mandatory sign/s attached.

11. Symbolic signs (To comply with SANS 1186) indicating the type and use of PPE will be placed at all entry points to the construction site.

12. A comprehensive individual record of issues and replacements must be kept.

13. Where sites / have been identified as specific PPE wearing areas / sites then the appropriate signage shall be erected at the area / site or placed on such machine / construction equipment.

3.22.2 Inspections

1. Contractor supervisors are required to perform weekly inspections of the PPE issued to their employees to ensure that the PPE is still in a serviceable condition and the PPE is available on site.

2. Inspections must be documented.

3.22.3 Training

All contractors shall ensure that their employees are informed and understand why the personal protective equipment is necessary, and trained in the use, care and maintenance thereof.

Thereafter, all employees shall sign an undertaking to wear such PPE supplied to them.

3.23 WORKPLACE SIGNAGE AND COLOUR CODING

1. Symbolic safety signage shall be displayed where it is required by legislation.

2. Contractors establishing sites must erect a company sign 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.

3. The location of every first aid box; fire extinguisher and emergency exit is to be clearly indicated by means of a sign.

4. When using, an explosive power tool the appropriate signage shall be erected, warning people of its use.

5. Contractors shall provide 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.

6. The meanings of the appropriate symbolic signage must be discussed during induction training and toolbox talks.

7. Where possible, within workshops, work areas and established premises, the appropriate sign indicating the meaning of symbolic safety signs must be displayed.

3.23.1 Signs

1. All symbolic safety signage, shall conform to the requirements of SANS standard 1186.

2. Signs shall be positions at such positions so as to be able to be seen from most positions within the work sites / areas.

3. All signage must be legible at all times and replaced timeously when unrecognisable from vantage points.

3.23.2 Segregation of vehicle and pedestrians

Where there is movement of traffic within camps, storage yards and established construction sites then appropriate site information signage indicating vehicle and pedestrian routes. Where possible, such routes must be barricaded.

3.23.3 Colour Coding

All colour coding and demarcation used shall conform to SANS standard 1091.

3.24 SAFE WORK PROCEDURES AND PRACTICES / SAFE OPERATING

Where there are any Eskom Distribution Work Instructions / Task Analysis / Task Manuals, reference to these documents must be made.

There must be written safe work procedures for all activities. Risk Assessments should refer to the safe work procedures. Refer to the informative documents for additional safe operating procedures.

3.25 DISCIPLINARY PROCESS

3.25.1 Organisational process

The principal contractor is required to implement a disciplinary process within his/her organisation to enforce conformance to requirements, similarly, appointed contractors must do the same.

3.25.2 Eskom Lifesaving Rules

1. Eskom views health and safety in high esteem and encourages that any organisation who performs work for Eskom adopt the same view.

2. Six Life Saving rules have been developed that will apply to all Eskom Employees, agents, consultants, and contractors. Failure to adhere to these rules by any Eskom employee or employee of a Principal Contractor or sub-contractor 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.

3. If any contractual work will be performed on any Eskom premises (including delivery of the guard huts), then the rules shall be obeyed by any contractor and their employees.

4. The rules are:

RULE DESCRIPTION OF RULE

Rule 1 OPEN, ISOLATE, TEST, EARTH AND CREATE AN EQUIPOTENTIAL ZONE BEFORE TOUCH

To ensure a safe electrical work environment, no person may work/operate on, around or near any electrical network, line or apparatus, electrically connected to the power system and/or electrically charged and/or not electrically charged.

Rule 2 HOOK UP AT HEIGHTS

Appendix AWorking at height is a significant part of work in Eskom Holdings and is regarded as a high-risk activity, as a result, all precautions must be taken to prevent incidents while working at height.

Wherever reasonably practicable, preference must be given to the performance of work at ground level as opposed to work in an elevated position. Where work in an elevated position is necessary, the requirements in this document and all other Eskom requirements pertaining to working from height shall apply.

Rule 3 BUCKLE UP

Where required, the proper wearing of seat belts for any driver, operator and passenger is mandatory in all vehicles/equipment when driving and/or travelling for Eskom business purposes. The driver is obligated to ensure that he/she as well as all passengers are properly always seated and wearing their seatbelts while being transported in the vehicle, as per Eskom specifications.

Note: This rule is applicable on any road or parking lot, irrespective of the speed, and when the vehicle moves in a forward or backward direction.

Rule 4 BE SOBER

No person who is under the influence or who appears to be under the influence of intoxicating liquor or drugs will be permitted to enter or remain on an Eskom site conduct Eskom business or drive/operate a vehicle/equipment for Eskom business purposes.

This includes any level of alcohol or the presence of any drugs, controlled substances, and/or illegal substances in the body that impairs or could impair mental and physical functioning, irrespective of when the substance was used.

Rule 5 ENSURE THAT YOU HAVE A PERMIT TO WORK

No person shall work without the required Permit to Work (PTW), which is governed by but not limited to:
Plant Safety Regulations; or

Operating Regulations for High Voltage Systems (ORHVS) (handover or permit); or

Low Voltage Operating Regulations; or

Any other activity where a permit is required, for example, driver and statutory permits.

No apparatus is to be returned to service without the cancellation of all permits on that plant in accordance with procedure, unless permission is granted for a particular plant to be returned to service with permits still open, like in the case of redundant systems.
NOTE: In the case of live work, a “Live Work Declaration Form” is to be completed by the authorised person, who is the person responsible for the safe execution of work according to relevant standards and procedures.

Rule 6 ENSURE SAFE LIVE WORKING

To ensure safe live work, each live worker shall:

Ensure all live work basic principles are adhered to, as outlined (for the method being used) in the High Voltage Live Working Standard for the respective division.

Observe and maintain the minimum approach distance (MAD).

Only perform live work (never mix live and dead work on the same site at the same time – Refer to ORHVS Section 7 and 5 handouts respectively).

Perform tasks they are authorised for and only undertake tasks that are documented in the respective Task Manual (TM). Only work on one potential (voltage) at a time.

3.25.3 Non-Conformance and Compliance

1. Any non-compliance to any health and safety requirement in this SHE specification is subject to discipline in terms of the Eskom Procurement and Supply Management Procedure.

2. Principal contractors are required to implement a non-conformance procedure (if not already in place) for issuing to contractors for transgressions. The procedure can include “quality” related non-conformance issues. Similarly, appointed contractors must implement a non-conformance procedure.

3. The procedure for the issuing and closing off of non-conformance reports shall be strictly adhered to.

4. Contract management must close out non-conformances issued, in not doing so, will not ensure that any recommendations made have been carried out and or implemented.

5. Where non-conformances are issued by Eskom, then one of the close-out steps of the procedure will be for the offender to be called on by the contractor responsible manager to explain the non-conformance issued and what they intend doing to prevent a recurrence of the non-conformance.

6. Contractor failure to provide adequate PPE to their employees for the tasks being performed and/or to visitors and failure to enforce the wearing of such PPE will be viewed as a transgression of the legislative and Eskom requirements.

3.25.3.1 Non-compliance

1. Eskom views the following at-risk behaviour in a very serious light:

a.) Anyone disregarding any requirements contained in the OHS Act, NEMA, Eskom Health, Safety, and Environmental Policies, this document, site specifications, and approved safety and health plans.

b.) Anyone performing an unsafe act or creating an unsafe condition that could pose a danger to such person(s) or to others.

c.) Contractors allowing any of their own employees (including casual labourers or labour-broker employees) to work on any site without ensuring that each employee has received proper training.

d.) Contractor failure to provide adequate PPE to their employees for the tasks being performed and/or to visitors and failure to enforce the wearing of such PPE.

2. Any such person described above will be subjected to a disciplinary process, and if found guilty, this may lead to dismissal in the case of an Eskom employee, and in the case of a contractor, it may result in the suspension of the contract and blacklisting.

3.26 SUBSTANCE ABUSE

1. Alcohol and substance abuse poses a significant threat to any business, more so in industrial incidents and the driving of vehicles. Eskom is therefore, entitled to take reasonable steps to ensure that intoxicated persons are identified and prevented from entering, or working on, any of Eskom’s equipment and premises, similarly contractors should adopt the same principles.

2. General Safety Regulation 2A is clear on the legal stance regarding intoxication.

3. Persons are not permitted from entering or remaining on or at a workplace whilst under the influence of either or both substances, not permitted to be under the influence or consume intoxicating substance whilst at / in the workplace. There is provision regarding the taking of medication.

4. The alcohol and drug permissible level is 0%.

5. All contractors shall comply with Eskom’s procedure 32-37 (“Substance Abuse Procedure”), remembering that this is an Eskom Cardinal Rule: “RULE 4: BE SOBER”), that is to say, they will make themselves available to be tested by Eskom as and when required.

6. Contractors are encouraged to compile their own manual and to carry out regular testing of their own employees. The legislative alcohol level is deemed to be zero.

7. Test records must be treated as “Confidential” and filed in the employee’s personal file.

3.27 MACHINERY

1. All machinery intended for use on the project and or brought to the work sites by contractors must be appropriate to the task being performed, be in a good condition and adequately maintained.

2. Contractors shall ensure that all machinery is to be listed on an inventory list, be inspected regularly and at least monthly or as required by legislation and risk assessments. Machinery should be numbered or tagged so that it can be properly monitored and inspected.

3. Where required machinery must have the necessary approved test or calibration documentation prior to being brought onto the project and the records shall form part of the SHE Plan. Maintenance calibration shall be undertaken in terms of the manufacturer’s requirements.

4. All fuel driven equipment must be properly maintained in accordance with the manufacturer’s recommendations and legal requirements.

5. Eskom functionaries’ reserves the right to inspect items of machinery brought to site by contractors for use on this project.

6. Should the Eskom functionary 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 Eskom functionary shall advise the contractor in writing and the contractor shall forthwith remove the item from the site and replace it with a safe and adequate substitute.

Note: In such cases, the contractor shall not be entitled to extra payments or extensions of time in respect of delay caused by the Eskom’s instructions.

7. All machine operators shall be certified competent to operate such machine. Copies of their of certificate of competencies shall be kept.

3.27.1 Machine guarding and barricading

1. Every shaft, pulley, wheel-gear, sprocket, coupling, clutch, friction drum, spindle end screw, key, bolt on a revolving shaft, driving belt, chain rope or similar object shall be securely fenced or guarded.

2. The machines or tool with moving parts should be guarded to prevent limbs or loose clothing from getting under, into, above or around the dangerous moving parts.

3. Guards should form a permanent part of the machine or tool, easy to remove noncorrosive, rigged and as far as reasonable heat resistant.

4. 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.

5. All guards must 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.

6. Machine guards must be painted on the outside in the same colour as the machine or tool.

7. Inside of guards and moving or rotating parts must be painted orange.

3.27.2 Inspection records

Contractors are required to conduct monthly inspections on all machinery which, in terms of the manufacturer’s requirements are supposed to have fitted guards. An inspection check list of such machinery is to be used and act as a record of inspection. Such record must be filed in the sites SHE File.

3.28 LOCK OUT SYSTEM

3.28.1 Electrical

1. Contractors shall develop an LV lock out system where any work that involves connecting into any Eskom LV line, system or a customer’s residential establishment is to be performed.

2. When working in close proximity to the Eskom power lines then authorisation shall be obtained from the local Eskom CNC office first, before starting such work. If in doubt as to the definition of close proximity, contact the CNC for clarification. Also refer to paragraph 3.33.

3.29 TOOLS AND EQUIPMENT

1. Contractors shall ensure that all tools and equipment are identified, safe to be used and is maintained in a good condition.

2. Contractors shall ensure that all tools and equipment are listed on an inventory list, be regularly inspected at least monthly or as required by legislation and risk assessments. The equipment should be numbered or tagged so that it can be properly monitored and inspected.

3. Where applicable, tools and equipment must have the necessary approved test or calibration documentation prior to being brought onto the project and the records shall form part of the SHE Plan. Maintenance calibration shall be undertaken in terms of the manufacturer's requirements.

4. All fuel driven equipment must be properly maintained in accordance with the manufacturer's recommendations and legal requirements.

5. Eskom functionaries reserve the right to inspect tools or items of equipment brought to site by contractors for use on this project.

6. Should the Eskom functionary 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 Eskom functionary shall advise the contractor in writing and the contractor shall forthwith remove the item from the site and replace it with a safe and adequate substitute.

Note: In such cases, the contractor shall not be entitled to extra payments or extensions of time in respect of delay caused by the Eskom's instructions.

7. Where defective tools and equipment are identified, such tools and equipment shall be removed out of service immediately, locked away to prevent further use until such time as the tool or piece of equipment has been repaired.

8. Contractors shall ensure that the appropriate records are kept for all tools and equipment used on the project. Such tools and equipment shall be subjected to regular inspections.

3.29.1 Hand tools

1. All hand tools (hammers, chisels, spanners, etc.) must be recorded on a register and inspected by the construction supervisor on a monthly basis as well as by users prior to use.

2. Tools with sharp points in toolboxes must be protected with a cover.

3. All files and similar tools must be fitted with handles.

4. No makeshift tools are permissible on the project.

3.29.2 Pneumatic tools

1. It is illegal for a pneumatic tool to be operated by using a compressed gas cylinder. Pneumatic equipment shall only draw supply from mobile air compressors or from compressed air lines installed within the contractor's premises.

2. All pneumatic tools should be numbered, recorded and inspected at least monthly as well as by users prior to use.

3. Where tools have a spindle drive, then the revolutions per minute speed shall be measured in accordance with the manufacturer specifications.

4. When using compressed air hoses with the interlocking type of connection in the hose, connectors shall be secured together with wire clips or binding through holes provided to prevent accidental disconnection.

5. Compressed air shall NOT be used for any purpose other than that for which it is provided. Compressed air shall not be used to remove dust or debris from clothing or for cleaning purposes.

6. Hoses to be orderly routed and elevated if required in order to prevent tripping hazards or vehicles and or mobile equipment driving over them.

7. All pneumatic tools operators shall be certified competent to operate such tool. Copies of their of certificate of competencies shall be kept.

3.29.3 Portable electric tools

1. All portable electric tools shall be operated through an earth leakage system unless they are of the double insulated type. It is good practice to operate them through an earth leakage.

2. The electrical cords of all portable electrical tools shall be in a good working condition at all times.

3. Any electrical tool that has any defects (including cords) shall be removed from service and locked in a suitable lockable cabinet to prevent unauthorised use.

4. All portable electric tool operators shall be certified competent to operate such tool. Copies of their of certificate of competencies shall be kept.

3.30 BOILERS, PRESSURISED SYSTEMS, AND VESSELS UNDER PRESSURE

3.30.1 Compressed gasses

1. Industrial gas bottles, when not handled correctly and receive damage to the cylinder and or brass fittings could become projectiles, which could cause severe injuries and or damage to equipment.

2. When transporting, cylinders, where possible they must be transported in the upright position and secured to prevent dislodgement.

3.30.1.1 Storage

1. The storage and the building of storage facilities shall be done in terms of the local authority's regulations under whose control the site/work area is established. Where the site/work area is established on any

Eskom premises, the Eskom requirements shall be adhered to as a minimum. (Refer to Eskom Standard 34-404 – Safe Handling, Storage, and Maintenance of Pressure Equipment.)

2. The following requirements apply to all gas cylinder storage:

3. Compliance to SANS 10087, all parts as relevant must be the minimum requirement. Some of the issues mentioned in the bullet points reflect basic principles in SANS 10087, but specific compliance is dependent in actual installation, total quantities and other hazards.

4. Contractors shall establish storage areas as approved by the project manager.

5. Storage areas shall be well clear of buildings.

6. The storage areas shall be fenced, with adequate shaded-type roofing, with stable and solid floor surfaces.

7. For security and ventilation purposes, a wire mesh fence should surround the storage area. A gate should be provided, which must keep the enclosure locked.

8. All danger signs shall be prominently displayed at storage areas, for example:

a. "No Smoking"; and

b. "No Naked Flames".

9. Adequate ventilation shall be provided where the store is made of building material (bricks).

10. Storage areas shall be kept free from all combustible materials; no other materials shall be stored in the cylinder enclosure.

11. Full cylinders shall be kept apart from empty cylinders, so that it will not be necessary to open valves to check whether cylinders are empty or full.

12. Cylinders shall always be secured separately in an upright position, and special stands shall be used for cylinder storage where they are unable to be secured against a sold wall.

13. Cylinders shall be stored in rows with an aisle in-between for easy removal in the event of fire.

14. Empty cylinders must clearly be marked as such.

15. Adequate and appropriate fire-fighting equipment shall be available. Equipment must be positioned directly outside the storage area access, but at a safe distance.

16. Cylinders for different gases shall be stored separately. The storage areas must be identified by means of a label for that particular type of gas.

17. Flammable and oxidising gases shall not be stored together; greases and oils and other combustible materials are not permitted to be stored in the liquid store.

18. Only flameproof electrical lighting/equipment shall be used, where installed.

19. Cylinders not kept in a constructed store shall only be allowed on site if in an approved trolley/cage and if they are properly secured with a chain in an upright position.

20. All gas operating torches must have flashback arrestors fitted on the hose: one on the hose at the bottle after the pressure valve and one on the hose attached to the torch.

3.30.2 Inspection Records

Contractors must ensure that monthly inspections are conducted on all ancillary gas tools / equipment and such inspections must be recorded on an appropriate inspection list which will form part of the inspection records.

3.30.3 Mobile and fixed compressors

1. Contractors shall ensure that all vessels under pressure are inspected by an AIA and shall be in possession of the AIA inspection and test certificate.

2. All pressure vessels shall be provided with at least one safety valve and such safety valve should be kept locked.

3. Where required, the vessel under pressure should be provided with a manufacturer's plate.

4. The vessel under pressure should be fitted with a pressure gauge in Pascal and the maximum permissible operation pressure marked with a red line on the dial (marking the glass is not permissible).

3.31 EXPLOSIVES

1. The requirements of the Explosives Regulation of the OHS Act shall be strictly adhered to. A copy of the written permission from the Chief Inspector of Department of Labour shall be obtained before use of any explosive material – refer to requirement in Explosives Regulation 13 (3) of the OHS Act.

2. Construction operations may necessitate that ground and rock be blasted. Prior to a blast a siren will have to be sounded. Warning flags will have to be displayed at the entrance to the area of the blast and guards will be placed at strategic points.

3. Should blasting be necessary during the construction phase, the necessary authorisation must be secured from the relevant local municipality. Adjacent landowners must be notified prior to the blasting activities on site.

4. If there is a requirement for explosives to be used then these shall not be brought onto the site or be used without the express permission of the relevant Project Manager.

3.31.1 Handling

Detonators and other explosives shall never be carried in the same box.

3.31.2 Blasting

1. Only a licensed operator is allowed to blast.

2. Should the contractor be required to carry out blasting operations, he/she is to fully acquaint themselves with, and adhere to the blasting procedures and legislation. Every blast must be cleared with the project manager or appointed representative before charges are placed.

3. For all blasting operations, a blasting mat (conveyor belts) shall be used to cover the blasting area so as to reduce the amount of flying debris.

3.31.3 Storage

Explosives or detonators shall not be stored on any site that has not been declared as a explosives storage (magazine) in terms of the OHS Act Explosive regulations 4.4 and 13.4.

3.31.4 Transportation

Requirements for the transporting and storage of explosives shall be in accordance to Explosives Regulation 13.4 of the OSH Act and SANS 10228 standard "The identification and classification of dangerous goods for transport by road and rail modes", published by SABS.

3.32 PERMIT TO WORK

When the project work requires the erection of any MV and or LV lines which will encroach on the existing 11 000- and 400 000-volt lines, the principle contractor and the respective appointed contractor shall request from the Eskom CNC responsible for the respective area for authority to work in close proximity to the lines and sign for and work under the Eskom ORHVS permit system. The principal contractor shall be responsible for appointed contractor's compliance to this requirement.

3.32.1 Completed Permits

Where permits are issued, then the control of the permits must be in accordance to the organisational permit system.

Permits issued will be controlled in accordance to the Eskom ORHVS system.

3.33 ELECTRICAL INSTALLATIONS

3.33.1 Temporary Installations Inspections

Where contractor camps are to be established then the requirements of CR regulation 24 the Electrical Installation Regulations and the Electrical Machinery regulations shall be adhered to.

When construction work is to be performed in urban areas and occupied rural areas, prior to start work and throughout the progress of work, all contractors are required to ascertain as to what services are buried underground and take the necessary precautions to prevent damage to such services.

3.33.2 Earth leakages

All earth leakage devices that have been installed in any electrical system shall be subjected to the relevant testing and operation on a regular basis.

Where earth leakage devices have not been installed in old electrical systems, then all work shall be done through a portable earth leakage, unless such electrical equipment and or tools are of the double insulated type.

3.34 EXCAVATIONS

1. Requirements of Construction Regulation 13 of the OHS Act, shall apply.

2. 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, electric, etc. Overhead hazards shall be assessed and dealt with prior to commencement of work.

3. Adequate precautions shall be taken by contractors to prevent slumping of excavations, as well as to prevent rocks and loose material falling onto workers.

4. All excavations done by the contractor are to be clearly demarcated and barricaded to prevent accidental access. Where poles and or cables cannot be placed in the relevant excavation on the same day it is dug, then either the excavation shall be back filled, a solid fixed cover placed over the open hole, which shall cover the entire hole, or a substantial barricade placed around the hole.

5. 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.

6. No material to be within 3m of the excavation edges.

7. All excavations must be on register and inspected daily before work commences and after inclement weather by the contractor's appointed competent person, declared safe and his findings noted in the said register. Principal contractors, construction supervisors are to review the said register on a regular basis.

8. Whilst work is being performed in an excavation, there shall be adequate supervisor, at all times.

9. Where excavation is carried out for cables then every twelve meters there shall be an escape ladder, in all excavations.

10. No work shall commence in an excavation unless the excavation has been declared safe by the competent person.

3.34.1 Inspection Records

All site inspection records should be kept in the safety file.

3.35 BARRICADING

3.35.1 Excavations / Trenches

1. 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.

2. Barricading must be placed as close as possible to the excavation.

3. Barricading material / fences that will withstand any forces greater that 100kg shall be used.

4. In rural areas where there is any livestock and or people who can inadvertently fall into any excavation, it is ideally that the excavation be backfilled, or a suitable sturdy cover be placed over the whole excavation and be prevented from being lifted by inquisitive persons.

5. In urban areas and or near occupied land, warning signs and flashing warning lights at night shall be displayed in suitable positions to warn any persons approaching the area.

Any updates made on the Barricading / excavation standard or procedure takes precedence for 3.35.1. **Note –** Refer to (DMN 34–279).

6. No Excavations to be left open overnight, backfilling instead should be done in alignment to the latest Eskom procedure or document.

3.36 LADDERS AND / CLIMBING IRONS

1. Ladders use shall confirm to the requirements of GSR 13A and used in terms of GSR 6.

2. Climbing irons are permitted to be used in place of ladders on condition that the requirements of GSR 6 are not compromised and from an electrical point of view not damage any cabling. The working at heights risk assessment must indicate the use of climbing irons.

3. Employees using climbing irons shall be suitably trained in the use, care and maintenance of such climbing irons.

4. When using climbing irons, the appropriate rope grab fall prevention system shall be used.

5. The correct fall protection equipment shall be worn and used whilst climbing up, working from and climbing down ladders.

6. The appropriate head protection, with chin strap shall be worn by employees working from a ladder or with climbing irons.

3.36.1 Inspection Records

A detailed inspection of all ladders and or climbing shoes shall be conducted monthly by a competent person and every time prior to climbing by employees using such ladders. The inspection check lists must be filed in the site SHE files

3.37 LIFTING AND MATERIAL HANDLING

1. A risk assessment should be conducted prior to starting with the task.

2. When working in close proximity to power lines, the contractor must apply for a permit. Refer to Eskom Operating Regulations for High Voltage Systems and Electrical Machinery Regulation 15 of the OHS Act.

3. 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

4. Where lifting work is to be performed at night, then an Illumination survey shall be conducted prior to the start of work and adequate lighting shall be provided.

5. All crane operators, lifting machine operators and riggers shall be trained and certified competent to perform the relevant tasks.

6. All the requirements as listed in the DMR 18 shall be adhered to,

7. The appropriate Distribution task manuals shall be used throughout the project.

3.37.1 Lifting machines

1. Before using any lifting machines the operator should inspect it daily, where the machine appears faulty, it shall be removed from service immediately.

2. All lifting machines shall be examined and subjected to a performance test by an accredited person/company at intervals not exceeding 12 months, as per DMR 18 or more frequently as desired.

3. All hooks shall be fitted with a safety latch/catch and be in a good operational condition.

4. All lifting machines should be recorded on a register, refer to the requirements of the Driven Machinery Regulations 18 of the OHS Act 85 of 1993

5. All lifting machines should be conspicuously and clearly marked with identification particulars and the maximum mass load which it is designed for.

3.37.2 Mobile cranes

1. The crane operator shall be trained for the class of crane they are operating and be in possession of an operators permit.

2. All mobile cranes shall be examined and subjected to a performance test by an accredited person/company at intervals not exceeding 12 months, as per SANS 19 The Inspection, Testing and examination of Mobile Cranes".

3. All mobile cranes shall be subjected to an inspection prior to daily use and a record kept of the inspection.

4. Any hydraulic crane leaking fluid must be taken out of service and be repaired prior to further use. This is for safe stable operations and protection of the environment.

5. Outriggers shall be used every time the crane is to be utilised to lift any sort / size load irrespective of time constraints and light loads.

6. Crane operators shall ensure that loads are not carried over the heads of any workmen, the rigger will give warning signals.

7. Riggers shall be utilised when lifting loads and shall direct the crane operators with the appropriate signals.

3.37.3 Lifting tackle

1. A risk assessment shall be conducted prior to commencing with the task to identify that the correct slinging equipment is used for the specific load.

2. 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.

3. 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.

4. All lifting tackle should be conspicuously and clearly marked with identification particulars and the maximum mass load which it is designed for.

5. All hooks shall be fitted with a safety latch/catch and be in a good operational condition.

3.37.4 Inspection and test records

All lifting machines and tackle shall be subjected to 3 monthly inspections and immediately prior to use by the competent operator. Tests shall be in accordance with the DMR 18. All inspections and tests shall be recorded which shall be files on the site specific SHE File.

3.37.5 Material handling

1. Guide ropes to be used to prevent loads from swinging. (manila ropes).

2. A rigging study should be conducted for all critical lifts to ensure the correct equipment is available.

3. Employees shall keep out from under suspended loads 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 within a barricaded of area.

4. No user of machinery shall require or permit any person to be moved or supported by means of a lifting machine; unless such machine is fitted with a man- cage designed and fabricated according to an approved SANS standard and a risk assessment has been done.

5. Hand signals will be displayed and visible on all cranes and the SANS 1029 standard must be used to ensure uniformity and all the crane operators, riggers must be trained according to the SANS 1029.

3.38 STATISTICAL REPORTING

Statistics is an integral part of the framework for measuring health and safety performance and assist in improving the organisation's health and safety performance. Man-hours must be reported on the monthly basis including the incident stats on the project.

3.38.1 Monthly statistical reports

1. The principal contractor must report to Eskom project manager, on the date of every month, their SHE statistics and those of their appointed contractors for the previous month.

2. The statistical information required is:

a. Name of contractor company

b. Incidents: Lost time, medical; first aid, near misses reported

c. Manpower numbers per principal contractor and sub-contractor company

d. Actual man-hours worked

e. Status on incidents investigated and recommendations closed out

3.39 PLANNED TASK OBSERVATIONS

1. Task observations is a crucial step in identifying any deviations from specified process and or procedures. **Contractor Management and supervisors** should conduct **Planned Task Observations**.

2. Contractors are required to carry out periodic task observations on employees who are more at risk and therefore need to be observed more frequently and more systematically than people who are at low risk. Included in the observation process will be to identify any at-risk procedures as listed / not listed in the safe work procedures for that task.

3. Select and prioritise, even after hours, those individuals who are at high risk of being injured or causing a loss whilst performing dangerous / hazardous work.

4. Guide for selection (high-risk employees)

- new and transferred employees
- poor performers
- employees with limited experience or competence (skill, knowledge or attributes)
- employees with substance abuse problems (such as alcohol and/or drug problems)
- employees who display at risk behaviours such as risk takers
- as well as good performers (possible improvement to procedure)

5. Task observations may be conducted by an observer who is at least equally competent to conduct planned, unplanned or partial basis (all of which are important) observations.

Note 1: Certain tasks may comprise of a number of sub-tasks and may in their entirety be classified as safe.

6. Following a task observation, feedback and instruction shall be given immediately to the worker who has been observed.

Note 2: Task observations do not replace **behaviour observations**.

3.39.1 Observation reports

Task observations shall be documented **and filed in the site SHE file**.

3.40 BEHAVIOUR OBSERVATIONS

Also known as Visible Felt Leadership - Refer to Procedure 32-407

Safety behavioural observations must be done daily at each workplace on the project site. It is preferable that the safety observation teams comprise of two persons and represent different levels in the organisation. The objective of behaviour safety observations is to assess and address the actual safe and unsafe behaviours of people in the workplace, as well as workplace conditions that are caused by the actions or non-actions of employees, contractors, or their supervisors.

1. These observation interventions will provide management with a clear picture of the current safety and health culture in the various workplaces, which is reflected in the actual behaviours and conditions versus the expected safety requirements.

2. The intent of the behaviour observation process is for management to be visible in the workplace and for them to:

a. recognise and encourage positive behaviours, so that they are sustained;

b. immediately address and correct unsafe behaviours and conditions; and

c. provide a two-way communication channel to discuss safety and health achievements and concerns regarding employees, contractors, and visitors.

3. Contractors are required to carry out periodic observations on employees. This observation is not limited to unsafe workers but to all employees. This type of observation corrects unsafe behaviour as well gives an immediate chance to reward safe behaviour.

3.40.1 Observation reports

Observation forms must be completed after each observation and retained in the site SHE File by the Principal Contractor.

3.41 AUDITING

3.41.1 Approval and compliance of principle 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 specification. Once there is compliance only then will the principal contractor SHE plan be approved by the project manager and an appointed Eskom functionary. The implementation of the SHE Plan shall be assessed / audited by Eskom custodians on monthly basis. This will include physical conditions evaluation.

3.41.2 Third Party Legal Compliance Verification Audits

All contractors involved in the project may be subjected to a third-party legal compliance verification audit that will be conducted on the site activities A copy of the summary of the findings and the proposed corrective actions shall be submitted to Eskom Project Manager by the Principal Contractor. The written report shall be submitted within one week after the completion of the audit.

3.41.3 Eskom SHE audits / Inspection

Eskom shall evaluate all contractors' SHE performance on an ongoing basis against the legal compliance, Eskom requirements, SHE specification and the contractors SHE plans.

Note: Eskom reserves the right to conduct unannounced audits / inspections on contractors

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

If there are any findings/ non-compliance identified as serious in these audits, work will be stopped for that specific Principal Contractor and appointed Contractor Company through the project custodians. Refer to clause 3.49 on "Work Stoppage" in this SHE Specification.

3.41.4 Contractor SHE audits / Inspections

Principle Contractors are required to conduct internal audits / inspections on both their employees and their appointed 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 manager within one week after completion of the audit / inspection. Where appointed contractors are audited by the principal contractor then a copy of the audit report shall be submitted to the appointed contractor on the last day of the audit.

3.42 PROJECT RULES

The principal contractor shall compile a set of project / site and general rules for the project. Eskom has listed rules which must be adopted.

The principal contractor is fully responsible for the health and safety of his / her workers and his / her appointed contractors in accordance with the contract.

3.42.1 General rules

1. The performance of work shall be done with respect to health and safety.

2. Contractors shall be responsible for enforcing and respecting all applicable health and safety rules in performance of all work covered by the contract, particularly those relative to the OHS Act and regulations made under them as well as to Eskom requirements.

3. Contractors shall take reasonable steps necessary to ensure the protection of workers, visitors, property, and the public.

4. Contractors shall conduct regular site inspections and act promptly in all situations where there is a risk to safety, health, or the environment.

5. Contractors shall report to Eskom and investigate all accidents/incidents having caused, or having risked causing, losses or injury in order to identify the cause(s) and immediately take appropriate corrective and preventative measures. Follow the Eskom 32-95 Procedure Manual for conducting EH&S Incident Management.

6. Contractors shall take all necessary steps to ensure that their workers and persons granted access to the work site and who are under the contractor's control or who are present at the contractor's request comply with these safety requirements and with the necessary legislative requirements.

7. Contractors shall ensure and demonstrate to Eskom that he/she and all contractors to be appointed on this project have adequately allowed for the cost of health and safety measures that may be required during the work/services.

8. Contractors shall provide their workers with proper training so that they can perform their work safely.

Train all staff to be aware of their own responsibilities for, and to provide information, instruction, and training on, the particular hazards and risks in relation to the scope of work.

9. Contractors shall provide and maintain in proper condition all personal protective equipment for their workers and visitors as well as any other safety or special precaution devices. The contractor shall ensure that his / her workers and all other persons having access to the work site use appropriate personal protective equipment in a safe manner.

10. Contractors are required to take reasonable steps to prevent bodily harm to persons whom he/she has authority to direct in terms of how these persons perform their work or tasks.

11. Illegal drugs, alcohol, firearms, or other dangerous substances shall not be allowed on the project/site.

Reporting for work under the influence of an illegal drug, alcohol, or other dangerous substance is not permitted.

12. All contractor employees shall undergo full medical examinations prior to start any work on site.

3.42.2 Site rules

1. Contractors shall ensure compliance with all project site rules.

2. The principal contractor shall submit his / her health and safety plan to Eskom for review before commencing work or activity on site.

3. Appropriate and suitable personal protective equipment (PPE) shall be provided by the principal contractor and his/her appointed contractors where required and particularly where job-specific hazards dictate.

4. Good housekeeping practices shall be continually maintained throughout the project and work areas left in a clean and safe condition.

5. The working at heights policy and legislated requirements will be strictly adhered to and that the risk assessment will determine the need for fall protection when working from height.

6. Only trained and certified employees are permitted to operate specialised tools, equipment and motorised transport.

7. Ladders shall be properly constructed and kept in good repair. Ladders shall be the proper length and type/standard for the task. All ladders shall be identified and registered.

8. All scaffolding will be constructed as per SANS standards and OHS Act Regulations.

9. Each person responsible for working on an elevated platform shall visually identify that scaffolding has been inspected and tagged by a competent person prior to each shift.

10. Compressed gas cylinders shall be stored and used in the upright position and be properly secured at all times; protective caps shall be in place when cylinders are not in use, and gauges shall be removed prior to transportation of cylinders.

11. All machine guards protection shall be kept in place and shall not be modified or tampered with.

12. All excavations shall be protected by adequate and firmly fixed means and not left open overnight.

13. Employees shall not walk or work under suspended loads.

14. When not in use, mobile equipment shall be shut off, keys removed and where applicable, parking brakes engaged..

15. All excavations shall meet Construction Regulations requirements and shall comply with the project minimum standards for barricading, and adequate access and egress shall be provided for excavations.

16. Lockout/tag-out procedures shall be followed when performing work on, mechanical equipment, electrical services, etc. and obtain the necessary permits where required.

17. Access to safety equipment shall be kept clear at all times. A clear area shall be maintained around fire hydrants at all times.

18. All safety and warning signs must be erected, be legible and shall be observed.

19. Posted speed limits shall be observed.

20. Appropriate bins are provided on site which shall be utilised for waste.

21. Do not use cellular phones in areas where cell phones usage is prohibited.

22. When walking through the site or to personal work areas, use recognised thoroughfares. Do not take short cuts or walk on unsafe or uneven ground surfaces.

23. No open or unattended fires are allowed within the construction/ work site.

24. All requirements related to fire protection and prevention fire extinguishers shall be adhered to.

25. Gambling, horseplay and fighting will not be permitted or tolerated

26. Only work related tools and equipment are permitted to be brought on to site and subjected to security checks

27. It is strictly forbidden to bring firearms and pets on to site

28. Food shall not be stored in work areas or site tool boxes

3.42.3 Smoking

The national smoking policy must be observed, and smoking is permitted in designated areas only (Eskom Smoking Procedure 32-36). Latest Government legislation, guidelines and by-laws must be complied with by the Principal Contractor.

3.42.4 Cellular phones

The national requirements regarding the use of cellular phones must be observed, in particular when driving and or operating mobile equipment and or machinery.

3.42.5 Walking in confined sites

Cognisance must be taken when there are pedestrians walking in and around construction sites. Often, they are not seen by operators of large driven machinery or heard where there is excessive noise. All site personnel and visitors must be warned of the dangers of jay walking and the requirement to stick to allocated walkways.

3.43 SHE PLANS

Note: The plan does not necessarily have to be split into and filed under each heading, but it would make auditing easier and employees able to reference easier). In compiling the SHE Plan, cognisance must be made of the detail listed in the specification and the plan must address as to how the contractor will implement the requirements listed in the specification. Proper numbering must be done to enable the ease of access to any available document within the SHE Plan in the file.

1. A safety and health plan is a documented plan that addresses the hazards identified and includes safe work procedures to mitigate, reduce, or control the hazards identified. It is specific to each construction project undertaken and site where work is done, is compiled by the principal contractor and appointed contractor, and must be approved by the client/agent prior to the commencement of any construction activities on a project.

2. The principal contractor shall prepare a SHE Plan to address and manage all applicable sources of risk as well as any other sources of risk that are identified during the execution of the project. The plan shall incorporate the requirements as listed in this SHE specification. A copy of all the project plans shall be kept in the site SHE File and be available at all times.

3. The principal contractors SHE Plan shall be submitted to the project manager for review and approval before the signing of the contract and, once accepted, shall not be amended without prior consultation and acceptance by the project manager.

4. The principal contractor shall insure that his/her appointed contractors prepare their SHE plan to address and manage all applicable sources of risk as well as any other sources of risk that are identified during the execution of the project. Their SHE plan shall incorporate the requirements as listed in this SHE specification as well as the applicable requirements listed in the principle contractors SHE plan. A copy of all the project plans shall be kept in the site SHE File and be available at all times.

5. The appointed contractors SHE Plan shall be submitted to the principal contractor for review and approval before the signing of the contract and, once accepted, shall not be amended without prior consultation and acceptance by the project manager. The principal contractor will be required to send a copy of the appointed contractors SHE plan to the project manager for information, approval and record retention.

6. The Principal Contractor should make provisions for the Cost of Health and Safety measures during the Construction Process, and where Preliminaries and general are available, the Principal Contractor should ensure that all Cost and Safety Measures are covered or will be addressed, e.g. Personal Protective Equipment, Safety Posters.

3.44 RECORD KEEPING

1. All records required in terms of legislative and Eskom requirements shall be kept and filed in the contractor's SHE files. These records shall be kept for the duration of the project. They shall be open to audit / inspection by any party who is entitled to audit / inspect the project.

2. Where there are activities at the work sites, then the required records for that work site must be filed at that work site. If records are required to keep at the head / main offices, then the work site must have up to date / valid copies of such documentation.

3. Where a contractor is unsure as to which records are required to be kept, then advice must be obtained from the project SHE functionary at the earliest.

3.45 SHE FILES

Note1: A Competent part time / full time SHE Officer must be available to discuss the identified gaps by the Client SHE Officer (e.g., 14 days allocated by procurement at tender stage to correct identified deviations).

Without the presence of the *Competent Principal Contractor, SHE Officer*, no time will be allocated to discuss deviations identified by the Client SHE Officer.

Note 2: For Site Specific files – Only *2 attempts* will be allocated to correct deviations (N.B. - A competent part time / full time SHE Officer must be available to discuss the identified gaps by the Client SHE Officer). If the safety file fails on the 2nd attempts, a report should be provided to the PM as there will be no further re-evaluations that would be done.

1. A SHE File means a file or other record in permanent form, containing the information about the safety and health management system during construction and all information relating to the post-construction phase after handover to the client, so that the client can maintain the works in a healthy and safe way.

2. All contractors are required to keep a SHE File on every project site. If there is more than one site per project, a file per site shall be kept at that site for that site. Contractors may keep additional files at their head office as additional records. The SHE file shall be maintained by all the contractors on their construction sites and shall be available on request for audit and inspection purposes.

3. The SHE File shall consist of the requirements in terms of the project's safety specification, the contractor's safety and health plans, and this standard.

4. The sequence of filing the documentation must be kept in the same sequence as listed in this SHE Specification and the SHE Plan.

5. Each record shall be separated by partitions to afford easy identification and access. Each partition must be labelled.

6. On completion of the construction work/project, the principal contractor must hand over a consolidated safety and health file to the project manager. The principal contractor must also hand over all drawings, designs, lists of materials used, and other applicable information about the completed structure, as well as the list of subcontractors, the agreement, and the type of work completed.

7. Where during extended projects, documentation in the SHE Files becomes cumbersome, and then older documentation must be archived inboxes which shall be correctly labelled and be available for auditing purposes. The archived documentation must be also handed over at the completion of the project.

8. Mini File with all the updated documents for the team that will be performing work should be made available; this also applies to any team to assist with the team documents required in the event of the On-Job Observation and during the Outage.

3.46 PUBLIC SAFETY

1. 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 or safety (section 9 of the OHS Act has reference).

2. A member of the public is any company non-employed person(s) who could be directly or indirectly exposed to Eskom's/contractors' products or activities.

3. Eskom upholds the rights of the members of the public and maintains an awareness and educational programme to protect the public against the risks that may arise out of, and in the course of, Eskom's activities. Similarly, contractors shall share the same respect for the public.

4. Contractors, where working in any area where members of the public have access or can approach the work site, will be approached by the public for reasons of inquisitiveness, members airing complaints, vandalism, theft, public unrest, intimidation, stray/wandering animals, etc. and will then implement such measures that will place great emphasis on public safety.

Contractors shall factor in, in their safety plan, how they intend safeguarding/controlling any members of the public against their activities during the project, without damaging Eskom's name and reputation. Assistance/information in this regard can be sought from the project managers.

3.47 WORKING IN CLOSE PROXIMITY TO / ON PUBLIC ROADS

1. Due to the nature of the work, the safety of contractor employees and other road users is of paramount importance.

2. The task to be performed shall be properly planned with all the role players. Dependent on the category of road to be worked on, the relevant traffic authorities must be informed of the task.

3. High-visibility vests shall be worn.

4. If the authorities need to be in attendance, no work shall start until such time as the authorities arrive on site, irrespective of whether outages are planned and will result in delays.

5. Work areas shall be adequately barricaded so as to prevent unauthorised access. This rule applies for normal and breakdown work.

6. The following, from a road safety perspective, shall be carried out:

3.47.1 Planning work and resources

1. Some of the resources include:

a. traffic signs;

b. red flags;

c. road cones;

d. amber rotating lights (on vehicles and on "Workmen ahead" traffic signs);

e. reflective vests/bibs;

f. Truck Stoppers (To preventing the truck to roll backwards depending to the inclined terrain)

2. Notifications of proposed work to:

a. traffic;

b. Telkom, if required; and

c. landowner(s).

3. Determine a strategy to control members of the public. 4.

5. Confirm with the Traffic Department whether they will control the traffic at the work site.

6. If traffic officers will be on site to control the traffic, determine and document traffic control measures that will be implemented. Ensure that all parties involved sign the traffic control agreement. If traffic officers will not be on site, ensure that there are sufficient flags persons positioned on both sides of the workplace to warn oncoming traffic.

Note: the responsibility for compliance lies directly on the shoulders of the construction supervisor for the task.

3.47.2 On-site risk assessment

1. Ensure that all members of staff are included when performing risk assessment.

2. Conduct an on-site risk assessment prior to commencement of work and continuously during the task execution by:

a. identifying the existing hazards / risks;

b. treating, transferring, tolerating, or terminating the identified risks;

c. ensuring that all workers acknowledge identified risks and hazards by signing a risk assessment form/worker's register.

3.47.3 Make work site safe to work

a. Park vehicles as far from the roadside as possible.
b. Ensure that all rotating amber lights on the vehicles are switched on and are visible to approaching traffic.
c. Ensure that all people are wearing their reflective vests/bibs.
d. Liaise with traffic officers on site to confirm the traffic control agreement.
e. Place traffic signs.
f. Place flags persons, who shall remain in position until relieved of their duties.

3.47.3.1 National roads

a. “Stop / Go” signs and persons with red flags placed 60 m on either side of the work site (a person with a red flag is only required if traffic is not controlled by traffic officers)
b. “Men at work” signs 120 m on either side of the work site
c. 60 km/h sign 180 m on either side of the work site
d. 80 km/h sign 300 m on either side of the work site
e. 100 km/h sign 450 m on either side of the work site
f. 120 km/h sign 550 m on either side of the work site
g. “Workmen ahead” sign, fitted with a rotating amber light, 560 m on either side of the work site

3.47.3.2 Provincial roads or dual-carriage roads

a. “Stop / Go” signs and persons with red flags placed 60 m on either side of the work site (a person with a red flag is only required if traffic is not controlled by traffic officers)
b. “Men at work” signs 120 m on either side of the work site
c. 60 km/h sign 180 m on either side of the work site
d. 80 km/h sign 300 m on either side of the work site
e. 100 km/h sign 450 m on either side of the work site
f. “Workmen ahead” sign, fitted with a rotating amber light, 460 m on either side of the work site

3.47.3.3 Rural roads

a. “Stop / Go” signs and persons with red flags placed 60 m on either side of the work site (a person with a red flag is only required if traffic is not controlled by traffic officers)
b. “Men at work” signs 120 m on either side of the work site
c. 60 km/h sign 180 m on either side of the work site
d. 80 km/h sign 300 m on either side of the work site
e. 100 km/h sign 450 m on either side of the work site
f. “Workmen ahead” sign, fitted with a rotating amber light, 460 m on either side of the work site

Once a task has been completed, ensures that all equipment is picked up and packed onto vehicles; then remove signage and, lastly, flags persons.

3.48 UNLAWFUL ORDERS

1. Section 14 of the OHS Act stipulates that employee shall carry out any lawful order given to them. That is to say, they have the right to refuse to obey an unlawful order or work instruction.

2. In terms of the Legal and Eskom requirements, if an employee has a reasonable belief that the work to be undertaken is likely to endanger themselves or any other person/s due to at risk behaviour or working in unsafe conditions, or a lack of protective equipment or clothing, he/she has the right to refuse to work.

3. An employee may also in terms of Section 29 of the National Environmental Management Act, Act 107 of 1998, refuse to work if the work would result in an imminent and serious threat to the environment.

4. All contractors shall ensure that their employees are conversant with the hazards to his/her health, safety and the environment that are part of any work that he/she has to perform, as well as the precautionary measures required in respect of those hazards.

5. Each contractor manager shall as soon as reasonably practicable, investigate and resolve an employee's refusal to work based on health, safety and environmental management related issues or concerns, in terms of the Incident management segment of this SHE specification.

3.49 WORK STOPPAGE

1. Any person may stop any activity where an unsafe act or unsafe condition that poses or may pose an imminent threat to the safety and health of an individual/s or create a risk of degradation of the environment exists. This includes any unauthorised work or service performed by, or legally or contractually non- compliant acts or omissions by, any contractor contracted to work at that site.

2. Work stoppages that are initiated because SHE concerns, non-compliance, or poor performance related to the contractor's works or services shall not warrant any financial compensation claim lodged against Eskom where the contractor has not met the requirements defined legally or contractually.

3. Where stoppages are carried out, the required non-conformance report shall be raised.

4. All work stoppages ideally should be investigated and documented by contractor management.

3.50 HOURS OF WORK

The requirements of the Basic Conditions of Employment Act, Chapter Two "Regulation of Working Time" must be adhered to.

All contractors are required to maintain an accurate record of time worked by each employee.

3.50.1 Normal work

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

Contractors will notify their Eskom Supervisor/s 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 from the Department of Labour.

3.50.2 Night work

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

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

3.50.3 Overtime

Where overtime is required to be performed, then the appointed contractors shall inform the principal contractor of such action. The principal contractor shall inform the project manager of such function.

Contractors shall be aware of the effects of human fatigue and regulate overtime accordingly.

3.51 SAFETY ACHIEVEMENTS

1. Contractors must compile a manual for recognising and rewarding outstanding achievements in the fields of safety and health within their organisations in order to promote a safety culture.

2. Rewards shall be meaningful, and employees must be encouraged to nominate worthy fellow employees for recognition. Contractors are permitted to use Eskom Distribution 34-1709 (“Recognition for Safety Achievements Standard”) as a guide.

3. Recognition does not always need to be monetary. Rewarding by giving material gifts, time-off certification, and small team functions all mean the same. It is the thought and the praise for the achievement that are rewarding.

3.52 SECURITY

1. Where construction work will be performed on any Eskom sites, then the security requirements for such sites shall be adhered to.

2. All contractors shall be accountable and responsible for the security of all their equipment, materials etc. on any of their work sites, camp sites and when and where they utilise an agreed Eskom site.

3. Where there is access control to construction sites, any land owned sites and or Eskom sites, such access control requirements shall be observed.

4. Eskom reserves the right to search any contractor and or Eskom vehicle entering or leaving the site / premises of any Eskom site.

5. Any Security related issues shall be escalated to Eskom Security Section further advice and guidance.

3.52.1 Physical Guarding

The Supplier shall furnish the site on a continuous 24-hour basis with fully trained male and female uniformed PSIRA Graded and registered security officers (x 2 Security guards per site and per shift).

The duties of the contracted officers shall be those specified in the contract and job descriptions as provided by the end user (Eskom).

Note: No female guards can be deployed to work night shift at any sites due to safety reasons.

Working time / Shifts

Shifts to be covered are:

Morning shift: 06:00 – 18:00

Night shift: 18:00 – 06:00

The contracted guards assigned to ESKOM shall conform to the, PSIRA Act, Firearm Control Act (where applicable) OHS&A Act, and ESKOM procedures, training standards, competencies, rules, regulations and shall perform duties as may be mutually agreed upon in writing from time to time by the supplier and ESKOM.

3.52.2 Supplier Expectations

If an external supplier is hired by the Principal Contractor to conduct security duties,

The Supplier must:

1. Be registered with the Registrar of companies, SARS, COID and PSIRA.
2. Have access to a PSIRA and SASSETA registered training facility.
3. Be able to supply, sustain and manage a sufficient number of Security Officers to satisfy the requirements of ESKOM.
4. Security guards must be firearm competent to SAPS firearm competency (where applicable).
5. Firearm competency certificates and PSIRA identification cards must be carried whilst on duty at an Eskom site.
6. Have Security Risk Insurance.

3.52.3 Uniforms

Service provider shall provide the necessary equipment and PPE for all their employees.

- Wearing of uniform is compulsory and as per PSIRA requirements. Corporate wear shall be worn at Office buildings and combat uniform for field work.
- Handheld radios (base radios) / Cell phones as specified by Eskom.
- Uniforms must always be clean and correctly worn. The uniform must be in good condition.
- The winter uniform should include a warm coat, boots, gloves and a beanie (wooden hat).
- Personal protective equipment (PPE) must include safety shoes, raingear and level 3 bullet proof vest.
- Bullet proof vests shall be worn as part of uniform by all security officers. Only Eskom shall indicate exclusions to this rule for certain sites or posts as per the site risk assessments; if applicable.
- For obvious hygiene and safety reasons, each Security officer must be issued with his / her own bullet proof vest.

3.52.4 Duties to be performed

All Eskom Policies, procedures, directives, SOP and work instructions as applicable to the specific site must be complied with in the performance of services to Eskom however the following is also applicable:

<u>Guard Duties</u>

- o Observe surroundings
- o Report suspicious incidents / activities / occurrences
- o Render guarding services at special events (e.g. general overall)**3.52.5 Access Control**

For admission / access shall be strictly complied with.

- Check all personnel access permits, visitor's permits, vehicle permits, and laptop /equipment permits for validity against date of issue or expiry date and if necessary against ID document.

- Search all vehicles as per standard operating procedures. Check documentation with regard to toolboxes, equipment, parcels and other items and issue equipment sheets if necessary. Refuse access with prohibited items such as cameras, firearms and alcoholic beverages and refer to the site supervisor / manager.

- Check material removal permits and verify content and signature. Confiscate items not described on the removal permit and hand in for safekeeping. Refuse exit with goods if an authorized supervisor / manager did not sign removal permit.

- Lock and secure gates and doors after hours.

- Any person without an Eskom ID Card shall not be allowed access onto the Eskom premises and must be treated as a visitor.

- The SO must first confirm all visits to Site supervisor / manager verbally or telephonically before allowing the visitor to enter.
- Eskom employees without authorized ID cards to a specific site must be treated as visitors and their details recorded on the Visitors' Register. These employees do not require escorting.

3.52.5.1 Visitor Management

- Positive identification at all times (SA ID, passport, drivers licence)
- Recording of visitors details electronically or manually
- Confirm appointment all visitors must be accompanied by a host at all times
- Facilitation of visitors (receipt and exit by host)
- Declaration of equipment, issuing of permits
- Prohibited items (rules/ regulations applicable)
- Random searches
- Random alcohol screening

3.52.5.2 Minimum security measures in place

1. 1.8m Diamond mesh Fence
2. Spot Lights
3. Gate with chain and padlock
4. Short Vegetation
5. 2 x Security Guards
6. Panic buttons / Cell phone and or two way radio
7. Guard hut (2.4m x 2.4 m) or 1.2m x 2.4m
8. Water
9. Bulletproof to be worn by Security Officer

3.52.6 Response to Fire

When Security Officers are on duty and a fire is detected, they must immediately inform the nearest Fire Brigade and other emergency services. The Security Officer must inform the SITE SUPERVISOR (or appointed delegate), ESKOM MANAGER / SUPERVISOR and the SERVICE PROVIDER's control room must also be informed. The incident must be recorded in detail in the OB. All Security Officers must be competent and have completed a basic level one firefighting course.

• If it appears to be an extinguishable fire, then the Security Officer must first attempt to extinguish it before calling the ESKOM MANAGER/ SUPERVISOR.

- A full detailed report is to be provided to the ESKOM MANAGER/ SUPERVISOR within 12 hours of the incident.

- It is imperative that the local emergency numbers are available and kept up to date at all security points.

3.53 OMISSIONS FROM SAFETY AND HEALTH REQUIREMENTS SPECIFICATION

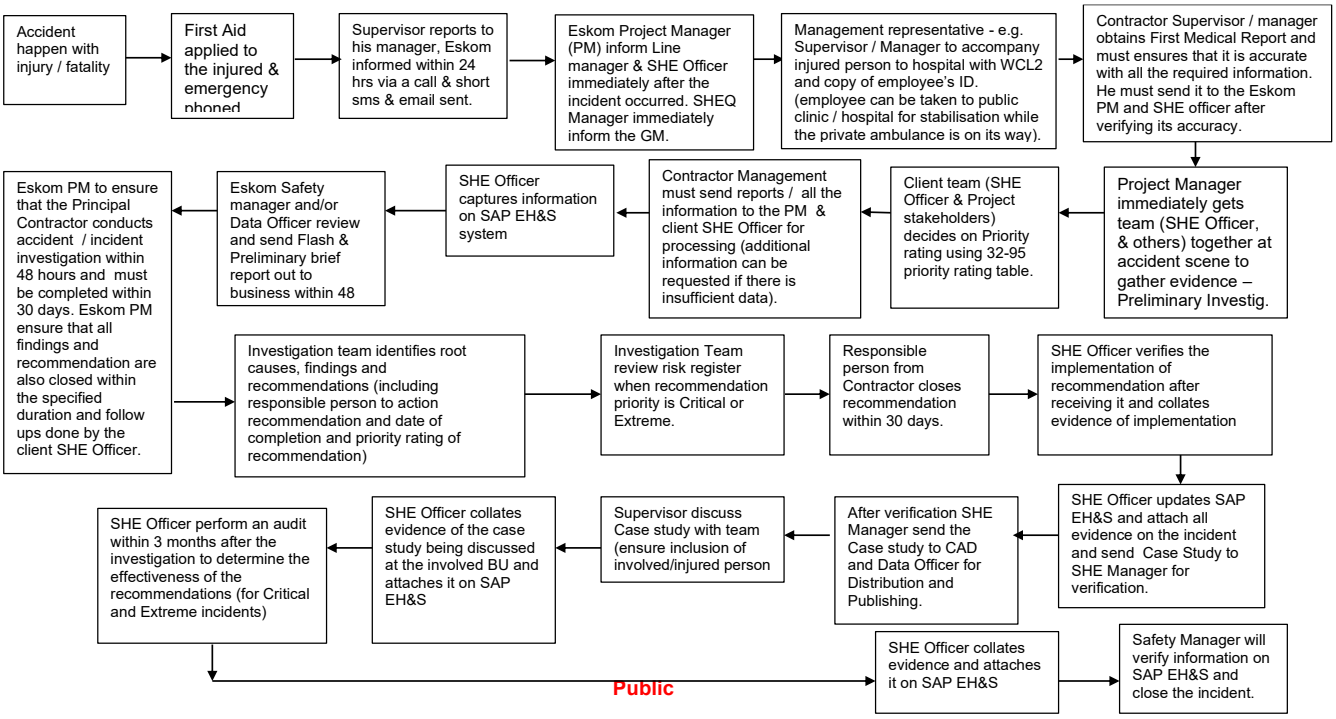
By drawing up this SHE specification Eskom has endeavoured to address the most critical aspects relating to SHEQ issues in order to assist the contractor in adequately providing for the health and safety of employees on site.

Should Eskom not have addressed all SHEQ aspects pertaining to the work that is tendered for, the contractor needs to include it in the SHE Plan and inform Eskom of such issues when submitting the tender.

3.54 CONTRACT SIGN OFF

On completion of the project, all appointed contractors shall close out their project documentation and SHE Files and forwards such to the principal contractor. The principal contractor shall likewise close out his/her project documentation and SHE Files and forwards such to the project manager.

ANNEXURE A – INCIDENT / ACCIDENT FLOWCHART (Below on the next page)



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Annexure B - Principal Contractor (&Contractor) Safety Pledge

PRINCIPAL CONTRACTOR (& CONTRACTOR) SAFETY PLEDGE

As an Accountable & Responsible Employer I am committed to ensure that I will comply with section 8 (Duties of the employer) of the OHS Act 85 of 1993 & its Regulations which include the CR 7 (Construction Regulation – Duties of the Principal Contractor), I will also ensure that all my employees work safely at all times and will:

- work in a way to minimise the risk to safety, health of myself and others and ensure that the work will not have adverse effects on the environment;
- comply with all Eskom Life Saving Rules and ensure that all employees fully comply as well;
- not undertake tasks for which I am not appropriately licensed, qualified, trained or skilled;
- comply at all times with all work instructions and safety procedures;
- wear the required personal protective equipment appropriate to the task and site;
- ensure that any tool I use is fit for its purpose and used accordingly;
- provide information regarding possible hazards that may exist with regards to the work I am to perform;
- have a knowledge of and ensure compliance with all relevant regulations including SACPCMP requirements for SHE officers and Project Managers;
- report back to the Site Supervisor if the conditions of work alter or the nature of my job changes;
- follow the emergency procedures;
- immediately report and injury, incident, damage or loss which occurs as a result of my work;
- report any opportunity for safety, health or environmental improvements.

- ensure that all employees are transported as per Eskom procedure requirements.
- provide man-hours timely on a monthly basis for all employees as required by the Client.

In the event my company and its employees deviate from complying with the expected compliance requirements through negligence and allowing them to attend outages and work tasks without fulfilling the

I have read and understood the expectations required of me.

Name: _____ Signed: _____

Date: _____