


|   |                 |  |
|---|-----------------|--|
|  | <b>Standard</b> |  |
|---|-----------------|--|

**Title: Contractor Health and Safety Requirements**

**Document Identifier: 32-136**

**Alternative Reference Number: N/A**

**Area of Applicability: Eskom Holdings SOC Ltd**

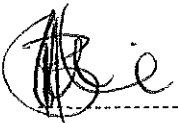
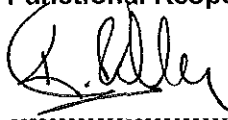
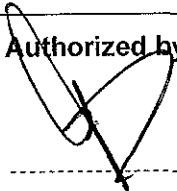
**Functional Area: Sustainability and Risk Division**

**Revision: 3**

**Total Pages: 33**

**Next Review Date: November 2021**

**Disclosure Classification: Controlled Disclosure**

|   |   |   |
|---|---|---|
| <p><b>Compiled by</b></p>  <p><b>B Matsie</b><br/>Senior Advisor<br/>Contractor OHS Management</p> <p>Date: 19/12/2016</p> | <p><b>Functional Responsibility</b></p>  <p><b>R Pillay</b><br/>Middle Manager<br/>Contractor OHS Management</p> <p>Date: 19/12/2016</p> | <p><b>Authorized by</b></p>  <p><b>J Naidoo</b><br/>Senior Manager<br/>OHS Sustainability</p> <p>Date: 19/12/2016</p> |
|---|---|---|

## Content

|  | Page |
|--|------|
| 1 Introduction . . . . .   | 4    |
| 2 Supporting Clauses . . . . .   | 4    |
| 2.1 Scope . . . . .  | 4    |
| 2.1.1 Purpose . . . . .  | 4    |
| 2.1.2 Applicability . . . . .  | 5    |
| 2.1.3 Effective date . . . . .   | 5    |
| 2.2 Normative/Informative References . . . . .                         | 5    |
| 2.2.1 Normative . . . . .  | 5    |
| 2.2.2 Informative . . . . .  | 6    |
| 2.3 Definitions . . . . .  | 6    |
| 2.4 Abbreviations . . . . .  | 11   |
| 2.5 Roles and Responsibilities . . . . .                               | 12   |
| 2.6 Process for Monitoring . . . . .                                   | 14   |
| 2.7 Related/Supporting Documents . . . . .                             | 14   |
| 2.8 Statutory/Non-statutory Appointment . . . . .                      | 15   |
| 3. Document Content . . . . .  | 15   |
| 3.1 Material and Equipment . . . . .                                   | 15   |
| 3.2 Risk Assessments . . . . .   | 15   |
| 3.3 Record Keeping . . . . .   | 16   |
| 3.4 Disciplinary Process . . . . .                                     | 16   |
| 3.5 Life-Saving Rules . . . . .  | 16   |
| 3.6 Health and Safety Behaviour Observations . . . . .                 | 17   |
| 3.7 Incident Investigation . . . . .                                   | 17   |
| 3.8 Training . . . . .   | 17   |
| 3.9 Health and Safety Representative . . . . .                         | 18   |
| 3.10 Health and Safety Communication . . . . .                         | 18   |
| 3.11 Contractor's Site Facilities . . . . .                            | 19   |
| 3.12 Public Safety . . . . .   | 19   |
| 3.13 Emergency Preparedness . . . . .                                  | 19   |
| 3.14 Occupational Health and Hygiene . . . . .                         | 20   |
| 3.15 Auditing . . . . .  | 21   |
| 3.16 Inspections . . . . .   | 21   |
| 3.17 Transport/Mobile Plant Equipment . . . . .                        | 22   |
| 3.18 Hazardous Materials/Chemicals Management . . . . .                | 22   |
| 3.19 Machinery, Tools and Equipment . . . . .                          | 23   |
| 3.20 Explosive-Powered Tools . . . . .                                 | 23   |
| 3.21 Lifting Equipment . . . . .                                       | 23   |
| 3.22 Boilers, Pressurised Systems and Vessels under Pressure . . . . . | 23   |
| 3.23 Working at Heights . . . . .                                      | 24   |

### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

|      |  |    |
|------|--|----|
| 3.24 | Excavations and Tunnelling..                             | 24 |
| 3.25 | Confined Spaces  | 25 |
| 3.26 | Danger of Engulfment ..                                  | 25 |
| 3.27 | Barricading  | 25 |
| 3.28 | Explosives   | 26 |
| 3.29 | Demolition Work  | 26 |
| 3.30 | Permit to Work   | 26 |
| 3.31 | Radiography, Ultrasonic or Non-destructive Testing (NDT) | 27 |
| 3.32 | Work in Close Proximity to/on Public Roads.              | 27 |
| 3.33 | Work Stoppage  | 27 |
| 3.34 | Substance Abuse  | 27 |
| 3.35 | Statistical Reporting                                    | 27 |
| 3.36 | Housekeeping   | 28 |
| 3.37 | Workplace Signage and Colour Coding                      | 29 |
| 3.38 | Personal Protective Equipment (PPE)..                    | 29 |
| 3.39 | Safety, Health and Environment (SHE) Specification       | 29 |
| 3.40 | Safety, Health and Environment (SHE) Plan                | 30 |
| 3.41 | Safety, Health and Environment (SHE) File                | 30 |
| 3.42 | Hours of Work  | 31 |
| 3.43 | SHE Recognition and Reward System.                       | 31 |
| 3.44 | Environmental Care.                                      | 31 |
| 3.45 | Unlawful Orders  | 32 |
| 3.46 | Section 37(2) Agreement                                  | 32 |
| 3.47 | Security   | 32 |
| 4    | Acceptance   | 32 |
| 5    | Revisions  | 33 |
| 6    | Development Team   | 33 |
| 7    | Acknowledgements   | 33 |

**CONTROLLED DISCLOSURE**

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

## 1. Introduction

Eskom is committed to safeguarding contractors (principal contractors, appointed contractors, suppliers, vendors, service providers and consultants) and the environment against undesired operating exposures, which is in line with its Safety, Health, Environmental and Quality Policy. Therefore, as an organisation, processes need to be in place to identify all possible practical occupational health and safety risks to which contractors are exposed and to implement appropriate measures that need to be taken in order to prevent any incidents or injuries or environmental damage resulting from accidental exposure

The term "contractor requirements" means a comprehensive documented prerequisite of imperative safety, health and environmental requirements for a contract or project

Contractors have the crucial responsibility for executing work safely on-site/project, including measures for contractor health, safety and environment for their activities/services to prevent any injury to employees and/or other people and members of the public or damage to the environment. Each contractor is responsible for ensuring that its employees and the employees of any appointed contractors comply with all applicable occupational health and safety legislative requirements and the policies and procedures of Eskom

## 2. Supporting Clauses

### 2.1 Scope

The aim of this standard is to standardise the health and safety requirements applicable to activities of contractors throughout Eskom Holdings SOC Limited and its subsidiaries, with a view to achieving a common goal, namely Zero Harm.

This standard sets out the minimum legislative and organisational requirements.

Each project and situation may contain additional unique activities, challenges, needs, and requirements that must be considered and incorporated, over and above the minimum requirements already contained in this standard

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

#### 2.1.1 Purpose

The purpose of this document is to stipulate essential information on significant safety and health aspects for purposes of contractor health and safety conformity and standardisation

Eskom's contractors have the fundamental accountability and responsibility for executing on-site safety, health, and environment issues for their activities, services, products, and work. Each contractor is responsible for ensuring that its employees and the employees of all appointed contractors comply with all occupational safety, health, and environmental (SHE) statutory requirements and the policies and procedures of Eskom Holdings SOC Limited

#### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

The contractor's SHE management system must demonstrate compliance with the level appropriate to the service provided and with the applicable legal requirements. The contractor and its employees must be able to carry out their work in a safe manner, using correct procedures for safe plant, equipment and substances, employing systems of work that are safe, and providing adequate instruction, training, and supervision for all employees.

In addition to the legislative requirements governing health, safety and environment, contractors shall comply with all Eskom Holdings SOC Limited policies, procedures, and standards.

**NOTE:** This standard (or any project-specific version of it) does not replace legislative requirements.

### **2.1.2 Applicability**

*This standard is applicable to Eskom Holdings SOC Limited's divisions, subsidiaries, and entities in which Eskom has a controlling interest.*

This standard shall apply to all Eskom and Eskom subsidiary employees carrying out any form of contract work for or on behalf of Eskom, that is, agents, clients, and contractors.

**NOTE:** It will be the responsibility of the client or agent to ensure that the contractors are informed of any revisions to any documents listed which they are required to adhere to while performing work for Eskom Holdings SOC Limited.

### **2.1.3 Effective date**

This document will be effective from the day of signature. Implementation of this standard shall be monitored after a period six months from the authorisation date.

## **2.2 Normative/Informative References**

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

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

### **2.2.1 Normative**

- [1] ISO 9001 Quality Management Systems
- [2] 32-296: Integrated SHE Organisation, Roles and Responsibilities, and Statutory Appointments Procedure
- [3] 32-727. Safety, Health, Environment, and Quality Policy
- [4] 32-726 SHE Requirements for the Eskom Commercial Process
- [5] 240-62196227. Life-saving Rules Standard
- [6] 32-245: Waste Management Procedure
- [7] 32-477. Safety, Health, and Environment Training and Development
- [8] 32-524 Developing Health & Safety Specifications
- [9] 32-529 Occupational Health and Safety Risk Management Process
- [10] 32-407: Behavioural Safety Observations

#### **CONTROLLED DISCLOSURE**

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- [11]32-124· Eskom Fire Risk Management
- [12]32-108. Firefighting Organisation
- [13]32-37 Substance Abuse Procedure
- [14]32-95: Environmental, Occupational Health and Safety Incident Management Procedure
- [15]32-418. Working at Heights Standard
- [16]32-520: Occupational Health & Safety Risk Assessment Procedure
- [17]32-345· Eskom Vehicle Safety Specification
- [18]32-1112· Eskom Disciplinary Code (Standard)
- [19]32-1113 Eskom Disciplinary Procedure
- [20]32-1034· Eskom Procurement and Supply Chain Management Procedure
- [21]240-62946386 Vehicle and Driver Safety Management Procedure
- [22]240-44175038. Control of Non-conforming Product or Service Procedure
- [23]240-46569633: Professional and Statutory registration for Construction Project Managers and Supervisors with SACPCMP
- [24]Project and Construction Management Professions Act, 2000 (Act No 48 of 2000)
- [25]National Environmental Management Act, 1998 (Act No. 107 of 1998)
- [26]National Environmental Management: Waste Act, 2008 (Act No 59 of 2008)
- [27]All relevant South African legislation (at national, provincial, and municipal level)
- [28]Occupational Health and Safety Act, 1993 (Act No 85 of 1993), and regulations.

### 2.2.2 Informative

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

- [1] 240-84520108. Public Safety Standard
- [2] 32-726: SHE Requirements for the Eskom Commercial Process
- [3] 32-303· Requirements for the Safe Processing, Storage, Removing, and Handling of Asbestos-containing Materials, Equipment, and Articles Procedure
- [4] 240-46569633 Professional and Statutory Registration for Construction Project Managers and Supervisors with SACPCMP

### 2.3 Definitions

NOTE: Where there are no listed Eskom definitions, the definitions listed in the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) (OHS Act), or its regulations should be referred to

**2.3.1 Agent:** (OHS Act) means any person who acts as a representative for a client.

#### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- 2.3.2 Baseline risk assessment:** Baseline risk assessment refers to the OHS hazards and risks that are identified and assessed before the inception of a new project and commencement of operations. The baseline risk assessment shall include both routine and non-routine tasks.
- 2.3.3 Client:** 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 construction works.
- 2.3.4 Competent person:** 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).
- 2.3.5 Contractor:** A contractor is a current or potential supplier, vendor, contractor, consultant, or service provider. A supplier may be a natural or legal person. Definition is per 32-726 SHE Requirements for the Eskom Commercial Process
- 2.3.6 Contract custodian:** The person defined in a contract as the Eskom representative, for example, the project manager/end-user, that is, the person responsible for managing the contract and ensuring that the works or services are executed in terms of the contract
- 2.3.7 Construction work:** means any work in connection with:
- a) the construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure,
  - b) the construction, erection, maintenance, demolition, or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system, or any similar civil engineering structure; or type of work
- 2.3.8 Construction vehicle:** means a vehicle used for means of conveyance for transporting persons or material or both such persons and material, as the case may be, both on and off the construction site for the purpose of performing construction work
- 2.3.9 Consultant:** means a person providing professional advice
- 2.3.10 Controlled disclosure:** controlled disclosure to external parties (either enforced by law or discretionary)
- 2.3.11 Design:** in relation to any structure, includes drawings, calculations, design details, and specifications
- 2.3.12 Designer:** means:
- a) a competent person who –
    - I. prepares a design,
    - II. checks and approves a design;

#### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

III. arranges for a person at work under his or her control to prepare a design, including an employee of that person where she or he is the employer, or

IV designs temporary work, including its components,

- b) an architect or engineer contributing to, or having overall responsibility for a design,
- c) a building services engineer designing details for fixed plant,
- d) a surveyor specifying articles or drawing up specifications;
- e) a contractor carrying out design work as part of a design and building project; or
- f) an interior designer, shop-fitter or landscape architect

**2.3.13 Duty of care to the environment:** 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

**2.3.14 Employee:** 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

**2.3.15 Employer:** 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. 66 of 1995)

**2.3.16 Environment:** 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

**2.3.17 Eskom requirements:** Eskom requirements flowing from directives, policies, standards, procedures, specifications, work instructions, guidelines, or manuals

**2.3.18 Fall protection plan:** 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

#### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30



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

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

**2.3.21 Health and safety file:** means a file or other record in permanent form, containing the information required as contemplated in these (the Construction Regulations)

**2.3.22 Health and safety specification:** means a document specification of all health and safety requirements pertaining to associated works on a construction site, so as to ensure the health and safety of persons.

**2.3.23 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

**2.3.24 Internal:** means an Eskom department that performs work for another Eskom department

**2.3.25 Joint venture:** means a strategic alliance between two or more parties to undertake economic activity together. The parties agree to create a new entity (incorporated or unincorporated) together by each party's contribution of equity, and they then share in the profits, losses, and control of the enterprise. The venture may be for one specific project only or a continuing business relationship

**2.3.26 Life-Saving Rule:** Life-Saving Rules are a set of Eskom safety rules that, if not adhered to, have the potential to cause serious harm to people

**2.3.27 Maintenance:** (maintenance management) Schemes can be based on a number of techniques to focus on those parts which deteriorate and need to be maintained:

- a) Preventative – planned maintenance involves replacing parts and consumables or making necessary adjustments at pre-set intervals, so there are no hazards created by component deterioration or failure.
- b) Condition-based – this involves monitoring the condition of critical parts and carrying out maintenance whenever necessary to avoid hazards which could otherwise occur.
- c) Breakdown-based – this is carried out when faults or failures have occurred. This is acceptable if the failure does not present an immediate hazard and can be corrected before the risk is increased

**2.3.28 Mandatary:** includes an agent, a contractor, or an appointed contractor for work, but without derogating from his/her status in his/her own right as an employer or user.

#### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

**2.3.29 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, who shall be registered with the Health Professions Council of South Africa

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

**2.3.31 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

### 2.3.32 Mine

a) when used as a noun

- i. any borehole or excavation, in any tailings or in the earth, including the portion of the earth that is under the sea or other water, made for the purpose of searching for or winning a mineral, whether it is being worked or not, or
- ii any other place where a mineral deposit is being exploited, including the mining area and all buildings, structures, machinery, mine dumps, access roads, or objects situated on or in that area that are used or intended to be used in connection with searching, winning, exploiting, or processing of a mineral, or for health and safety purposes. But, if two or more excavations, boreholes, or places are being worked in conjunction with one another, they are deemed to comprise one mine, unless the Chief Inspector of Mines notifies their employer in writing that those excavations, boreholes, or places comprise two or more mines; or
- iii. a works; and

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

**2.3.33 Organisation:** may be defined as a group of individuals (large or small) that is cooperating under the direction of executive leadership in accomplishment of certain common objects

**2.3.34 Project:** means an activity or a group of activities that has a defined start and end date, a defined scope, and a defined sum of money allocated to complete the activities.

**2.3.35 Project manager/leader:** means the person who has the responsibility for the successful planning and execution of a project. The project manager must satisfy the certification requirements set by the South African Council for the Project and Construction Management Professions Note. The project manager is the duly authorised Eskom representative who acts on Eskom's behalf as the administering officer for the purposes of the contract (The term "project manager" in the context of this procedure should be used in its broader sense and should not be restricted to the designation of project manager in any specific work environment )

### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- 2.3.36 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.
- 2.3.37 Service provider:** any private person or legal entity that provides any service(s) to Eskom for compensation
- 2.3.38 Subsidiary:** an enterprise controlled by another (called the parent) through the ownership of greater than 50% of its voting stock
- 2.3.39 Task:** a segment of work that requires a set of specific and distinct actions for its completion
- 2.3.40 Toolbox talks:** 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 )
- 2.3.41 The Act:** (OHS Act) means the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), as amended, and the regulations thereto
- 2.3.42 Visitor:** any person visiting a workplace with the knowledge of, or under the supervision of, an employer or who is not providing a specific service to Eskom

## 2.4 Abbreviations

| Abbreviation | Explanation  |
|--------------|--|
| BU           | Business Unit  |
| CE           | Chief Executive  |
| COID Act     | Compensation for Occupational Injuries and Diseases Act, 1993 (Act No 130 of 1993) |
| HIRA         | Hazard Identification and Risk Assessment  |
| MHS Act      | Mine Health and Safety Act, 1996 (Act No 29 of 1996)                               |
| NEMA         | National Environmental Management Act, 1998 (Act No 107 of 1998)                   |
| OHS Act      | Occupational Health and Safety Act, 1993 (Act No 85 of 1993)                       |
| OHS          | Occupational Health and Safety   |
| H&S          | Health and Safety  |
| ORHVS        | Operating Regulations for High Voltage Systems                                     |
| SACPCMP      | South African Council for the Project and Construction Management Professions      |
| SHE          | Safety, health, and environment  |
|              |  |

### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

## 2.5 Roles and Responsibilities

The Group Chief Executive (Eskom), as the employer in terms of the OHS Act and in general terms, has the overall responsibility and liability for the health and safety of all persons involved at all Eskom sites. Within the framework of the OHS Act, the CE may discharge these duties as far as is reasonably practicable. These duties may be delegated to section 16(2) appointees and to responsible managers within the various Eskom divisions

Eskom and its subsidiaries must take all reasonably practicable steps to prevent construction-related incidents and harm to any person, including members of the public, and damage to property and the environment.

*The contractor, being an employer in his/her own right, is still required to abide by Eskom SHE requirements, as well as the relevant safety, health and environmental legislation.*

The appointed managers are responsible for health and safety and environment on sites under their control

### 2.5.1 Project management

Project management is the discipline of planning, organising, motivating, and controlling resources to achieve specific goals. A project is a temporary endeavour with a defined beginning and end (usually time-constrained, and often constrained by funding or deliverables), undertaken to meet unique goals and objectives, typically to bring about beneficial change or added value. The temporary nature of projects stands in contrast with business as usual (or operations), which are repetitive, permanent, or semi-permanent functional activities to produce products or services. In practice, the management of these two systems is often quite different, and as such requires the development of distinct technical skills and management strategies.

The primary challenge of project management is to achieve all of the project goals and objectives while honouring the preconceived constraints. The primary constraints are scope, time, quality and budget. The secondary and more ambitious challenge is to optimise the allocation of necessary inputs and integrate them to meet pre-defined objectives.

### 2.5.2 Project managers

Project managers manage activities and resources allocated to projects in a cohesive, efficient manner as well as administer and execute engineering and technology projects (including control plant) within cost, quality and time.

Eskom. Project health and safety manager/practitioner

The responsibility of the health and safety manager/practitioner is to provide assurance, as well as to advise, assist, and support the project manager, supervisor, and project engineer in the management of the health and safety issues on the project, which include ensuring proper coordination among the various contractors. The health and safety manager/practitioner shall also be responsible for assisting in the development of site- and project-specific health and safety specifications and for ensuring that health and safety specifications are issued with enquiry documents and that the contractor's health and safety plans are submitted, evaluated, and approved. He/she shall be responsible for auditing and ensuring compliance with legal requirements

#### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

### 2.5.3 Contractor health and safety officer

Where appointed, a contractor health and safety officer shall be competent to perform the required duties as contemplated by the OHS Act and project requirements

### 2.5.4 MHS Act

In terms of the MHS Act, the appointment of a health and safety officer is required for the duration of the contracted work. The contractor's health and safety officer shall assist and support the contractor's construction manager to ensure that the organisation's health and safety responsibilities are fulfilled and that there is compliance with the health and safety specifications and health and safety plan.

In determining the number of appointed competent health and safety officers, the nature and scope of work being performed shall be taken into consideration.

All contractor health and safety officers must have a close liaison with Eskom's OHS departments for the divisions/BUs within the area where they are working.

### 2.5.5 OHS Act

In terms of Construction Regulation 8(5) a contractor must, after consultation with the client and having considered the size of the project, the degree of danger likely to be encountered or the accumulation of hazards or risks on the site, appoint a full-time construction health and safety officer in writing to assist in the control of health and safety related aspects on the site. Provided that, where the question arises as to whether a construction health and safety officer is necessary, the decision of the inspector is decisive.

The appointed safety officer must have the necessary competencies and resources to be able to carry out his/her tasks efficiently and must be registered with a statutory body approved by the Chief Inspector.

The contractor's health and safety officer shall assist in the control of all safety-related matters at the sites, and have inputs at the design stage.

In determining the number of appointed competent health and safety officers, the nature and scope of work being performed shall be taken into consideration.

All contractor health and safety officers must have a constant liaison with Eskom's divisional health and safety departments and cooperate with the health and safety managers/practitioners responsible for providing them with a health and safety service.

### 2.5.6 Contractors

All the duties that Eskom has as the client towards the contractor, the contractor, in turn, shall have towards all his/her appointed contractors. It must be noted that the contractor remains accountable and responsible for his/her appointed contractors.

The relationship between the contractor and his/her appointed contractor shall be governed by the contractual arrangements into which they have entered.

Contractors shall carry out the duties as contemplated in sections 8 and 9, the relevant regulations and duties as listed in regulation 7 of the Construction Regulations of the OHS Act.

#### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

All Eskom contractors are to ensure their compliance with the legislative requirements and any further requirements contained in the contractual agreements they enter into with Eskom.

Where subsidiaries of Eskom, such as Rotek Industries, serve in the capacity of an Eskom contractor, they must comply with any further contractual requirements.

Construction supervisors shall be appointed in writing for the duration of the construction project, with the primary responsibility of supervising the construction work. Where required, contractors may appoint additional employees as assistant construction supervisors. Persons appointed must be competent and have extensive knowledge of the type of work they are required to supervise.

Assistant construction supervisors have the same responsibilities as construction supervisors. This appointment does not relieve the construction supervisors of any of their accountabilities and/or responsibilities.

### **2.5.7 Employees**

Section 14 of the OHS Act has reference, contractor employees are responsible for their own health and safety, as well as the health and safety of their colleagues while at work. The client / employer / contract management cannot be expected to be totally responsible if any of their employees do not comply with legislative and Eskom health and safety requirements. Employees will be held jointly responsible where situations so require. In their own interest, contractor employees must be aware of the responsibilities of their contractor management.

### **2.5.8 Construction professional registration**

The legislation and the SACPCMP's publications direct that all persons assuming responsibility for construction project management, construction management and construction health and safety should be registered as professionals in the appropriate category with the SACPCMP in order to comply with legal and statutory requirements within South Africa.

### **2.5.9 Joint ventures**

Where the work is to be managed jointly with a joint venture partner, the requirements imposed on the contractors shall also apply to the joint venture partner, thus each contractor shall be responsible and accountable for their own organisation's health and safety. All organisations shall be signatory to the required section 37(2) agreement of the OHS Act.

Where a joint venture operates as separate entities, the SHE requirements need to be met by each partner. If the joint venture operates as a single entity which has been registered and through mutual agreement, all the SHE requirements must be met by the single business entity.

Each company shall be liable for its own contraventions and could, therefore, be prosecuted in its own right without reference to any of the other companies involved.

## **2.6 Process for Monitoring**

This document will be reviewed five-yearly or if required.

## **2.7 Related/Supporting Documents**

Not applicable

### **CONTROLLED DISCLOSURE**

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

## 2.8 Statutory/Non-statutory Appointment

All statutory appointments shall comply with legislative requirements and any Eskom non-statutory appointments must be made using Eskom Standard 32-296 Integrated SHE Organisation, Roles and Responsibilities, and Statutory Appointments

Where BUs require additional non-statutory appointments to be made by contractors, these are permitted (in terms of the BU's Legal Appointments Manual, where compiled). All appointments/copies made by the contractor shall be included in the health and safety file, and should be available to the client/agent

Where construction work is conducted on sites governed by mining legislation, the appropriate equivalent appointments and assignments shall be made. Depending on the nature of the contract, the assignments shall be expanded

## 3. Document Content

### 3.1 Material and Equipment

Material and equipment used or purchased must conform to the health and safety requirements of the manufacturer and legislative requirements. Where reclaimed material is authorised to be used, it shall meet the manufacturer's safety requirements, as if new.

Cognisance of the health and safety factor during work: the health and safety of such material/equipment shall be factored in, to ensure that it remains safe for use by others at a time after completion of the contract. Eskom and/or the designer/agent/client shall determine the acceptability of workmanship.

### 3.2 Risk Assessments

It is a legal requirement in terms of section 8(2)(d) of the OHS Act and section 9 of the CR for an employer to carry out risk assessments to establish what hazards to the health and safety of persons are attached to any work which is performed, any article or substance which is produced, processed, used, handled, stored, or transported and any plant or machinery which is used in his/her business and he/she shall, as far as is reasonably practicable, further establish what precautionary measures should be taken with respect to such work, article, substance, plant or machinery in order to protect the health and safety of persons and shall provide the necessary means to apply such precautionary measures

A risk assessment is defined as an identification of the hazards present in an organisation and an estimate of the extent of the risks involved, taking into account whatever precautions are already being taken

It is essentially a three-stage process.

- identification of all hazards,
- evaluation of the risks,
- measures to control the risks

#### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

Risk assessments are required to be maintained. This means that significant changes to a process or activity, or any new process, activity or operation, should be subjected to a risk assessment and that if new hazards come to light during the work process, these should also be subjected to risk assessments

Risk assessments for long-term processes should be periodically reviewed and updated. Method statements or written safe work procedures are an effective method as information and record of the way jobs or tasks must be performed.

Prior to start of work, risk assessments on every job or task are ideal to allow supervisors and employees to assess any inherent risks that could have been overlooked during the initial risk assessment or any changes that might have occurred in a period of absence, in particular if a job or task is extended over a day or halted due to inclement weather.

### 3.3 Record Keeping

Record keeping is a system where relevant documentation is kept for auditing or inspection purposes and may be referenced to at any stage during or after a project

All records pertaining to the project in terms of legislative and Eskom requirements shall be kept. The SHE files shall be kept for the duration of the project. They shall be open to audit or inspection by any party who is entitled to audit or inspect the project. SHE files should be handed over by the contractor to the asset owners for archiving on completion of the project

### 3.4 Disciplinary Process

A disciplinary process is an organisational structured procedure to deal with employees who have transgressed organisation requirements. This is a method of changing behaviour. It is essential for an organisation to have such a process

### 3.5 Life-Saving Rules

Life-saving Rules are a set of Eskom safety rules that, if not adhered to, have the potential to cause serious harm to people.

These rules are generally determined in terms of the consequences of the behaviours they describe, i.e. if a particular set of behaviours or actions have a very high probability of causing disabilities or fatalities when performed.

Rule 1: Open, Isolate, Test, Earth, Bond and/or Insulate before Touch

Rule 2: Hook up at Heights

Rule 3: Buckle Up

Rule 4: Be Sober

Rule 5: Ensure that you have a Permit to Work

These rules are created to enforce "zero tolerance" of serious at risk behaviours

Violation of these rules will be viewed in a serious light and the consequences will be dealt with via the respective disciplinary processes

#### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30



Life-saving Rules apply to all Eskom employees, agents and contractors. Visitors to Eskom should also respect and adhere to these rules as applicable and could be instructed to leave the Eskom premises with immediate effect should they refuse to do so.

### 3.6 Health and Safety Behaviour Observations

The objective of behaviour safety observations is to assess and address the actual safe and unsafe behaviour of people in the workplace, as well as workplace conditions that are caused by the actions or non-actions of employees and contractors.

### 3.7 Incident Investigation

All incidents shall be investigated in terms of OHS Act General Administrative Regulations 8 and 9, using Eskom Procedure 32-95 as a reference, and where injuries as contemplated in sections 24 and 25 have been sustained, be reported to the Department of Labour.

Contractors shall use the standard General Administrative Regulation Annexure 1 "Recording of an Incident" form as a minimum for all incident investigation reports.

The objective of incident investigation, not only being a legal requirement, is to establish why and how the incident occurred, and to find out the real causes of the incident and to decide on precautionary measures that are required to address the causes to prevent any recurrences of the same or similar incidents.

### 3.8 Training

Appropriate training must be given to employees in order for them to be competent to perform the tasks assigned to and expected of them. Training also gives an employee a chance to develop additional skills which will benefit any organisation.

The contractor shall have a training matrix for his/her organisation.

#### 3.8.1 Induction training

All contractors, their employees and visitors are required to attend formal induction training courses. Such training shall be conducted by contractor management, construction safety officers, or construction supervisors.

Induction training is a chance to inform persons of the health and safety organisational requirements, not only in the organisation's offices but also at the workplaces.

#### 3.8.2 Site-specific awareness training

Over and above induction training, contractors are required to ensure, before an employee commences work on the project, that the supervisor in control with responsibility for the employee has informed the employee of his/her scope of authority for that site/workplace.

#### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

### 3.9 Health and Safety Representative

The requirements of sections 17 and 18 of the OHS Act shall be complied with. Where operational work is performed by contractors, they shall appoint health and safety representatives for each workplace.

Contractor managers shall permit their appointed health and safety representatives to carry out their functions as required by legislation and support them in fulfilling these functions.

The client may require a contractor safety representative to be appointed and trained based on the nature and risk level of work through sections 17 and 18 of the OHS Act.

### 3.10 Health and Safety Communication

Communication is a two-way tool to enhance awareness and knowledge with the main aim of changing behaviour or influencing decision-making. Communication is a process that allows information sharing and exchange using different methods that sometimes require feedback.

#### 3.10.1 SHE committees

Statutory SHE committees in terms of sections 19 and 20 and General Administrative Regulation 5 of the OHS Act and Eskom requirements shall be established.

SHE committees are forums to discuss health and safety related matters, with specifics such as making recommendations to an employer on health and safety matters, incident investigations and any other health and safety related matters as prescribed by such committees.

Project managers shall include safety and health as a standing agenda item for all their project meetings, and minutes of these meetings must be available on site at all times.

NOTE: This meeting does not replace or act as a substitute for the required SHE committee meeting.

#### 3.10.2 Toolbox talks

Toolbox talks are short, targeted meetings and/or awareness sessions to inform and/or educate employees on the hazards and risks they will be exposed to when they perform work. Use toolbox talks to create awareness among the employees to recognise and avoid unsafe conditions.

Use toolbox talks to teach employees to correct or report health and safety hazards so management and other employees can take actions to correct them. Employees will learn to avoid potentially hazardous situations discussed during toolbox talks as well as to be able to identify hazards and correct those hazards prior to starting a task/job if there are hazards present.

Toolbox talks are an effective way to meet your legal requirements.

#### 3.10.3 General SHE communication

Constant communication with employees creates an interest and feeling of being part of the team. Various methods could be in the form of, but not limited to:

- posters
- videos
- competitions

#### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- newsletters

Such methods are learning aids and also send a message or act as a reminder of a SHE topic without having to hold specific forums or training sessions

### 3.11 Contractor's Site Facilities

Where required, contractors, unless otherwise specified in the contract or negotiated with Eskom to use *their facilities*, must ensure that adequate facilities are provided for their employees on the site/project.

When such facilities are provided, they must comply with the Facilities Regulations, SANS 10400 standard A to XA and CR 30

### 3.12 Public Safety

Eskom upholds the rights of 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. Contractors shall include in their SHE plan how they intend controlling or safeguarding any members of the public against their activities during the project, without damaging Eskom's name and reputation

### 3.13 Emergency Preparedness

Emergency situations threaten, or may cause harm to, the lives of employees and members of the public, may cause damage to property, infrastructure and equipment as well as degradation to the environment, and may disrupt production and the rendering of services

The contractor shall have an emergency preparedness plan that will address all the identified risks of the organisation to achieve a quick response and recovery to bring the situation back to normal in the shortest possible period of time and most cost-effective way

#### 3.13.1 Fire safety

Fire safety is an integral part of the general safety and protection of an organisation, its employees and members of the public from the effects of fire, heat and smoke. As a minimum, this is ensured by compliance with and the application of legislative and policy requirements.

Fire safety requirements are covered in the Construction Regulations and the National Building Regulations, SANS 10400 (T regulations).

#### 3.13.2 First aid planning and emergency care

Every person at a workplace should be afforded appropriate and prompt medical treatment/assistance.

In the event of an incident and to receive post-incident rehabilitation, organisations are required to meet the first-aid requirements of General Safety Regulation 3.

"An employer shall take all reasonable steps that are necessary under the circumstances, to ensure that persons at work receive prompt first aid treatment in the case of injury or emergency."

#### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

Eskom has established a contract with Netcare 911 for all their employees, contractors and their employees for emergency medical assistance needed while on duty anywhere in South Africa. The telephone number is 086 1237 566 (0861 2ESKOM)

### **3.13.3 Emergency escape routes**

The SANS 10400 T regulations make provisions for escape routes to be incorporated into buildings

Far too often, when there are fires within building, employees are fatally injured due to the fact that they were unable to evacuate the burning building. This is attributed to the fact that there were no escape routes and/or, if there were routes in the building, egress was impeded by the routes being used as storage areas

## **3.14 Occupational Health and Hygiene**

### **3.14.1 Medicals**

Medical surveillance is based on the occupational risk exposure of employees. It is a statutory requirement according to the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and forms an essential component of an Occupational Health and Safety programme.

The purpose of medical surveillance is to comply with statutory requirements to determine fitness for duty by assessing whether or not the prospective candidate or employee is physically/mentally/psychologically fit and able to perform the inherent requirements of the prospective or current job without any ill effects or limitations, and to provide a baseline health status against which future changes can be measured. To be able to measure job-specific fitness, individual person job specifications are required.

The contractor shall have a medical surveillance programme

### **3.14.2 Occupational hygiene**

Occupational hygiene is the identification, evaluation and control of those environmental factors, arising in or from the work place that may cause illness, injury, or discomfort to the employees or the surrounding communities.

Occupational hygiene stressors include chemical, physical, biological and ergonomic stressors.

Where there is a possibility of occupational hygiene stressors (for example noise, dust, illumination, heat and cold stressors, ergonomics, vibration (hand, arm, and whole body) etc.), health risk assessments must be carried out to determine whether there is any possible worker exposure. Records of all these assessments should be documented and kept up to date. Contractors shall monitor the extent to which their employees are exposed to the occupational hygiene stressors. These assessments should be conducted by a SANAS-accredited and DOL-approved inspection authority.

#### **CONTROLLED DISCLOSURE**

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

### 3.14.3 Protection against thermal conditions

The requirements as listed in the OHS Act Environmental Regulations for Workplaces, Regulation 2, are precise. The human body will only survive if its core temperature is within medically accepted limits of WBGT Index of 30 not exceeding for heat, and dry bulb (DB) temperature not less than 6 °C for cold. Any exposure outside these limits can lead to organ damage/failure and death.

### 3.14.4 Asbestos control management

Exposure of employees to asbestos-containing materials is a serious health risk. The management and disposal of asbestos-containing materials also pose significant environmental impacts and consequent legal and financial risks. Where the handling of asbestos and/or asbestos-related products is required, this shall only be carried out in terms of the Asbestos Regulations of the OHS Act.

### 3.14.5 Noise

Noise and vibration are both fluctuations in the pressure of air (or other media) which affect the human body. Vibrations that are detected by the human ear are classified as sound. Noise is an unwanted sound.

Where the value of the 8 hour rating level, 85 dBA and above which hearing impairment is likely to result, the contractor shall have an effective hearing conservation programme.

### 3.15 Auditing

To maintain an organisation's efficiency and statutory observance, regular audits throughout the organisation must be conducted.

Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organisation's operations. It helps an organisation accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

### 3.16 Inspections

Regular inspections on health and safety matters highlight problem areas and enable action to be taken before an incident occurs. Safety inspections can be either reactive or proactive.

Reactive inspections are those that occur after the fact, i.e. the incident has already occurred, or you respond to reports which highlight that something is not according to plan.

The proactive approach endeavours to identify, evaluate and control hazards and risks before they develop to the stage of causing an incident.

The common method employed to identify potential hazards before they manifest themselves is safety inspections, where the work area is inspected for any hazards and these are recorded, and after the inspection the hazards are assessed and a plan of action is formulated to rectify such hazards.

#### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

A surprise inspection tends to have different results than an announced inspection. Leaders wanting to know how others in their organisation perform can drop in without warning, to see directly what happens. If an inspection is made known in advance, it can give people a chance to cover up or to fix mistakes. This could lead to distorted and inaccurate findings. A surprise inspection, therefore, gives inspectors a better picture of the typical state of the inspected object or process than an announced inspection.

### 3.17 Transport/Mobile Plant Equipment

Vehicle usage accounts for a large number of injuries and fatalities as a result of vehicle accidents in South Africa. Construction sites account for a number of construction-related accidents involving construction vehicles and mobile equipment.

The National Road Traffic Act regulates vehicle usage, the road worthiness of vehicles and the competency of vehicle drivers.

There is a misconception regarding the carrying of passengers in the back of vehicles. The Act does not permit passengers to be transported in the back of light delivery vehicles. The carrying of passengers at the back of trucks is only permitted if such a truck is fitted by the manufacturer or manufacturer's appointed fitment centre with a specifically designed crew cab and appropriate seating and seat belts per passenger.

Eskom does not approve the conveying of passengers in the back of vehicles designed to carry equipment/loads (any truck/trailer), irrespective of whether crew cabs are fitted and seating with four-point seat belts is fitted.

Construction vehicles and mobile equipment, when driven or towed on a public road, fall within the requirements of the Act.

Construction Regulation 23 "Construction vehicles and mobile plant" lists the requirements for construction work.

Fleet safety is high on Eskom's safety programme, not only in regard to its own vehicle fleet, but it also requires contractors to afford the same importance to their vehicles and mobile equipment fleet.

### 3.18 Hazardous Materials/Chemicals Management

The handling and the application of hazardous materials have a major impact on the health and wellbeing of all persons and the environment. Various requirements for the handling and storage of hazardous materials and chemicals are listed in the OHS Act.

In the purchasing of hazardous materials and/or chemicals, buying departments can fulfil the legislative requirements by ensuring that purchases are only done from the suppliers and manufacturers who comply with the requirements of section 10 (General duties of manufacturers and others regarding articles and substances for use at work) and section 22 (Sale of certain articles prohibited) of the OHS Act.

Any hazardous materials and chemicals, including gasses, must be stored in compliance with the legislative requirements, local municipal by-laws and SANS building standards.

#### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

### 3.19 Machinery, Tools and Equipment

Machinery is considered as any article or a combination of articles assembled, arranged or connected and which is used or intended to be used for converting any form of energy to perform work, or which is used, or intended to be used, whether incidental thereto or not, for developing, receiving, storing, containing, conforming, transmitting, transferring or controlling any form of energy.

The requirements for the use of machinery are covered in the various regulations of the Occupational Health and Safety Act

There are strict requirements regarding the supervision and use of machinery. Incorrectly used machinery or using unsafe machinery can cause serious harm and/or damage. Therefore it is important to ensure the safeguarding of all mechanical equipment in order to protect the health and safety of persons who may be exposed to such mechanical equipment and that machinery must be operated by competent persons.

### 3.20 Explosive-Powered Tools

An explosive-powered tool means a tool that is activated by an explosive cartridge and/or air or gas charge and that is used for driving bolts, nails and similar objects for the purpose of providing fixing.

Due to the nature of this tool fastening system operating on an explosive force, it is considered a *lethal operating tool*, especially when the manufacturer's and legal requirements are not adhered to, in particular when being operated. These types of tools operate like a loaded gun and must be treated with extreme caution and must be operated by specially trained employees.

The legal operating requirements for explosive-powered tools are set out in the Construction Regulations.

### 3.21 Lifting Equipment

Due to its versatility, lifting equipment is often abused and/or misused. This nearly always results in damage to and/or failure of equipment, leading to incidents and serious injuries.

All types of lifting equipment are governed by regulation 18 of the OHS Act Driven Machinery Regulations, as follows:

- Construction Regulations – Material hoists and tower cranes
- Driven Machinery Regulations – Goods hoists, lifting machines and lifting tackle (which includes all the lifting machine codes as listed in the regulations and the national code of practice for the training providers of lifting machine operators)

When working in close proximity (with tower cranes) to power lines, the contractor shall apply for a permit. Refer to the Eskom Plant Safety Regulations and/or Operating Regulations for High-voltage Systems and Electrical Machinery Regulations 19(4) and 19(5) of the OHS Act.

### 3.22 Boilers, Pressurised Systems and Vessels under Pressure

The Pressure Equipment Regulations cover various types of equipment, from boilers, fixed plant compressors, mobile compressors, and pressure vessels to fire extinguishers and all piping associated with such equipment.

#### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

There are strict requirements in terms of the Pressure Equipment Regulations. A poorly maintained and/or operated piece of equipment can have catastrophic consequences.

### 3.23 Working at Heights

Where there is a risk of a fall causing personal injury, measures should be taken to prevent a fall and injury. Falls occur at any level. The duty is to prevent falls. It is worth noting that there are almost as many low-fall injuries as high-fall injuries. Where it is reasonably practicable to take precautions to prevent falls, steps should be taken to do so.

In an effort to prevent falls, including falling objects and/or materials, fall protection plans and rescue plans are required to be compiled and implemented. The Occupational Health and Safety Act places duties on employers, employees and anyone who controls the way work at height is undertaken.

Where possible, efforts should be made to provide a safe working platform for employees before resorting to the use of a fall arrest system. Where this is not practicable, suitable fall arrest equipment shall be provided.

All equipment used for working at height must conform to the OHS Act and relevant SANS standards.

A working platform can be virtually any surface from which work is carried out, such as a roof, floor, platform on a scaffold, a mobile elevated work platform, the treads of a stepladder, climbing irons, suspended platforms, boatswains chair etc.

#### 3.23.1 Eskom lifesaving rule "Hook up at Height"

When working at height, you must take suitable and sufficient measures to prevent, as far as is reasonably practicable, any person falling a distance liable to cause personal injury. Where a fall from any height could result in harm, an effective means of fall prevention needs to be put in place. You are required to take practicable steps to ensure the safety of yourself and others, as well as not knowingly exposing yourself or others to harm.

#### 3.23.2 Floor and wall openings

Falls through openings in walls, floors, roadways etc. account for a number of fatalities and serious injuries where such openings exist and are not protected. Floor and wall openings must be included in the fall protection plan.

When including fall arrest equipment, cognisance must be taken of the amount of pedestrian and vehicular traffic and that the equipment specified is of such a nature to prevent its dislodgement or unauthorised removal, in other words, adequate barricading.

### 3.24 Excavations and Tunnelling

#### 3.24.1 Excavations

Almost all construction work involves some form of excavation, for foundations, drains, sewers, etc. These can vary greatly in depth and may be only a few centimetres deep or very deep and very dangerous.

#### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30



A relatively small collapse might involve about a cubic metre of soil, but a cubic metre of soil weighs over a tonne. A person at the bottom of a trench who is buried under this volume of material would be unable to breathe, due to the pressure on the chest, and could quickly suffocate and die.

An excavation may also be a 'confined space' within the meaning of the Work in Confined Spaces Regulations, and additional precautions will need to be taken.

The legislative requirements for making excavations are contained in Construction Regulation 13 of the OHS Act.

### **3.24.2 Tunnelling**

No ground material can be considered as stable when excavating or tunnelling is taking place or worked in, due to environmental and seismic factors. Ground collapse is an extremely hazardous reaction, especially where persons are working within the tunnel, normally resulting in serious injuries and fatalities.

Any contractor performing tunnelling activities shall comply with Construction Regulation 15, which then refers to the Tunnelling Regulations as published under the Mine Health and Safety Act, 1996 (Act No. 29 of 1996), as amended, and regulation 15 of the Construction Regulations.

### **3.25 Confined Spaces**

The belief that any confined space is a safe place as far as asphyxiation is concerned, due to ignorance of the air quality within and the risk factors, is dangerous. Most asphyxiates are colourless and odourless. Sometimes the odour asphyxiate is considered a nuisance and temporary. This puts the entering into a confined space as an extremely high risk. If testing is not performed irrespective of the size of space or the duration of entry, then employees' health (short or long term) will be placed at risk.

The requirements as listed in General Safety Regulation 5 shall be adhered to.

### **3.26 Danger of Engulfment**

No person shall be permitted to work in any situation where there is a danger of material, etc. being discharged, unless that person is issued with an appropriate safety belt/harness fitted with a rope, where at least one other person who has been trained in rescue is available and observing. If there is a possibility of gas or other fumes being emitted from the material in question, adequate precautions shall be taken regarding air quality.

### **3.27 Barricading**

Falls through openings in walls, floors, excavations, approaching dangerous equipment and operations continue to pose a threat to persons.

To protect persons against any form of injury through entering unauthorised entrances and/or areas or approaching dangerous and/or operating equipment, stringent precautions have to be taken to prevent such persons approaching. This is done by erecting substantial barriers, fencing or covers to a degree that prevents unauthorised removal.

#### **CONTROLLED DISCLOSURE**

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

### **3.28 Explosives**

The handling and use of explosives for any form of construction work are controlled by the requirements of the Explosives Regulations of the OHS Act, the Mine, Health and Safety Act, 1996 (Act No. 29 of 1996) and the Explosives Act, 1956 (Act No 26 of 1956)

Requirements for the transporting and storage of explosives are to be in accordance with Explosives Regulation 13(4) of the OHS Act and SANS 100228 Code of Practice for the Identification and Classification of Dangerous Substances and Goods for Transport (published by the South African Bureau of Standards)

Explosives in the wrong hands and used for the wrong application can have devastating consequences

### **3.29 Demolition Work**

Demolition of structures is an extremely hazardous task and can only be performed by competent persons.

All demolition work must be planned, and all role-players must be involved in the planning; this includes conducting thorough risk assessments.

If explosives are to be used, the requirements in terms of the Explosives Regulations shall be adhered to

Where structures (power lines, poles, lattice towers, etc ) are required to be demolished, this shall be done in terms of Eskom requirements (task manuals).

All demolition work shall be carried out in accordance with Construction Regulation 14 Demolition Work

### **3.30 Permit to Work**

A permit-to-work system is a formal written system used to control certain types of work that are potentially hazardous.

A permit-to-work is a document which specifies the work to be done and the precautions to be taken

Permits-to-work form an essential part of safe systems of work for many maintenance activities. They allow work to start only after safe procedures have been defined and they provide a clear record that all foreseeable hazards have been considered

A permit is needed when maintenance work can only be carried out if normal safeguards are dropped or when new hazards are introduced by the work. Examples are entry into vessels, hot work and pipeline breaking.

If the type of work requires working with Eskom power systems/networks (low voltage, medium voltage, or high voltage), then the appropriate permits will be required.

#### **CONTROLLED DISCLOSURE**

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

### 3.31 Radiography, Ultrasonic or Non-destructive Testing (NDT)

During the construction phase and maintenance phase, certain equipment and/or materials require some form of examination to ascertain that the material used is free of any form of defect or welded joints in piping are leak free. Where testing is performed, all actions for that specific type of testing must be done in accordance with the relevant requirements.

### 3.32 Work in Close Proximity to/on Public Roads

Working next to or in close proximity to any public road has its inherent dangers, not only to the persons carrying out the work but also to the motorists, where the persons working do not take care of their own safety and ignore any rules and regulations. It is imperative that when work is performed, all the requirements in terms of the National Road Traffic Act are complied with. For additional worker safety, organisations should enhance the national requirements.

### 3.33 Work Stoppage

Section 8(2)(f) and Construction Regulation 5(q) of the OHS Act have clear requirements regarding the non-permitting of an employee to work unless adequate precautionary measures are taken and the stopping of any work which is not in accordance with health and safety plans.

Any person may stop any activity where an unsafe act or unsafe condition exists that poses or may pose an imminent threat to the health and safety of an individual or create a risk of degradation of the environment. 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.

Work stoppages that are initiated due to SHE concerns will be handled in terms of the Eskom standard SHE Requirements for the Eskom Commercial Process (32-726).

Where stoppages are carried out, the required non-conformance report shall be raised.

### 3.34 Substance Abuse

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.

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

Persons are not permitted to enter or remain on or at a workplace whilst under the influence of either or both substances and are not permitted to be under the influence of or consume intoxicating substances whilst at/in the workplace. There is provision regarding the taking of medication.

The alcohol and drug permissible level is 0%.

### 3.35 Statistical Reporting

There is a legal requirement in terms of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) (General Administrative Regulations) that certain serious incidents must be reported to the Department of Labour within a specified time.

#### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

Measuring performance also allows us to entrench a positive safety culture and benchmark against world-class systems

The primary purpose of measuring health and safety performance is to provide information on the progress and current status of the strategies, processes and activities used by Eskom to control risks to health and safety

Measurement information sustains the operation and development of the health and safety management system, and the control of risk, by:

- providing information on how the system operates in practice;
- identifying areas where remedial action is required,
- providing a basis for continual improvement

This report will also enable the organisation to reflect on the impact of the implemented improvement strategies, namely a decrease or an increase of incidents.

### **3.35.1 From a contractor point of view**

There are regulatory requirements in the Construction Regulations which put much emphasis on the relationship between and accountability from the client and contractor point of view. The contractor which is an employer in its own right does not release Eskom from fundamental responsibilities, therefore Eskom will have an interest in their activities.

“We can't manage what we can't measure.”

“What is measured can be monitored and improved.”

### **3.36 Housekeeping**

Good housekeeping fulfils important functions, which are to the advantage not only of the worker but also of the employer:

- It saves time taken up by searching for equipment, tools and articles.
- Injuries are prevented as passages, walk areas and workplaces are free from superfluous material
- Space is saved if equipment and articles are neatly packed and correctly stored
- The risk of fire is diminished when provision is made for the correct placing of the right type of refuse bins, store areas comply with good storage practices and stacking is done in accordance with accepted stacking practices.

Access to emergency and/or safety equipment will be uninterrupted

Housekeeping is “A Place for Everything and Everything in Its Place”

A clean and tidy workplace produces a clean and safe worker

Prompt disposal of waste materials, scrap, and rubbish is essential to prevent unnecessary storage

#### **CONTROLLED DISCLOSURE**

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

### 3.37 Workplace Signage and Colour Coding

The purpose of symbolic safety signs is to convey a message without the use of a specific language. In this way instant recognition takes place or the employee can receive a message, order or warning

Caution and care need to be taken when positioning mandatory signage. Where these signs "indicate" a requirement that means that it shall be done, irrespective of whether the activity is present or the equipment is a requirement. For example, if the sign indicates that hearing protection is required, which is now no longer the need but the sign is still in place, hearing protection shall be worn.

All signs and notices shall conform to the requirements of SANS 1186 in terms of standard signs, safety colours, geometric forms, and dimensions.

In terms of identification regarding colour marking, ensure that the colours used match the appropriate colours of SANS 10140 and 1091.

### 3.38 Personal Protective Equipment (PPE)

Personal protective equipment may be described as clothing and/or equipment used in the workplace to protect the worker from risks and hazards and includes but is not limited to equipment and clothing worn on the body as well as equipment used to determine, measure or indicate danger. The objective of protective clothing is to prevent exposure or injury to any body parts exposed to operations.

In the interests of the effective protection of the worker, it is essential that the quality and effectiveness of the items should be of a high standard

It is imperative to realise that PPE, like any other form of protection, does not eliminate danger. It simply serves as a screen between the person and the danger lurking in the machine or process. In most instances, the negative effect of danger to the human body can only be limited to a greater or lesser extent by the PPE. Employees must be trained on the limitations of PPE and on how to fit PPE.

General Safety Regulation 2 of the OHS Act makes provision for employers to make the workplace safe and where required to provide appropriate PPE

### 3.39 Safety, Health and Environment (SHE) Specification

**NOTE:** This paragraph is included for information sharing only. The guideline for the compilation of SHE specifications is contained in an Eskom document 32-524 "Developing a Construction Safety, Health, and Environmental Specification"

As a norm, Eskom provides SHE project/service specifications for all types of contracts awarded

Minimum requirements for SHE specifications must be task, project, and site specific. The various project tasks have to be defined, the associated hazards identified, and the associated risks listed.

SHE specifications provide a basis of requirements for contractors to compile their project-specific SHE plans

#### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

By drawing up SHE specifications, the client has endeavoured to address the identified critical aspects relating to health and safety issues in order to assist the contractor in adequately providing for the health and safety of employees on site. Should additional risks be identified later by Eskom or its agents/clients, these will be included in the contract works information and/or relayed at the clarification or negotiation meeting.

### 3.40 Safety, Health and Environment (SHE) Plan

A health and safety plan is a documented plan that addresses hazards identified and includes safe work procedures to mitigate, reduce, or control the hazards identified. It is specific to each project undertaken and site where work is done, is compiled by the contractor and appointed contractor, and must be approved by the client/agent prior to the commencement of any activities on a project. The contractor and the client/agent must both be signatories to the health and safety plan once negotiated, agreed, and accepted. This plan has to be regularly updated to take account of any changes in project scope and unanticipated conditions.

The health and safety plan must cover all aspects of the health and safety procedures to be applied by all contractors for the duration of the contract.

Where any H&S issues have been omitted in the specification, and the contractor is aware of these, the omitted issues must be documented in the plan, and the client/agent must be advised of the omission.

Eskom will evaluate each contractor for their health and safety plan. A health and safety plan will be accepted and signed by an Eskom SHE functionary, and approved and signed by the contract custodian. The main contractor is required to evaluate his/her appointed contractors and proof of compliance shall be included in the main contractor's safety file. The contractor shall not be allowed to commence work on site until the health and safety file has been accepted and approved.

### 3.41 Safety, Health and Environment (SHE) File

A SHE file means a file or other record in permanent form, containing the information about the project and site's health and safety management system during the project and all information relating to the post-project phase after handover to the client.

The Construction Regulations, regulation 7(1)(a)(7), requires contractors to keep a SHE file which contains all documentation required in terms of legislative and Eskom requirements.

All Eskom contractors and their appointed contractors are required to keep a SHE file on every project worksite. If there is more than one worksite per specific project and scope of work, a file per site shall be kept at that site for that site and scope of work. 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.

The main contractor is responsible for ensuring that his/her contractor(s) maintain a SHE file and adhere to the SHE plans at all times during the duration of their appointment. However, this does not take away the authority from Eskom personnel to regularly inspect and audit his/her contractors' SHE file.

#### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

### 3.42 Hours of Work

The Basic Conditions of Employment Act, 1997 (Act No. 75 of 1997), stipulates the permissible working hours for individuals to optimally perform their duties

Staff consistently working excessive hours of overtime risk their health and safety and that of their colleagues due to fatigue

Fatigue can have deadly consequences, especially in environments where a loss of alertness can threaten the health and safety of the employee or others.

### 3.43 SHE Recognition and Reward System

Recognition is a key tool in employee retention programmes, for a reason People need more than constructive feedback and positive affirmation They need recognition of extra effort. Every person has different reasons for working The reasons for working are as individual as the person. But, we all work because we obtain something that we need from work. The something obtained from work impacts on morale, employee motivation, and quality of life To create positive employee motivation, treat employees as if they matter

Prioritise employee recognition and you can ensure a positive, productive, innovative organisational climate. Provide employee recognition to say thank you and to encourage more of the actions and thinking that you believe will make your organisation successful.

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.

### 3.44 Environmental Care

Everyone has the right to an environment that is not harmful to his or her health or wellbeing. Sustainable development requires the integration of social, economic and environmental factors in the planning, implementation and evaluation of decisions to ensure that development serves present and future generations

Everyone has the right to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that

- prevent pollution and ecological degradation;
- promote conservation; and
- secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

The National Environmental Management Act, 1998 (Act No 107 of 1998), is specific in the requirements that are applicable to all entities and populations within the boundaries of South Africa

Eskom supports and is committed to the environmental legislative requirements as demonstrated by the compilation of the Eskom SHE Policy and the compilation of the Eskom Environmental Management Plan. This plan is applicable to all who provide a service in any form to Eskom with the duty of care to the environment

#### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30

### 3.45 Unlawful Orders

The OHS Act, section 14(c), specifies that an employee shall at work carry out any lawful order given to him/her and obey the health and safety rules and procedures laid down by his/her employer or by anyone authorised thereto by his/her employer in the interest of health or safety

### 3.46 Section 37(2) Agreement

Section 37 of the OHS Act potentially punishes employers (contractors) for the unlawful acts or omissions of mandataries (his/her contractors) except where a written agreement between the parties has been concluded containing arrangements and procedures to ensure compliance with the said act by the mandatory.

The section 37(2) agreement recognises that a contractor/supplier is an employer in its own right with duties as prescribed in the OHS Act and mandates the contractor/supplier to ensure that all work will be performed or machinery and plant used by their employees is in accordance with the provisions of the Act

It further states that a contractor/supplier shall strictly adhere to and ensure that its employees adhere to the prescriptions as contained in the OHS Act and agree to comply with Eskom's safety requirements

This agreement constitutes the sole agreement between the parties and no variation, modification or waiver of any of the provisions of this agreement or consent to any departure therefrom shall in any manner be of any force or effect unless confirmed in writing and signed by both parties, and such variation, modification, waiver or consent shall be effective only in the specific instance and for the specific purpose and to the extent for which it was made or given.

Eskom, as an organisation, has drawn up an agreement in terms of section 37(2), which is entered into with contractors/suppliers.

### 3.47 Security

Eskom throughout its business operations has standards and procedures in place to combat crime and other security issues. Although security operations are initiated from a corporate level, individual operating units control security within their confines to meet the crime and security for such environment. This means there will be differences in site-specific operations. Contractors shall ultimately be responsible for their assets unless agreed otherwise between themselves and the client.

## 4. Acceptance

This document has been seen and accepted by:

| Name                               | Designation                                 |
|------------------------------------|---|
| Risk and Sustainability OHS Mancom | Risk and Sustainability OHS Mancom          |
| Robin Pillay                       | Middle Manager Contractor Safety Management |
| Jace Nardoo                        | Snr Manager OHS Sustainability              |

#### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30



## 5. Revisions

| Date        | Rev. | Compiler   | Remarks  |
|-------------|------|------------|--|
| July 2016   | 3    | B Matsie   | Document reviewed to align to new legislative requirements and Eskom changes |
| July 2015   | 2    | FM Pooe    | Document under review due to new changes being introduced                    |
| August 2013 | 1    | AE Barnard | The document reviewed to ensure incorporation of Specification 32-118        |

## 6. Development Team

The following people were involved in the development of this document.

- F Pooe
- K Pillay
- L Motshelanoka
- B de Klerk
- A Qithi
- Kgaogelo Sedibeng
- Diane Maunatlala

## 7. Acknowledgements

Nil

### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30