

	<b>Standard</b>	
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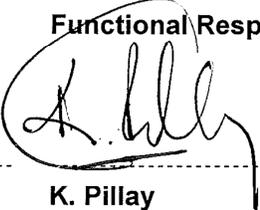
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## 1. Introduction

**NOTE:** This standard replaces Procedure 32-136: "Construction Safety, Health, and Environmental Management", but retains the same number and has a title change.

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.

**NOTE:** An Eskom employee/leader (for example, project manager/contract custodian) cannot be appointed as an agent; therefore, where the word "client/agent" is referred to in this standard, an Eskom leader will be the client.

**NOTE:** Where, in the text of this document, reference is made to the male gender, it also means the female gender.

The purpose of this document is to provide contractors with essential information on significant safety, health and environmental aspects and give direction to contractors when compiling their SHE programs and SHE plans.

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

Contractors have the crucial responsibility for executing work safely on-site/project/ including measures for contract health, safety and environment for their activities/services to prevent any injury to employees and or other people who is not employees and members of public or damage to environment. Each contractor is responsible for ensuring that his/her 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.

The contractor has the responsibility to implement and maintain all necessary safety, health and environmental precautions and procedures. Details of compliance with appropriate control measures and strategies should be included in the tender or purchasing documentation.

All contractors shall use the applicable safety, health and environmental information in this standard to develop a suitable and sufficient health, safety and environmental plan, which will indicate to Eskom the level of compliance with the health, safety and environmental requirements.

Eskom will evaluate each contractor for their health, safety and environmental plan. A final health, safety and environmental plan will be approved and signed by an Eskom SHE functionary. The contractor is, thereafter, required to evaluate any appointed contractors that will be appointed by the Principal Contractor and compliance proof will be included in safety file of contractors. The contractor will not be allowed to commence work on site until the safety, health and environmental plan has been approved.

## 2. Supporting Clauses

### 2.1 Scope

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

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This standard sets out the minimum legislative and organisational requirements and by virtue of explaining the need in each section makes provision for contractors to compile individual manuals in order to complement this standard for their own compliance with 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. Similarly, there may be requirements in this standard that are not altogether relevant or applicable to the scope of work and, therefore, will accordingly be excluded from the 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 own safety, health and environmental plans/procedures/manuals/work instructions to adequately address their specialised activities and scope of operation.

Where any form of work is performed, the quality of the work will have an effect on the health and safety of all persons and the environment.

### **2.1.1 Purpose**

Contractors are accountable for taking all the necessary steps to protect all persons (including employees, visitors, and the general public), to protect the environment and property against any harm during the course of performing work or services in relation to their contractual obligations. In addition, all work procedures and equipment will be carried out in accordance with Eskom and legislative requirements.

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 any appointed contractors comply with all occupational safety, health, and environmental (SHE) statutory requirements and the policies and procedures of Eskom Holdings SOC Limited.

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 to 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.

The purpose of this standard is to specify the minimum health, safety and environmental requirements that contractors shall comply with and to ensure universal standardisation across Eskom.

**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, principal contractors, contractors, suppliers, vendors, and service providers.

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**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 to which they are required to adhere while performing work for Eskom Holdings SOC Limited.

### **2.1.3 Effective date**

1 August 2015.

## **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: Mandatory SHE Requirements for Eskom Procurement and Supply Chain Management
- [5] 240-62196227: Life-saving Rules Standard
- [6] 32-245: Waste Management Procedure
- [7] 32-248: Environmental Management Programme
- [8] 32-477: Safety, Health, and Environment Training and Development
- [9] 32-529: Occupational Health and Safety Risk Management Process
- [10] 32-407: Behaviour Safety Observation Procedure
- [11] 32-123: Emergency Planning
- [12] 32-124: Eskom Fire Risk Management
- [13] 32-108: Fire fighting Organisation
- [14] 32-93: Vehicle and Driver Safety Management Procedure
- [15] 32-37: Substance Abuse Procedure
- [16] 32-95: Procedure for the Effective Management of Health, Safety, and Environmental-related Incidents
- [17] 32-418: Working from Heights Procedure
- [18] 32-36: Smoking Policy
- [19] 32-520: Procedure Manual for Performing Occupational Health and Safety Management and Environmental Management: Conducting EH&S Risk Assessment
- [20] 32-345: Eskom Vehicle Safety Specification

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- [21]32-1112: Eskom Disciplinary Code (Standard)
- [22]32-1113: Eskom Disciplinary Procedure
- [23]32-1034: Eskom Procurement and Supply Chain Management Procedure
- [24]240-44175038: Control of Non-conforming Product or Service Procedure
- [25] 240-46569633: Professional and Statutory registration for Construction Project Managers and Supervisors with SACPCMP
- [26]Project and Construction Management Professions Act, 2000 (Act No. 48 of 2000)
- [27]National Environmental Management Act No 107 of 1998
- [28]National Environmental Management Waste Act 59 of 2008
- [29]All relevant South African legislation-provincial, municipal by-laws
- [30]Operational Unit Procedures
- [31]Occupational Health and Safety Act and Regulations No 85 of 1993.

### **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] 32-282: Procedure for Medical Surveillance
- [2] 34-333: Health and Safety Requirements to be Met by Principal Contractors Employed by Eskom
- [3] 41-61: Occupational Health and Safety Requirements to be Met by Eskom Contractors and Subcontractors During Maintenance and Construction Work
- [4] 41-417: Transmission Environmental Management System Manual
- [5] 34-893: The Management of Technical, Risk, and SHEQ Audits in Distribution
- [6] 34-1544: Management of Asbestos
- [7] 34-227: Pre-task Planning and Feedback Process
- [8] 34-367: Management of Substance Abuse
- [9] 34-380: Identifying, Analysing, Documenting, and Observing Tasks According to Criticality
- [10] 34-370: Management of Ergonomic Hazardous Exposure in the Workplace
- [11] 34-925: Refusal to Work on the Grounds of Health, Safety, and Environmental Concerns
- [12] 34-1164: Medical Surveillance
- [13] 34-1748: Procedure to Manage the Distribution Safety Risk Process
- [14] 34-408: Distribution Driver Operator Assessment and Training
- [15] 34-961: Legal Appointments and Authorisations
- [16] 34-1710: Provision and Use of Personal Protective Equipment
- [17] 39-54: Selection, Use, and Maintenance of Personal Protective Equipment
- [18] 34-323: Personal Protective Equipment Specifications
- [19] 41-62: Personal Protective Equipment Manual
- [20] 34-403: Risk Management Training
- [21] 34-190: Access to Farms (includes strategy on dealing with game farms)
- [22] 34-226: Safeguarding of Electrical Installation and Machinery
- [23] 34-228: Health and Safety Representative Inspection Reports and Guidelines

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- [24] 34-370: The Management of Ergonomic Exposure in the Workplace
- [25] 34-402: Safeguarding of Mechanical Equipment
- [26] 34-404: Safe Handling, Storage, and Maintenance of Pressure Equipment
- [27] 34-441: Medical Waste Management
- [28] 34-724: Inspection of Fibreglass Extension Ladders
- [29] 34-332: First Aid
- [30] 34-1402: Procedure for Using Fall Arrest System
- [31] 34-1131: Standard for Fall Arrest System
- [32] 34-315: Emergency Preparedness
- [33] 41-460: Emergency Preparedness Response Procedure in Accordance with ISO 14001:2004 (Environment)
- [34] 34-132: Distribution Fire Risk Management
- [35] 34-369: Monitoring of Occupational Hygiene Factors
- [36] 34-643: Job Plan Standard
- [37] 34-116: Colour Coding, Symbolic Safety Signs, and Demarcation
- [38] 34-1709: Recognition for Safety Achievements Standard
- [39] 34-1427: Public Safety
- [40] 34-316: The Requirements for the Selection of Health and Safety Representatives and Establishing Health and Safety Committees
- [41] 32-716: Internal Occupational Health and Safety Communication Procedure
- [42] 34-1954: Supervision of People in Electrically Hazardous Locations
- [43] 34-908: Barricading
- [44] 34-445: Standard for Equipotential Footplates
- [45] 34-440: Selection, Purchase, and Storage of Hazardous Material
- [46] 32-846: Operating Regulations for High Voltage Systems
- [47] 32-681: Plant Safety Regulations
- [48] 32-726: SHE Requirements for the Eskom Commercial Process
- [49] 32-303: Requirements for the Safe Processing, Storage, Removing, and Handling of Asbestos-containing Materials, Equipment, and Articles Procedure
- [50] 34-368: Standard for Low-voltage Operating
- [51] 34-673: Procedure for Low Voltage Operating
- [52] 34-328: Low Voltage Live Work Standard
- [53] 34-983: Entering a Potentially Dangerous/Unsafe Place
- [54] 34-925: Procedure for Refusal to Work on the Grounds of Health, Safety, and Environmental Concerns
- [55] 34-1454: Clearance and Maintenance of Servitude Routes
- [56] 240-46569633 Professional and Statutory Registration for Construction Project Managers and Supervisors with SACPCMP
- [57] DISSCABT5: Specification for the Manufacture, Testing, Approval, and Procurement of Wood Pole Climbing Irons/Shoes
- [58] Eskom Distribution Technical Instruction 11TI-019: Transportation of People on the Back of Open Vehicles
- [59] NRS043:2005 (Edition 2): Joint Use of Structures for Power and Telecommunication Lines
- [32] Distribution Task Manuals for LV, MV, Live Work, and Major Engineering Works.

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## 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.

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

**2.3.3 Built Environment:** (240-46569633 Annexure B1) refers to the functional area in which registered persons practice. The Built Environment includes all structures that are planned and/or erected above or underground, as well as the land utilized for the purpose and supporting infrastructure.

**2.3.4 Business unit (BU):** (32-296) means any defined unit within the Eskom environment, operating as a business under a particular cost-centre number. In the context of this document and in terms of health and safety, any reference to a BU includes a defined unit within any Eskom division and its subsidiaries.

**2.3.5 Cardinal Rule:** (32-421) (renamed Lifesaving Rule) a rule that, if not adhered to, has the potential to cause serious harm to people.

**2.3.6 Client:** (OHS Act) Eskom representative (Internal – Asset Owner), also referred to as the contract administrator/custodian or agent or project manager (as defined in the contract). He/she is the person responsible for ensuring that the works or services are executed in terms of the contract, as well as adherence to legislation pertaining to construction works.

**2.3.7 Competent person:** (OHS Act) means any person having the knowledge, training, experience, and qualifications, specific to the work or task being performed, provided that, where appropriate, qualifications and training are registered in terms of the South African Qualifications Authority Act, 1995 (Act No. 58 of 1995).

**2.3.8 Contractor:** (OHS Act) means an employer as defined in section 1 of the Act who performs construction work and includes principal contractors.

**2.3.9 Contractor:** In relation to this document, where the word “contractor” is used, it will mean all or some of the following: principal contractors, appointed contractors, suppliers, vendors, service providers and consultants.

### 2.3.10 Construction work:

(OHS Act) means any work in connection with:

- a) the erection, maintenance, alteration, renovation, repair, demolition or dismantling of, or addition to, a building or any similar structure;
- b) the installation, erection, dismantling, or maintenance of a fixed plant where such work includes the risk of a falling person;
- c) the construction, maintenance, demolition, or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system, or any similar civil engineering structure; or

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- d) the moving of earth, the clearing of land, the making of an excavation, pilling, or any similar type of work.

**2.3.11 Construction vehicle:** (OHS Act) 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.

**2.3.12 Consultant:** means a person providing professional advice.

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

**2.3.14 Design:** (OHS Act) in relation to any structure, includes drawings, calculations, design details, and specifications.

**2.3.15 Designer:**

(OHS Act) means any of the following persons:

- a) Person who prepares a design
- b) Person who checks and approves a design
- c) Person who arranges for any person at work under his/her control (including an employee of his/hers, where he/she is the employer) to prepare a design
- d) Architect or engineer contributing to, or having overall responsibility for, the design
- e) Building service engineer designing details for fixed plant
- f) Surveyor specifying articles or drawing up specifications
- g) Contractor carrying out design work as part of a design and build project
- h) Temporary works engineer designing formwork and false work
- i) Interior designer, shop fitter, and landscape architect.

**2.3.16 Duty of care to the environment:** (32-136) anybody who causes or has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing, or recurring. If such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, such person must minimise and rectify such pollution or degradation of the environment.

**2.3.17 Employee:** (OHS Act) means, subject to the provisions of subsection (2), any person who is employed by or works for an employer and who receives or is entitled to receive any remuneration or who works under the direction or supervision of an employer or any other person.

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**2.3.18 Employer:** (OHS Act) means, subject to the provisions of subsection (2), any person who employs or provides work for any person and remunerates that person or expressly or tacitly undertakes to remunerate him/her, but excludes a TES (ex labour broker) as defined in section 1(1) of the Labour Relations Act 1956 (Act No. 28 of 1956).

**2.3.19 Environment:**

(32-94) means:

- a) the land, water, and atmosphere of the earth;
- b) micro-organisms and plant and animal life; and
- c) any part or combination of (a) and (b) and the interrelationships among and between them, and the physical, chemical, aesthetic, and cultural properties and conditions of the foregoing that influence human health and well-being.

**2.3.20 Environmental aspect:** element of an organization's activities or products or services that can interact with the environment.

**2.3.21 Environmental Impact:** any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's environmental aspects.

**2.3.22 Environmental impact assessment (EIA):** process by which the environmental consequences of a proposed project or programme are evaluated and alternatives are analysed. EIA is an integral part of the planning and decision-making processes.

**2.3.23 Environmental Management plan:** A detailed plan of action prepared to ensure that recommendations for enhancing or ensuring positive impacts and limiting or preventing negative environmental impacts are implemented during the life-cycle of a project. This Environmental Management Plan should preferably form part of Eskom's Environmental Management System.

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

**2.3.25 Fall protection plan:** (OHS Act) means a documented plan of all risks relating to working from an elevated position, considering the nature of work undertaken, and setting out the procedures and methods to be applied in order to eliminate the risk.

**2.3.26 Hazard:** (OHS Act) means a source of, or exposure to, danger.

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

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

**2.3.29 Health and safety plan:** (OHS Act) means a document plan that addresses hazards identified and includes safe work procedures to mitigate, reduce, or control hazards identified.

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**2.3.30 Health and safety specification:** (OHS Act) 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.

**2.3.31 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.

**2.3.32 Heatstroke:** (OHS Act) means a pathological condition arising from thermoregulatory failure of the human body.

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

**2.3.34 Joint venture:** (32-136) 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.

**2.3.35 Leader:** Eskom responsible person that operates closest to the contractor.

**2.3.36 Maintenance:**

(maintenance management)- Schemes can be based around 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.

**2.3.37 Mandatary:** (OHS Act) 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.

**2.3.38 Medical Certificate of fitness:** (OHS Act) means a certificate valid for one year, issued by an occupational health practitioner, issued in terms of the regulations, whom shall be registered with the Health Professions Council of South Africa.

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

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**2.3.40 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.

**2.3.41 Mine:**

(MHS Act – compliance) means:

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

**2.3.42 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.

**2.3.43 Pollution:**

32-94) means any change in the environment caused by:

- substances;
- radioactive or other waves; or
- noise, odours, dust, or heat emitted from any activity;

including the storage or treatment of waste or substances, construction, and the provision of services, whether engaged in by any person or an organ of state, where that change has an adverse effect on human health or well-being, or on the composition, resilience, and productivity of natural or managed ecosystems, or on materials useful to people, or will have such an effect in the future.

**2.3.44 Pre-job meetings:** (34-227) means a meeting that is held prior to the commencement of the day's work and that is attended by all the relevant employees associated with the work task.

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**2.3.45 Principal contractor:** (OHS Act) means an employer, as defined in section 1 of the Act, who performs construction work and is appointed by the client to be in overall control and management of a part of, or the whole of, a construction site.

**NOTE:** Note: where construction work is performed within Eskom by an Eskom internal contractor, that individual or department will be regarded as the internal contractor for the purpose of this standard.

**2.3.46 Professional natural scientist:** (32-136) means any person holding registration as a professional natural scientist in terms of the Natural Scientific Professions Act, Act No. 27 of 2003.

**2.3.47 Project:** (32-136) 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.

**2.3.48 Project manager/ Leader:** (32-136) 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:** 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.)

**2.3.49 Provincial director:** (OHS Act) means the provincial director as defined in Regulation 1 of the General Administrative Regulations under the Act.

**2.3.50 Public Road:** Any road, street or any other place which is commonly used by the public or any section thereof or to which the public or any section has a right to access and includes: any bridge, any other work or object forming part or connected with or belonging to such road, the verge of any such road (street, general, provincial and national roads).

**2.3.51 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.

**2.3.52 Site:** (34-228) means an Eskom department, unit, complex, building, specific project, work site, or the site where agents, clients, principal contractors, contractors, suppliers, vendors, and service providers provide a service to Eskom, directly or indirectly.

**2.3.53 Service provider:** any private person or legal entity that provides any service(s) to Eskom for compensation.

**2.3.54 Subsidiary:** (32-94) an enterprise controlled by another (called the parent) through the ownership of greater than 50% of its voting stock.

**2.3.55 Supplier:** (32-1034) means a natural or legal person who renders a service and may include the following current or potential supplier vendor, contractor, consultant.

**2.3.56 Task:** (34-227) a segment of work that requires a set of specific and distinct actions for its completion.

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**2.3.57 Toolbox talks:** (34-227) where the team leader, after conducting pre-task planning, shares all the tasks at hand and discusses task allocation, the identified risks, and the control measures with all his/her team members on site before commencing a specific task and documenting the agreed strategy. (This shall be done to ensure common understanding of the tasks, risks, and control measures required.)

**2.3.58 The Act:** (OHS Act) means the Occupational Health and Safety Act No. 85 of 1993, as amended, and the Regulations thereto.

**2.3.59 Vendor:** any private person or legal entity who qualifies to render services, perform work, or provide goods to Eskom, directly or indirectly, and may include contractors, subcontractors, consultants, suppliers, and service providers.

**2.3.60 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
EIA	Environmental impact assessment
EMP	Environmental management programme
HIRA	Hazard identification and risk assessment
HV	High Voltage
LV	Low Voltage
MHS Act	Mine Health and Safety Act (Act No. 29 of 1996)
MSDS	Material Safety Data Sheet
MV	Medium Voltage
NEMA	National Environmental Management Act
NWA	National Water Act (Act No. 36 of 1996), as amended
OHNP	Occupational Health Nursing Practitioner
OHS Act	Occupational Health and Safety Act No. 83 of 1993
OHS	Occupational Health and Safety

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Abbreviation	Explanation
ORHVS	Operating Regulations for High Voltage Systems
RoD	Record of Decision
SAQA	South African Qualifications Authority
SACPCMP	South African Council for the Project & Construction Management Professions
SHE	Safety, health, and environment

## 2.5 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), using the appointment template as in 32-296 as an example.

All appointments/copies made by the contractor shall be included in the health and safety plan, 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.

## 2.6 Roles and Responsibilities

The 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 the health and safety of all persons and the environment, sites under their control.

Eskom Documentation Centre shall ensure that the information contained in this standard is communicated to all divisions.

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### 2.6.1 Project Management

Project management is the discipline of planning, organizing, motivating, and controlling resources to achieve specific goals. A project is a temporary endeavor 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 honoring the preconceived constraints. The primary constraints are scope, time, quality and budget. The secondary and more ambitious challenge is to optimize the allocation of necessary inputs and integrate them to meet pre-defined objectives.

### 2.6.2 Project Managers

Manage activities and resources allocated to p[rojects into a cohesive, efficient manner as well at to 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.

### 2.6.3 Contractor health and safety officer

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

Where possible (if appointed) could have an input into the design of a project. If the appointment is post design stage, then the health and safety officer must b given the opportunity to have an input in the SHE plan.

### 2.6.4 MHS Act only

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.

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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.

### **2.6.5 OHS Act**

In terms of Construction Regulation 6(6) on the appointment of a health and safety officer (dependent on the size of the project and the degree of danger), the relevant contractor manager shall appoint a full-time safety officer for the duration of the contracted work in writing.

The appointed safety officer must have the necessary competencies and resources to be able to carry out his/her tasks efficiently.

The contractor's health and safety officer shall assist in the control of all safety-related matters on the sites, as well as inputs in the design stage (if appointed at that stage), but involved in the 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 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.

### **2.6.6 Eskom**

Is to provide assurance, to advise, to assist and to support the Eskom project manager and project engineer in the management of the environmental issues on the project, which includes, ensuring that the environmental documentation is issued with the enquiry documentation and ensuring compliance with the Environmental decision and the environmental management plan.

### **2.6.7 External**

Is to advise, assist and support the principal contractor and appointed contractors in the management of the environmental issues on the project, which includes, ensuring compliance with the Environmental decision and the project environmental management plan.

#### **Principal contractors**

In terms of the Construction Regulations, when principal contractors appoint contractors, the principal contractor would then have the same accountability and responsibility in relation to the appointed contractors as the client/agent has in relation to the principal contractor.

It must be noted that the principal contractor remains accountable and responsible for his/her appointed contractors. None of the additional safety requirements specified by the clients/agents reduce the principal contractor's accountability and responsibility for the health and safety of his/her employees and appointed contractor employees within his/her working area.

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Principal contractors shall carry out the duties as contemplated in Section 8 and 9, the relevant regulations and duties as listed in Regulation 5 of the Construction Regulations of the OHS Act.

All project work performed consideration of the health and safety of all personnel on site shall be taken into account at all times.

### **2.6.8 Contractors**

In terms of the Construction Regulations, all the duties that the client has towards the principal contractor, the principal contractor, in turn, has towards all his/her appointed contractors. It must be noted that the principal contractor remains accountable and responsible for his/her appointed contractors.

However, appointed contractors still have the accountability and responsibility for the health and safety of their employees and any appointed contractor employees within their working area. Any areas of concern should be discussed urgently with the principal contractor.

The relationship between the principal contractor and the appointed contractor will be governed by the contractual arrangements into which they have entered.

Contractors shall carry out the duties as contemplated in Section 8 and 9, the relevant regulations and duties as listed in Regulation 5 of the Construction Regulations of the OHS Act.

All project work performed the consideration of the health and safety of all personnel on site shall be taken into consideration.

### **2.6.9 Construction supervisors**

Construction supervisors shall be appointed in writing in a full-time capacity for the duration of the construction project, with the primary responsibility of supervising the construction work. Where required, contractors deemed may appoint additional employees as assistant construction supervisors. Persons appointed must be competent and have extended 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.

### **2.6.10 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 cooperate with legislative and Eskom health and safety requirements. Employees will be held jointly responsible where situations dictate. In their own interest, contractor employees must be aware of the responsibilities of their contractor management.

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### 2.6.11 Service Providers/Suppliers/Vendors

Will provide the necessary services as related in the contracts awarded and the SHE specifications compiled for that specific contract.

### 2.6.12 Construction Professional Registration

At the beginning of this century, through the promulgation of legislation, six councils for the professions, including the SACPCMP, were established under the auspices of the Council for the Built Environment (an overarching council) for, among other things, the registration of professionals in Construction Project Management.

It is anticipated that the risk of harm caused by inexperience, opportunism, incompetence or negligence could be significantly reduced in the meaningful compliance to the abovementioned legislation. Even though the journey to meet these legislative requirements may be fraught with practical challenges, especially for employees and others doing work for Eskom, it is imperative that Eskom is not complicit in related offences.

The objects of the Council for the Built Environment are concerned with the protection of public interests and the environment, as well as the promotion of human development and, most importantly, health and safety. In the promulgation of the various related statutes, professional registration requirements were introduced and affirmed with the prohibition of work being done by persons not registered professionally to do such work (unless under the direction, control, supervision of or in association with a professionally registered person who also assumes responsibility for such work).

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.

The law, especially the legislation referred to document "Professional and Statutory registration for Construction Project Managers and Supervisors with SACPCMP", applies to all persons. This document shall apply throughout Eskom, with respect to all Construction Projects for all stages of a Project and Construction Works.

### 2.6.13 Eskom

The Project Management Centre of Excellence is the custodian of the professional registration requirements for Project Management and is responsible for ensuring centralised records and control of all related matters.

### 2.6.14 Contractors

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

Eskom subsidiaries and their vendors are also to ensure compliance with the law whether or not their work is for Eskom or other entities. Where subsidiaries of Eskom, such as Roshcon and

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Rotek, serve in the capacity of an Eskom Vendor / Principal Contractor, they are also to comply with any further contractual requirements. Eskom subsidiaries are encouraged to formulate supporting enablers for their employees, similar to this document.

### **2.6.15 Joint Ventures**

There may be occasions when Eskom and other organisations combine resources to carry out a joint venture contract. Unless otherwise stipulated, where the work is to be managed jointly with a joint venture partner, the requirements imposed on the contractors will also apply to the joint venture partner, that is to say, each contractor shall be responsible and accountable for its own organisation's health and safety. All organisations shall be signatory to the required section 37(2) agreement of the OHS Act.

Where the construction work is to be managed jointly with a joint venture partner, the requirements imposed on the client will also apply to the joint venture.

Proper management of joint ventures, using an appropriate joint venture agreement that includes, in writing, the health and safety arrangements as required in terms of section 37(2) (if applicable) of the OHS Act, is critical in managing SHE issues.

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

Where a joint venture operates as separate entities, then 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.

### **2.7 Process for Monitoring**

This document will be reviewed three yearly or sooner if the content so requires it.

### **2.8 Related/Supporting Documents**

Not applicable.

## **3. Document Content**

### **3.1 Material and Equipment**

In the interests of health, safety and quality, materials used must conform to the safety requirements of the manufacturers and legislative requirements. Where reclaimed material is authorised to be used, it shall meet the manufacturer's safety requirements, as if new. Workmanship shall, at all times, be of a grade accepted as the best practice.

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

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### 3.2 Risk Assessments

It is a legal requirement in terms of Section 8 (2)(d) of the OHS Act for an employer to carry out risk assessments to establish 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, transported and any plant or machinery which is used in his/her business and he/she shall as far as 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.

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, then 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 / tasks must be performed.

Prior to start of work, risk assessments on every job / 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 / 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 / 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/inspection by any party who is entitled to audit/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.

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### **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.

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.

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 behaviours of people in the workplace, as well as workplace conditions that are caused by the actions or non-actions of employees, contractors, or their supervisors.

### **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 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, but 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 further 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 be able to perform the tasks assigned and expected to perform. Training also gives an employee a chance to develop additional skills which will benefit any organisation.

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### **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 organisational requirements, not only in the organisation's offices but at the workplaces as well.

### **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.

## **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.

A health and safety representative is the go between the employer and the employee. If they perform their functions in terms of the requirements, they will certainly be an asset, not only to the employer, but to the employees as well.

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.

Client may require a contractor safety representative to be appointed and trained based on the nature and risk level of work though sections 17 and 18 of the OHS Act is not met by contractor.

## **3.10 Health and Safety Communication**

Communication is a two way process that involves the sending and receiving of symbols, signs or signals (words, pictures, things, actions). It is speaking and listening, writing and reading, behaving, observing behaviour. Its goal is to achieve understanding.

### **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.

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### 3.10.2 Toolbox talks

It's not easy to identify hazards and risks in your organisation and take corrective measures to protect the health and safety of your employees. You must also inform them, provide instructions and train them on these hazards and risks they're faced with.

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

Toolbox talks are short, targeted meeting and or training sessions to inform and or train employees on the hazards and risks they will be exposed to whenever they perform work. Use toolbox talks to train the employees to recognise and avoid unsafe conditions as part of an organisations profitability and professional development.

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, correct those hazards, prior to starting a task / job if there are hazards present.

### 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;
- newsletters

Such methods are learning aids as well as sending a message or acting as a reminder of a SHE topic without having to hold specific forums or training sessions.

## 3.11 Contractor's Site Facilities

When working away from an established workplace, such as an office, factory or workshop, where there are established facilities, from a humane perspective, a sense of belonging and management care, every employee is entitled to such facilities as if they were at the main place of work.

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 and the SANS 10400 standard A to XA.

## 3.12 Public Safety

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

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Eskom upholds the rights of the members of the public and maintains an awareness and educational programme to protect the public against the risks that may arise out of, and in the course of, Eskom's activities. Similarly, contractors shall share the same respect for the public. Contractors shall factor in, in their safety plan, how they intend safeguarding/controlling any members of the public against their activities during the project, without damaging Eskom's name and reputation.

### **3.13 Emergency Preparedness**

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

Contingency plans 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 and to provide for:

#### **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 to and the application of legislative and policy requirements.

The discipline of Fire Risk Management has many facets and interfaces with many other disciplines and activities. 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 applicable 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.

Eskom has established a contract with Europ-Assist for all their employees, contractors and their employees for emergency medical assistance needed while on duty anywhere in South Africa. The telephone number is 0861 237566 (0861 2ESKOM).

#### **3.13.3 Emergency Escape routes**

The SANS 10400 T regulations makes provisions for escape routes to be incorporated in buildings.

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

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### 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 no 85 of 1993 and forms an essential component of an Occupational Health and Safety programme. Medical Surveillance is a planned programme of periodic medical examinations which may include clinical examination, biological monitoring and/or medical tests of employees by an Occupational Health Nurse Practitioner or, in prescribed cases, by an Occupational Medical Practitioner.

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.

Medical surveillance programs are the most effective way of measuring and keeping track of work related health issues which should ideally cater for Pre-employment, Periodic, Transfer and Exit medical examinations.

#### 3.14.2 Occupational Hygiene

Occupational Hygiene is devoted profession at providing expert guidance with regards to identifying health hazards, use of methodologies to evaluate the extent and then provide advice on control measures.

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

Where there is a possibility of occupational hygiene stressors (for example, noise, dust, illumination, HCS, heat and cold stressors, ergonomics, etc.), health risk assessments must be carried out to determine whether there is any possible worker exposure. Records of all these assessment 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 an approved inspection authority as listed on the Department of Labour database. The findings from these assessments should be communicated to all affected parties and be reported to the relevant authorities.

#### 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. Any exposure outside these limits can lead to organ damage/failure or death.

Within South Africa, thermal conditions go from one extreme in the winter months to the other extreme in the summer months. They also vary from province to province.

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### 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 risk.

The inhalation of regulated asbestos fibres causes serious lung diseases, including asbestosis, cancer of the lungs, and mesothelioma. These diseases usually become apparent only some years after exposure to asbestos and sometimes only 40 or more years after the first exposure. Cigarette smokers who are exposed to asbestos exhibit a marked increase in the incidence of lung cancer when compared to non-smokers.

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 is very clear in the requirements for handling

### 3.15 Auditing

Traditionally, audits were largely associated with gathering information about financial systems and the financial records of an organization or a business. However, recent audits have begun to include non-financial subject areas, such as safety, security, information systems performance, and environmental concerns. With non-profit organizations and government agencies, there has been an increasing need for performance audits, examining their success in satisfying mission objectives. As a result, there are now audit professionals who specialize in security audits, information systems audits, and environmental audits.

To maintain organisations efficiency and profit making, regular audits throughout the organisation must be conducted.

Integrating these niche knowledge bases into a single audit could produce a more effective outcome if a holistic approach is employed. However, to accomplish this, decisions on risk evaluation require a heightened awareness by auditors to broaden their perspectives and think outside the box.

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.

Although accounting is an important skill for an internal auditor, the focus for internal auditors is the evaluation of operational, risk management, internal control and the governance processes of the organisation.

### 3.16 Inspections

The key elements in achieving and maintaining high standards of health, safety and environment are a commitment by management, effective training, systems of work that are safe and regular monitoring and a committed work force. In manufacturing and construction operations, regular inspections enable managers and supervisors to assess whether they are likely to meet objectives or if there are any deviations so that they can initiate corrective action. In much the same way regular inspections on safety matters highlight problem areas and enable action to be taken before an incident occurs. Safety inspections can be either reactive or proactive.

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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.

A surprise inspection tends to have different results than an announced inspection. Leaders wanting to know how others in their organization 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. It also enhances external confidence in the inspection process.

### **3.17 Transport/Mobile Plant Equipment**

Vehicles usage accounts for a large number of 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 is very clear in regards to vehicle usage, the road worthiness of vehicles and the competency of vehicle drivers.

One of the miss conceptions is 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 in the back of trucks is only permitted if such a truck is fitted by the manufacture or manufacture 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. Due to resultant damage from use on construction sites, these vehicles / equipment require extra attention for roadworthiness.

Construction regulation 21 “construction vehicles and mobile plant” lists the requirements for construction work.

Fleet Safety is high on Eskom’s safety program, not only in regard to its own vehicle fleet, but 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 has 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,

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Unfortunately, during construction work, very little respect is taken of the effects of the environment with regards to hazardous chemical spillage.

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.

The storage requirements of any hazardous materials and chemicals, including gasses must be in compliance to the legislative requirements, local municipal by-laws and SANS building standards.

### **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 performing 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. It would be inappropriate to list the specific regulations here.

There are strict requirements regarding the supervision of machinery and the using of machinery. Incorrectly used 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 Drivers of Machinery**

Drivers shall be in possession of an appropriate valid driver's licence, valid for the class of vehicle and authorised in writing to operate the Construction vehicles and mobile plants. The National Road Traffic Act, 1996 (NRTA) requires that a driver/operator must be trained and authorised to operate such mobile machinery. The training of these drivers/operators very often only addresses the operating aspects of the machinery and does not focus on driving on public roads, hence the need for a national driver's license. No competency certificate may be issued without the driver/operator having a valid code B driver's license.

When driving on a public road, each operator/driver of machinery/mobile equipment must be in possession of a valid national drivers licence (Code B). It is important to note that a public road according to the NRTA includes what is considered a road for operational purposes. The definition of a public road is not linked to the "ownership" of a road or parking areas, but the common use by the public irrespective of the condition of the road (tracks in the field are also deemed as a public roads).

### **3.21 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.

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Due to the nature of this tools fastening system operating on an explosive force, it is considered as a lethal operating tool, especially when the manufacturers and legal requirements are not adhered to, especially when being operated. These type 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 defined in the Construction regulations.

### **3.22 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. Invariably, operators and riggers tend to ignore the legislative and manufacturers requirements as there is a misconception of, it takes too long to set up the equipment in accordance to requirements and or, let's use the chain sling or lifting machine to tie down that load.

All types of lifting equipment are governed by the OHS Act Driven Machinery Regulations 18: 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.

### **3.23 Boilers, Pressurised systems and Vessels under Pressure**

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

There are strict requirements as regulated by the Pressure Equipment regulations. A poorly maintained and or operated piece of equipment can have catastrophic consequences.

### **3.24 Working at Heights**

Where there is a risk of a fall causing personal injury then measures should be taken to prevent a fall and injury. Previously the notion that a fall occurs from a height (2 metres and above) is outdated. 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. The incidents of falling at the same level are increasing. Where it is reasonably practicable to take precautions to prevent a falls, steps should be taken to do so.

In an effort to prevent falls, including falling objects and or materials, fall protection 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.

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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.

Work at height is any work performed above from a stable work surface, or where a person puts himself/herself in a position where he/she exposes himself/herself to a fall from or into. Work at height is; thus, work in any place, including a place at, above, or below ground level, where a person could be injured if he/she fell from that place. Access and egress to a place of work can also be work at height.

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.

#### **3.24.1 Eskom Lifesaving Rule “Hook up at Height”**

When working from height, you must take suitable and sufficient measures to prevent, so 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.

#### **3.24.2 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. Judging by the number of pedestrian related incidents, it appears that they are oblivious of the openings for various reasons and fall through them. It is for this reason; floor and wall openings must be included in the fall protection plan.

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

### **3.25 Excavations and Tunnelling**

#### **3.25.1 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 be very deep and very dangerous. Every year, a number of employees are killed in excavations, in collapsed tunnels and trenches, some being buried alive, Many others are injured and there are hundreds of reportable incidents each year during excavation and tunnelling operations.

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.

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Deep trenches look dangerous; however, trenches and or excavations less than 2.5 metres deep are where most related deaths occur, in fact, most accidents occur in ground conditions with no visible defects.

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

The legislative requirements of making excavations are in Construction Regulation 11 of the OHS Act.

### **3.25.2 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 the Construction regulation 13, which then refers to the Tunnelling Regulation as published under the Mine Health and Safety Act 1996 (Act No. 29 of 1996), as amended, and Regulation 13 of the Construction Regulations.

### **3.26 Entering Confined Spaces**

The belief that any confined space is a safe place from asphyxiation due to ignorance of the air quality within and the risk factors is dangerous. A majority of the asphyxiates are colourless and odourless. Sometimes the odour asphyxiate is considered as 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.

### **3.27 Danger of Engulfment**

Falling into or being sucked into loose material which is contained in a vessel is extremely hazardous. More often, the material surrounding the engulfed worker acts as an adhesive, which invariably makes recovery difficult. In some instances, dependant on the consistency of the material, an individual is sucked into it at a rapid pace.

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.

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### 3.28 Barricading

Falls through openings in walls, floors, excavations, approaching dangerous equipment and operations continue to pose a threat to persons. It is human nature for persons to take short cuts, disregard no entry signage, be inquisitive and not watching where they are walking. It is a given fact that if there is a hole around, someone will fall into or through it, similarly, if there is a dangerous operation or piece of equipment, people are drawn towards it. In most cases, falls and contact with the moving equipment or operations have severe consequences.

To prevent persons from 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 to prevent unauthorised removal.

Construction regulation 11 and General Machinery Regulation 3 are explicit it barricading requirements.

### 3.29 Explosives

The handling and use of explosives for any form of construction work is controlled by the requirements of the Explosives Regulations of the OHS Act, Mine, Health and Safety Act 29 of 1996 and the Explosives Act 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

### 3.30 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 be involved in the planning, this includes conducting thorough risk assessments.

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

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

All demolition work shall be carried out in accordance with Construction Regulation 12 Demolition Work.

### 3.31 Permit to Work

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

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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 (low voltage, medium voltage, or high voltage), then the appropriate permits will be required.

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

During the construction phase and maintenance phase, certain equipment and or material 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 the requirements for that specific type of testing must be done in accordance to the relevant requirements.

### **3.33 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 is complied with. For additional worker safety, organisations should enhance the national requirements.

### **3.34 Work Stoppage**

Section 8 (2)(f) and Construction regulation 5 (3)(d) of the OHS Act is clear in the requirements regarding the non-permitting an employee from working unless adequate precautionary measures are taken and the stopping 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 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 exists. This includes any unauthorised work or service performed by, or legally or contractually non-compliant acts or omissions by, any contractor contracted to work at that site.

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.

### **3.35 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.

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

The alcohol and drug permissible level is 0%.

### **3.36 Statistical Reporting**

There is a legal requirement that is; according to Occupational Health and Safety Act 85 of 1993, (General Administrative Regulations) that stipulates that certain serious incidents must be reported to the Department of Labour within a specified time.

It is general practise worldwide to include safety reporting as part of the annual report which indicates how caring the organisation is and also the welfare or wellness which influences the organisational culture.

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.

Statistics is an integral part of the framework for measuring health and safety performance and assist in improving the organisation's health and safety performance.

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 that is a decrease or increase of incidents.

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

There are regulatory requirements from the Construction regulations which makes much emphasis on the relationship and accountability from Client and Contractor (Service Provider) point of view. The contractor which is an employer in their own right doesn't abdicate Eskom of 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”

### **3.37 Housekeeping**

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

- it saves time taken up by searching for equipment, tools and articles;

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- 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.

### 3.38 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. Symbolic signs are designed so that language, ethnic groups or literacy makes no difference. To prevent confusion symbolic signs should be applied throughout the entire organisation.

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, that is, if the sign indicates that hearing protection is required, which is now no longer the need, and 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.

Standardised colour coding reflects the same meaning throughout an organisation. It conveys a message to employees as does symbolic safety signs. It diminishes the risk of workers becoming confused whilst moving around work and storage areas. Different colours have different meanings which should be applied throughout the organisation, including storage yards.

Organisational signage indicates the name of the organisation and applicable employee contact details.

### 3.39 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 include but 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.

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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. In practice, this is not always the case and uninformed workers, supervisors and employers may suffer from the negative consequences arising from this.

It is imperative to realise that PPE, like any other 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.

When purchasing PPE for workers working near heat sources or chances of heat engulfment, that synthetic clothing is not purchased or worn.

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

### **3.40 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”.

Being a requirement in terms of the Construction regulations, client's are required to provide contractors with SHE specifications in order to inform them of what health, safety and environmental requirements are involved on a specific project. In addition, these specifications provide guidance to potential contractors in order for them to base their tender applications accordingly.

As a norm, Eskom provides SHE project/services 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.

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.

### **3.41 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 construction project undertaken and site where work is done, is compiled by the principal contractor and appointed contractor, and must be approved by the client/agent prior to the commencement of any construction activities on a project. The principal 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.

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

The content of the plan must cover all the SHE-related issues listed in the project SHE specifications.

Where any SHE 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.

### **3.42 Safety, health and Environment (SHE) File**

The construction regulations, regulation 5 (7) requires principal contractors to keep a SHE file which will contain all documentation required in terms of legislative and Eskom requirements.

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

All contractors are required to keep a she file on every project worksite. If there is more than one work site 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

### **3.43 Hours of Work**

The Basic Conditions of Employment Act stipulates the permissible working hours an individual may 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 is a state of impaired mental and/or physical performance and lowered alertness, which can effect employees at every level of the organisation. It is caused by a wide variety of factors, including inadequate restorative sleep, hard physical or mental work, health and psychological factors. It is also a significant cost that most businesses simply bear because it is part of 'working hard' and often difficult to accurately identify. Fatigue can have deadly consequences, especially in environments where a loss of alertness can threaten the health and safety of the employee or others.

Fatigue may have adverse effects on the health of individuals. Evidence from studies of shift workers

indicate a higher incidence of:

- Increased accident rates both at work and in employees' private time
- Increased levels of medical disorders (gastrointestinal, cardiovascular etc.).
- Higher levels of stress and complaints associated with stress (e.g., anxiety, depression).
- Higher rates of personal and marital problems.

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Sleep deprivation does not merely cause fatigue but also adversely affects concentration judgement spatial learning ability, creativity ( in the sense of being able to formulate an appropriate "plan" for a given situation) rapidity of a response to an unfamiliar situation.

Good fatigue management is about regulating, measuring and managing the opportunity to obtain sufficient sleep rather than prescribing the hours that an individual works.

### 3.44 SHE Recognition and Reward System

Recognition is a key tool in employee retention programs for a reason. People need more than constructive feedback and positive affirmation. They need recognition of extra effort. They need to "feel" it. This will never go away as a basic human need.

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 morale, employee motivation, and the quality of life. To create positive employee motivation, treat employees as if they matter.

One of the most effective ways to express appreciation is often one of the most overlooked: saying thank you. Even if most of the duties one performs are a normal part of the job, hearing thank you in a spontaneous and timely way can mean a lot to anyone. It should be done often, and can be done privately or publicly in front of co-workers. Mention the task, project, or behavior you want to recognize and be sincere.

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

People who feel appreciated are more positive about themselves and their ability to contribute. People with positive self-esteem are potentially your best employees. These beliefs about employee recognition are common among employers even if not commonly carried out. 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.

### 3.45 Environmental Care

Many inhabitants of South Africa live in an environment that is harmful to their health and wellbeing. Everyone has the right to an environment that is not harmful to his or her health or wellbeing;

The State must respect, protect, promote and fulfil the social, economic and environmental rights of everyone and strive to meet the basic needs of previously disadvantaged communities;

Inequality in the distribution of wealth and resources, and the resultant poverty, are among the important causes as well as the results of environmentally harmful practices;

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;

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

The environment is a functional area of concurrent national and provincial legislative competence, and all spheres of government and all organs of state must cooperate with, consult and support one another;

it is desirable:

- that the law develops a framework for integrating good environmental management into all development activities;
- that the law should promote certainty with regard to decision making by organs of state on matters affecting the environment;
- that the law should establish principles guiding the exercise of functions affecting the environment;
- that the law should ensure that organs of state maintain the principles guiding the exercise of functions affecting the environment;
- that the law should establish procedures and institutions to facilitate and promote cooperative government and intergovernmental relations;
- that the law should establish procedures and institutions to facilitate and promote public participation in environmental governance;
- that the law should be enforced by the State and that the law should facilitate the enforcement of environmental laws by civil society.

The National Environmental Management Act 107 OF 1998 is quite specific in the requirements that are applicable to all entities and populace within the boundaries of South Africa.

Eskom supports and is committed to the environment 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 of any form to Eskom with the duty of care to the environment.

### **3.46 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 and safety. In industry, numerous incidents have resulted from workers being given unlawful instructions/orders which have resulted in either injuries and or property damage.

In industry, numerous case studies show that incidents have resulted from workers being given unlawful instructions/orders which have resulted in either injuries and or property damage.

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### 3.47 Section 37(2) Agreement

Section 37 of the OHS Act potentially punishes employers (principals) for the unlawful acts or omissions of mandataries (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 mandatary.

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 the 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 should will be entered into with contractors/suppliers.

### 3.48 Security

Security issues are rampant within South Africa, thus, maintaining a security system within most organisations is high in the organisations business plan. Organisations have specific security systems with their organisations to combat the elements.

When there is any work to be performed on any organisation's premises where such systems are in place, due respect must be given to these systems.

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 difference in site specific operations. Contractors shall ultimately be responsible for their assets unless agreed between themselves and the client.

## 4. Acceptance

This document has been seen and accepted by:

Name	Designation
OHS Steercom	
Kerseri Pather	General Manager Sustainability
Jace Naidoo	Senior Manager Contractor Management
Alex Stramrood	Senior Manager Safety Risk Management
Robin Pillay	Manager Contractor Management

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## 5. Revisions

Date	Rev.	Compiler	Remarks
July 2015	2	FM Poee	Document review
August 2013	1	AE Barnard	Need for a common and standardised approach to the integration of Eskom's SHE contractor requirements to clarify roles, responsibilities, and requirements. The standard has been compiled from a procedure (32-136) and the incorporation of Specification 32-118, with additions added.

## 6. Development Team

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

- F Poee
- L Motshelanoka
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## 7. Acknowledgements

Nil.

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