

 Eskom	Standard	Group Capital Division
---	----------	------------------------

Title: **Minimum SHEQ Training**

Document Identifier: **39-3**

Alternative Reference Number: **N/A**

Area of Applicability: **Group Capital Division**

Functional Area: **SHEQ**

Revision: **5**

Total Pages: **107**

Next Review Date: **January 2023**

Disclosure Classification: **Controlled Disclosure**

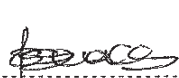
Compiled by



F Mathai

SHE Officer

Supported by



S Isaacs

Middle Manager
OHS

Functional
Responsibility



J Naidoo

Senior Manager
OHS

Authorized by



M Chettiar

Chairperson of the GCD
SHEQ Steering Committee

General Manager (GM):
Capital Execution
Assurance

Date: 16/01/2018

Date: 16/01/2018

Date: 16/1/2018

Date: 17/1/2018

Content

	Page
1. Introduction.....	3
2. Supporting Clauses	3
2.1 Scope.....	3
2.1.1 Purpose.....	3
2.1.2 Applicability	3
2.1.3 Effective date.....	3
2.2 Normative/Informative References	4
2.2.1 Normative.....	4
2.2.2 Informative.....	5
2.3 Definitions	5
2.4 Abbreviations	6
2.5 Roles and Responsibilities	6
2.6 Process for Monitoring.....	8
2.7 Related/Supporting Documents.....	8
3. Document Content.....	9
3.1 Recommended SHEQ Training Courses	9
4. Acceptance.....	89
5. Revisions.....	90
6. Development Team	93
7. Acknowledgements	93
Appendix A	94

CONTROLLED DISCLOSURE

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

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

1. Introduction

The purpose of this standard is to provide an outline of the minimum SHEQ Training requirements for employees, contractors, students and visitors in order to comply with statutory requirements and meet the SHEQ Management needs of the Group Capital Division.

The Group Capital Division shall ensure that persons working under its control are aware of:

- The SHEQ consequences, actual or potential of their work activities, their behaviour and the SHEQ benefits of improved personal performance
- Their roles and responsibilities and the importance of adhering and conforming to the SHEQ Policy and procedures

This standard was developed and shall be maintained on the principle that training programmes and procedures shall take into account different levels of

- a) Responsibility, ability, language, skills, literacy and
- b) Risk

The organisation's SHEQ Management System shall ensure that employees at all levels are competent to perform their duties and responsibilities assigned to them and that they receive training where necessary.

2. Supporting Clauses

2.1 Scope

Purpose

The minimum SHEQ training as identified in this standard shall provide appropriate knowledge and skills for preventing and controlling accidental loss within the Group Capital Division.

Applicability

This standard is applicable to all employees in the Group Capital Division and all Temporary Employment Service Agent employees, contractors, sub-contractors, students and visitors.

Effective date

The effective date for the implementation of this standard will be 6 months after the authorisation date.

CONTROLLED DISCLOSURE

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

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

2.2 Normative/Informative References

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

Normative

Note: The definitions given in ISO 9001:2015, 14001:2015, OHSAS 18001:2007, Specification with guidance for use shall apply:

- [1] ISO 9001:2015 Quality Management System
- [2] ISO 14001: 2015 Environmental Management Systems – Specification with guidance for use
- [3] OHSAS 18001: 2007 Occupational Health and Safety Management Systems Requirements
- [4] 32-727 Eskom SHEQ Policy
- [5] 39-33, GCD Safety, Health, Environment and Quality Audit Management Standard
- [6] 240-62946386, Vehicle and Driver Safety Management
- [7] 240-88365419, Eskom Driver Training
- [8] 32-95, Environmental, Occupational Health and Safety Incident Management Procedure
- [9] EPC 32-736, Land and Biodiversity Policy
- [10] 32-107, Fire Risk, Emergency Management and Firefighting Training Programme
- [11] 32-123, Emergency Planning
- [12] 32-1034 Eskom Procurement and Supply Chain Management Procedure
- [13] 32-245, Waste Management Standard
- [14] 240-70172585, Vegetation Management and Maintenance within Eskom Land Servitudes and Rights of way Standard
- [15] 32-282, Procedure for Medical Surveillance
- [16] 32-345, Eskom Vehicle Safety Specification
- [17] 32-407, Behavioural Safety Observations
- [18] 32-418, Working at Height
- [19] 240-62196227, Eskom Life Saving Rules
- [20] 32-425, Hearing Conservation
- [21] 32-477, Safety Health and Environment Training and Development
- [22] 32-524, Developing a SHE Specification
- [23] 240-114967625, Operating Regulations for High Voltage Systems
- [24] NSQ-100, Nuclear Safety and Quality Management System Requirements
- [25] IAEA GS-R-3:2006, The management system for facilities and activities – Safety Requirements.
- [26] 32-1067, Performance Management

CONTROLLED DISCLOSURE

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

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

Informative

- [1] Criminal Procedure Act, Act 51 of 1977
- [2] Occupational Health and Safety Act, Act 85 of 1993
- [3] Mine Health and Safety Act, Act 29 of 199
- [4] Compensation for Occupational Injury and Diseases Act, Act 130 of 1993
- [5] South African Qualifications Act, Act 58 of 1995
- [6] Labour Relations Act, Act 66 of 1995
- [7] Skills Development Act, Act 97 of 1998
- [8] National Environmental Management Act, Act 107 of 1998
- [9] Public Finance Management Act, Act 1 of 1999

2.3 Definitions

Employee: For the purposes of this standard the term employee shall include Group Capital Division permanent employees, Temporary Employment Service Employees (TES employees) and learners.

Personal Protective Equipment (PPE): Equipment worn to protect a person from hazardous exposures encountered in the organisation.

Senior and Middle Managers: means Senior General Managers, General Managers and Departmental/Line Managers.

SHEQ Management Training: Training that addresses SHEQ management principles and techniques. This training provides knowledge and skill in preventing and controlling accidental loss.

SHE Representative: Representatives appointed under a legislative, standard or organisational requirement for example a Health and Safety Representative in terms of OHS Act or an Environmental or Quality Management Representative in terms of ISO requirements.

Technical SHEQ Training: Training that provides knowledge and skill for completing specific SHEQ work.

Training requirements: Training required ensuring an employee attains task competency. Training requirements should include SHEQ as well as general competency training needed to provide employees with the knowledge and skills to do their tasks well.

CONTROLLED DISCLOSURE

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

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

2.4 Abbreviations

Abbreviation	Explanation
COID Act	Compensation for Occupational Injuries and Diseases Act, Act 130 of 1993.
EMS	Environmental Management Systems.
HIRA	Hazard Identification and Risk Assessment.
ISO	Internal Standards Organisation.
SAP LSO	SAP Learning Solution
OHNP	Occupational Health Nurse Practitioner.
OHS Act	Occupational Health and Safety Act, Act 85 of 1993.
PCB's	Polychlorinated Biphenyls.
QMS	Quality Management Systems.
SAQA	South African Qualifications Authority Act, Act 58 of 1995 (SAQA Act).
SHE/Risk Management	Safety, Health, Environmental and Quality Risk Management.
SANAS	South African National Accreditation System
ASME	The American Society of Mechanical Engineers
NQA-1	Nuclear Quality Assurance
KNPS	Koeberg Nuclear Power Station
NSQ-100	Nuclear Safety and Quality Management System
IAEA GS-R-3	International Atomic Energy Association
NNR RD-0034	National Nuclear Regulator (For South Africa) Requirements Document

2.5 Roles and Responsibilities

Manager/Supervisor

2.5.1 Training, awareness and competence

It shall be the responsibility of every Manager and/or Supervisor to:

- Have an effective process in place to ensure the competency of employees to carry out their designated functions.
- Ensure that the necessary competence is available for the effective and efficient operation of the business. This shall include any persons performing tasks for or on behalf of the Group Capital Division.
- Ensure that employees are competent to perform tasks that may have an impact on SHEQ in the workplace. Competence shall be defined in terms of appropriate education, training and experience.
- Identify general competency and skill requirements in order to define the knowledge and skills employees need to perform their work properly, efficiently and to an acceptable level of competency.

CONTROLLED DISCLOSURE

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

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

- e) Employees need to be made aware of their roles and responsibilities and training should take into consideration language skills and literacy and the risk involved in the working environment.
- f) Eskom shall identify training needs associated with its SHEQ risks and its OHSAS 18001, ISO 14001 and its ISO 9001 Management Systems.
- g) Ensure analysis of both present and expected competence needs as compared to the competence that already exists. For example future demands related to strategic and operational plans and objectives.
- h) Conduct training needs assessments as and when employees' job outputs change or review at least once a year and involve employees in the process; and evaluate effectiveness of the training management process.
- i) Identify, prioritise and confirm the relevant training required by employees based on their job profiles, years of experience, risk exposure profiles, legislative and organisational documented requirements.
- j) Where no statutory, regulatory or standard requirement calls for re-training the principle of recognition for prior learning shall apply.
- k) Ensure that employees have Individual Development Plans (IDPs).
- l) Ensure that development outputs are written into IDPs and managed through the Performance Management Procedure.
- m) Budget for and approve training related expenditure.
- n) If required, provide the resources to carry out the training e.g. coaches in relation to on-job training.
- o) Ensure and confirm that employees receive the identified required training.
- p) Keep a record of all statutory / non-statutory training and monitoring expiry dates.
- q) Awareness training sessions should also be planned and conducted on a regular basis, e.g. SHEQ Monthly Themes, articles in newsletters, work-stoppages, safety events/days and environmental awareness events/days.
- r) Communicate the cancellation of any training or awareness event to the responsible Co-ordinator/Service Provider in good time.
- s) Training statistics on SHEQ training shall be reported by all projects and departments on a monthly basis using Form 207. Form 207 need not be submitted to the GCD Construction SHEQ Department; however compliance will be monitored through internal audit processes. The GCD Construction SHEQ Department will track monthly and year to date training statistics using the LSO Report. Thereafter the information will be presented at the GCD SHE Managers and Executive Steering Committee.

CONTROLLED DISCLOSURE

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

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

2.5.2 Records Management

All training and awareness carried out shall be captured onto SAP LSO and records such as copies of certificates/equivalent and/or attendance registers shall be kept by the relevant Line Manager/Supervisor or SHEQ section for legal authorisations and training using HR SAP LSO system.

2.5.3 Employees Generally

Each individual shall be responsible for attending and constructively participating in the relevant SHEQ training at the time and location specified by their direct manager/supervisor or any other authorized person.

2.5.4 Training Needs Analysis

The Training Matrix and Training Needs Analysis (Form 240-109937930) shall be used to help identify missing workplace skills, knowledge or abilities as well as to determine ways to acquire them. The training needs shall be identified and analysed at a Department/Project level which shall in-turn lead to the identification of training needs for the Group Capital Division. Group Capital Divisions training needs are consolidated using Form 240-114732954.

This process shall be used by the Line Manager/Supervisor/Mentor in partnership with the employee to ensure that the training intervention recommended for the employee results in knowledge, skill and attitude transfer from the training room to the workplace.

Consideration of the need for competence includes sources such as:

- Future demands related to plans and objectives
- Potential incidents and accidents
- Anticipated management and workforce succession plans
- Changes to Eskom processes, tools and equipment
- Evaluate the effectiveness of the training intervention and determine competence of the individual employees to perform define activities and tasks
- Statutory and regulatory requirements and standards, affecting Eskom and its customers

2.6 Process for Monitoring

This standard is subject to document control procedures and will be updated when it is due for revision or when conditions dictate. Monitoring will be done through audits processes 39-33.

2.7 Related/Supporting Documents

Form 240-109937930, Training Matrix and Training Needs Analysis

Form 207, SHEQ Training Statistical Report

Form 240-114732954, GCD Consolidated Training Needs Analysis

CONTROLLED DISCLOSURE

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

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

3 Document Content

3.1 SHE System Management Training

3.1.1 Group Capital Division SHEQ Induction Training for Executives

Duration: 2 Hours

Frequency: On appointment or as soon as reasonably possible thereafter.

Refresher/Retraining: Refresher training will be conducted annually in accordance with a financial year (between January and March) and when site risk profile changes.

Target Group: Executive Management.

Objectives and outcomes: SHEQ Induction training shall be provided in order to bring about an awareness of safety, health, environmental and quality management principles in order to proactively eliminate or reduce harm to people and losses in all its varied forms to the organisation by implementing effective cost efficient controls.

The purpose of the Induction training shall be to make each person conversant with the following:

1. The Eskom SHEQ Policy;
2. King IV, Corporate governance and sustainable development;
3. Risk Management: An integrated and holistic approach; (Baseline Risk Assessments, HIRA, Task analysis);
4. OHS Act duties and responsibilities; as well as the delegation of the individual's specific roles and responsibilities, with reference to 240-62582234)
5. Legal liability;
6. Environmental Management;
7. Management systems overview and integration:
 - OHSAS 18001
 - ISO 14001
 - ISO 9001
8. Eskom Life Saving Rules;
9. Incident Management; (From incident to Department of Labour enquiry)
10. Management of culture; (Behaviour-based solutions and visible leadership);
11. Management performance and compliance;
 - Measuring; and
 - System auditing certification

Resources: Internal

CONTROLLED DISCLOSURE

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

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

3.1.2 Group Capital SHEQ Induction Training for Employees and Students

Duration: 4 Hours

Frequency: On appointment or as soon as reasonably possible thereafter and when the site risk profile changes.

Refresher/Retraining: Refresher training will be conducted annually in accordance with a financial year (between January and March) and when site risk profile changes.

Target Group: The target group is all employees including, new, reassigned, and transferred in employees and students and/or anyone after a prolonged period of absence.

Objectives and outcomes: SHEQ Induction training shall be provided in order to bring about an awareness of safety, health, environmental and quality practices specific to an employee's work environment, site or project.

The purpose of the Induction training shall be to make each person conversant with the following:

SHEQ Theory (A basic overview);

1. The Divisional SHEQ Management system/processes: (Referring to OHSAS 18001, ISO 14001 and ISO 9001, this shall include Corrective Action, Preventative Action, and Customer Satisfaction etc.);
- 4 Eskom SHEQ Policy;
- 5 Eskom Life Saving Rules;(Can either be presented as a stand-alone training intervention or as part of induction training)
- 6 The role of the Health and Safety Representative;
- 7 The governance structure of the local Health and Safety / SHE Committees;
- 8 Environmental management;
- 9 Individual roles, rights and responsibilities in managing SHEQ issues; (OHS Act, Environment and organisational requirements including job descriptions);
- 10 Pre-task planning and risk assessment;
- 11 Emergency Planning and Response (Evacuation warden, fire warden and first aider);
- 12 SHEQ rules and work-site specific SHEQ procedures;
- 13 Signage;
- 14 Housekeeping; (Clean desk requirements)
- 15 Particular hazards that may be inherent in a process, equipment or substance that may be present at or in a work method used on a work site;
- 16 Medical surveillance requirements, including occupational hygiene monitoring;
- 17 The right to refuse to do dangerous work;
- 18 The management of substance abuse;
- 19 Incident/non-conformity reporting requirements; (Occupational Health and Safety, Environment and organisational requirements, including near misses)

CONTROLLED DISCLOSURE

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

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

20 Applicable legislative requirements; (Occupational Health and Safety, Environment and organisational requirements)

21 PPE requirements; and

22 Personal security.

Note 1: The above mentioned representation is the minimum topics/areas that need to be covered during the course of the induction training.

Note 2: Consistency of training - Induction and orientation training shall be carried out to a standard format in order to ensure consistency. Checklist and other guides may be used to ensure consistency.

Note 3: Worksite orientation/awareness programmes shall be subject to review with employees when design/process changes are made and when the site risk profile has changed.

Resources: Internal

3.1.3 Group Capital SHEQ Induction and Orientation for Visitors, including Clients, Suppliers and Consultants

Duration: In accordance with Site or Business Unit requirements.

Frequency: Each Site or Business Unit shall determine its own requirements for frequent, infrequent and short-term visitors taking into account the site or workplace to be visited and the purpose for the visit. Visitors should be included in the training programme according to the level of risk to which they may be exposed or could cause. A systematic programme of induction shall be established.

Target Group: All Visitors, including Clients, Suppliers and Consultants

Objectives and outcomes: SHEQ Induction training shall be provided in order to bring about an awareness of safety, health, environmental and quality practices specific to the organisation, site or project. An induction programme shall be developed to assist managers in confirming that visitor's safety and SHEQ orientation is carried out in a systematic and comprehensive manner. The scope of the induction training shall be risk based.

The purpose of the Induction training shall be to make each person conversant with the following, as the minimum requirements to be covered:

- 4 Eskom SHEQ Policy;
- 5 Eskom Life Saving Rules;
- 6 Environmental Management;
- 7 Particular hazards that may be inherent in a process, equipment or substance that may be present at or in a work method used on a work site;
- 8 SHEQ rules and work-site specific SHEQ procedures;
- 9 General workplace requirements,
- 10 Emergency planning and response (Emergency procedures and any other relevant procedures);
- 11 Signage;

CONTROLLED DISCLOSURE

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

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

- PPE requirements;
- Personal security;
- Incident/non-conformity reporting requirements; and
- Other, as may be required.

Resources: Internal - Various mediums may be used to conduct the training including video or DVD presentations.

3.1.4 Group Capital SHEQ Scope of Work Orientation and Induction for Contractors and Sub-contractors

Duration: In accordance with Site or Business Unit requirements.

Frequency: Each Site or Business Unit shall determine its own requirements for Contractor and Sub-contractor scope of work orientation and induction. Contractors, sub-contractors and Temporary workers should be included in the training programme according to the level of risk to which they may be exposed or could cause. A systematic programme of induction shall be established.

Refresher/Retraining: A refresher course will be conducted annually.

Target Group: Contractors and Sub-contractors.

Objectives: The Contractor and Sub-contractor scope of work orientation programmes shall depend on the nature of the work and the contractual requirements.

Resources: Internal - The Contractor and Sub-contractor scope of work orientation shall be conducted by the relevant supervisor or a person nominated by the site or project manager.

3.1.5 General Health and Safety Awareness/ Introduction to Basic Occupational SHE

Duration: 2 Days

Frequency: Training shall be provided as and when the need arises

Refresher/Retraining: Refresher will be conducted where the content of the legislation, regulations and codes of standards change.

Unit Standard (No credits required):

- 1) Demonstrate an understanding of basic health and safety principles in and around the workplace – 259639
- 2) Participate in the implementation and evaluation of a safety and health management programme in the workplace – 259601

Target Group: OHS Practitioners, employees who are small group team leaders, Supervisors, newly elected Fulltime Health and Safety Reps, SHE reps, and General Workers who have not had previous exposure to SHE legislation and fundamentals of organisational SHEQ system management.

Objectives:

To equip learners with information, knowledge and skills to be able to:

CONTROLLED DISCLOSURE

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

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

- 1) Control basic SHE hazards and risks at the point of action and in the execution of day to day operational tasks.
- 2) Explain the importance of integrating safety and health considerations in routine activities within the workplace and identify the critical areas in order to prevent incidents taking place.
- 3) Understand safety performance measures against established objectives, deal with any deviations from the set objectives and make recommendations on the development of the safety and health management programme.

Course contents:

The course should therefore cover the following aspects:

- 1) Explain the scope and objective of SHE legislation
- 2) Explain both employer and employee duties with regard to occupational safety and health in the workplace;
- 3) Understand the Rights of the Employer and Employee as per SHE legislation
- 4) Explain the general safety rules in the workplace.
- 5) Understand Eskom's lifesaving rules
- 6) Explain the use and application of Personal Protective Equipment in the workplace
- 7) Explain good housekeeping in the workplace.
- 8) Explain and apply emergency procedures in the workplace.
- 9) Identify basic SHE hazards in the work place
- 10) Carry out preliminary risk assessment of the allocated job and work area
- 11) Take immediate, appropriate action to rectify the problem according to own scope and authority
- 12) Notify the correct person in the correct way to ensure further action is taken
- 13) Practical application of the concepts shared

Course outcomes:

On completion of this course, learners will be able to:

- 1) Explain both employer and employee duties with regard to occupational safety and health in the workplace.
- 2) Explain the general safety rules in the workplace.
- 3) Explain the use and application of Personal Protective Equipment in the workplace
- 4) Explain good housekeeping in the workplace.
- 5) Explain and apply emergency procedures in the workplace.
- 6) Explain the requirements for the implementation of a safety and health management programme in the workplace. Explain the requirements for the implementation of a safety and health management programme in the workplace.
- 7) Implement the procedures for evaluating safety and health performance in a workplace, as required by the safety and health management programme.

CONTROLLED DISCLOSURE

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

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

8) Evaluate performance of workplace safety activities required by the safety and health management programme.

9) Explain the requirements for the implementation of a safety and health management programme in the workplace. Explain the requirements for the implementation of a safety and health management programme in the workplace.

10) Implement the procedures for evaluating safety and health performance in a workplace, as required by the safety and health management programme.

11) Evaluate performance of workplace safety activities required by the safety and health management programme.

Resources: External

3.1.6 Office Health and Safety

Duration: 1 day

Frequency: Once off

Refresher/Retraining: Retraining will be conducted where internal regulations, standards and procedures set change

Target Group: Office based employees

Objectives and Outcomes:

To promote office safety and ensure that learners understand their responsibilities in terms of maintaining health and safety at work.

Course content and outcomes:

On completion of this training, learners will be able to

- 1) Demonstrate understanding of Office Health and safety management programme
- 2) Explain the principles of office safety
- 3) Describe Office hazards, risks and controls
- 4) Demonstrate understanding of Emergency preparedness for office environment
- 5) Health and safety promotion.

Resources: Internal or External

3.1.7 SHE Management Training (Classroom Based/ eLearning)

Duration: 10 Days

Frequency: Training shall be provided on appointment and when the need arises.

Refresher/Retraining: Retraining will be conducted where internal regulations, standards and procedures set change.

Unit Standard (Credits required): Facilitate the development, implementation and maintenance of a Safety, Health and Environment management system – 244283

Target Group: OHS/SHE Professionals, SHE Reps, Managers and Supervisors.

CONTROLLED DISCLOSURE

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

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

Objectives and Outcomes:

To give learners the understanding and skills to conduct an organisation's baseline, issue based and continuous risk assessments, as well as understanding of SHE management system requirements and procedures.

Course contents:

The course should cover the following aspects:

- 1) Understanding of SHE management system requirements and procedures;
- 2) Safety hazards and environmental aspects identification and risk assessment in the workplace;
- 3) Guidance on development and implementation of SHE management system procedures and work instructions.
- 4) Understanding of the various workplace SHE aspects eg. Occupational hygiene, mechanical, electrical, environmental impacts, occupational health, etc.
- 5) The link between occupational health and occupational hygiene and the effect on workplace safety.
- 6) The impact of human behaviour on workplace safety.
- 7) Applicable SHE legal requirements

Course outcomes:

- 1) Explain SHE management requirements and procedures,
- 2) Conduct safety hazards and environmental aspects identification and risk profiling in the workplace'
- 3) Develop and implement SHE management systems and work instructions
- 4) Prevention and management of workplace incidents
- 5) Understanding of the link between human behaviour and safety
- 6) An appreciation of the applicable SHE legal requirements and an ability to comply to these in the workplace

Resources: External

3.1.8 Occupational Health and Safety Assessment Series Awareness – OHSAS 18001: 2007

Duration: 1 Day

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Refresher training will be conducted where the content of the standard change.

Unit Standard (no credits required):

Manage requirements related to quality and other standards – 116785

Target Group: All employees involved in the implementation of the SHE Management System and contactor SHE Management Personnel.

CONTROLLED DISCLOSURE

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

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

Objectives and outcomes: To provide learners with the basic understanding of the principles and requirements for the application, implementation and auditing of OHSAS 18001: 2007, Occupational Health and Safety management system and benchmark practices.

To enable learners to run a competitive, reputable and sustainable business, maintain acceptable standards of performance related to the process, product or service.

Course contents:

The course should therefore cover the following:

- 1) Introduction to Occupational Health and Safety Management Systems;
- 2) Elements of successful Occupational Health and Safety Management;
- 3) General requirements;
- 4) Occupational Health and Safety Policy;
- 5) Planning;
- 6) Implementation and operation;
- 7) Checking and corrective action; and
- 8) Management review.

Resources: Internal or External.

3.1.9 Occupational Health and Safety Assessment Series Implementation– OHSAS 18001: 2007

Duration: 5 Days

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Refresher will be conducted where the content of standard change.

Unit Standard (no credits required):

Manage requirements related to quality and other standards – 116785

Target Group: All employees involved in the implementation of the SHE Management System and contactor SHE Management Personnel.

Objectives and outcomes: To provide learners with skills and knowledge to be able to plan, implement and audit the OHSAS 18001: 2007, Occupational Health and Safety management system.

To enable learners to run a competitive, reputable and sustainable business, maintain acceptable standards of performance related to the process, product or service.

Course contents:

The course should therefore cover the following:

On completion of this course, learners will be able to:

- 1) Explain the fundamentals of Occupational Health and Safety Management Systems;
- 2) Explain the elements of successful Occupational Health and Safety Management;

CONTROLLED DISCLOSURE

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

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

- 3) Occupational Health and Safety Policy;
- 4) Planning;
- 5) Implementation and operation;
- 6) Checking and corrective action; and
- 7) Management review.

Outcomes:

On completion of this course, learners will be able to:

- 1) Explain the fundamentals of Occupational Health and Safety Management Systems;
- 2) Explain the elements of a successful Occupational Health and Safety Management system.

Resources: External

3.1.10 Lead Auditors – OHSAS 18001 Occupational Health and Safety Management System Training

Duration: 5 Days

Frequency: Training shall be provided as and when the need arises.

Refresher/Re-training: Refresher will be conducted where the content of standard change.

Unit Standard (Credits required):

- 1) Perform auditing activities – 12674
- 2) Verify compliance to safety, health and environmental requirements in the workplace – 259604

Target Group: All employees involved in the SHE Management System, including Supervisors, SHE Reps, SHE Practitioners, Business Unit Managers and other members of the Auditing team.

Objectives and outcomes:

- 1) Enable learners to be able to understand the importance of compliance to safety, health and environmental legal and other requirements for a specific workplace and the importance of integrating safety, health and environmental considerations into all routine activities at the workplace;
- 2) Equip learners with knowledge and skills to audit documentation related to materials, components, process performance and final product for compliance with specifications, e.g. policies and procedures, company performance criteria and;
- 3) Enable learners to identify any deviations and workplace safety performance in the workplace from health, safety and environmental requirements and be able to ensure that the correct action is taken in situations where safety health and environmental issues are not in accordance with requirements.

Course contents:

The course scope shall include:

CONTROLLED DISCLOSURE

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

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

- 1) A detailed proven procedure/process for effective internal audits that can be applied to any process/ SHE management system.
- 2) The Audit Process and Measuring effectiveness
- 3) Audit methodology(s)
- 4) Commitment to auditing;
- 5) Requirements from OHSAS 18001 Auditing
- 6) ISO 19011:2011 Guidelines for quality and/or environmental management systems auditing;
- 7) Developing an audit system;
- 8) Arranging an audit;
- 9) Planning and managing audits;
- 10) Auditors selection and training;
- 11) Carrying out the audit;
- 12) Managing the on-site process as the team leader;
- 13) Maximizing the effectiveness of the audit team;
- 14) Interviewing styles;
- 15) Use of audit protocols;
- 16) Compliance verification strategies;
- 17) Data collection and interpretation;
- 18) Reporting;
- 19) Case studies of current best practices; and
- 20) Acting on audit results.

Course outcomes:

On completion of this course, learners will be able to:

- 1) Plan and prepare for the audit process.
- 2) Communicate the audit plan to affected parties
- 3) Conduct the audit process.
- 4) Interpret and evaluate findings.
- 5) Compile an audit report.
- 6) Report on the audit findings.
- 7) Follow-up and evaluate corrective action(s) / improvements made.
- 8) Discuss and explain auditing process and purpose of auditing.

Resources: External

3.1.11 NEBOSH Occupational Health and Safety Management

Duration: 15 Days

CONTROLLED DISCLOSURE

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

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

Frequency: Training shall be provided as and when the need arises.

Target Group: Operating Managers, First Line Supervisors, and SHE Professionals who require competency in the management and control of Occupational Health, Safety, Environment and Quality issues.

Objectives and Outcomes:

- 1) The purpose of this course is to equip learners with knowledge and skills to be able to explain the importance of integrating safety and health (SHEQ) considerations in routine activities within the workplace and identify the critical areas in order to prevent incidents.
- 2) Also to be able to measure safety performance against established objectives, deal with any deviations from the set objectives and make recommendations on the development of the safety and health(SHEQ) management programme.

Course contents:

The course is structured around NGC1: Management of Health and Safety workplace hazards, NCC1: Managing and Controlling Hazards in Construction Activities and NCC2: Construction Health and Safety Practical and covers the following:

- 1) Foundation in Occupational health and safety
- 2) Concept of SHEQ management
- 3) Basic Legal Liability concepts and Health and Safety Policy
- 4) Organising for health and safety in the workplace, Health and Safety Committees and Representatives
- 5) Promoting a positive health and safety culture
- 6) Risk assessment
- 7) Principles of control and incidents prevention
- 8) General site issues – hazards and controls (including requirements for premises, housekeeping, machinery and equipment safety)
- 9) Working at height – hazards and control
- 10) Excavation work and confined spaces – hazards and control
- 11) Demolition– hazards and control
- 12) Movement of people and vehicles – hazards and control
- 13) Work equipment – hazards and control
- 14) Manual and mechanical handling – hazards and control
- 15) Electrical – hazards and control
- 16) Fire – hazards and control
- 17) Chemical and biological health – hazards and control
- 18) Physical and psychological health – hazards and control
- 19) Incident investigation, recording and reporting
- 20) Monitoring, review and audit

CONTROLLED DISCLOSURE

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

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

Course outcomes:

On completion of this course, learners will be able to:

- 1) Explain the communication processes in promoting occupational health and safety in the working place.
- 2) Demonstrate the planning and execution of a project designed to promote occupational health and safety in the working place.
- 3) Monitor, measure and report on the effectiveness of the promotional programme.

Resources: External

3.1.12 SHE Training for Supervisors

Duration: 3 Days

Frequency: Training shall be provided as and when the need arises

Refresher/Retraining: Retraining will be conducted where internal regulations, standards and procedures change

Unit Standard (No credits required):

Supervise personal safety practices in the workplace – 254099

Target Group: Eskom and Contractors Supervisors

Objectives and Outcomes:

The purpose of this course is to equip learners' knowledge and skills to be able to implement Health and Safety policies and safe work procedures, as well as supervise personal safety practices and manage safety emergencies in the workplace

Course contents:

- 1) Overview of Occupational Health and Safety Act (OHSA) and Compensation for Occupational Injuries and Diseases Act. (COIDA);
- 2) Roles and responsibilities of Line Managers and OHS/SHE Professionals in the implementation of health and safety
- 3) Overview of health and safety in the workplace;
- 4) Understanding the Eskom SHEQ Policy and health and safety procedures;
- 5) Emergency preparedness planning;
- 6) Overview of Hazards Identification and Risk Assessment (HIRA) and housekeeping;
- 7) Dangers and control measures when working with moving machinery and other hazardous conditions
- 8) Safety procedures for work in confined spaces.

Course outcomes:

On completion of this course, learners will be able to:

- 1) Demonstrate an understanding of Health and Safety in the workplace.
- 2) Ensure the implementation of Health and Safety policies and procedures.

CONTROLLED DISCLOSURE

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

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

- 3) Participate in the development and implementation of a Health and Safety plan for their sections in line with the site Health and Safety plan.
- 4) Monitor the implementation of the Health and Safety plan, systems and procedures in their sections.
- 5) Explain relevant sections of the Occupational Health and Safety Act and Compensation for Occupational Injuries and Diseases Act. (COID).
- 6) Explain the purpose of health and safety committees and health and safety representatives.
- 7) Explain safe working practices in the workplace in accordance with work policies and procedures.
- 8) Explain the application of emergency procedures
- 9) Monitor good housekeeping practices in workplace.
- 10) Explain the dangers of working with moving machinery and other hazardous conditions in the workplace.
- 11) Explain and monitor procedures for entering a confined space.

Resources: External

3.1.13 Supervisor Training Course - The role of a Supervisor

Duration: 2 Days

Frequency: Training shall be provided as and when the need arises.

Target Group: All Supervisors, in other words all individuals who manage staff, contractors and others e.g. temporary workers.

Objectives and outcomes: Supervisors shall be equipped with the necessary skills to effectively execute their supervisory functions and duties. They should subsequently understand the hazards and risks of the operation, for which they are responsible, have the competencies necessary to carry out the activities safely and they must ensure that staff under their control follows safe working procedures. Furthermore they should have thorough knowledge of the following functions of supervision:

- Planning – Involves determining the most effective means of achieving the work of the unit.
- Organizing – Involves distributing the work among the employees in the group and arranging the work so that it flows smoothly.
- Staffing – is concerned with obtaining and developing competent people.
- Leading – Involves directing and channelling employee behaviour towards the accomplishment of work objectives.
- Controlling – Determines how well the work is being done compared with what was planned.

Resources: External

3.1.14 Train-the-Trainer – 00031345

Duration: 2 Days

CONTROLLED DISCLOSURE

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

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

Frequency: Training shall be provided as and when the need arises.

Target Group: All Supervisors and employees involved in the management of the SHE Management System.

Objectives and resources: All Supervisors shall be equipped with the skills to conduct on-site training for employees. They should have a thorough knowledge of the following:

- Presentation techniques;
- Learning processes;
- Advantages and disadvantages of training media;
- Techniques for eliciting responses from every participant;
- Ideas for improved transfer of training;
- Reasons why training programmes succeed or fail;
- Teaching tips for discussion leaders; and
- How to get top management support.

Resources: External

3.1.15 Permit to Work Processes

Duration: 4 Hours

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Refresher will be conducted where the content of internal regulations, standards and procedures set change

Target Group: All persons required to issue permits or perform work under a permit.

Objectives and outcomes: The purpose of the course shall be to enable persons to identify and control risks in relation to acts, conditions and processes by implementing SHE rules and internal permit-to-work systems for highly hazardous work. The course is also intended to promote compliance to SHE permit requirements placed upon the organisation by external authorities.

The course scope shall include:

- Organisational permits and high risk work controls;
- Externally required permits; and
- Applicable Organisational SHE standards and procedures.

Resources: Preferably internal training; however where external resources are used service providers must have in depth knowledge of the Group Capital utility, risks and working environment.

3.1.16 Leadership in Safety Management Training

Duration: 2 Days

Frequency: Training shall be provided for all newly appointed/current managers and thereafter as and when the need arises.

CONTROLLED DISCLOSURE

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

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

Refresher/Retraining: retraining will be conducted where the content of internal regulations, standards and procedures change.

Target Group: Executive, Senior and Middle Managers. (M Band to GM Level)

Objectives and outcomes: In many ways, Senior and Middle Managers is the key to effective safety management, as they must translate leadership's commitment and safety management systems into everyday activity. This training looks at the role of the front-line managers and the skills necessary for them to execute their critical safety responsibilities.

The course scope shall include:

- Incident Impact, Causes, and Prevention
- Behavioural Observations and Taking Action
- Repeated Unsafe Behaviour and Discipline
- Incident Investigation and Management
- Establishing a Safety Climate/Culture
- Safety Action Meetings
- Action Plans

Resources: Internal

3.1.17 Behavioural Safety Observation Train-the-Trainer Programme

Duration: 4 Days

Frequency: Training shall be provided for all newly identified potential trainers.

Refresher/Retraining: Where the content of internal regulations, standards and procedures changes.

Target Group: Identified Safety, Health and Environmental (SHE) Practitioners who have a potential in training.

Objectives and resources: The SHE Practitioners shall be equipped with the skills to conduct training for employees. They should have a thorough knowledge of the following:

- Presentation techniques;
- Learning processes;
- Advantages and disadvantages of training media;
- Techniques for eliciting responses from every participant;
- Ideas for improved transfer of training
- Reasons why training programmes succeed or fail;
- Teaching tips for discussion leaders; and
- How to get top management support.

Resources: Internal, A competent person shall be nominated to conduct and/or facilitate the training programme.

CONTROLLED DISCLOSURE

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

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

3.1.18 Behavioural Safety Observation Training

Duration: 1 Day

Frequency: Training shall be provided for all newly appointed/current managers, Supervisors and all other employees.

Refresher/Retraining: Refresher training shall be conducted depending on the results of the risk assessment. Re-training is recommended to aid with behavioural change and at risk behaviours.

Target Group: Executive, Senior Middle Managers, Supervisors and SHE Officers.

Objectives and outcomes: The Behavioural Observation programme is a training intervention that equips participants with a methodology to address and improve safety related behaviours in their work environment. The visibly demonstrated commitment, leadership, and drive of management and supervisory personnel significantly determine the success of the safety effort. An interactive behavioural safety auditing style provides not only a perfect vehicle for this to happen, but is actually one of the most powerful tools in generating the following benefits:

- By focusing on safe and unsafe behaviours of people, it helps manage the base of the 'safety pyramid', and the underwater portion of the 'safety iceberg'.
- It provides an ideal vehicle for two-way constructive interactions that are non-punitive.
- It is a process not just a chat. Behavioural observations and actions are discussed and recorded.
- Data is collected and used positively and pro-actively for follow-up action.
- Praise is given for positive behaviour where due.
- Safety standards are checked, clarified, challenged, discussed, enforced and upgraded.
- It is a powerful source of 'leading indicator' metrics.
- It highlights strengths and weaknesses in safety systems.
- It raises employees' safety awareness.
- It motivates employees to work safely.
- It is an indispensable tool in any behavioural safety continuous/sustainable improvement programme – greatly assisting in the prevention of injuries.

Resources: Internal, A competent person shall be nominated to conduct and/or facilitate the training programme.

3.1.19 Electrical Safety

Duration: 3 Days

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Refresher will be conducted based on the risk assessment conducted, where the content of legislation, regulations, standards and procedures set change.

Target Group: All employees who are required to perform electrical work and those who are required to provide routine day-to-day advice on Health, Safety and welfare in construction work.

CONTROLLED DISCLOSURE

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

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

Objectives and outcomes: The course needs to cover the following topics as a minimum, in order for employees to get a proper appreciation and understanding of electricity, related technology, risks and prevention strategies:

Risks related to electrical contact –

- **Direct Current and Alternating Current:**
 - Facilitate the basic principles and ensure understanding of the risks related with each.
- **Single Phase and Three Phase:**
 - Facilitate the basic principles and ensure understanding of the risks related with each.
- **Resistance and Resistance Heating:**
 - Facilitate basic understanding of the technology, its proper use and the accidental consequences if not applied correctly or induced by accident.
- **Induction and Induction Heating:**
 - Facilitate basic understanding of the technology, its proper use and the accidental consequences if not applied correctly or induced by accident.
- **Low, Medium and High Voltages:**
 - Understanding the differences in technology, safety distances and clearances and support with graphical material to facilitate proper appreciation of the risks and precautions applicable.
 - **Electrical technology and exposures in Generation, Transmission and Distribution** (overview, with site examples): Good appreciation of the process of generating electricity, increasing voltage for transmission over distance, the distribution network and the stepping down of voltage towards end user supplies. Use graphical and photo material.
- **Supervision of Unauthorised Persons near Live Equipment:**
 - Ensure that live chambers and the risks related to it in Power Station and other areas are well understood. Use practical work and site visit to imprint the principles.
- **Circuit Designer Competence:**
 - Basic appreciation of the knowledge, skills and standards to be used in design.
- **Materials and Equipment Correctly Specified for Normal and Fault Conditions:**
 - Basic appreciation of the knowledge, skills and standards to be used in design.
- **Circuit Overload Protection:**
 - Basic understanding of the technology and its application.
- **Fault Protection:**
 - Basic understanding of the technology and its application.
- **Earth Leakage Protection:**
 - Basic understanding of the technology and its application.
- **Circuit Breakers and Isolators:**
 - Basic understanding of the technology and its application.

CONTROLLED DISCLOSURE

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

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

➤ **Provisions for Isolation:**

- Basic understanding of the technology and its application.

➤ **Circuits:**

- Indicate the purpose, application and uses of labelling, drawings and manuals.

➤ **Equipment and Premises Correctly Labelled:**

- Understanding of labelling the purpose, application and uses.

➤ **Materials and Equipment According to Specification:**

- Ensure a proper understanding of electrical specifications, its application and enforcement.

➤ **Adequate Physical Support:**

- Ensure proper understanding of the safety aspects related to cable, line and conductor support structures in power stations, sub stations and outside areas.

➤ **Adequate Ventilation for Cooling:**

- Ensure proper understanding of effective ventilation around electrical systems in tunnels, pipes, rooms, sub stations and even outside areas, as a critical fire prevention principle.

➤ **All Accessible Conducting Parts Insulated:**

- Ensure proper understanding of insulating material, its uses in the electrical applications and the safety impacts of not being effective or properly maintained.

➤ **Adequate Access for Maintenance:**

- Proper understanding of safe and adequate access in areas like cable tunnels, behind panels in sub stations and other specific areas.

➤ **Competence and Workmanship of Installer:**

- Basic appreciation of the knowledge, skills and standards to be used in installation.

➤ **Open (= switch off), Isolate and Earth:**

- Basic appreciation of the safety aspects related to breaker, link, switch operation and the safety implications if not complied with.

➤ **Lock-out Procedures:**

- Basics of the philosophy of lock out and its use to safeguard people and plant.

➤ **Safety Tests:**

- Basics of the philosophy of safety testing and its use to safeguard people and plant.

➤ **Performance Tests:**

- Basics of the philosophy of performance testing and its use to safeguard people and plant.

➤ **Temporary Supplies:**

- Basics of the philosophy of temporary supplies and its use to safeguard people and plant.

➤ **Portable Electric Tools:**

- How should it be checked for electrical safety? (Use photos and practical examples)

CONTROLLED DISCLOSURE

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

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

➤ **Certificate of Compliance:**

- What are the purpose, use and correct application of this certificate?

➤ **SANS 10142:**

- Basic appreciation of the principles, process and use of this specification.

➤ **Electrical Installations in Hazardous Locations (flammable gas installations):**

- Basic principles and application for safety purposes.

➤ **Flame proof, Explosion proof, intrinsically safe:**

- Understanding of requirements and basic principles.

➤ **SANS 10108:**

- Basic appreciation of the principles, process and use of this specification.

➤ **Typical Causes of Electrical Fires:**

- Understanding basic principles and the lessons learned from incidents (Use case studies and support material)

➤ **Fighting Electrical Fires:**

- Basic techniques, extinguishing media and application.

➤ **First Aid Measures for Electric Shock:**

- Basic understanding of cardiac arrest and resuscitation principles.

➤ **Battery rooms:**

- Understanding operation, safety risks, precautions and effective maintenance and operation.

➤ **Hydrogen plant:**

- Understanding operation, safety risks, precautions and effective maintenance and operation.

➤ **Sulphur Hexa Fluoride Plant:**

- Understanding operation, safety risks, precautions and effective maintenance and operation.

Resources: Internal or external

CONTROLLED DISCLOSURE

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

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

3.2 Construction Management Training

3.2.1 NEBOSH Construction Certificate

Duration: 15 Days + 1 Day

Frequency: Training shall be provided as and when the need arises.

Target Group: All employees who have construction management responsibilities and who are required to provide routine day-to-day advice on Health, Safety and welfare in construction work.

Objectives and outcomes: The course provides employees in the construction industry with the essential knowledge required to enable them to take an active role in the management of health and safety in their workplace, and the best way to integrate risk management into daily operations as well as monitor it effectively. It covers key construction issues in more technical detail.

The syllabus is divided into 3 units namely, 1 International General Certificate (IGC) unit and 2 International Construction Certificate (ICC) Units:

❖ **IGC1: Management of international health and safety**

- Element 2: Foundations in health and safety
- Element 2: Health and safety management systems - Plan
- Element 3: Health and safety management systems - Do
- Element 4: Health and safety management systems - Check
- Element 5: Health and safety management systems – Act

❖ **ICC1: Managing and controlling hazards in international construction activities**

- Element 1: Construction management
- Element 2: Construction site - hazards and risk control
- Element 3: Vehicle and plant movement - hazards and risk control
- Element 4: Musculoskeletal - hazards and risk control
- Element 5: Work equipment - hazards and risk control
- Element 6: Electrical safety
- Element 7: Fire safety
- Element 8: Chemicals and biological health - hazards and risk control
- Element 9: Physical and psychological health - hazards and risk control
- Element 10: Working at height - hazards and risk control
- Element 11: Evacuation work and confined spaces - hazards and risk control
- Element 12: Demolition and deconstruction - hazards and risk control

❖ **ICC2: International Construction health and safety practical application**

CONTROLLED DISCLOSURE

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

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

Resources: External

3.2.2 Passport Induction

Duration: 1 Day

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Refresher will be conducted annually, when starting a new project and extension of work that includes new hazards. Retraining will be conducted where the content of the legislation, regulations, codes of standards and project specification and procedure change.

Target Group: All employees and contractors frequently visiting more than one Business Unit (Plant) as part of their work.

Objectives and Outcomes: The course shall be aimed at training employees in the statutory requirements and regulations specific to their working environment as specified in the Construction Regulations under the Occupational Health and Safety Act, Act 85 of 1993.

Course contents and outcomes:

- 1) An overview of the amended Construction Regulations;
- 2) The role of clients;
- 3) The role of designers;
- 4) The role of project managers;
- 5) The role of quantity surveyors;
- 6) Pre-planning;
- 7) Risk assessments, methods and techniques for identifying, evaluating and managing hazards on a construction project, and how to determine corrective and preventative measures;
- 8) Health and safety specification;
- 9) Project Health and Safety Plans;
- 10) Occupational Health and Hygiene;
- 11) Safe work procedures;
- 12) Method statements;
- 13) Health and Safety File;
- 14) Overview of key health and safety interventions;
- 15) Inspections / Audits;
- 16) The cost of accidents; and
- 17) Health and Safety as the catalyst for project performance.

Resources: External

3.2.3 Construction Regulations

Duration: 2 Days

CONTROLLED DISCLOSURE

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

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

Frequency: Training shall be provided as and when the need arises

Refresher/Retraining: When starting a new project and extension of work that includes new hazards. Retraining will be conducted where the content of the legislation, regulations, codes of standards and project specification and procedure change.

Unit Standard (no credits required): Comply with legal requirements for a construction contract – 9982

Manage health and safety on a construction project – 15136 and

Eskom Procedure 32-136

Target Group: All Managers and Supervisors involved in construction related work.

Objectives and Outcomes: This course is aimed at training employees in the statutory requirements and regulations specific to their working environment as specified in the Construction Regulations under the Occupational Health and Safety Act, Act 85 of 1993.

Course contents:

The course scope shall include:

- 1) An overview of the Construction Regulations;
- 2) An overview of the Eskom construction and contractor management process and procedures;
- 3) The role of clients;
- 4) The role of designers;
- 5) The role of project managers;
- 6) The role of the agent
- 7) The role of COHS manager
- 8) The role of COHS officer
- 9) The role of quantity surveyors;
- 10) The registering process with legal entities and bodies for all personnel in Construction Projects (SACMP).
- 11) Legal appointments
- 12) Pre-planning;
- 13) Risk assessments, methods and techniques for identifying, evaluating and managing hazards on a construction project, and how to determine corrective and preventative measures;
- 14) Health and safety specification;
- 15) Project Health and Safety Plans;
- 16) Occupational Health and Hygiene;
- 17) Safe work procedures;
- 18) Method statements;
- 19) Health and Safety File;
- 20) Overview of key health and safety interventions;

CONTROLLED DISCLOSURE

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

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

- 21) Inspections / Audits;
- 22) The cost of accidents;
- 23) Man hours (reporting and recording)
- 24) Health and Safety as the catalyst for project performance.

Course outcomes:

- 1) Discuss the importance of legislative controls over construction work and applicable penalties
- 2) Evaluate the definition of “construction work” and apply to a predetermined set of examples
- 3) Discuss outcome of evaluation in a group setting.
- 4) Discuss the various definitions of the role players and application to business unit / self.
- 5) List the different appointments to be made as per the Construction Regulations and briefly describe the duties of those appointees
- 6) Briefly describe the different phases of the Eskom Contractor Management process and the roles of Procurement personnel, SHE functionaries, Contract Managers and other role players at the different phases,
- 7) List the Eskom Contractor Management level 1 procedures facilitating compliance to the Construction Regulations.

Resources: Internal or External.

3.2.4 Contracts Health and Safety Management Training for Tender Committee members

Duration: 2 hours – Overview contact training and 1 hour – e-learning assessment

Frequency: Training shall be provided as and when the need arises (once off)

Unit Standards (no credits required): Comply with legal requirements for a construction contract – 9982

Eskom Procedure 32-726, 32-136, 32-524 and 37-2 agreement, Supplier deregistration.

Target Group: Members of different Eskom Tender committees throughout the Organisation

Objectives and Outcomes:

Equip learners with knowledge to be able to implement the different of safety aspects Safety Eskom contracts management standard and policies according to their respective roles in the construction work value chain;

Course contents:

- 1) Eskom Construction SHE Management standard, procedures and process.
- 2) Roles and responsibilities of all role players (Project Managers, Contract Managers, Tender Committee members, Procurement and OHS officials) in contractor management.
- 3) Application of health and safety for contracts.
- 4) The application of Health and Safety specifications and requirements when scoping for a project and evaluating potential service providers during the tendering stage.
- 5) Applicable legislation for effective construction health and safety management

CONTROLLED DISCLOSURE

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

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

Course outcomes:

On completion of this course, learners will be able to:

- 1) Demonstrate an understanding of Eskom procedures related to contracts safety management.
- 2) Understand the legal and moral implications of contracting service providers for different works for Eskom.

Resources: Internal or External

3.2.5 Contracts Health and Safety Management Training for Procurement Officials

Duration: 2 days

Frequency: Training shall be provided as and when the need arises (Once off)

Unit Standards (no credits required): Manage health and safety on a construction project - 15136,

Comply with legal requirements for a construction contract – 9982 and

Eskom Procedure 32-726, 32-136, 32-524 and 37-2 agreement, Supplier deregistration

Target Group: Procurement personnel (Buyers, Commodity Sourcing Managers, etc. involved in the tendering process for all contracted work in the Organisation)

Objectives and Outcomes:

Equip learners with knowledge and skills to be able to implement the different aspects of the Eskom health and safety management standards, procedures and policies according to their respective roles in the construction work value chain.

Course contents:

- 1) Eskom Construction SHE Management procedures
- 2) Roles and responsibilities of Project Managers, Procurement and OHS officials in contractor management
- 3) The application of Health and Safety specifications and requirements when scoping for a project and evaluating potential service providers during the tendering stage.

Course outcomes:

On completion of this course, learners will be able to:

- 1) Demonstrate an understanding of Health and Safety with regard to contract management.
- 2) Demonstrate understanding of legal requirements and their application within the Eskom construction management space.
- 3) Demonstrate an understanding of the Eskom contracts management process

Resources: Internal or External

3.2.6 Contracts Health and Safety Management Training for SHE Practitioners

Duration: 3 days

Frequency: Training shall be provided as and when the need arises

CONTROLLED DISCLOSURE

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

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

Unit Standards (no credits required): Manage health and safety on a construction project – 15136,

Comply with legal requirements for a construction contract – 9982 and

Eskom Procedure 32-726, 32-136, 32-524 and 37-2 agreement, Supplier reconsideration, Project life cycle model (construction)

Target Group: Construction SHE Professionals

Objectives and Outcomes: Equip learners with knowledge and skills to be able to implement the different aspects of the Eskom Health and Safety construction management standards, procedures and policies according to their respective roles in the construction value chain;

Course contents (minimum):

- 1) Eskom Construction SHE Management procedures
- 2) Roles and responsibilities of Project Managers, Procurement and OHS professional (construction Manager, Officer, Agent, etc) officials in contractor management
- 3) Legal appointments
- 4) Application of health and safety on a construction site (Permit requirement, notifications, auditing)
- 5) The application of Health and Safety specifications and requirements when scoping for a project and evaluating potential service providers during the tendering stage.
- 6) Professional registrations
- 7) Site Health and safety plan and site establishment
- 8) Applicable legislation for effective construction health and safety management

Course outcomes:

On completion of this course, learners will be able to:

- 1) Demonstrate an understanding of Health and Safety on a construction site.
- 2) Assist with the development of Health and Safety policies and procedures.
- 3) Develop and implement a Health and Safety Site plan.
- 4) Monitor the implementation of the Health and Safety plan, systems and procedures.
- 5) Demonstrate the application of Health and Safety specifications and requirements when scoping for a project and evaluating potential service providers during the tendering stage.
- 6) Demonstrate understanding of legal requirements and their application within construction management.
- 7) Demonstrate understanding of the registering process with legal entities and bodies for all personnel in Construction Projects (SACMP).

Resources: Internal or External

3.2.7 Contracts Health and Safety Management Training for Construction Clerk of works, Project Supervisors, Managers, Engineers, Designers and Agents

Duration: 3 days

CONTROLLED DISCLOSURE

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

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

Frequency: Training shall be provided as and when the need arises (once off)

Unit Standards (no credits required):

Manage health and safety on a construction project – 15136,

Comply with legal requirements for a construction contract – 9982 and

Eskom Procedure 32-726, 32-136, 32-524 and 37-2 agreement, Supplier reconsideration

Target Group: Construction Supervisors, Clerk of works, Project Managers, Engineers, Designers and Eskom Agents.

Objectives and Outcomes: To equip learners with knowledge and skills to be able to implement the different aspects of the Eskom health and safety contracts management standards, procedures and policies according to their respective roles in the construction work value chain;

Course contents:

- 1) Eskom Contracts OHS Management procedures and process
- 2) Roles and responsibilities of Project Managers, Procurement and OHS officials in contractor management
- 3) Application of health and safety on a construction site
- 4) Site Health and safety plan and site establishment
- 5) Applicable legislation for effective construction health and safety management

Course outcomes:

On completion of this course, learners will be able to

- 1) Demonstrate an understanding of Health and Safety on a construction site.
- 2) Describe and demonstrate an understanding of the Eskom contracts management process from start to end
- 3) Monitor the implementation of the Health and Safety plan, systems and procedures.
- 4) Demonstrate the application of Health and Safety specifications and requirements when scoping for a project and evaluating potential service providers during the tendering stage.
- 5) Demonstrate understanding of legal requirements and their application within the Eskom construction management space.
- 6) Demonstrate understanding of the registering process with legal entities and bodies for all personnel in Construction Projects (SACPCMP).

Resources: Internal or External

3.3 Health and Safety Legislation Training

3.3.1 Legal Liability based on Occupational Health and Safety Act 85 of 1993 training

Duration: 1 Day

Frequency: Training shall be provided as and when the need arises

CONTROLLED DISCLOSURE

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

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

Unit Standard (no credits aligned): Demonstrate understanding of occupational health and safety legislation in the workplace – 244288 and

Demonstrate knowledge and understanding of relevant current occupational health and safety legislation – 120344

Target Group: Supervisors, Line, Senior Managers and all persons whose work related activities involve the management and control of occupational health and safety issues.

Objectives and Outcomes: The purpose of this course is to provide learners with knowledge of the basic principles of occupational health and safety legislation and the consequences of non-compliance

Course contents:

- 1) General duties of an employer and employee
- 2) Health and safety management system and programmes
- 3) Health and safety policy
- 4) Risk Management (assessment and control)
- 5) Health and safety planning (Targets, objectives and indicators)
- 6) Health and safety Structures, roles and responsibilities
- 7) Health and safety training
- 8) Procurement management
- 9) Engineering/maintenance
- 10) Safety observations, inspections and Task analysis
- 11) Personal Protective Equipment
- 12) Communication
- 13) Enforcements
- 14) Inspectors, Investigations and Inquiries
- 15) Offenses, Penalties and Liability Concerns

Course outcome:

On completion of this course, learners will be able to:

- 1) Demonstrate knowledge and understanding of the basic principles of the relevant legislation
- 2) Explain the requirements for compliance as stipulated in the current legislation.
- 3) Determine the management controls required under legislation to achieve compliance.
- 4) Demonstrate knowledge and understanding of record keeping required by the legislation.
- 5) Explain the legal obligations of the employer in terms of training and communication.
- 6) Discuss pertinent occupational health and safety legislation applicable to a specific workplace.
- 7) Discuss and explain the application of the common law principles pertinent to health and safety in the workplace.
- 8) Apply the current Act for compensation for occupational injuries and diseases in the workplace.

CONTROLLED DISCLOSURE

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

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

Resources: External

3.3.2 OHS Act and Regulations

Duration: 1 Day

Frequency: Training shall be as and the need arises.

Refresher/Training: Refresher will be conducted where the content of the legislation, regulations and codes of standards change.

Target Group: all Supervisors and all employees involved with the SHE Management system.

Objectives and Outcomes: An Advanced Health and Safety course shall be aimed at training Employees in the statutory requirements and regulations specific to their working environment as Specified in the Occupational Health and Safety Act, Act 85 of 1993.

Resources: External

3.3.3 OHS Act for Management and managing legal risk exposures (Occupational Health and Safety Act, Act 85 of 1993)

Duration: 1 Day

Frequency: Training shall be provided for all newly appointed/current managers and thereafter as and when the need arises.

Refresher/Training: Where the content of legislation, regulations and standards change.

Target Group: Executive, Senior and Middle Managers.

Objectives and outcomes: Participants shall gain hands-on knowledge and insight into their roles, duties, functions rights and powers enforced by legislation that will enable them to manage occupational health and safety effectively and successfully. Participants will be empowered and better equipped to interpret and implement the requirements of the OHS Act. Participants will become familiar with the responsibilities and liabilities of the relevant parties, the role of top management, the employer, section 16(2), the GMR 2(1), GMR2 (7) and the importance of an integrated risk management strategy and culture.

- General introduction to the Occupational Health and Safety Act, Act 85 of 1993;
- General duties of the employer and employee;
- Extracts from the Regulations;
- Delegation of responsibilities – Statutory Appointments;
- Overview of Health and Safety Representatives and Committee structures;
- Review of essential documents;
- Liability of Manufacturers and Suppliers;
- Overview of Contractor Management;
- Inspectors, Investigations and Inquires; and
- Offences, Penalties and Liability concerns.

CONTROLLED DISCLOSURE

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

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

Managing Legal Risk Exposures:

Objectives and outcomes: The Legal Liability course will assist employers in meeting their legal obligations and improve the effectiveness of their health and safety programmes through better employee participation and commitment. This requires them to be inducted in terms of the following legal terminology:

- Criminal liability;
- Civil liability , (delictual liability);
- Vicarious liability;
- Prescription of claims;
- Burden of proof;
- Standard of care - the reasonable man test, reasonable foreseeability, remoteness of harm;
- Apportionment of liability;
- Summons and charge sheet;
- Admission of guilt;
- Indemnities;
- Due diligence;
- The South African scenario (duties of the employer);
- The control of records and physical evidence;
- Litigation management; and
- Reputation management.

Resources: Internal or External.

3.3.4 SHE legislation for OHS Practitioners

Duration: 10 Days

Frequency: Once off and training shall be provided as and when the need arises

Unit Standard (credits required): Demonstrate understanding of occupational health and safety legislation in the workplace – 244288 and

Demonstrate knowledge and understanding of relevant current occupational health and safety legislation – 120344

Target Group: Employees on the SHE Practitioners Development Program

Objectives and outcomes: The purpose of this course is to provide learners with knowledge of the basic principles of occupational health and safety legislation, the consequences of non-compliance and skills that will enable them to practice effectively at Business Units and Construction Sites.

Course contents:

Introduction

CONTROLLED DISCLOSURE

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

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

The introductory part of the course should entail the following outcomes:

- 1) How legislation is compiled and promulgated;
- 2) How to read and understand an Act, its Regulations and reference material;
- 3) Understanding legal principles, prosecution and compliance;
- 4) High level overview of Provincial and Local Authority By-laws;
- 5) General legal principles

Health legislation

- 1) Detailed overview of applicable health legislation at National level;
- 2) Requirements and compliance to applicable health legislation;
- 3) Registration, certification and minimum documentation required for Eskom Clinics;

As a minimum, the following statutes need to be discussed in detail:

The Constitution

- 1) Occupational Health and Safety Act (Act no. 84 of 1993)
- 2) Hazardous substance Act (Act no. 15 of 1973)
- 3) Compensation of Occupational Injuries and Diseases Act (Act no. 130 of 1993)
- 4) Foodstuffs, Cosmetics and disinfectants Act (Act 54 of 1972)
- 5) Health Act (Act 63 of 1997)
- 6) Medicines and Related Substances Act 101 of 1965
- 7) Tobacco Products Control Amendment Act 63 of 2008
- 8) Foodstuffs, Cosmetics and Disinfectants Act 54 of 1972

Environmental legislation

- 1) Detailed overview of applicable environmental legislation at National level;
- 2) South African Environmental principles
- 3) Environmental governance in South Africa
- 4) King III and the Environment
- 5) Administrative Law and the Implementation of Environmental Law
- 6) Requirements and compliance to applicable environmental legislation;
- 7) Registration, certification and minimum documentation required for Eskom;

As a minimum, the following statutes need to be discussed in detail:

The Constitution

- 1) National Environment Laws Amendment Act, No 44 of 2008
- 2) Atmospheric Pollution Prevention Act, 1965,
- 3) National Environmental Management: Air Quality Act, 2004, (To be promulgated)
- 4) Environment Conservation Act, 1989,

CONTROLLED DISCLOSURE

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

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

- 5) National Environmental Management Act, 107 1998,
- 6) Environmental Conservation Act (Act no. 73 of 1989)
- 7) Nuclear energy Act (Act 131 of 1993)
- 8) Water services act (Act 108 of 1997)
- 9) National Environmental Management: Biodiversity Act 10 of 2004
- 10) National Environmental Management: Protected Areas Act 57 of 2003
- 11) Marine Living Resources Act 18 of 1998
- 12) Heritage Act
- 13) Waste Act
- 14) International Environmental protocols

Safety legislation

- 1) Detailed overview of applicable environmental legislation at National level;
- 2) Requirements and compliance to applicable environmental legislation;
- 3) Registration, certification and minimum documentation required for Eskom;

As a minimum, the following statutes need to be discussed in detail:

The Constitution

- 1) National Roads Act (Act no. 54 of 1971)
- 2) Fire brigade services act (Act 99 of 1987)
- 3) Road traffic act (Act 29 of 1989)
- 4) Occupational Health and Safety Act (Act no. 84 of 1993)
- 5) Mines Health and Safety Act 29 of 1996
- 6) Compensation of Occupational Injuries and Diseases Act (Act no. 130 of 1993)
- 7) Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act 36 of 1947
- 8) National Key Points Act 102 of 1980

Court proceedings

- 1) Detailed overview of the structures for courts in RSA;
- 2) Detailed overview of the role and function of courts in different levels;
- 3) Detailed overview of correct court proceedings in a Civil case as opposed to a Criminal case.

Legal compliance management

- 1) Introduction and appreciation of the IMBEWU legal register managed in Eskom;
- 2) Registration on the IMBEWU website and practical use of the centralised legal compliance registers.

Course outcomes:

On completion of this course, learners will be able to:

CONTROLLED DISCLOSURE

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

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

- 1) Demonstrate knowledge and understanding of the basic principles of the relevant legislation
- 2) Explain the requirements for compliance as stipulated in the current legislation.
- 3) Determine the management controls required under legislation to achieve compliance.
- 4) Demonstrate knowledge and understanding of record keeping required by the legislation.
- 5) Explain the legal obligations of the employer in terms of training and communication.
- 6) Discuss pertinent occupational health and safety legislation applicable to a specific workplace.
- 7) Discuss and explain the application of the common law principles pertinent to health and safety in the workplace.
- 8) Apply the current Act for compensation for occupational injuries and diseases in the workplace.

Resources: External

3.3.5 Compensation for Occupational Injuries and Diseases Act 130 of 1993 (COID) training

Duration: 1 Day

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Retraining will be conducted where the content of the legislation or regulations change.

Target Group: All Managers, Supervisors and employees involved in the COID reporting process.

Objectives and outcomes: COID training shall be aimed at creating awareness and understanding of the purpose, application and legal requirements of the Act, and the correct reporting and recording procedures with regards to work related injuries and diseases.

The aim of the COID Act is to provide for compensation in the case of disablement caused by occupational injuries and diseases, sustained or contracted by employees in the course of their employment, or death from such injuries or diseases, and to provide for matters connected therewith.

The course scope shall include:

- Overview of the COID Act Legislation;
- Fundamentals of the COID Act;
- The right to compensation;
- The duties of the employer and employee;
- Benefits and the calculation thereof;
- Different classes of compensation payments and the manner of calculating earnings;
- Procedure and steps to follow when reporting injuries and diseases;
- Prepare compensation documentation for occupational injuries and diseases;
- The compensation process and the required documentation for the completion and submission of a claim;
- Checklist for compensation problems;

CONTROLLED DISCLOSURE

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

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

- COID management process;
- The investigation of an injury or disease in the workplace;
- Accidents outside of the Republic of South Africa;
- Legal rules, inquiries, fines and penalties; and
- The new amendments to the COID Act

Resources: External

3.3.6 Mine Health and Safety Act, Act 29 of 1996

Duration: 2 days

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Retraining will be conducted where the content of the legislation or regulations change.

Target Group: All employees whose work falls within the scope of the Mine Health and Safety Act.

Objectives and outcomes: To provide participants with knowledge and practical understanding of the Mine health and safety legislation, its latest amendments, implications and application in Eskom.

Course Content:

- 1) Introduction to MHSA, criminal and civil liability
- 2) Aims and objectives of the MHSA
- 3) The role of the MHSA in the broader responsibilities for SHE
- 4) Duties of the employer and employees regarding SHE issues in a mining environment
- 5) Insight into the liabilities of various parties under the MHSA
- 6) Types on reportable incidents under the MHSA
- 7) Rights, duties and powers of SHE Representatives and committees
- 8) Implications of manufacturer's duties in accordance to MHSA
- 9) MHSA regulations and their applications

Resources: External

3.3.7 Health & Safety (SHE) Representatives Training

Duration: 2 days

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Refresher training will be conducted where the candidate has decided to continue with the role of being a Health and Safety Representatives.

Validation of certificate: The certificate is valid for 3 years, after which the candidate may resign or continue with the role. A refresher course will be conducted for candidates who continue with their role.

CONTROLLED DISCLOSURE

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

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

Unit Standard (no credits required):

Describe the functions of the workplace health and safety representative _ 259622 and

Conduct workplace Occupational Health and Safety (OHS) inspections _259619

Target Group: Employees to be appointed as Health and Safety Representatives in terms of OHS Act.

Objectives and outcomes:

- 1) Understand the objectives and statutory requirements pertaining to health and safety in the workplace.
- 2) Explain the rights, powers, functions and duties of the workplace health and safety representative and how any errant health, safety and environmental issues may be handled.
- 3) Participate in the safety, health and environmental structures and measure these activities according to health, safety and environmental requirements.

Course Content:

- 1) Legal aspects and requirements
- 2) General duties of employers and employees
- 3) Hazard identification and risk assessment techniques
- 4) Causes and effects of accidents and incidents
- 5) Accident / incident investigations
- 6) Critical task inventory and analysis
- 7) Colour codes and symbolic signs
- 8) Personal Protective Equipment
- 9) Inspection techniques
- 10) Task / Job observation processes
- 11) Effective communication skills
- 12) Health and Safety Committee structures and requirements
- 13) Emergency preparedness and response requirements

Course outcomes:

On completion of this course, learners will be able to:

- 1) Describe the framework of workplace health and safety legislation pertaining to health and safety representatives
- 2) Explain the specified requirements to conduct safety, health and environmental representation activities at a working place
- 3) Address safety, health and environment related issues within the scope of authority.
- 4) Comply with the activities within safety, health and environmental structures.
- 5) Explain the relevant legal requirements to conduct Occupational Health and Safety (OHS) inspections

CONTROLLED DISCLOSURE

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

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

- 6) Plan Occupational Health and Safety (OHS) inspections.
- 7) Conduct inspections to identify non-compliance in the workplace.
- 8) Report on Occupational Health and Safety (OHS) inspections.

Resources: Internal or External.

3.3.8 National Railway Safety Regulator Act 16 of 2002

Duration: 1 Day

Frequency: Training shall be provided as and when the need arises.

Refresher/Re-training: Refresher will be conducted where the content of the legislation is amended, the requirements set by regulations, standards, procedures and codes change.

Target Group: All employees involved in the SHE Management System, including Supervisors and Business Unit Managers.

Objectives and Outcomes: To provide participants with an overview on the National Railway Safety Regulator Act.

The course scope shall include:

- High level overview on all sections of the Act.

Resources: External

3.3.9 Operating Regulations for High Voltage Systems (ORHVS Training)

Duration: 10 Days. (Depending on the level of authorisation required and the level of the learner).

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Refresher will be conducted where the content of internal regulations, standards and procedures set change.

Target Group: All technical staff, including contractors training shall be provided once (full course) for first timers and thereafter refresher courses shall be conducted every third year.

Objectives and outcomes: This training covers all the Regulations pertaining to the safe operation of the power system.

- Basic background of the regulations;
- Control of the power system;
- Duties and responsibilities of officials and employees;
- Access;
- Keys;
- Safe operating work practices;
- Abnormal conditions;
- Live work; and
- Work permit system.

CONTROLLED DISCLOSURE

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

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

Resources: Internal

3.3.10 Operating Regulations for High Voltage Systems (ORHVS Training) for OHS functional (Awareness)

Duration: 2 Days (ORHVS), 2 Days (PSR).

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Refresher will be conducted where the content of internal regulations, standards and procedures set change. Technical (10 Days)

Target Group: All technical staff, including contractors training shall be provided once (full course) for first timers and thereafter refresher courses shall be conducted every third year.

Objectives and outcomes: This training covers all the Regulations pertaining to the safe operation of the power system.

- Basic background of the regulations;
- Control of the power system;
- Duties and responsibilities of officials and employees;
- Access;
- Keys;
- Safe operating work practices;
- Abnormal conditions;
- Live work; and
- Work permit system.

Resources: Internal or External

3.4 Risk Management Training

3.4.1 Incident investigation and Root Cause Analysis Training

Duration: 3 Days

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Refresher will be conducted where the content of internal regulations, standards and procedures set change.

Unit Standard (no credits required): Conduct an investigation into workplace safety, health and environmental incidents – 259617

Target Group: Managers, SHE Reps, OHS Professionals, Supervisors and all employees involved in incident investigation process.

CONTROLLED DISCLOSURE

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

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

Objectives and Outcomes: This course will give the learners knowledge of the Eskom incident management process, skills to use a root cause analysis technique and to develop effective corrective actions in order to eventually help prevent the recurrence of incidents.

The course should guide the investigator through a process of loss or potential loss evaluation, identification of immediate and basic causes and ultimately the determination of lack of control.

Course contents:

They should have a thorough knowledge about the following:

- 1) Causes and consequences of incidents - A map for investigations;
- 2) Overview of the Eskom incident management procedure and process (Incident notification, reporting, classification, investigation, follow-up and close-out);
- 3) Subjectivity and objectivity during incident investigation;
- 4) Overview of risk management in the application of root cause analysis;
- 5) Root cause analysis technique;
- 6) Remedial actions;
- 7) Case studies and lessons learnt;

Learning outcomes:

On completion of this course, learners will be able to:

- 1) Describe requirements for workplace safety, health and environment incident investigation
- 2) Describe the different steps of the incident management process as per Eskom incident management procedure
- 3) Describe the root cause analysis technique as applied in the Eskom incident management procedure
- 4) Explain the importance of sharing the outcomes of an investigation and lessons learnt

Resources: External

3.4.2 Baseline Risk Assessment

Duration: 5 Days

Frequency: Training shall be provided on appointment and when the need arises.

Refresher/Retraining: Retraining will be conducted where internal regulations, standards and procedures set change

Unit Standard (credits required):

Conduct a baseline risk assessment and take appropriate action – 244287

Target Group: OHS Practitioners, Occupational Hygiene Practitioners, Line Managers, Project Managers and SHE Reps.

Objectives: Techniques to conduct and/or maintain the organisation's baseline risk assessment must be part of the skills amongst the managerial and supervisory levels.

CONTROLLED DISCLOSURE

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

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

As such they must be inducted in the principles of OHS risk management, line management responsibilities, and the use of risk assessment tools as outlined in the Eskom Occupational Health and Safety Risk Assessment Procedure 32-520.

The purpose of this course is to equip learners with knowledge and skills to be able to conduct work place base-line risk assessment.

Course Contents:

The course should include the following aspects:

- 1) Description of the Eskom OHS risk assessment process;
- 2) Description of different types of risk assessment (Baseline, Issue-based, continuous and Health risk assessments);
- 3) Practical steps to conduct workplace risk assessments;
- 4) Specified requirements needed to conduct a base-line risk assessment.
- 5) Practical steps in conducting a baseline risk assessment.
- 6) Remedial action for hazards identified and risks assessed.
- 7) Compiling a comprehensive baseline risk assessment report;
- 8) Workplace checklist (including ergonomics hazards)

Course outcome:

On completion of this course, learners will be able to:

- 1) Explain the specified requirements needed to conduct a base-line risk assessment.
- 2) Prepare to conduct a baseline risk assessment.
- 3) Conduct a baseline risk assessment.
- 4) Initiate remedial action for hazards identified and risks assessed.
- 5) Compile a baseline risk assessment report.
- 6) Present and explain the business unit risk profile base on the baseline risk assessment report.

Resources: External

3.4.3 Hazard Identification and Risk Assessment (HIRA)

Duration: 3 Days

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Retraining will be conducted where internal regulations, standards and procedures set change.

Unit Standard (no credits required):

Conduct a continuous risk assessment in a workplace – 120330

Target Group: Employees whose work activities involve risk assessment and management

Objectives and outcomes:

After the training the target audience should have broad knowledge, skills and understanding of techniques and methodologies of conducting risk assessments as per Eskom Risk Assessment procedure

Course contents:**CONTROLLED DISCLOSURE**

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

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

- 1) General principles and the theory of risk assessment
- 2) Explain the concept - baseline risk assessment
- 3) Explain the concept – issue/task based risk assessment
- 4) Explain the concept- continuous risk assessment
- 5) Occupational hazard identification and qualification
- 6) Hazards identification, risk analysis and risk consequences
- 7) The mechanics and technicalities of risk assessment process
- 8) Describe different risk control strategies
- 9) Initiate remedial and follow-up actions for the identified hazards and assessed risks

Course outcomes:

On completion of this course, learners will be able to:

- 1) Explain the legal and specified requirements for conducting continuous risk assessments
- 2) Describe the continuous risk assessment process
- 3) Prepare to conduct a continuous risk assessment.
- 4) Initiate remedial action and follow up on Continuous Risk Assessment.

Resources: Internal or External

3.4.4 Advanced Risk Assessment

Duration: 2 Days

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Retraining will be conducted where internal regulations, standards and procedures set change

Target Group: Technical Managers and Supervisors, Designers and maintenance staff.

Objectives and outcomes: Managers and Supervisors require the necessary tools to analyse complex systems in order to obtain the necessary information to improve the design and safety associated with a system.

As such they should be inducted into the following:

- Overview of The Risk Management Process;
- SCHIRP (Systematic Comprehensive Hazard Identification Risk Profile);
- Hazard and Operability process techniques (HAZOP);
- Critical Task Analysis;
- Construction of Fault Trees;
- Boolean Algebra and Fault Tree Reduction;
- System Analyses;

CONTROLLED DISCLOSURE

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

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

- Failure Mode and Effect Analyses (FMEA);
- Concepts from Reliability Engineering;
- Statistical Distributions of Failures;
- Failure Probability and Unavailability of a Component;
- Quantification of Fault Trees;
- Event Tree Analysis;
- Consequence Modelling; and
- Human Reliability.

Resources: External

3.4.5 Fundamentals of Risk Assessment

Duration: 2 Days

Frequency: Training shall be provided on appointment and when the need arises.

Refresher/Retraining: Retraining will be conducted where internal regulations, standards and procedures set change

Target Group: Managers, Supervisors and all employees in the management of the SHE Management System.

Objectives and outcomes: The Fundamentals of Risk Assessment Course will give participants insight into the process of Risk Management. The use of Risk Analysis and Risk Control Techniques shall also be illustrated.

Resources: Internal or External

3.4.6 Critical Task Analysis Training

Duration: 2 Days

Frequency: Training shall be provided on appointment and when the need arises.

Refresher/Retraining: Refresher will be conducted where the content of the internal regulations, standards and procedures set change.

Unit Standard (no credits required):

Conduct a Task Analysis and take appropriate action to address identified risks – 120341

Target Group: Managers, Supervisors and all employees involved in the SHE Management System.

Objective and Outcomes:

The purpose of this course is to train learners to be able to conduct a planned task analysis as part of a risk assessment process.

Managers and Supervisors should acquire the techniques to systematically analyze tasks from a SHE and efficiency perspective, and be able to deal with all of the critical concerns in the workplace. Managers and supervisors should therefore have thorough insight into the following:

CONTROLLED DISCLOSURE

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

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

Course Contents:

- 1) Causes and effect of loss;
- 2) Management control of loss;
- 3) Task analysis and procedures; explain what a task analysis is, conduct a task analysis, take appropriate action to address identified risks.
- 4) Inventory of tasks;
- 5) Identifying the critical tasks;
- 6) Break tasks down into steps or activities;
- 7) Pinpoint loss exposure;
- 8) Make efficiency checks/ inspections;
- 9) Develop controls;
- 10) Write procedures, practices or work instructions
- 11) Implementation and monitoring of procedures, practices or work instructions;
- 12) Update and maintain records.

Course outcome:

On completion of this course, learners will be able to:

- 1) Explain what a critical task analysis is.
- 2) Conduct a critical task analysis.
- 3) Take appropriate action to address identified risks.
- 4) Develop and implement a safe work procedure.

Resources: External

3.4.7 Written Safe Work Procedures (W.S.W.P) Training

Duration: 3 Days including formative and summative assessments.

Frequency: Training shall be provided on appointment and when the need arises.

Refresher/Retraining: Refresher will be conducted where the content of the internal regulations, standards and procedures set change.

Unit Standard (no credits required): Conduct workplace Occupational Health and Safety (OHS) inspections – 259619

Target Group: Managers, Supervisors and all employees who are required to carry out formal or informal job observations, critical task analysis and compile written safe work procedures.

Objectives and Outcomes:

To give Managers, Supervisors and employees knowledge and skills to systematically analyse tasks from a SHE and efficiency perspective and be able to compile safe work procedures for their critical tasks.

Course Contents:**CONTROLLED DISCLOSURE**

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

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

- 1) Causes and effect of loss;
- 2) Management control of loss;
- 3) Overview of Written Safe Work Procedures and Inspections Techniques;
- 4) Task analysis and compiling a safe work procedure;
- 5) Ensuring the effective implementation of the safe work procedure.

Resources: External

3.4.8 Modern SHE / Risk Management or similar course

Duration: 5 Days

Frequency: Training shall be provided for all newly appointed/current managers and supervisors and thereafter as and when the need arises.

Refresher/Retraining: Refresher will be conducted where legislation, regulations, codes and standards prescribed change.

Target Group: Managers, Supervisors and all employees involved in the SHE Management System.

Objectives and outcomes: Modern SHE/Risk Management techniques allow organisations to integrate safety management into the overall management effort and establish effective risk control in an organisation. This approach ensures that safeguarding the workforce goes hand-in-hand with business success.

Participants should understand the following:

- Causes and Consequences of Incidents;
- Managing Risk Exposures as part of Integrated Risk Management;
- Managing Legal Risk Exposures (Mine Health and Safety Act and/or OHS Act and Environmental legislation);
- Risk Assessment (Baseline, HIRA, Task Analysis);
- Measuring and Monitoring Risk Control;
- Inspection for Incident Prevention and Cost Control;
- Introduction to Environmental and Quality Management;
- Developing Rules and Personal Protective Equipment Systems;
- Emergency Preparedness;
- Effective Communication Skills;
- Introduction to Hygiene Monitoring and Management;
- Identifying, Analysing, Documenting and Observing Critical Tasks;
- Incident Investigation and Introduction to Root Cause Analysis;
 - Developing and Managing Teams;
 - Company Culture and Change Management;

CONTROLLED DISCLOSURE

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

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

- System Development and Implementation; and
- Participant Learning Assessment.

Resources: External.

3.4.9 Environmental, Occupational, Health and Safety Incident Management (Based on 32-95)

Duration: 1 Day

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Refresher will be conducted where the content of internal regulations, standards and procedures set change

Target Group: All Employees

Objective and Outcomes: This course will give you high-level intention and requirements for the effective management of incidents that occur during the course of Eskom's business that result in, or could result in, occupational diseases/illnesses, fatalities, injuries, near misses, and/or environmental damage. Incident Management Awareness training provides learners with an understanding of the Eskom Environmental, Occupational, Health and Safety Incident Management Procedure (32-95) for terminology, definitions, interpretations and the entire process steps from the incident inception, reporting, recording, prioritisation, investigation to final closure. This will then enable the learner to interface the process steps into the SAP EH&S system training with ease and broader perspective.

After completing this course the learner will be able to:

1. Have an appreciation of incident management process in Eskom;
2. Identify an OHS (SHE) incident;
3. Know what are emergency response and the stakeholders that should be informed about the incident;
4. Know what is required in order to report, investigate, implement safety measures, close-out and communicate the incident.

Resources: Internal

3.4.10 Process HAZOP Technique

Duration: 2 Days

Frequency: Training shall be provided on appointment and when the need arise.

Refresher/Retraining: Retraining will be conducted where internal regulations, standards, procedures and codes set change.

Target Group: Supervisors.

Objectives and outcomes: Supervisors should learn how to apply the Process HAZOP technique to identify hazards and to priorities recommendations on the basis of risk, and should have a thorough knowledge into the following:

- Introduction to hazard identification;

CONTROLLED DISCLOSURE

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

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

- Introduction to Process HAZOP;
- The need for Process HAZOP;
- Process HAZOP study methodology;
- Process HAZOP exercises;
- The role of the Process HAZOP leader;
- Process HAZOP reporting and follow-up; and
- ISO 9000 and Process HAZOP studies.

Resources: External

3.4.11 Inspections (Inspection techniques)

Duration: 1 Day

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Refresher will be conducted where the content of internal regulations, standards and procedures set change. Retraining will be provided where work methods change, there is a significant change on the type of work carried out and the type of equipment used to control exposure changes.

Target Group: All employees involved with planned general inspections.

Objectives and outcomes: The Planned General Inspection Course shall be aimed at developing general inspection skills that will enable a person to:

- Plan and prepare for inspections;
- Conduct regular inspections encompassing the entire operation with the primary purpose of identifying SHE hazards;
- Initiate immediate remedial action where necessary; and
- Report on and follow up on inspection results.

Resource: External

3.4.12 Housekeeping Inspection

Duration: 4 Hours

Frequency: Training shall be provided as and when the need arises.

Target Group: All employees involved in housekeeping inspections

Objectives and outcomes: The Housekeeping Inspection Course shall be aimed at developing housekeeping inspection skills that will enable a person to undertake an inspection of the general work environment for the specific purpose of assessing its orderliness.

Resource: External

CONTROLLED DISCLOSURE

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

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

3.4.13 Mobile and material handling equipment

Duration: 3 Hours

Frequency: Training shall be provided as and when the need arises.

Target Group: All employees involved in mobile and material handling equipment inspections.

Objectives and outcomes: The Mobile and Material Handling Equipment Course shall be aimed at developing inspection skills that will enable the person to inspect moving equipment, either self-propelled or towed, used to transport, carry, or manipulate material and people. For example cranes, lifting trucks, tractor-trailers etc.

Resource: External

3.4.14 Pre-use inspection

Duration: 4 Hours

Frequency: Training shall be provided as and when the need arises.

Target Group: All employees required to undertake pre-use inspections.

Objectives and outcomes: The Pre-use Inspection Course shall be aimed at developing inspection skills that will enable the person to undertake an inspection of a piece of mobile and material handling equipment prior to its use for the purpose of identifying SHE hazards. Other equipment requiring pre-use inspections include welding machines, gas equipment, grinders etc.

Resources: External

3.4.15 Preventative Maintenance

Duration: 4 Hours

Frequency: Training shall be provided as and when the need arises.

Target Group: All employees involved in preventative maintenance

Objectives and outcomes: The Preventative Maintenance Inspection Course shall be aimed at developing inspection skills that will enable the person to pre-determine equipment maintenance for the purpose of ensuring that the normal operating life of the piece of equipment is met or exceeded, and to ensure that the equipment performs in an acceptable manner.

Resources: External

3.4.16 Specialised Equipment

Duration: Normally 1 day depending on the type of equipment.

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Refresher will be conducted where the content of internal regulations, standards, procedures and codes set change. Retraining will be provided where work methods change, there is a significant change on the type of work carried out and the type of equipment used to control exposure changes.

Target Group: All persons required to work with specialised equipment.

CONTROLLED DISCLOSURE

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

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

Objectives and outcomes: The purpose of this training is to provide for the safety of employees and to ensure competence in the safe handling and operating of specialized equipment.

Equipment is defined as all non-self-propelled tools (hand-held or otherwise) for example chainsaws, brush cutters, lawnmowers compressors jackhammers and workshop tools such as grinders and electric drills etc.

Resources: Internal or external.

3.5 Occupational Hygiene Management Training

3.5.1 Hot Works

Duration: 1 day

Frequency: Training shall be provided as and when the need arises (once off)

Refresher/Retraining: Retraining will be conducted where the content of the legislation is amended, the requirements set by regulations, standards and codes change.

Target Group: All employees performing different hot work activities such as welding

Objectives and Outcomes:

The course scope shall include:

- 1) Classification of hot work
- 2) Hot work hazards and dangers
- 3) Safety precautions when doing hot work
- 4) All the legislative and safety requirements for safety during hot work activities.

Resources: External

3.5.2 Ergonomics Awareness training

Duration: 3 Days

Frequency: Shall be as and when the need arises.

Refresher/Retraining: Refresher will be conducted where the content of the legislation is amended, the requirements set by regulations, standards, procedures and codes change.

Unit Standard (no credits required):

Conduct an ergonomic assessment and take appropriate action – 244523

Target Group: Occupational Hygiene and OHS Practitioners

Objectives and outcomes:

Ergonomics training shall be aimed at creating awareness, understanding and an appreciation for the field of Ergonomics. Ergonomics looks at the relationship between our bodies and the machinery or equipment that we use in order to perform our daily tasks. It looks at the physical factors in the work place, which may affect the safety, health, comfort or general physical well-being of employees.

CONTROLLED DISCLOSURE

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

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

The purpose of this course is to equip learners with knowledge and skills to be able to conduct an ergonomic assessment and take appropriate action

Course Contents:

The course scope shall include:

- 1) Ergonomics definition and principles
- 2) The benefits of an ergonomic programme
- 3) Ergonomic related injuries and their causes
- 4) Identifying ergonomic risk factors
- 5) Office ergonomics
- 6) Industrial ergonomics
- 7) Control strategies to minimise risk
- 8) Injuries prevention strategies

Course outcome:

On completion of this course, learners will be able to:

- 1) Explain the concept of ergonomics in the workplace.
- 2) Perform post-assessment activities

Resources: Internal and External

3.5.3 Hazardous Chemical Substances Management training

Duration: 3 Days

Frequency: Training shall be provided as and when the need arises

Unit Standard (no credits required):

Monitor and make recommendations on the application of health and safety principles regarding hazardous substances in the working place – 120370,

Identify and deal with dangerous goods – 119032 and

Manage hazardous substances – 264454

Target Group:

- 1) Employees working with different types of HCS and dangerous goods;
- 2) Drivers of vehicles carrying HCS and;
- 3) OHS, Occupational Hygiene Practitioners and other employees who may be exposed to HCS in the course of their duties.

Objectives and Outcomes:

The purpose of this course is to equip learners with knowledge and skills to be able to demonstrate the ability to monitor, advice and report on compliance with legislation regarding hazardous substances.

CONTROLLED DISCLOSURE

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

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

On completion of this course, learners will be able to:

- 1) Monitor, advise and report on the specified requirements with regards to hazardous substances in a work place
- 2) Understand and apply different types of dangerous goods Legislation, Protocols and Conventions
- 3) Demonstrate knowledge pertaining to the application of methods in preventing exposure to hazardous substances in a work place.
- 4) Perform basic control and confinement of hazardous materials operations within the capabilities of the resources and personal protective equipment available.
- 5) Demonstrate understanding of the protection of people working with hazardous materials and situations
- 6) Assist emergency services in protecting people and property from hazardous materials.
- 7) Identify protective action factors.
- 8) Apply protective actions.
- 9) Apply safety precautions.
- 10) Demonstrate knowledge pertaining to the classification, physical state, health effects and disposal methods of hazardous substances in a workplace.
- 11) Analyse an incident for potential or actual hazardous materials and their possible consequences.
- 12) Consider options and plan the management of an incident.
- 13) Implement a hazardous materials management plan.
- 14) Evaluate a hazardous materials management plan.

Resources: External

3.5.4 Asbestos Awareness Training

Duration: 1 day

Frequency: Training shall be provided as and when the need arises

Refresher/Retraining: Refresher will be conducted where the content of the legislation is amended, the requirements set by regulations, standards and codes change. Retraining will be provided where work methods, there is a significant change on the type of work carried out and the type of equipment used to control exposure changes.

Unit Standard (no credits required): Practice environmental awareness – 12512

Target Group: Employees working in areas where there are asbestos material and danger of being exposed to Asbestos dust/fibres.

Objectives and outcome:

The purpose of this course is to provide learners with understanding of asbestos and its dangers in the workplace and how to protect themselves against possible exposure to asbestos fibres.

Course outcome:

CONTROLLED DISCLOSURE

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

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

On completion of this course, learners will be able to:

- 1) Describe the causes and effects of exposure to asbestos.
- 2) Demonstrate understanding of control measures to reduce asbestos exposure.
- 3) Demonstrate understanding of the importance of asbestos level monitoring and measurement in the workplace.
- 4) Identify asbestos containing material in the workplace and applicable control measures.
- 5) Report asbestos contamination and protect others from exposure.

Resources: External

3.5.5 Occupational Health and Hygiene Management Awareness Training

Duration: 1 Day

Frequency: Training shall be provided as and when the need arises

Refresher/Retraining: Refresher will be conducted where the content of the legislation is amended, the requirements set by regulations, standards, procedures and codes change.

Target Group: Managers, Supervisors and Employees, where applicable.

Objectives and outcomes: Occupational health and hygiene training shall be aimed at acquainting participants with the fundamental concepts of occupational health and hygiene management.

The course shall entail a comprehensive overview of:

- Occupational Health Administration;
- Hazard recognition and evaluation (occupational hygiene stressors and related employee exposure, hazards and measurements.);
- Hazard controls;
- Minimization of ill health and injury;
- Occupational hygiene monitoring; relevant methods of measurement, instruments and techniques selected for measurement and relevant legal and other specific requirements;
- Occupational medicine;
- Medical Surveillance; and
- Records.

Resources: Internal or External.

3.5.6 Personal Protective Equipment (PPE)

Duration: 1 Hour

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Refresher will be conducted where the new Personal Protective Equipment must be re-issued. Retraining will be provided where work methods change, there is a significant change on the type of work carried out and the type of equipment used changes.

CONTROLLED DISCLOSURE

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

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

Target Group: All employees, where applicable.

Objectives and outcomes: Training shall be provided on the proper, use, care and limitations of Personal Protective Equipment before the issue of that equipment to the respective employee, for example training on the correct use of the Fall Arrest System.

Resources: By competent internal trainers, the service provider or the supplier of the product.

3.6 Working at height and confined space Training

3.6.1 Working at heights/ Fall Arrest System (FAS) training

Duration: 3 days

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Retraining will be conducted where internal regulations, standards and procedures change.

Unit Standard (no credits required):

Explain and perform fall arrest technique when working at heights – 229998

Target Group: Technical Managers, Workers who perform work at heights, Supervisors and SHE Practitioners.

Minimum learners per class: 4 learners.

Maximum learners per class: 6 learners to allow enough practical demonstration and practice for each learner

Objectives and Outcomes:

The purpose of this course is train learners on the safe use of Fall Arrest Systems and the implementation of fall protection plan when working at height where there is a risk of injury from a fall.

Upon completion of the course, the participants are expected to have a full understanding of safe use of fall protection systems and Fall Arrest Systems their application within Eskom.

Course contents:

This training should include practical where candidates can simulate working at heights.

The course should include the following:

- 1) Fall Arrest;
- 2) Anchoring: (Wire Slings, Webbing Slings and Fixed Anchors)
- 3) Rope Skills: (Abseiling, Passing Knots and Ascending)
- 4) Equipment selection and limitations
- 5) Knots
- 6) Exclusion zones
- 7) Administration: (Risk Assessment, Fall Protection Plan and Related Standards & Legislation)

Course outcomes:

CONTROLLED DISCLOSURE

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

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

On completion of this training, learners will be able to:

- 1) Explain the use of a range of fall arrest equipment and knowledge of applicable regulations.
- 2) Describe the requirements to safely perform work in elevated positions.
- 3) Describe the requirements to correctly inspect, care for and store fall arrest equipment.
- 4) Describe the safety, health and environmental principles with regards to working platforms, ladders, scaffolds and walkways in elevated positions.
- 5) Explain and use basic rope knots.
- 6) Install and use fall arrest systems.
- 7) Inspect and assemble fall arrest equipment and systems.
- 8) Interpret and implement a fall protection plan.

Resources: External

3.6.2 Basic Rescue from Fall Arrest System (FAS)

Duration: 2 days

Frequency: Training shall be provided as and when the need arises.

Prerequisite: 3 days working at heights/ Fall Arrest System (FAS) training and,
First aid level 1 and 2

Refresher/Retraining:

Re-assessment will be conducted every 2 years to keep the Operators skills current.

Unit Standard (no credits required):

Install, use and perform basic rescues from fall arrest systems and implement the fall protection plan – 229995

Target Group: Workers who perform work at heights, Supervisors and SHE Practitioners, Designers and maintenance staff needing to perform high- angle rescues for people working at heights.

Minimum learners per class: 4 learners.

Maximum learners per class: 6 learners to allow enough practical demonstration and practice for each learner

Objectives and Outcomes:

The purpose of this course is train learners on the safe installation, use, performance of basic rescues from fall arrest systems and the implementation of fall protection plan when working at height where there is a risk of injury from a fall.

Upon completion of the course, the participants are expected to have a full understanding of Fall Arrest Rescue Mechanisms (safe) and its application within Eskom.

Course contents:

This training should include practical where candidates can simulate working at heights and rescuing a person from FAS.

CONTROLLED DISCLOSURE

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

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

The course should include the following:

- 1) Fall Arrest;
- 2) Anchoring: (Wire Slings, Webbing Slings and Fixed Anchors)
- 3) Rope Skills: (Abseiling, Passing Knots and Ascending)
- 4) Equipment selection and limitations
- 5) Rescue (Snatch Rescue, Mechanical Advantage Systems, Lifting & Lowering of a patient – from a vertical and horizontal lifeline and diagonal cableways)
- 6) Administration: (Risk Assessment, Fall Protection Plan and Related Standards & Legislation)

Course outcomes:

On completion of this training, learners will be able to:

- 1) Explain the use of a range of fall arrest equipment and knowledge of applicable regulations.
- 2) Describe the requirements to safely perform work in elevated positions.
- 3) Describe the requirements to correctly inspect, care for and store fall arrest equipment.
- 4) Perform basic fall arrest rescues to bring a casualty down to safety.
- 5) Install and use fall arrest systems.
- 6) Inspect and assemble fall arrest equipment and systems.
- 7) Interpret and implement a fall protection plan.

Resources: External

3.6.3 Hauling Training

Duration: 1 day

Frequency: Training shall be provided as and when the need arises.

Prerequisite: 3 days working at heights/ Fall Arrest System (FAS) training, rescue training and First aid level 1 and 2

Refresher/Retraining: Re-assessment will be conducted every 2 years to keep the Operators skills current.

Unit Standard (no credits required): Explain and perform fall arrest technique when working at heights – 229998

Target Group: OHS/SHE Practitioners, Technical Managers, Supervisors and Workers performing work at heights and material hauling.

Minimum learners per class: 5 learners.

Maximum learners per class: 10 learners to allow enough practical demonstration and practice for each learner

Objectives and Outcomes:

The purpose of this course is train learners on the safe use of material hauling when working from heights and the implementation of fall protection where there is a risk of injury from a fall.

CONTROLLED DISCLOSURE

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

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

Upon completion of the course, the participants are expected to have a full understanding of Fall Arrest System and safe material hauling and its application within Eskom.

Course contents:

This training should include practical where candidates can simulate working at heights.

The course should include the following:

- 1) Introduction
- 2) Key components for a safe lifting operation
- 3) Prepare for rope access and assemble personal rope access equipment;
- 4) Equipment care
- 5) On site assessments
- 6) Hauling work
- 7) Pulley systems
- 8) Knots
- 9) Anchoring: (Wire Slings, Webbing Slings and Fixed Anchors)
- 10) Rope Skills: (Abseiling, Passing Knots and Ascending)
- 11) Equipment selection and limitations

Course outcomes:

On completion of this training, learners will be able to:

- 1) Explain the use of a range of fall arrest equipment and knowledge of applicable regulations.
- 2) Describe the requirements to safely perform work in elevated positions and use of hauling equipment.
- 3) Describe the requirements to correctly inspect, care for and store fall arrest and hauling equipment.
- 4) Describe the safety, health and environmental principles with regards to working platforms, ladders, scaffolds and walkways in elevated positions.
- 5) Explain and use basic rope knots.
- 6) Install and use fall arrest systems.
- 7) Inspect and assemble fall arrest equipment and Pulley systems.
- 8) Interpret and implement a fall protection plan.
- 9) Elementary rigging and rope management.
- 10) Perform basic rope access manoeuvres safely.

Resources: External

3.6.4 Work at height assessment and fall protection plan training

Duration: 2 Days

Frequency: Training shall be provided as and when the need arises

CONTROLLED DISCLOSURE

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

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

Unit Standard (no credits required): Assess a worksite for work at height and prepare a fall protection plan – 229994

Target Group: SHE Practitioners/Professionals and Supervisors/ Managers of people doing work at heights

Objectives and Outcomes:

The purpose of this course is to give learners the skills to:

- 1) Assess the safety of others performing tasks at height and
- 2) Develop fall protection plans for people working at height

Course outcome:

On completion of this course, learners will be able to:

- 1) Perform a risk assessment of the worksite where work is to be done at height.
- 2) Demonstrate knowledge of fall arrest rescue equipment and advanced fall arrest rescue techniques.
- 3) Develop a fall protection plan and fall arrest plan.
- 4) Manage safety of personnel working at heights.

Resources: External

3.6.5 Working in confined spaces and control measures

Duration: 3 Days

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Refresher will be conducted based on the risk assessment conducted, where the content of legislation, regulations, standards and procedures set change.

Unit Standard (no credits required):

Work in confined spaces on construction sites – 15034

Implement safety procedures for open holes or deep excavations – 365183

Target Group: All employees who are required to perform work in confined spaces, their Supervisors and SHE Practitioners.

Objectives and outcomes:

The purpose of this course is to equip learners with knowledge and skills to be able to identify the hazard of confined spaces and the precautions required for the safety of the workers and public.

Course Content:

- a) Understanding the general principles involved in work in confined spaces
 - 1) Poor or no ventilation and the effect of it
 - 2) Claustrophobia and risks
 - 3) Medical and psychological fitness for work in confined spaces
 - 4) Design aspects influencing accessibility and egress

CONTROLLED DISCLOSURE

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

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

- b) Understanding the planning, preparation, execution and wrap up of work in confined spaces
 - 1) The practical planning of work in confined spaces and overview
 - 2) Aspects to be worked through during the preparatory phase
 - 3) Aspects to be managed during the execution phase
 - 4) Aspects to be managed during the wrap-up phase
- c) Understanding risk assessments of work in confined spaces
 - 1) Put risk assessments in context
 - 2) Practical aspects to be identified, evaluated and controlled
 - 3) Typical application of risk assessments in various scenarios
 - 4) Execution of a risk assessment
- d) Understanding sub terrain confined spaces (trenches, pits, pipes and sewers)
 - 1) Presentation of types of access systems and its practical application
 - 2) Inspection and maintenance on the equipment
 - 3) Ways and means to install access systems
 - 4) Procurement specifications and checks for compliance
- e) Understanding container type confined spaces (tanks, drums, pipes and containers)
 - 1) Presentation of types of access systems and its practical application
 - 2) Inspection and maintenance on the equipment
 - 3) Ways and means to install access systems
 - 4) Procurement specifications and checks for compliance
- f) Understanding ventilation and breathing systems
 - 1) Ventilation techniques and equipment
 - 2) Safe atmospheric conditions and minimum life sustaining requirements
 - 3) Types and use of breathing protection and support systems
- g) Understanding gas monitoring, gas warning and personal air safety systems
 - 1) Basic principles of gas monitoring
 - 2) Types and application of gas warning systems
 - 3) Types and application of personal air safety systems
- h) Understanding the integration with permit system and legal requirements
 - 1) Treatment of confined spaces in terms of Eskom Plant Safety Regulations
 - 2) Understanding basic legal requirements and compliance
 - 3) Role and execution of heat stress tests in support of maintaining a safe confined space
- i) Understanding rescue principles
 - 1) Confined space rescue principles, techniques and equipment

CONTROLLED DISCLOSURE

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

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

- 2) Practical examples of rescues
- 3) Case studies

Learning outcomes:

On completion of this course, learners will be able to:

- 1) Identify the hazards of working in confined spaces.
- 2) Identify appropriate protective clothing or equipment.
- 3) Identify training requirements for unskilled workers working in confined spaces & train the workers.
- 4) Plan and Implement emergency procedures.
- 5) Explain the relevant Occupational Health and safety regulations.
- 6) Explain the legal responsibilities for Health and Safety when working in or alongside excavations
- 7) Identify unsafe working conditions relating to excavations
- 8) Determine methods of achieving health and safety when working in or alongside excavations.
- 9) Undertake responsibility for safety of self and others.
- 10) Conduct safe work practices.

Resources: External

3.7 Environmental Training

3.7.1 Environmental Training

Duration: 1 Day

Frequency: Training shall be as and when the need arises.

Refresher/Retraining: Refresher will be conducted where the content of the legislation is amended, the requirements set by regulations, standards, procedures and codes change.

Target Group: Managers, Supervisors, all employees and students.

Objectives and outcomes: The purpose of Environmental training shall be to provide basic knowledge of the applicable Environmental Management legislation, standards and guidelines, fundamental issues concerning the workplace, the community, the individual and the environment and to further ensure effective standardized incident prevention and management involving people, wildlife, property, material, hazardous substances and equipment.

The course scope shall include:

- South African Environmental Law – an overview;
- South African Environmental principles;
- Environmental governance in South Africa;
- King III and the Environment;
- Administration Law and Implementation of Environmental Law;

CONTROLLED DISCLOSURE

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

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

- An Overview of International Standards;
- Introduction to EMS;
- Environmental impacts and aspects (to ensure that all employees and contractors, whose activities may create a significant impact on the environment, are identified and documented for relevant environmental training needed);
- Loss control;
- Identification of critical issues;
- Critical tasks and processes;
- Investigation of undesired events;
- Environmental control monitoring; and
- The implementation of the Environmental Management Systems (EMS) and the responsibility of the new employee towards the implementation of the system.

Resources: External

3.7.2 Environmental Legislation for Managers

Duration: 1 Day

Frequency: Training shall be as and when the need arises.

Refresher/Retraining: Refresher will be conducted where the content of the legislation is amended, the requirements set by regulations, standards, procedures and codes change.

Target Group: Executive Managers, Senior and Middle Managers

Objectives and outcomes: The purpose of the Environmental Legislative training shall be to provide basic knowledge of the applicable Environmental Management legislation concerning the workplace, the community, the individual and the environment and to further ensure effective standardized incident prevention and management involving people, wildlife, property, material, hazardous substances and equipment. Furthermore to understand the South African legislative making processes, funders environmental and social safeguard requirement, interpreting environmental legislation with the ability to understand the implication to business processes and practices and what measures need to be put in place to ensure legal compliance.

An overview of South African Environmental Laws:

National Environmental Management Act 107 of 1998 (NEMA)

- Constitutional Context
- Environmental Management Principles
- Integrated Environmental Management
- International obligations and agreements
- Enforcement
- Administration of NEMA and other Environmental Management Acts

CONTROLLED DISCLOSURE

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

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

Air Quality

- Air quality concerns
- NEMA: Air Quality Act 39 of 2004
- Air Quality Management in South Africa
- Atmospheres – pollutant formation and dispersion
- Air pollution sources in South Africa
- Air pollution emission –control technologies

Water use and water pollution

- Factors influencing water pollution
- Management of water pollution
- Legislation dealing with water pollution
- Authorization of waste related water use and waste

Integrated Waste Management

- Impacts resulting from waste emission into the atmosphere – air pollution
- Impacts resulting from land based disposal of waste
- Sustainable integrated waste management
- Integrated waste management in South Africa
- The new Waste Act

Pesticides

- Fertilizers and Farm Feed Act

Protected Areas

- South African Law
- South African protected natural and cultural heritage
- International Treaty obligations

Environmental Assessment and Environmental Management

- Defining environmental assessment
- Defining Environmental Management Systems – ISO 14001
- Developing a legal Environmental Register in accordance with ISO 14001 requirements

CONTROLLED DISCLOSURE

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

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

Climate Change

- What is climate change
- South African vulnerability to climate change
- Regional vulnerability
- Domestic policy response
- Local and national leadership
- Impact adaptation, mitigation, threats and opportunities
- International Environmental Protocols

Resources: External

3.7.3 Environmental Law for Practitioners

Duration: 5 Days

Frequency: Shall be provided as and when the need arise.

Refresher/Retraining: Refresher will be conducted where the content of the legislation is amended, the requirements set by regulations, standards, procedures and codes change.

Target Group: Environmental Officers and Managers

Objectives and Outcomes: shall be to provide basic knowledge of the applicable Environmental Legislation concerning the workplace, community, individual and the environment and to further ensure effective standardized incident prevention and management involving people, wildlife, property, material, hazardous substances and equipment.

All applicable environmental legislations and regulations

Resources: External

3.7.4 Introduction to Environmental Management Systems (ISO 14001:2015)

Duration: 1 Day

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Retraining will be conducted where the content of the standard and codes change.

Target Group: Business Unit Managers, Supervisors and all employees involved in the Environmental Management Systems.

Objectives and outcomes: Based on the ISO 14000 series of documentation, loss control and risk management principles, the course must take participants through the range of requirements to implement ISO 14000 or any Environmental Management System.

The course scope shall include:

- A thorough understanding of EMS standards and their application;

CONTROLLED DISCLOSURE

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

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

- The ability to benchmark your company against best practice in terms of EMS;
- A clear strategy to initiate an EMS in your organisation;
- Legislative requirements and information about environmental aspects and impacts over which this Division can maintain control;
- The Environmental Impact Assessment Process (EIA process)
- Identification of critical issues;
- Critical tasks and processes;
- Investigation of undesired events;
- Environmental impact management for offices;
- Environmental impact management for projects;
- To prevent pollution and to protect our natural environment;
- Loss control;
- Environmental control monitoring; and
- Audits and inspections.

Resources: External and Internal

3.7.5 Transition from ISO 14001:2004 to ISO 14001:2015 Awareness

Duration: 2 Days

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Retraining will be conducted where the content of the standard and codes change.

Target Group: Supervisors, Managers and Environmental Management Practitioners involved in environmental management systems and the development of such systems based on the ISO 14001:2015 standard requirements.

Objective and Outcomes: transferring skills to develop, document and transition from ISO 14001:2004 to ISO 14001:2015.

Resources: External

3.7.6 Implementing Environmental Management Systems (ISO 14001:2015)

Duration: 5 Days

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Retraining will be conducted where the content of the standard and codes change.

Target Group: All Environmental Management practitioners involved in the development, implementation and maintenance of EMS that need to comply and/or certified to the ISO 14001:2015 standard requirements.

CONTROLLED DISCLOSURE

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

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

Objectives and outcomes: This course focuses on transferring skills to develop, document and implement an environmental management system based on the ISO 14001:2015 standard. After the course exposure, the participants are expected to be able to develop, implement and maintain an EMS that will be compliant/certified to the ISO 14001 standard.

The course scope shall include:

- A thorough understanding of EMS standards and their application;
- The ability to benchmark your company against best practice in terms of EMS;
- A clear strategy to initiate an EMS in your organisation;
- Legislative requirements and information about environmental aspects and impacts over which this Division can maintain control;
 - The Environmental Impact Assessment Process (EIA process)
 - Identification of critical issues;
 - Critical tasks and processes;
 - Investigation of undesired events;
 - Environmental impact management for offices;
 - Environmental impact management for projects;
 - To prevent pollution and to protect our natural environment;
 - Loss control;
 - Environmental control monitoring; and
 - Audits and inspections.

Resources: External

3.7.7 Lead Auditors – ISO 14001 Environmental Management System

Duration: 5 Days

Frequency: Training shall be provided as and when the need arises.

Refresher/Re-training: Refresher will be conducted where the content of standard change.

Target Group: environmental practitioners involved in internal environmental audits

Objectives and outcomes: to provide participants with the skills to participate or lead an internal audit, an overview of risk control concepts and in-depth training in the application of audit methodologies and processes to enable them to measure work being done, to control harm to people, property processes, quality and the environment through appropriate ISO 14001 management systems.

Resources: External

3.7.8 Water Resources Management

Duration: 5 Days

Frequency: On appointment and shall be provided as and when the need arise.

CONTROLLED DISCLOSURE

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

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

Refresher/Retraining: Refresher will be conducted where the content of the legislation is amended, the requirements set by regulations, standards and codes change.

Target Group: Environmental Management Practitioners, Supervisors and Managers involved in water management activities.

Objectives and Outcomes:

Understand the water cycle, ecosystem types, and the different water uses, the sources of impacts to water resources, different technologies employed to treat polluted water as well as what future options, the difference parameters and water quality variables to measure water quality, the technologies, process and mechanisms in place to reduce water consumption in Eskom, knowledge of applicable legislation both in terms of act and relevant sections, as well as the various standards and general authorisations and water quality standards for the different water uses, differentiate between chemical, physical and biomonitoring analyses, role of research in water management and what is being attempted to achieve by the research, understanding of role and function of the various licensing authorities, an understanding of water quality monitoring data, including biomonitoring, process to apply for a Water Use Licence (WUL) as well as use of General Authorisations (GA), and an understanding of wetland delineation, and of the approaches to water conservation and rehabilitation.

Integrated Water Resource Management in the Context of South African Legislation

Aim: The objective of the course is to:

- Train environmental managers and professionals in the fundamental principles of water and related legislation in South Africa; and
- Provide them with practical guidance on the implementation of current water and related legislation at the workplace in order to facilitate responsible water management.

Water Quality Monitoring: Principles, Approaches and Techniques

Aim: The course aims at enabling environmental managers to understand the principles and the practical approaches and techniques required to effectively monitor the chemical, hydrological, microbiological and aquatic elements of water quality. It is also aimed at assisting in the design and development of effective water quality monitoring programmes which take cognisance of the relevant legal, institutional, technical and practical issues. The course will also enable the understanding of the translation of data obtained through such monitoring programmes into reliable management information.

Resources: External

3.7.9 Groundwater Management

Duration: 3 Days

Frequency: On appointment and shall be provided as and when the need arise.

Refresher/Retraining: Refresher will be conducted where the content of the legislation is amended, the requirements set by regulations, standards and codes change.

Target Group: Environmental Management Practitioners, Supervisors and Managers involved in water management activities.

CONTROLLED DISCLOSURE

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

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

Objectives and Outcomes: Practical understanding of the concepts and principles underpinning the field of Groundwater Management in the context of South African legislation, and how to address impacts on groundwater resources, specifically focusing on Eskom as a case study. The interpretation of groundwater information and data.

- An understanding of the importance of groundwater, and groundwater-related issues;
- An understanding of the current legislative framework governing groundwater in South Africa;
- An appreciation of the sciences, concepts and principles underpinning sustainable integrated Groundwater Management;
- An understanding of geo-hydrological monitoring, conceptual modeling and numerical modelling of Groundwater Systems;
- An appreciation of risks and liabilities associated with potential pollution impacts on groundwater resources.
- An appreciation of groundwater risk prevention, reduction and mitigation options

Resources: External

3.7.10 National Water Act and Water Use Authorisations

Duration: 3 Days

Frequency: On appointment and shall be provided as and when the need arise.

Refresher/Retraining: Refresher will be conducted where the content of the legislation is amended, the requirements set by regulations, standards and codes change.

Target Group: Environmental Management Practitioners, Supervisors and Managers involved in water management activities.

Objectives and Outcomes: understanding of water use authorization and the Water Use License Application (WULA) process in the broader context of environmental management legislation and the NWA's Water Use Authorisation Framework, as currently described in procedures and guidelines of the Department of Water Affairs. Preparation of Integrated Water and Waste Management Plans (IWWMPs)

- Integrated Water Resource Management and the National Water Act (NWA)
- Source and Resource Directed Measures under the NWA
- Legal Requirements for Water Use Authorisation
- Types of Water Uses
- Tiers of Water Use Authorisations (i.e. do I need a Water Use License?)
- Integrated Water Use Licenses
- Considerations for evaluating Water Use License Applications (WULA's) – section 27
- DWAF External Guidelines for WULAs
- WULA's for abstraction and storage of water
- WULA's for disposal and discharge: Risk Assessments and drafting of Integrated Water and Waste Management Plans (IWWMPs)

CONTROLLED DISCLOSURE

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

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

- WULA's for river diversions and in-stream activities
- WULA's for stream-flow reduction activities
- Avoiding pitfalls in water use license applications

Resources: External

3.7.11 Energy Conservation

Duration: 4 Hours

Frequency: Shall be provided as and when the need arise.

Refresher/Retraining: Refresher will be conducted where the content of the legislation is amended, the requirements set by regulations, standards, procedures and codes change.

Target Group: Employees, Environmental Reps and Environmental Officers and Managers

Objectives and Outcomes: After the course exposure, the participants are expected to have a good understanding of practical application of energy conservation management.

- Legislative Overview
- Carbon Footprint overview
- Energy Tips
- Energy Conservation Management
- Building Energy Management
- Energy Systems Management
- Energy Management Control System
- Logistics and Vehicle Management
- Water and Waste Energy cycle
- Environmental off set management
- Material Management

Resources: Internal or External

3.7.12 Hazardous Material Spill Kit

Duration: 3 Hours

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Refresher will be conducted where the content of the requirements set by regulations, standards and codes change.

Target Group: Supervisors and all employees (including students) involved in the handling and management of oil.

Objectives and outcomes: response to oil spills and after completion the learner will be certified in the use of a hazardous material spill kit.

Resources: External

CONTROLLED DISCLOSURE

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

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

3.7.13 Oil Management and polychlorinated Biphenyl**Duration:** 1 Day**Frequency:** Training shall be provided as and when the need arises**Refresher/Retraining:** Refresher will be conducted where the content of the requirements set by regulations, standards and codes change.**Target Group:** Supervisors and all employees (including students) involved in the handling and management of oil.**Objectives and outcomes:** To ensure that employees and students whose activities involve oil management and the handling of PCB contaminated oil are aware of their work activities and their roles and responsibilities in achieving conformance with the organisation's SHEQ policy and oil management work instructions/procedures that are in accordance with ISO 14001.**Resources:** Internal or External.**3.7.14 An introduction to the Legal Framework for Contaminated Land: Chapter 8 of the NEMWA****Duration:** 2 Days**Frequency:** On appointment and shall be provided as and when the need arise.**Refresher/Retraining:** Refresher will be conducted where the content of the legislation is amended, the requirements set by regulations, standards and codes change.**Target Group:** Relevant Environmental Practitioners and Managers**Objectives and Outcomes:** To provide students with an overview of the contaminated land provisions as contained in NEMWA Chapter 4: Part 8, as well as the framework for the management of contaminated land as published by the department of environmental affairs.**Resources:** External**3.7.15 Integrated Land Management towards Sustainable Land Use****Duration:** 1 Day**Frequency:** On appointment and shall be provided as and when the need arise.**Refresher/Retraining:** Refresher will be conducted where the content of the legislation is amended, the requirements set by regulations, standards and codes change.**Target Group:** Environmental managers, land management practitioners and consultants in the assessment and management of land.**Objectives and Outcomes:** the course should include:

- Rehabilitation and monitoring of land
- Land Quality monitoring towards responsible land management
- Basic principles of Ecological Rehabilitation and Mine Closure

Resources: External**CONTROLLED DISCLOSURE**

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

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

3.7.16 Integrated Waste Management in South Africa

Duration: 5 Days

Frequency: On appointment and shall be provided as and when the need arise.

Refresher/Retraining: Refresher will be conducted where the content of the legislation is amended, the requirements set by regulations, standards and codes change.

Target Group: Relevant Environmental Practitioners and Managers

Objectives and Outcomes: to provide the learner with a basic understanding of the integrated waste management requirements. After the course exposure, the participants are expected to have an understanding of the waste management life cycle, overview of waste management act and its application and also to seek ways of prioritising waste management in terms of waste management hierarchy where possible

- Brief Overview of Waste Management Act
- Waste Management principles
- Waste Management System (Information)
- Hierarchy of Waste Management
- Land Pollution

Resources: External

3.7.17 Cleaner Production

Duration: 4 Hours

Frequency: On appointment and shall be provided as and when the need arise.

Refresher/Retraining: Refresher will be conducted where the content of the legislation is amended, the requirements set by regulations, standards and codes change.

Target Group: Employees, Environmental Reps and Environmental Officers and Managers

Objectives and Outcomes: After the course exposure, the participants are expected to have a full understanding of preventive interactive continuous strategy for modifying products, processes and services to enhance efficiency, which improves environmental performance and reduces costs, leading to a reduction of risks and a competitive advantage. Cleaner Production also encompasses terms such as waste minimisation, pollution prevention, waste avoidance, etc. and is recognized as an important approach to leading industry in the direction of sustainable development.

Resources: External

3.7.18 Essential Air Quality Management

Duration: 2 Days

Frequency: On appointment and shall be provided as and when the need arise.

Refresher/Retraining: Refresher will be conducted where the content of the legislation is amended, the requirements set by regulations, standards, procedures and codes change.

Target Group: Relevant Environmental Practitioners

CONTROLLED DISCLOSURE

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

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

Objectives and Outcomes: to obtain the overall skill in legislation, interpretation, air quality abatement technology, measurements, monitoring and modelling. After the course exposure, the participants are expected to have a full understanding of Air Pollution Control and its application within Group Capital Division. To understand the different technologies employed to control air emissions as well as what future options, the difference between the technologies in terms of what emissions each deal with and to what level of reduction in pollution, knowledge of applicable legislation both in terms of act and relevant sections, as well as the various standards, differentiate between emission standards and ambient standards, role of research in air quality and what is being attempted to achieve by the research, understanding of role and function of the various licensing authorities, an understanding of air quality monitoring data – ambient and point source, process to apply for an Atmospheric Emissions License (AEL) as well as exemption requests, and an understanding of the difference between gaseous emission in terms of contribution to Greenhouse Gases and human health.

- Legislative overview
- Dust Monitoring
- Diesel vehicle Emission

Resources: External

3.7.19 Biodiversity

Duration: 5 Days

Frequency: On appointment and shall be provided as and when the need arise.

Refresher/Retraining: Refresher will be conducted where the content of the legislation is amended, the requirements set by regulations, standards, procedures and codes change.

Target Group: Environmental managers, land management practitioners and consultants in the assessment and management of land.

Objectives and outcome:

Understand the concept of biodiversity and ecosystems, and the different ecosystems, the sources of impacts to ecosystems, the Eskom/ Endangered Wildlife Trust (EWT) partnership, the concept of ecosystem services and off-sets, the technologies, process and mechanisms in reduce wildlife interaction in Eskom, knowledge of applicable legislation both in terms of act and relevant sections, as well as the various mechanisms in place in South Africa to protect ecosystems and promote conservation, differentiate between, role of research in biodiversity and what is being attempted to achieve by the research, understanding of role and function of the various licensing authorities, an understanding of monitoring data related to biodiversity, process to apply for permits and license related to biodiversity (i.e. cutting of protected trees and forests) as well as use of the EWT reporting mechanism and the approaches to land management, conservation and rehabilitation.

- Snake Handling
- Tree Identification
- Herbicide Application
- Integrated Land Management towards Sustainable Land use
- Land Quality Monitoring towards Responsible Land Management
- Basic Principles of Ecological Rehabilitation and Mine closure

CONTROLLED DISCLOSURE

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

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

Resources: Internal or External.

3.7.20 Environmental Impact Assessment

Duration: 5 Days

Frequency: On appointment and shall be provided as and when the need arise.

Refresher/Retraining: Refresher will be conducted where the content of the legislation is amended, the requirements set by regulations, standards and codes change.

Target Group: Environmental Practitioners involved in environmental impact assessments.

Objectives and Outcomes: to empower practitioners who will be involved in the managing of EIA's the ability to undertake the process required to undertake an environmental impact assessment, to be able to define scope of work, compile project plan, manage the process, review outcomes and appropriately communicates the result of the assessment to influence business decision-making. The roles and responsibilities and function of an environmental control officer to be covered.

Resources: External

3.7.21 Social Impact and Heritage Assessments

Duration: 1 Day

Frequency: On appointment and shall be provided as and when the need arise.

Refresher/Retraining: Refresher will be conducted where the content of the legislation is amended, the requirements set by regulations, standards, procedures and codes change.

Target Group: Environmental managers, land management practitioners and consultants in the assessment and management of land.

Objectives and outcome: Understand the concept of social impact assessment and heritage assessments, and the different social parameters impacted by Eskom's operations, the concept of involuntary resettlement (displacement by which development projects cause people to lose land or other assets, or access to resources resulting in physical dislocation, loss of income or other adverse impacts; and resettlement is a process whereby those adversely affected are assisted in their efforts to improve, or at least restore, their incomes and standards of living), comprehend Eskom's procedure for the Involuntary Resettlement of Legal and Illegal Occupants on or from Eskom Procured Land, development and implementation of socio-economic development plans, knowledge of applicable legislation both in terms of act and relevant sections, as well as the various mechanisms in place in South Africa related to heritage, land reform and restitution, expropriation and security of tenure. After the course exposure, the participants are expected to have a full understanding of demonstration of healthy communication and people skills. Indicated by the level of emotional intelligence and health of relationships at work, amongst customers, staff and or colleagues.

- Social Impacts Assessments (SIAs)
- Heritage Impact Assessments (HIAs)
- Applicable legal and other requirements

Resources: Internal or External

CONTROLLED DISCLOSURE

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

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

3.7.22 Environmental Risk Assessment based on ISO 31000

Duration: 5 Days

Frequency: On appointment and shall be provided as and when the need arise.

Refresher/Retraining: Refresher will be conducted where the content of the legislation is amended, the requirements set by regulations, standards, procedures and codes change.

Target Group: Environmental managers, land management practitioners and consultants in the assessment and management of land.

Objectives and outcomes: transferring skills to conduct environmental risk assessments and to generate environmental risk management plans in conformity with ISO 31000.

Resources: External

3.8 Emergency Training

3.8.1 Emergency Preparedness and Response

Duration: 3 Days

Frequency: Training shall be provided once on appointment and when the need arises.

Refresher/Retraining: Refresher will be conducted where the content of internal regulations, standards and procedures set change.

Unit Standard: Apply technical knowledge and skill in emergency planning – 242679

Explain emergency preparedness and response procedures – 259597

Respond to, implement and manage emergencies according to an emergency action plan in a workplace – 120329

Target Group: Managers, Supervisors and all persons appointed as members of an emergency preparedness team e.g. emergency preparedness co-ordinator, first aiders, evacuation wardens, fire officials etc.

Objectives and outcomes: Emergency Preparedness training shall be aimed at educating employees in the existing requirements and procedures as well as the need for emergency forecasting and planning. The objective of any emergency preparedness programmes is to pro-actively protect life, property, equipment and materials in order to reduce or prevent loss to the organisation.

➤ **The course scope shall include:**

- The identification of potential accidents and emergencies;
- The identification of persons to take charge during an emergency;
- Emergency preparedness administration;
- Emergency response plans;
- Implement and manage emergency response action plans and procedures;
- Emergency response teams;

CONTROLLED DISCLOSURE

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

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

- Emergency equipment;
- The establishment of Mutual aid agreements;
- Communication with statutory bodies;
- Communication with neighbours and the public;
- The protection of vital records; and
- Practice drills

Resources: Internal or External.

3.8.2 First Aid (Levels 1 and 2)

Duration: Level 1, 2 Days

Duration: Level 2, 3 Days (Prerequisite a valid Level 1 certificate)

Frequency: Training shall be provided on all appointed First Aiders.

Refresher/Retraining: Refresher training will be conducted every third year for all appointed First Aiders.

Unit Standard: Provide risk-based primary emergency care/first aid in the workplace – 120496 (Level 1 & 2)

Provide risk-based primary emergency care/first aid in the workplace – 376480 (Level 3)

Target Group: All nominated and/or appointed First Aiders

Objectives and outcomes: The First Aid level 1 and level 2 courses shall be aimed at equipping employees with basic life support competencies in order to minimize the mobility and mortality of injured or ill employees through the application of prompt and appropriate first aid and emergency care at the workplace.

➤ **The course scope shall include:**

- The principles of primary emergency care in all health emergencies for persons in the workplace;
- Sustain advanced level of preparedness to deal with emergencies in the workplace;
- Assess and manage a multiple injured emergency scene/disaster in the workplace;
- Explain and manage shock; and
- Conduct secondary assessment of the sick or injured person and provide appropriate primary emergency care.

Resources: External

3.8.3 Fire Training for Individuals (Basic firefighting)

Duration: 1 Day

Frequency: Training shall be provided as and when the need arises.

CONTROLLED DISCLOSURE

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

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

Refresher/Retraining: Refresher will be conducted where the content of internal regulations, standards and procedures set change

Unit Standard: Demonstrate knowledge pertaining to fires in working places – 120331

Target Group: All nominated or appointed Fire Officials and all drivers of Eskom insured vehicles.

Objectives and outcomes: The fire training course for individuals shall be aimed at:

- Conveying basic knowledge pertaining to fires;
 - The definition of fire, principles and chemistry of combustion;
 - The main causes of fire, fire spread and the principles of heat transmission;
 - The effects of fire and the different methods of fire spread and control;
 - The classification of fires and appliances to control fires and methods of detection;
 - Elevating employees' awareness towards existing fire risks;
 - The identification of potential fire risks in employees' surrounding environments e.g. housekeeping;
 - Training employees in the safe use, storage and handling of the various fire fighting equipment available at their specific work sites;
 - Basic fire extinguisher handling training;
 - Symbolic safety signs;
 - Creating awareness around the relevant policies and procedures e.g. evacuation procedure and the reporting of incidents; and
 - Fire safety at home;
- **Practical exercises:**
- Application of equipment in a small controlled scenario.

Resources: External

3.8.4 Evacuation Warden Training

Duration: 1 Day

Frequency: Training shall be provided as and when the need arises.

Refresher/Retraining: Refresher will be conducted where the content of internal regulations, standards and procedures set change.

Unit Standard: Conduct evacuations and emergency drills – 242825

Target Group: All nominated and/or appointed Evacuation Wardens

Objectives and outcomes: Evacuation Wardens have specific duties in the workplace in the event of an emergency. The aim of this training is to ensure that Evacuation Wardens have a clear understanding of what is required of them if a disaster were to strike their building and its occupants.

- **The training course shall address the following aspects:**

CONTROLLED DISCLOSURE

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

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

- What an emergency is
- What kind of emergencies can take place in the workplace, potential threats and risks, for example fire, floods, bomb threats, armed robbery
- Emergency planning, structures and evacuation procedures, including the location of services, safety signs, registers etc.
- The responsibilities of Evacuation Wardens
- Evacuation planning
- Evacuation action structure
- Emergency evacuation training for staff, including evacuation drills and the reporting of emergencies
- The evacuation of disabled persons
- Post emergency analysis

Resources: Internal or External

3.9 Quality Training

3.9.1 ISO 9001 Quality Awareness

Duration: 1 Day

Frequency: Training shall be provided as and when the need arises.

Refresher/Re-training: Refresher will be conducted where the content of standard change.

Target Group: All employees

Objectives and Outcomes: To equip learners with comprehensive understanding of ISO 9001 standard, as part of the Quality Management System.

Learning outcomes:

On completion of this course, learners will be able to understand the:

- a) Scope of a quality management system and
- b) Quality Management principles
- c) Terms and definitions typically used in a quality management system
- d) Elements of a benchmark quality management system
- e) Compatibility between ISO 9001 quality management system and other management systems
- f) Overview of management responsibility towards a quality management system
- g) Overview of resourcing requirements for a quality management system
- h) Overview of the requirements and process for product realisation
- i) Measuring and monitoring a quality management system

Resources: External

CONTROLLED DISCLOSURE

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

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

3.9.2 ISO 9001 Quality Executive Awareness

Duration: 4- 6 Hours

Frequency: Training shall be provided as and when the need arises.

Refresher/Re-training: Refresher will be conducted where the content of standard change.

Target Group: All managers and senior managers

Objectives and Outcomes:

- a) Background of Quality Management
- b) The benefits of ISO 9001 Quality Management systems;
- c) The requirements of ISO 9001
- d) Quality management principles;
- e) Documents requirements of ISO 9001
- f) Conformance and non-conformance

Resources: External

3.9.3 ISO 9001 Transition from 2008 to 2015 version of the Standard

Duration: 2 days

Frequency: Training shall be provided as and when the need arises

Refresher/Re-training: Refresher will be conducted where the content of standard change.

Target Group: All Quality Management Practitioners, managers and senior managers.

Objectives and Outcomes: The significant differences between the ISO 9001:2008 version and ISO 9001:2015, necessitate that all clients previously trained on the 2008 version have a clear understanding of the differences in revised requirements and how to implement and maintain the changes to successfully retain ISO 9001 certification status. The objective of this course is to enable clients to smoothly transition their existing or newly implemented ISO 9001:2008 Quality Management System to the 2015 version. It also assist clients understand the timelines of certification against 2008 to 2015 and enables learners to effectively implement the change management process.

Resources: External

3.9.4 ISO 9001:2015 Quality Standard Implementation

Duration: 5 Days

Frequency: Training shall be provided as and when the need arises.

Refresher/Re-training: Refresher will be conducted where the content of standard change.

Unit Standard: Manage requirements related to quality and other standards – 116785

Target Group: All employees involved in the implementation of the Quality Management System and contactor SHEQ Management Personnel.

CONTROLLED DISCLOSURE

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

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

Objectives and Outcomes: To provide learners with skills and knowledge to be able to plan, implement and audit the ISO9001:2015, Quality Management system.

To enable learners to run a competitive, reputable and sustainable business, maintain acceptable standards of performance related to the process, product or service.

Course contents:

The course should therefore cover the following:

On completion of this course, learners will be able to:

- a) Explain the fundamentals of Quality Management Systems;
- b) Explain the elements of successful Quality Management;
- c) Occupational Health, Safety and Quality (SHEQ) Policy;
- d) Planning;
- e) Implementation and operation;
- f) Checking and corrective action; and
- g) Management review.

Outcomes:

On completion of this course, learners will be able to:

- a) Explain the fundamentals of Quality Management Systems;
- b) Explain the elements of a successful Quality Management system

Resources: External

3.9.5 Internal Quality Management Auditor Course

Duration: 3 Days

Frequency: Training shall be provided as and when the need arise.

Refresher/Re-training: Refresher will be conducted where the content of standard change.

Target Group: Quality Management Practitioners

Objective and Outcomes: The purpose of this course is to equip learners with knowledge and skills to audit a Quality Management System, documentation related to materials, components, process performance and final product for compliance with specifications, e.g. policies, procedures and company performance criteria.

Learning contents and outcomes:

On completion of this course, learners will be able to:

- a. Understand and apply the ISO 19011 requirements for auditing;
- b. Develop auditing material required to conduct an internal audit;
- c. Prepare and plan for an internal audit;
- d. Perform audits displaying appropriate auditing techniques;
- e. Compile and audit report;

CONTROLLED DISCLOSURE

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

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

- f. Review systems and processes;
- g. Audit suppliers with or without formal management system in place;
- h. Understand what a certification body expects for conformance proof.

Resources: External

3.9.6 Lead Auditors Training (ISO 9001)

Duration: 5 Days

Frequency: Training shall be provided as and when the need arises

Refresher/Re-training: Refresher will be conducted where the content of standard change.

Unit Standard: Perform auditing activities – 12674,

Verify compliance to Quality and environmental requirements in the workplace _259604

Target Group: All employees involved in the Quality Management System, including Supervisors, Quality Reps, SHEQ Practitioners, Business Unit Managers and other members of the Auditing team.

Objectives and Outcomes:

- 1) Auditors should possess the knowledge and skills necessary to achieve the intended results of the audits they are expected to perform. All auditors should possess generic knowledge and skills and should also be expected to possess some discipline and sector-specific knowledge and skills. Audit team leaders should have the additional knowledge and skills necessary to provide leadership to the audit team
- 2) Equip learners with knowledge and skills to audit a Quality Management System, and Environmental Management System documentation related to materials, components, process performance and final product for compliance with specifications, e.g. policies and procedures, company performance criteria and;
- 3) Enable learners to identify any deviations and workplace safety performance in the workplace from health, safety and environmental requirements and be able to ensure that the correct action is taken in situations where safety health and environmental issues are not in accordance with requirements.

Course contents:

The course scope shall include:

- a) A detailed proven procedure/process for effective internal audits that can be applied to any process/ SHE management system.
- b) The Audit Process and Measuring effectiveness
- c) Audit methodology(s)
- d) Commitment to auditing;
- e) Requirements from ISO 9001;
- f) SANS ISO 19011:2011 Guidelines for quality and/or environmental management systems auditing;

CONTROLLED DISCLOSURE

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

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

- g) Developing an audit system;
- h) Arranging an audit;
- i) Planning and managing audits;
- j) Auditors selection and training;
- k) Carrying out the audit;
- l) Managing the on-site process as the team leader;
- m) Maximizing the effectiveness of the audit team;
- n) Interviewing styles;
- o) Use of audit protocols;
- p) Compliance verification strategies;
- q) Data collection and interpretation;
- r) Reporting;
- s) Case studies of current best practices; and
- t) Acting on audit results.

Course outcomes:

On completion of this course, learners will be able to:

- a) Plan and prepare for the audit process.
- b) Communicate the audit plan to affected parties
- c) Conduct the audit process.
- d) Interpret and evaluate findings.
- e) Compile an audit report.
- f) Report on the audit findings.
- g) Follow-up and evaluate corrective action(s) / improvements made.
- h) Discuss and explain auditing process and purpose of auditing.

Resources: External

3.9.7 Quality Management Awareness Training

Duration: 1 day

Frequency: Training shall be provided as and when required

Target Group: All Employees

Objectives and Outcomes:

- Overview of ISO 9001 Documents Requirements
- Fog Index (Writing to the Correct Target Groups)
- Flow diagrams, flow charting, dependencies and interdependencies

CONTROLLED DISCLOSURE

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

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

- Procedure writing (Inputs , Activities, Outputs)
- Document Control (Numbering, Revisions, Authorizations, Review)
- Cross functional procedural writing and mapping
- Overall understanding the need for effective procedure writing
- Writing to a specific target audiences
- Understanding the impact of incorrectly or poorly written procedures

Resources: Internal or External

3.9.8 Quality Tools and Techniques

Duration: 2 days

Frequency: Training shall be provided as and when required

Refresher/Retraining: Refresher will be conducted where the content or procedures changes.

Target Group: Employees involved in the implementation of Quality Management System

Objectives and Outcome:

- Overview of ISO 9001 Documents Requirements
- Fog Index (Writing to the Correct Target Groups)
- Flow diagrams, flow charting, dependencies and interdependencies
- Procedure writing (Inputs, Activities, Outputs)
- Document Control (Numbering, Revisions, Authorizations, Review)
- Cross functional procedural writing and mapping
- Overall understanding the need for effective procedure writing
- Writing to a specific target audiences
- Understanding the impact of incorrectly or poorly written procedures

Resources: Internal or External

3.9.9 Requirements for Quality Assurance Programs for Nuclear Facilities (ASME NQA-1) Awareness

Duration: 2 Days

Frequency: Training shall be provided as and when the need arises.

Target Group: Nuclear Quality Assurance Practitioners

Objectives and Outcome:

To equip learners with an overview understanding of Nuclear Quality Assurance Program requirements (ASME NQA-1)

Learning outcomes:

On completion of this course, learners will be able to understand the:

CONTROLLED DISCLOSURE

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

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

- 1) Scope of a nuclear quality assurance program.
- 2) Understanding and more in depth knowledge and application of ASME NQA-1.
- 3) Terms and definitions typically used in a quality management system.
- 4) Compatibility between ASME NQA-1 and other nuclear management systems.
- 5) Overview of NQA-1 requirements PART 1, requirements one to eighteen.

Course content:

The course must cover the requirements of ASME NQA-1

Resources: External

**3.9.10 Requirements for Quality Assurance Programs for Nuclear Facilities (ASME NQA-1)
Lead Auditor Training**

Duration: 5 Days

Frequency: Training shall be provided for all auditors and lead auditors practicing on management systems which affect the technical performance of KNPS

Target Group: Nuclear Quality Assurance Practitioners

Objectives and Outcomes:

To equip learners with an detailed understanding of Nuclear Quality Assurance Program requirements (ASME NQA-1)

Learning outcomes:

On completion of this course, learners will be able to understand the:

- a) Scope of a nuclear quality assurance program.
- b) Understanding and more in depth knowledge and application of ASME NQA-1.
- c) Terms and definitions typically used in a quality management system.
- d) Compatibility between ASME NQA-1 and other nuclear management systems.
- e) In-depth Knowledge of NQA-1 requirements PART 1, requirements one to eighteen.
- f) Overview of NQA-1, PART 2 and PART 3.

Course content: The course must cover the following: Requirements of ASME NQA-1, PARTS 1 to 3

Resources: External

3.9.11 Nuclear Safety and Quality Management System Requirements (NSQ-100) Awareness

Duration: 2 Days

Frequency: Training shall be provided as and when the need arises.

Target Group: Nuclear Quality Assurance Practitioners

Objective and Outcomes:

To equip learners with an overview understanding of NSQ-100

CONTROLLED DISCLOSURE

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

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

Learning outcomes:

On completion of this course, learners will be able to understand the:

- a) Scope of a nuclear safety and quality management system.
- b) Understanding and more in depth knowledge and application of NSQ-100
- c) Terms and definitions typically used in a nuclear safety and quality management system.
- d) Compatibility between NSQ-100 and other nuclear management systems.
- e) Overview of NSQ-100 requirement four to requirement eight.

Course content:

The course must cover the following: Requirements of NSQ-100

Resources: External

3.9.12 Requirements for the Management System for Facilities and Activities (IAEA GS-R-3) Awareness

Duration: 2 Days

Frequency: Training shall be provided as and when the need arises

Target Group: Nuclear Quality Assurance Practitioners

Objective and Outcomes:

To equip learners with an overview understanding IAEA GS-R-3

Learning outcomes:

On completion of this course, learners will be able to understand the:

- a) Scope of a nuclear management system for facilities and activities.
- b) Understanding and more in depth knowledge and application of IAEA GS-R-3
- c) Terms and definitions typically used in a nuclear management system for facilities and activities.
- d) Compatibility between IAEA GS-R-3 and other nuclear management systems.
- e) Overview of IAEA GS-R-3 requirement two to requirement six.

Course content:

The course must cover the following: Requirements of IAEA GS-R-3

Resources: External

3.9.13 Requirements for Quality and Safety Management Requirements for Nuclear Installations (NNR RD-0034) Awareness

Duration: 2 Days

Frequency: Training shall be provided as and when the need arises.

Target Group: Nuclear Quality Assurance Practitioners

Objective and Outcomes:**CONTROLLED DISCLOSURE**

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

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

To equip learners with an overview understanding of an integrated management system NNR RD-0034

Learning outcomes:

On completion of this course, learners will be able to understand the:

- a) Scope of an integrated management system.
- b) Understanding and more in depth knowledge and application of NNR RD-0034.
- c) Terms and definitions typically used in an integrated management system.
- d) Compatibility between NNR RD-0034 and other nuclear management systems.
- e) Overview of NNR RD-0034 requirement seven to requirement eleven.

Course content:

The course must cover the following: Requirements of NNR RD-0034

Resources: External

Procurement of external training service providers

The procurement of all external training service providers shall be done in terms of 32-1034, Eskom Procurement and Supply Chain Management Procedure.

Criteria for sourcing internal or external training service providers

1. The Group Capital Division shall determine set criteria for the sourcing of internal and/or external training service providers. This information shall be used during the procurement process and shall be based on training and legal requirements.
2. The following shall serve as the minimum criteria for all potential training service providers:
 - It is recommended that all external course material shall be SAQA and/or SANAS registered and/or aligned and trainers SETA accredited. Alternatively external service providers shall be registered with an Approved Inspection Authority (AIA) or the Department of Labour.
 - Eskom requires all service providers to provide the organization with their SAQA, AIA or Department of Labour registration numbers.
 - Ensure that the risk of the misuse and abuse of registration numbers is managed and minimized.
 - Ensure that service providers are only used for the courses/services for which they are registered.
 - Only qualified trainers who meet applicable statutory requirements shall carry out training. In the case of internal trainers they would also need to meet the relevant qualification and experience requirements.
 - All education and training should emphasise the importance of meeting requirements and the needs and expectations of the customer and other interested parties.
 - Service providers must have knowledge of the Eskom critical tasks.

CONTROLLED DISCLOSURE

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

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

- Service providers must in advance be able to identify target audiences for their courses.
- Service providers must have knowledge of the relevant Eskom standards and procedures, where required.
- Service providers must be prepared to update or customise, if required, their existing training material and training methodologies to address Eskom specific risks.
- Service providers are expected to provide the client with lesson plans which should provide guidance in terms of instructional technique(s) to be used, learning goals and objectives, learning aids to be used, time frames, core concepts which need to be conveyed, and methods to assess the learner's competency.
- Service providers must understand that they may at any time be assessed and evaluated with regards to course content, training methodology, trainer's knowledge and experience.
- An organisational psychologist may assess all of the above to ensure that the desired behaviours are based on Eskom standards and procedures.
- Service providers must be prepared to offer refresher-training programmes, if required.
- All service providers shall be evaluated and reference checks shall be undertaken.
- All service providers must provide certificates to delegates upon the successful completion of the course.

3 Acceptance

This document has been seen and accepted by:

Name	Designation
M Chettiar	General Manager – Capital Execution Assurance
P Dukashe	Project Director – Medupi
A Mzobe	Project Director – Kusile
G Bronkhorst	General Manager Projects – Gx Coal Projects (Acting)
G Bronkhorst	General Manager Projects – Gx Clean Technology Projects
N Hari	General Manager – Power Delivery Projects (PDP)
P Govender	Programme Director – Project Development Department
R Mamorare	General Manager – Facilities
J Naidoo	Senior Manager – Construction SHEQ Department
P Govender	General Manager – Strategic Projects Department
P Sebola	Group Executive – GCD (Acting) General Manager – Capital Contracts Management
M Seabe	General Manager – Eskom Real Estate

CONTROLLED DISCLOSURE

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

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

4 Revisions

Date	Rev.	Compiler	Remarks
January 2018	5	F Mathai	<p>The standard was revised by F Mathai</p> <p>The entire document was reviewed to ensure that the content thereof remains relevant and applicable.</p> <ul style="list-style-type: none"> • Normative Reference list updated • All courses updated as per current course scopes • Included Unit Standards where applicable • Quality included throughout the document as well as quality courses. • Reference to Blue Flag Removed • Appendix A-G updated
September 2014	4	F Mathai	<p>Standard revised by F Mathai</p> <p>The following Environmental Courses were added:</p> <ul style="list-style-type: none"> • Environment – ISO 14001:2004 – Environmental Management Systems (EMS) (Awareness and Implementation) • Biodiversity • Social – community and Social Behaviour <p>The following Courses were removed:</p> <ul style="list-style-type: none"> • General Health and Safety Course (OHS Act) • Environmental Law for Managers • Water Management for Managers • Energy Conservation for Managers <p>The following courses Validation of Certificates were removed:</p> <ul style="list-style-type: none"> • Group Capital SHE Induction Training for Employees and Students • Occupational Health and Safety – OHSAS 18001:2007 (Introduction and Awareness) • Training for Construction Supervisors (Construction Regulations) • NEBOSH Construction Certificate

CONTROLLED DISCLOSURE

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

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

Hard copy printed on: 17 January 2018

			<ul style="list-style-type: none"> • Compensation for Occupational Injuries and Diseases Act 130 of 1993 (COID) • Occupational Health and Hygiene Management Awareness Training • Ergonomics • Environmental Training • Environmental Law for Practitioners • Environment – ISO 14001:2004 – Environmental Management Systems (EMS) (Awareness and Implementation) • Energy Conservation • Handling Storage and Dangerous Goods and Hazardous Substances
February 2013	3	S. Dube and M Mhlanga	<p>Standard revised by S. Dube, and M Mhlanga</p> <p>2.67 National Railway Safety Regulator Act 16 of 2002 – Added</p> <p>Section 3.2.1 Updated</p> <p>Section 3.6 Training and Development Process Requirements added</p> <p>Section 3.9 Updated</p>
March 2011	2	N Mahlaule	<p>The standard was revised by N Mahlaule</p> <p>The following changes were effected:</p> <ul style="list-style-type: none"> • Changing the name of the Division • Cross referencing and ensuring that the SHE Training Matrix as contained in 32-477 is aligned to the standard • Incorporating the validation period for certificates issue • Setting the criteria where in the refresher or retraining will be required • Elaborating and expanding on the Environmental Management training <p>The following Environmental Courses were added:</p> <ul style="list-style-type: none"> • Water Management • Water Management for Managers • Waste Management • Environmental Law for Managers • Environmental Law for Practitioners • Energy Conservation for Managers

CONTROLLED DISCLOSURE

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

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

			<ul style="list-style-type: none"> • Energy Conservation • Cleaner Production • Air Pollution ▪ Updating of Annexures ▪ SMAT/STOP Behavioural Observation course added to the modules ▪ Course titles and content aligned to the Learning Management System (LMS) course catalogue <p>The following courses in terms of the Blue Flag SHE Recognition Programme were added:</p> <ul style="list-style-type: none"> • Blue Flag Training for Trainers <p>Blue Flag Awareness Training</p>
February 2010	1	S Isaacs	<p>The standard was revised by S Isaacs</p> <p>Reference to all Quality Management Training has been removed</p> <p>The following training has been included:</p> <ul style="list-style-type: none"> • Leadership in Safety Management Training • Safety Management Audit Training (SMAT) • Safety Training Observation Programme (STOP) for Supervision • Mine Health and Safety Act Training • Cardinal Rules Awareness Training • Evacuation Warden Training • NEBOSH Construction Certificate • Working at height risks and control measures • Working in confined spaces and control measures • Electrical Safety • Asbestos Awareness Training <p>The following course descriptions and scope were amended:</p> <ul style="list-style-type: none"> • COID Act Training • Environmental Legislative Training • Environmental Training (Basic Awareness) • Vehicle Driver Training

CONTROLLED DISCLOSURE

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

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

			<ul style="list-style-type: none">Health and Safety Representatives Training Ergonomics.
May 2006	0	S Isaacs	A new standard was developed by S Isaacs for the Enterprises Division

5 Development Team

- S Isaacs

6 Acknowledgements

N/A

CONTROLLED DISCLOSURE

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

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

Hard copy printed on: 17 January 2018

Appendix A

(Normative)

GROUP CAPITAL DIVISION SHEQ MANAGEMENT COMPETENCY MATRIX FOR

1. PART A – Divisional Executive Management
2. PART B – Senior and Middle Management
3. PART C – Supervisory Staff
4. PART D – Other Employees (including students)
5. PART E – SHE Representatives
6. PART F – Contractors and Sub-contractors
7. PART G - Visitors, Clients, Suppliers and Consultants

Note: Each matrix listed below is a guide per level within the organisation. Management in consultation with their subordinates shall be required to jointly identify, prioritise and confirm the appropriate SHEQ training, required by subordinates each year, based on the generic list and their specific needs.

Hence each departmental training matrix shall be based on the following:

1. The competency requirements for individual roles in accordance with authorised job profiles;
2. The analysis must follow a risk based approach for training needs within the Project/ Department; and must be documented in IDPs for individual employees.

CONTROLLED DISCLOSURE

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

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

(Continue)**PART A****SHEQ Management Competency Development Requirements For
Executive Management**

The SHEQ management competency development requirements for Executive Management shall include at least the following:

1. Group Capital SHEQ Induction Training for Executives
2. OHS Act for Management and managing legal risk exposures. (Occupational Health and Safety Act, Act 85 of 1993)
3. Compensation for Occupational Injuries and Diseases Act 130 of 1993 (COID)
4. Mine Health and Safety Act 29 of 1996 (where applicable.)
5. Environmental Law for Managers
6. Management System overview and integration OHSAS 18001
7. Management System overview and integration ISO 14001
8. Vehicle driver training
9. Leadership in Safety Management Training
10. Fundamentals of Risk Assessment
11. Hazard Identification and Risk Assessment (HIRA)
12. Waste Management
13. ISO 9001 Executive Awareness

CONTROLLED DISCLOSURE

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

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

(Continue)**PART B****SHEQ Management Competency Development Requirements For****Senior and Middle Management**

The SHEQ management competency development requirements for Senior and Middle Management shall include at least the following:

1. Group Capital SHEQ Induction Training for Employees and Students
2. OHS Act for Management and managing legal risk exposures. (Occupational Health and Safety Act, Act 85 of 1993)
3. Mine Health and Safety Act (where applicable)
4. Leadership in Safety Management Training
5. Behavioural Safety Observation Training
6. Eskom Life Saving Rules awareness training
7. Modern SHE/Risk Management
8. Occupational Health and Safety OHSAS 18001 (Awareness and Implementation)
9. Training for Construction Supervisors (where applicable)
10. Compensation for Occupational Injuries and Diseases Act 130 of 1993 (COID)
11. Occupational Health and Hygiene Management Awareness Training
12. Ergonomics
13. Environmental Legislation for Managers (where applicable)
14. Legal Framework for integrated Waste Management in S.A (where applicable)
15. Management System overview and integration ISO 14001 (Implementation and Awareness)
16. Cleaner production (where applicable)
17. Biodiversity (where applicable)
18. Hazard Identification Risk Assessment (HIRA)
19. Fundamentals of Risk Assessment. (Where applicable)
20. Baseline Risk Assessment (where applicable)
21. Advanced Risk Assessment (where applicable)
22. Job Safety Analysis (Task analysis), Planned Job Observations, Hazardous Task Assessment (Written Safe Work Procedures)
23. Emergency Preparedness and Response
24. Root Cause Analysis Technique (RCAT)

CONTROLLED DISCLOSURE

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

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

25. Lead Auditing
26. Water Resource Management (where applicable)
27. National Water Act and Water Use Authorisations (where applicable)
28. Ground Water Management (where applicable)
29. Blue and Green Drop Programme (where applicable)
30. Energy Conservation (where applicable)
31. Handling, Storage and dangerous Goods and Hazardous Substances (where applicable)
32. An introduction to the Legal Framework for contaminated Land: Chapter 8 of the NEMWA (where applicable)
33. Integrated Land Management towards sustainable Land use (where applicable)
34. Social impact and Heritage Assessments (where applicable)
35. Environmental Risk Assessment based on ISO 3100 (where applicable)
36. Operating Regulations for High Voltage Systems (ORHVS) (where applicable)
37. SHE Incident/Non – conformity investigation Techniques
38. Environmental, Occupational, Health and Safety Incident Management Procedure (based on 32-95)
39. National Railway Safety Regulator Act 16 of 2002 (where applicable)
40. ISO 9001 Quality Executive Awareness
41. ISO 9001 Transition from 2008 to 2015 version of the standard

CONTROLLED DISCLOSURE

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

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

(Continue)**PART C****SHEQ Management Competency Development Requirements For
Supervisory Staff**

The SHEQ management competency development requirements for Supervisors shall include at least the following:

1. Group Capital SHEQ Induction Training for Employees and Students
2. Behavioural Safety Observation Training
3. Behavioural Safety Observation Train – the – trainer programme (where applicable)
4. Modern SHE/ Risk Management
5. Eskom Life Saving Rules training
6. Occupational Health and Safety OHSAS 18001 (Awareness and Implementation)
7. ISO 14001 Environmental Management (Awareness and Implementation)
8. ISO 9001 Quality Management (Awareness and Implementation)
9. OHS Act and the Regulations
10. OHS Act and the Regulations
11. Mine Health and Safety Training (where applicable)
12. Construction Regulations (where applicable)
13. NEBOSH Construction Certificate (where applicable)
14. Compensation for Occupational Injuries and Diseases Act 130 of 1993 (COID)
15. Occupational Health and Hygiene Management Awareness Training
16. Ergonomics (where applicable)
17. Environmental Training
18. Environmental Law for Managers
19. Fundamentals of Risk Assessment
20. Hazard Identification Risk Assessment (HIRA)
21. Baseline Risk Assessment (where applicable)
22. Advanced Risk Assessment (where applicable)
23. Environmental Risk Assessment based on 31000 (where applicable)
24. Process HAZOP Technique (where applicable)
25. Job Safety Analysis (Task Analysis) Planned Job Observations, Hazardous Task Assessment – Written Safe Work Procedures (W.S.W.P.)
26. Process Hazard and operability process techniques (HAZOP techniques) (where applicable)

CONTROLLED DISCLOSURE

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

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

27. Emergency Preparedness and Response
28. Oil Management and polychlorinated Biphenyl (where applicable)
29. Cleaner Production (where applicable)
30. Asbestos Awareness Training (where applicable)
31. Essential Air Quality Management (where applicable)
32. Inspection Techniques
33. Housekeeping Inspections
34. Permit to work process (where applicable)
35. Root Cause Analysis Technique (RCAT)
36. Lead Auditing (ISO 14001, ISO 9001 and OHSAS 18001) (where applicable)
37. Working at height risks and control measures (where applicable)
38. Working in confined spaces and control measures (where applicable)
39. Train-the-Trainer (where applicable)
40. Supervisor training Course (The role of a supervisor)
41. Water Resource Management (where applicable)
42. Groundwater Management (where applicable)
43. National Water Act and Water use Authorisations (where applicable)
44. Blue and Green Drop Recognition Programme (where applicable)
45. Energy Conservation (where applicable)
46. Handling, Storage and Dangerous Goods and Hazardous Substances (where applicable)
47. Hazardous Material Spill Kit (where applicable)
48. An introduction to the Legal Framework for contaminated Land: Chapter 8 of the NEMWA (where applicable)
49. Integrated Land Management towards sustainable Land use (where applicable)
50. Integrated Waste Management in South Africa (where applicable)
51. Essential Air Quality Management (where applicable)
52. Transition from ISO 14001:2004 to ISO 14001:2015 Awareness
53. Biodiversity (where applicable)
54. Environmental Impact Assessment (where applicable)
55. Social Impact and Heritage Assessment (where applicable)
56. Mobile and Material Handling Equipment (where applicable)
57. Pre-use Inspection (where applicable)
58. Prevention Maintenance (where applicable)

CONTROLLED DISCLOSURE

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

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

- 59. Operating Regulations for High Voltage Systems (ORHVS) (where applicable)
- 60. SHE incident/ non-conformity investigation techniques
- 61. Environmental, Occupational, Health and Safety Incident Management (Based on 32-95)
- 62. Specialised Equipment (where applicable)
- 63. Personal Protective Equipment
- 64. National Railway Safety Regulator Act 16 of 2002 (where applicable)
- 65. ISO 9001 Transition 2008 to 2015 (where applicable)
- 66. Internal Quality Management Auditor Course (where applicable)
- 67. Quality Management Awareness (where applicable)
- 68. Quality Tools and Techniques (where applicable)
- 69. Requirements for Quality Assurance Programmes for Nuclear Facilities (Awareness and Lead Auditors) (where applicable)
- 70. Nuclear Safety and Quality Management System Requirements – Awareness (where applicable)
- 71. Nuclear Safety and Quality Management System Requirements Awareness (where applicable)
- 72. Requirements for the Management System for Facilities and Activities Awareness (where applicable)
- 73. Requirements for Quality and Safety Management Requirements for Nuclear Installations (where applicable)

CONTROLLED DISCLOSURE

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

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

(Continue)**PART D****SHEQ Management Competency Development Requirements For
Other Employees (Including Students)**

The SHEQ management competency development requirements for Employees shall include at least the following:

1. Group Capital SHEQ Induction Training for Employees and Students
2. Behavioural Safety Observation Training
3. Behavioural Safety Observation Train – the – trainer programme (where applicable)
4. Modern SHE/ Risk Management
5. Eskom Life Saving Rules training
6. Occupational Health and Safety OHSAS 18001 (Awareness and Implementation)
7. ISO 14001 Environmental Management (Awareness and Implementation)
8. ISO 9001 Quality Management (Awareness and Implementation)
9. OHS Act and the Regulations
10. Mine Health and Safety Training (where applicable)
11. Construction Regulations (where applicable)
12. NEBOSH Construction Certificate (where applicable)
13. Compensation for Occupational Injuries and Diseases Act 130 of 1993 (COIDA)
14. Occupational Health and Hygiene Management Awareness Training
15. Ergonomics (where applicable)
16. Environmental Training
17. Environmental Law for Practitioners (where applicable)
18. Fundamentals of Risk Assessment
19. Hazard Identification Risk Assessment (HIRA)
20. Baseline Risk Assessment (where applicable)
21. Advanced Risk Assessment (where applicable)
22. Environmental Risk Assessment based on 31000 (where applicable)
23. Process HAZOP Technique (where applicable)
24. Job Safety Analysis (Task Analysis) Planned Job Observations, Hazardous Task Assessment
– Written Safe Work Procedures (W.S.W.P.)
25. Emergency Preparedness and Response
26. First Aid (Level 1, 2 & 3) (where applicable)

CONTROLLED DISCLOSURE

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

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

27. Fire Warden Training (where applicable)
28. Evacuation Warden Training (where applicable)
29. Oil Management and polychlorinated Biphenyl (where applicable)
30. Cleaner Production (where applicable)
31. Asbestos Awareness Training (where applicable)
32. Essential Air Quality Management (where applicable)
33. Inspection Techniques
34. Housekeeping Inspections
35. Permit to work process (where applicable)
36. Root Cause Analysis Technique (RCAT)
37. Lead Auditing (ISO 14001, ISO 9001 and OHSAS 18001) (where applicable)
38. Working at height risks and control measures (where applicable)
39. Working in confined spaces and control measures (where applicable)
40. Train-the-Trainer (where applicable)
41. Supervisor training Course (The role of a supervisor)
42. Water Resource Management (where applicable)
43. Groundwater Management (where applicable)
44. National Water Act and Water use Authorisations (where applicable)
45. Blue and Green Drop Recognition Programme (where applicable)
46. Energy Conservation (where applicable)
47. Handling, Storage and Dangerous Goods and Hazardous Substances (where applicable)
48. Hazardous Material Spill Kit (where applicable)
49. An introduction to the Legal Framework for contaminated Land: Chapter 8 of the NEMWA (where applicable)
50. Integrated Land Management towards sustainable Land use (where applicable)
51. Integrated Waste Management in South Africa (where applicable)
52. Essential Air Quality Management (where applicable)
53. Transition from ISO 14001:2004 to ISO 14001:2015 Awareness
54. Biodiversity (where applicable)
55. Environmental Impact Assessment (where applicable)
56. Social Impact and Heritage Assessment (where applicable)
57. Mobile and Material Handling Equipment (where applicable)
58. Pre-use Inspection (where applicable)
59. Prevention Maintenance (where applicable)

CONTROLLED DISCLOSURE

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

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

- 60. Operating Regulations for High Voltage Systems (ORHVS) (where applicable)
- 61. SHE incident/ non-conformity investigation techniques
- 62. Environmental, Occupational, Health and Safety Incident Management (Based on 32-95)
- 63. Specialised Equipment (where applicable)
- 64. Personal Protective Equipment
- 65. National Railway Safety Regulator Act 16 of 2002 (where applicable)
- 66. ISO 9001 Transition 2008 to 2015 (where applicable)
- 67. Internal Quality Management Auditor Course (where applicable)
- 68. Quality Management Awareness (where applicable)
- 69. Quality Tools and Techniques (where applicable)
- 70. Requirements for Quality Assurance Programmes for Nuclear Facilities (Awareness and Lead Auditors) (where applicable)
- 71. Nuclear Safety and Quality Management System Requirements – Awareness (where applicable)
- 72. Nuclear Safety and Quality Management System Requirements Awareness (where applicable)
- 73. Requirements for the Management System for Facilities and Activities Awareness (where applicable)
- 74. Requirements for Quality and Safety Management Requirements for Nuclear Installations (where applicable)

CONTROLLED DISCLOSURE

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

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

(Continue)**PART E****SHEQ Management Competency Development Requirements For
SHE Representatives including the Full-Time Eskom SHE Representation**

The SHEQ management competency development requirements for SHE Representatives shall include at least the following:

1. Group Capital SHEQ Induction Training for Employees and Students
2. Behavioural Safety Observation Training
3. Modern SHE/ Risk Management
4. Eskom Life Saving Rules training
5. Occupational Health and Safety OHSAS 18001 (Awareness and Implementation) (where applicable)
6. ISO 14001 Environmental Management (Awareness and Implementation)
7. Health and Safety Representative Course
8. OHS Act and the Regulations
9. Mine Health and Safety Training (where applicable)
10. Construction Regulations (where applicable)
11. Compensation for Occupational Injuries and Diseases Act 130 of 1993 (COID)
12. Occupational Health and Hygiene Management Awareness Training
13. Ergonomics (where applicable)
14. Fundamentals of Risk Assessment
15. Hazard Identification Risk Assessment (HIRA)
16. Baseline Risk Assessment (where applicable)
17. Advanced Risk Assessment (where applicable)
18. Job Safety Analysis (Task Analysis) Planned Job Observations, Hazardous Task Assessment – Written Safe Work Procedures (W.S.W.P.)
19. Emergency Preparedness and Response
20. Inspection Techniques
21. Housekeeping Inspections
22. Permit to work process (where applicable)
23. Root Cause Analysis Technique (RCAT)
24. Working at height risks and control measures (where applicable)
25. Working in confined spaces and control measures (where applicable)

CONTROLLED DISCLOSURE

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

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

- 26. Supervisor training Course (The role of a supervisor)
- 27. Transition from ISO 14001:2004 to ISO 14001:2015 Awareness
- 28. Pre-use Inspection (where applicable)
- 29. Prevention Maintenance (where applicable)
- 30. Environmental, Occupational, Health and Safety Incident Management (Based on 32-95)

CONTROLLED DISCLOSURE

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

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

(Continue)**PART F****SHEQ Management Competency Development Requirements For
Contractors and Sub-Contractors**

The SHEQ management competency development requirements for Contractors and Sub-contractors shall include at least the following:

1. Group Capital SHEQ scope of work orientation and induction for Contractors and Sub-contractors.
2. Behavioural Safety Observation Training
3. Eskom Life Saving Rules training
4. Emergency Preparedness and Response
5. Environmental, Occupational, Health and Safety Incident Management (Based on 32-95)
6. Risk Assessments (HIRA and Aspects and Impact Registers)

Note 1:

Where any of the above training is presented in-house Eskom will provide this training (e.g. Eskom Lifesaving Rules, SHEQ Induction, Eskom SHEQ Policy, Emergency preparation and response and Behavioural Safety Observation training).

Note 2:

The above mentioned training could be covered in one induction session and may also be addressed as individual topics for ongoing awareness and communication purposes.

CONTROLLED DISCLOSURE

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

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

(Continue)

PART G

**SHEQ Management Competency Development Requirements For
Visitors, Clients, Suppliers and Consultants**

A SHEQ management development programme for Visitors, Clients, Suppliers and Consultants shall include at least the following:

1. Group Capital SHEQ Induction and Orientation for Visitors, including Clients, Suppliers and Consultants.

Note 1:

Where any of the above training is presented in-house Eskom will provide this training (e.g. Eskom Lifesaving Rules, SHEQ Induction, Emergency preparation and response and Behavioural Based Safety Observation training).

Please Note: Unit Standards are applied throughout this Standard where applicable.

CONTROLLED DISCLOSURE

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

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