



**NORTH WEST OPERATING UNIT  
LAND DEVELOPMENT  
ENVIRONMENTAL MANAGEMENT**

**ENVIRONMENTAL MANAGEMENT  
PROGRAMME (EMPr) FOR ATLAS TOWER 22  
KV POWER LINE**



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<b>Project Name:</b>	Atlas Tower power line
<b>Project Number:</b>	TOS513517831
<b>Project Scope of Work:</b>	<ul style="list-style-type: none"> <li>• Build an overhead 22 kV power line</li> <li>• Terminate with 25KVA transformer to supply the tower</li> </ul>
<b>Date:</b>	04 July 2022
<b>Signature:</b>	

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## ACRONYMS

EMPr	Environmental Management Programme
EO	Environmental Officer
DWS	Department of Water and Sanitation
DEFF	Department of Forestry, Fisheries and Environment
SAHRA	South African Heritage Resource Agency
PPE	Personal Protective Equipment
OHSA	Occupational Health and Safety Act
SAPS	South African Police Services
GA	General Authorisation (for river crossing)

## GLOSSARY

**Environmental Authority:** Statutory body that governs and prescribes the processes that needs to be undertaken for certain construction activities. They are also the decision making authority granting authorisation for specific projects.

**Environmental impact:** Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's activities, products or services.

**Environmental management programme (EMP):** A program that guarantees the desired end state of the environment and describes how activities, that could have a negative impact, will be managed and monitored and impacted areas rehabilitated.

**Eskom Environmental Officer:** An individual appointed by Eskom to implement and monitor compliance to the EMP.

**Contractor:** A person or company appointed by Eskom to carry out stipulated activities.

**Environment:** Surroundings in which an organisation operates, including air, water, land, natural resources, flora, fauna, humans and their interactions.

**Environmental issues (aspect):** Elements of an organization's activities, products or services which can interact with the environment.

**Mitigate:** The implementation of practical measures to reduce adverse impacts or enhance beneficial impacts of an action.

**Monitoring:** An activity which ensures that the requirements of the Environmental Management Program is met.

## 1. INTRODUCTION

As part of Eskom's Integrated Environmental Management System (ISO14001), there is a commitment to the development & implementation of an Environmental Management Programme (EMPr) for all Eskom Projects.

**PLEASE NOTE THAT THIS IS JUST AN EMPr FOR THE POWER LINE ROUTE. THIS EMPr DOES NOT INCLUDE CONDITIONS OF THE GENERAL AUTHORIZATION ISSUED FOR THIS PROJECT. CONTRACTOR MUST ADHERE TO THE GENERAL AUTHORISATION CONDITIONS FOR THIS PROJECT.**

## 2. SCOPE OF EMPr

The scope of this Environmental Management Programme (EMPr) for Atlas tower power line is to give guidelines for environmental best practice, to the Contractor commissioned to construct the proposed distribution line. This document shall be seen as part of the contract. The document describes how activities that could have a negative impact on the environment will be managed and monitored and impacted areas rehabilitated.

**Further, this document will subsequently be used by Eskom staff that will be in charge of maintenance of the overhead line. This Environmental Management Programme will ensure that all lines are inspected and maintained correctly and effectively.**

This Environmental Management Programme ultimately has a long-term objective to ensure that a cradle to grave approach is implemented through ensuring that environmental management considerations are implemented throughout the life-span of the project.

### 2.1. Purpose

This Environmental Maintenance Programme (EMPr) for Atlas Tower power line projects describes how activities that could have a negative impact on the environment will be managed and monitored. This EMPr indicates if areas are impacted, how they should be rehabilitated. This maintenance EMPr will ensure that all power lines are inspected and maintained correctly and effectively.

### 2.2. EMPr Objectives

Its aim is to ensure that the following are in place:

There is a process to identify existing or to predict potential negative environmental impacts; Objectives and targets are set to ensure negative impacts are mitigated and existing impacts rehabilitated;

Resources and responsibilities are allocated to each target;

Actions are implemented to mitigate the identified negative environmental impacts; and Monitoring programmes are developed to track the actions that have been implemented so as to ensure the effectiveness of the action.

### 2.3. EMPr Compliance

The following are required for the compliance with the EMPr:

Environmental Training to be given to all resources working on project to understand what the possible environmental impacts will be. This training to be given by contractor to their people.

An Environmental Register is to be kept on site at all times.

The EMP must be available at all time on the construction site.

### 2.4. Project Responsibilities

PROJECT MANAGER	ESKOM ENVIRONMENTAL OFFICER	CONTRACTOR
<p>The Project Manager is responsible for overall management of project and EMPr implementation. The following tasks will fall within his / her responsibilities:</p> <ul style="list-style-type: none"><li>• Be familiar with the recommendations and mitigation measures of this EMPr, and implement these measures.</li><li>• Monitor site activities on a daily basis for compliance.</li><li>• Conduct internal audits of the construction site against the EMPr.</li><li>• Confine the construction site to the demarcated area.</li><li>• Rectify transgressions through the implementation of corrective action.</li></ul>	<p>The EO is responsible for the implementation of the EMPr during the construction phase as well as liaison and reporting to Eskom, Contractor, and Landowners. The following tasks will fall within his / her responsibilities:</p> <ul style="list-style-type: none"><li>• Be familiar with the recommendations and mitigation measures of this EMPr.</li><li>• Conduct during construction audits and compile reports.</li><li>• Educate about the management measures of the EMPr.</li><li>• Liaise with the construction team and the Project Manager.</li><li>• Recommend corrective action for non-compliance incidents on the construction site.</li></ul>	<p>The Contractor is responsible for the overall execution of the activities in the construction phase including the implementation and compliance <b>at all times</b> with recommendations and conditions of the EMPr as well as implementation of finding during audits by the EO. Maintain an environmental register which keeps a record of all incidents which occur on the site during construction. These incidents include:</p> <ul style="list-style-type: none"><li>• Public involvement / complaints</li><li>• Health and safety incidents</li><li>• Incidents involving Hazardous materials stored on site</li><li>• Non-compliance incidents</li></ul>

### 3. ENVIRONMENTAL LEGISLATION FRAMEWORK

LEGISLATION	SECTION	RELATES TO
The Constitution of South Africa	Chapter 2 Section 24 Section 25	Bill of Rights. Environmental rights. Rights in property.
National Environmental Management Act No. 107 of 1998 (NEMA)	Section 2  Section 24 (a), (d) & (5)  Section 28	Defines the strategic environmental management goals and objectives of the government. Applies throughout the Republic to the actions of all organs of state that may significantly affect the environment.  Listed activities and Regulations  The developer has a general duty to care for the environment and to institute such measures as may be needed to demonstrate such care.
Conservation of Agricultural Resources Act No. 43 of 1983.	Section 6	Implementation of control measures for alien and invasive plant species.
National Heritage Resources Act No. 25 of 1999	The general principles for governing heritage resources in South Africa	Provides general principles for governing heritage resources management throughout South Africa including national and provincial heritage sites, burial grounds and graves; archaeological and paleontological sites, and public monuments and memorials
National Water Act No. 36 of 1998	Section 19 Section 14	Provides for protection of water resources, Pollution prevention and Water uses authorisations
National Environmental Management: Air Quality Act No. 39 of 2004	Sections 26-27 Section 32	Control of fuels. Control of dust.
Occupational Health & Safety Act No. 85 of 1993	Section 8 Section 9	General duties of employers to their employees. General duties of employers and self employed persons to persons other than their employees.
Noise Control Regulations of the Environmental Conservation Act No. 73 of 1989.	Section 25	Control of noise
Fertilisers, Farm Feeds, Agricultural Remedies and Stock Remedies Act No. 36 of 1947	Sections 3-10.	Control of the use of registered pesticides, herbicides (weed killers) and fertilizers. Special precautions must be taken to prevent workers from being exposed to chemical substances in this regard.
Nature Conservation Ordinance (Transvaal) Act No. 12 of 1983	Section 98          Section 11	Identification of any specially protected or rare and endangered species. If these are to be affected by the proposed project, a permit from the Director General, Nature Conservation should be obtained prior to removal. Prohibits the picking of all indigenous plants on public roads and nature reserves without a permit.

National Forest Act No. 84 of 1998	Section 15	Prohibits destruction/removal of protected trees
Hazardous Substances Act No. 15 of 1973	Section 4	To provide for the control of substances which may cause injury or ill-health to or death of human beings by reason of their toxic, corrosive, irritant, strongly sensitizing or flammable nature or the generation of pressure thereby in certain circumstances, and for the control of certain electronic products; To provide for the division of such substances or products into groups in relation to the degree of danger; to provide for the prohibition and control of the importation, manufacture, sale, use, operation, application, modification, disposal or dumping of such substances and products; and to provide for matters connected therewith.
Fencing Act 31 of 1963	Section 17 Section 22	Any person erecting a boundary fence may clean any bush along the line of the fence up to 1,5 metres on each side thereof and remove any tree standing in the immediate line of the fence Any person who opens and leaves a gate open or unfastened or finding a gate open on passing through, neglects to shut and fasten a gate shall be guilty of an offence and liable for conviction.
National Roads Act 54 of 1971	Section 16	Prohibits the dumping of material on or near a national road
National Environmental Management Biodiversity Act 10 of 2004		Provides for the provisions of the protection of South African flora, fauna and microorganisms.

#### 4. ESKOM POLICIES AND PROCEDURES



PROCEDURE	DESCRIPTION
EPC 32-95	<i>Reporting, Recording, Investigating, Costing and Following up of Incidents/Accidents</i>
EPC 32-303	<i>Requirements for the Safe Processing, Storing, Removing and Handling of Asbestos or Asbestos containing material.</i>
DISASAAT8	<i>Provision and Use of Personal Protective Equipment (PPE)</i>
EPC 32-245	<i>Environmental Procedure: Waste Procedure</i>
EPC 32-247	<i>Environmental Procedure: Procedure for vegetation clearance and maintenance within overhead power line servitudes and on Eskom owned land.</i>
DST 34-440	<i>Selection Purchase and Storage of Hazardous Material.</i>

## 5. GENERAL CONDITIONS AND CONTROL MEASURES

Management of construction activities should be controlled by adhering to the Environmental control measures outlined below:

### 5.1 Environmental Control Measures (Pre Construction Phase, Construction Phase and Operational Phase)

PRE-CONSTRUCTION PHASE		
Aspect and Impact	Applicable Legislation	Applicable Eskom Standards
LANDOWNERS	The Constitution (Act No 108 of 1996) – Chapter 2, 24 and 25.	Wayleave Agreements Servitudes
	<ul style="list-style-type: none"><li>The Eskom project manager or co-ordinator shall be responsible for ensuring that the land owners have been informed before any work is carried out on site. Contractors shall find out if the land owners have been informed before moving onto site</li><li>The project manager must coordinate with other parties working on site regarding: site management, timing of works, clearing the site, materials ordering, waste management, access, deliveries and construction areas</li></ul>	
CONSTRUCTION CAMP	National Environmental Management Act (No 107 of 1998)	EPC 32- 94
	<ul style="list-style-type: none"><li>Choice of site for the Contractor's camp requires the EOs permission and must take into account location of local residents and / or ecologically sensitive areas, including flood zones and slip / unstable zones.</li></ul>	

## CONSTRUCTION PHASE

Aspect and Impact	Applicable Legislation	Applicable Eskom Standards
<b>ACCESS</b>		EPC 32- 94
	<ul style="list-style-type: none"> <li>Private and commercial entrances must not be obstructed.</li> <li>No property may be accessed after normal working hours, except with prior permission of the landowner. Privacy must be respected at all times.</li> <li>No wandering on the surrounding property, under any circumstances. Construction activities are to be confined to the servitude/wayleave area or as negotiated with the landowner. Wherever possible access will be along the cleared line from existing road and tracks. No earth moving equipment may be used to make access roads, except in rough terrain and then such use must be approved by the project manager or his delegate.</li> </ul>	
<b>GATES</b>		EPC 32- 95
	<ul style="list-style-type: none"> <li>All servitude gates shall be kept locked otherwise agreed with the owner.</li> <li>All gates shall be fitted with locks and be kept locked at all times during the construction phase.</li> <li>Gates shall only be left open on request of the Landowner if he accepts partial responsibility for such gates in writing, once the Contractor have left site the gates shall be fitted with Eskom locks.</li> </ul>	
<b>ROAD CROSSINGS</b>		EPC 32- 94
	<ul style="list-style-type: none"> <li>Eskom should direct a written application (as soon as possible or before work commences) to the Relevant Authority to ascertain if any of their infrastructure might be impacted upon and to acquire permission with regards to crossings.</li> <li>All crossings, i.e. where the cable crosses a road, telephone line or municipal services, needs to be considered as arrangements need to be made with the Relevant Authority. This letter must indicate the roads, or telephone line that will be crossed by the proposed construction (also specific location of crossing), date of crossing, and the duration of work during crossing.</li> </ul>	
<b>ENVIRONMENTAL TRAINING</b>		DISPVWAB1
	<ul style="list-style-type: none"> <li>Ensure that all site personnel have a basic level of environmental awareness training and GA induction</li> <li>The Contractor must monitor the performance of construction workers to ensure that the points relayed during their introduction have been properly understood and are being followed.</li> </ul>	

## CONSTRUCTION PHASE

Aspect and Impact	Applicable Legislation	Applicable Eskom Standards
<b>SITE CLEARING</b>		EPC 32- 247
	<ul style="list-style-type: none"> <li>Site clearing must take place in phased matter, as and when required.. The area to be cleared must be clearly demarcated and this footprint strictly maintained. Spoil that is removed from the site must be removed to an approved spoil site or licensed landfill site. The necessary silt fences and erosion control measures must be implemented in areas where these risks are more prevalent. These include wetland and steep areas. Topsoil from the Right of Way must be neatly stockpiled adjacent to the trench ready for backfill when required.</li> <li>Topsoil is to be stockpiled separately from the sub soils.</li> </ul>	
<b>SANITATION AND ABLUTION FACILITIES</b>		<b>EPC 32-245.</b>
	<ul style="list-style-type: none"> <li>Washing and toilet facilities shall be provided on site and in the construction camp.</li> <li>The facilities shall comply with Eskom standards and shall have the approval of the land owner. Portable toilets must be available to staff. Staff shall be sensitised to the fact that they should use these facilities at all times.</li> <li>These facilities shall be within 100m from workplaces but not closer than 50m from any natural water bodies.</li> </ul>	
<b>STORAGE OF MATERIALS (HAZARDOUS AND NON-HAZARDOUS)</b>	<b>Occupational Health and Safety Act 85 of 1993, Hazardous Substances Act</b>	<b>DST 34-440</b>
	<ul style="list-style-type: none"> <li>Storage of equipment and facilities should be designed to ensure safety of goods.</li> <li>Storage of hazardous materials shall be clearly marked and demarcated.</li> </ul>	
<b>HEALTH AND SAFETY</b>	<b>Occupational Health and Safety Act 85 of 1993</b>	<b>EPC 32-95</b>
	<ul style="list-style-type: none"> <li>It is the responsibility of Eskom to ensure that all construction and operational processes and procedures are compliant with the relevant health and safety regulations.</li> <li>A health and safety officer must be appointed.</li> </ul>	
<b>BARRICADING AND LIGHTING</b>	<b>Occupational Health and Safety Act 85 of 1993</b>	
	<ul style="list-style-type: none"> <li>Every excavation which is accessible to the public or which is adjacent to public roads or thoroughfares, or whereby the safety of persons may be endangered, shall be adequately protected by a barrier or fence of at least one metre in height and as close to the excavation and provided with warning illuminates or any other clearly visible boundary indicators at night or when visibility is poor as is practicable</li> </ul>	

## CONSTRUCTION PHASE

Aspect and Impact	Applicable Legislation	Applicable Eskom Standards
FIRES	Occupational Health and Safety Act 85 of 1993, National Veld and Forest Act Act No. 101 of 1998	EPC 32-245.
	<ul style="list-style-type: none"> <li>No open fires are permitted on private property, on site or in the veld, except under strictly controlled conditions.</li> <li>In the event that equipment that might pose a fire hazard is used in the construction process, suitable fire fighting equipment is to be made available at the construction site and in the construction camp. Emergency preparedness for different incidents e.g. fire, oil spill incidents should be in place and be implemented if and when the need arises (<b>see Annexure B</b>).</li> </ul>	
CEMENT MIXING	Occupational Health and Safety Act 85 of 1993, Hazardous Substances Act	EPC 32-245
	<ul style="list-style-type: none"> <li>Concrete mixing must be contained within a bunded area.</li> <li>Concrete mixing must only take place within designated areas.</li> <li>Ready mixed concrete must be utilised where possible.</li> <li>No vehicles transporting concrete to the site may be washed on site.</li> <li>Cement contaminated water must not enter the water system as this disturbs the natural acidity of the soil and affects plant growth.</li> <li>Cement mixing on site must take place on a non-permeable surface. The contractor is responsible to ensure that the cement bags are disposed of at a registered landfill site for hazardous substances</li> </ul>	
WASTE MANAGEMENT	NEMA: Waste Act	EPC 32-245
	<ul style="list-style-type: none"> <li>A Waste Management Plan must be developed and adhered to.</li> <li>The Contractor is responsible for developing the Waste Management Plan.</li> <li>Waste disposal methods will depend upon the location of the construction camps. This entails that sufficient waste bins are available on site and in the construction camp.</li> <li>The waste must be disposed of at an appropriate licensed waste disposal site.</li> <li>No containers, scrap metal, conductor etc. may be left on site. Such scrap must be removed and taken to an appropriate disposal site.</li> <li>Temporary waste storage sites must prior consent from the landowner and are to be barricaded at all times.</li> </ul>	

## CONSTRUCTION PHASE

Aspect and Impact	Applicable Legislation	Applicable Eskom Standards
<b>HAZARDOUS SUBSTANCES</b>	<b>Hazardous Substances Act</b>	<b>EPC 32-245, EPC 32-95</b>
	<ul style="list-style-type: none"> <li>No oil, diesel or other chemicals may be spilled or discarded anywhere.</li> <li>If an accidental spill occurs, it must be reported immediately (<b>Annexure A</b>) and cleaned to the satisfaction of ESKOM and the landowner.</li> <li>All hazardous waste must be suitably enclosed, labelled, stored and removed as per legal guidelines.</li> <li>The storage area must be properly demarcated and cordoned.</li> <li>Drip trays must be used for stationary trunks.</li> <li>These hazardous materials may not be disposed of with regular domestic waste. All excess material must be removed upon completion of any work performed and disposed of in a suitable manner by the respective Contractor.</li> </ul>	
<b>GROUND AND SURFACE WATER MANAGEMENT</b>	<b>NWA</b>	
	<ul style="list-style-type: none"> <li>Surface and groundwater shall not be polluted (oil, petrol, herbicides, ash, dust, etc) under any circumstances</li> <li>Wetlands must not be disturbed In Permanently wet areas such (vlei), no vehicular traffic shall be allowed. Only existing roads through such areas may be used with the approval of Utility and the landowner.</li> <li>No equipment that can cause irreparable damage to wet areas shall be used.</li> <li>No access roads through river and stream banks</li> <li>Any lines crossing over watercourses must be spanned for 32m per side from a watercourse.</li> <li>Minimise erosion of embankments and subsequent siltation of rivers and streams.</li> </ul>	
<b>PERSONAL PROTECTIVE EQUIPMENT</b>	<b>Occupational Health and Safety Act 85 of 1993</b>	<b>DISASAAT8</b>
	<ul style="list-style-type: none"> <li>Employees shall take reasonable care of their own health and safety.</li> <li>Employees shall cooperate with the employer to ensure that the requirements as set out in the <b>Occupational Health and Safety Act and the Regulation</b> fulfilled.</li> <li>Employees shall maintain each item of personal protective equipment provided to them and keep it clean and hygienic and in good state of pair.</li> <li>All the PPE purchased shall be in accordance with the Distribution Specification on PPE.</li> </ul>	

## CONSTRUCTION PHASE

Aspect and Impact	Applicable Legislation	Applicable Eskom Standards
<b>DUST CONTROL</b>	<b>Occupational Health and Safety Act 85 of 1993</b>	EPC 32- 95 EPC 32- 245
	<ul style="list-style-type: none"> <li>Drive at moderate speed on site access roads to minimise or avoid dust pollution. In urban areas, access roads should be treated to reduce dust pollution (tar, concrete, chip stone, spraying with water etc.).</li> </ul>	
<b>NOISE CONTROL</b>	<b>Occupational Health and Safety Act 85 of 1993</b>	EPC 32- 95
	<ul style="list-style-type: none"> <li>Eskom should direct a written application (as soon as possible or before work commences) to the Relevant Authority to ascertain if any of their infrastructure might be impacted upon and to acquire permission with regards to crossings.</li> <li>All crossings, i.e. where the cable crosses a road, telephone line or municipal services, needs to be considered as arrangements need to be made with the Relevant Authority. This letter must indicate the roads, or telephone line that will be crossed by the proposed construction (also specific location of crossing), date of crossing, and the duration of work during crossing.</li> </ul>	
<b>COMMUNITY ISSUES</b>	<b>Occupational Health and Safety Act 85 of 1993</b>	EPC 32-95
	<ul style="list-style-type: none"> <li>Property owners and local residents shall be treated with respect at all times. -Environmental clauses shall be included in contract documents for all contractors.</li> <li>All complaints shall be reported, recorded (Public complaints register) and investigated in compliance with the relevant BU procedure (EPC 32-95).</li> </ul>	
<b>BIRD INTERACTIONS</b>		EPC 32- 95
	<ul style="list-style-type: none"> <li>In the event of bird incidents, the ESKOM EO must be contacted.</li> <li>The EO will, liaise with appropriate experts (EWT) on bird behaviour to identify and mitigate problem areas by recommending appropriate action.</li> </ul>	

## CONSTRUCTION PHASE

Aspect and Impact	Applicable Legislation	Applicable Eskom Standards
BUSH CLEARANCE	<b>National Forestry Act No. 84 of 1998</b>	<b>EPC 32-247</b>
	<ul style="list-style-type: none"> <li>• Tree and bush clearance will be strictly limited to the minimum specified in Eskom construction specifications</li> <li>• No vegetation will be left lying around on site.</li> <li>• No vegetation clearing in the form of de-stumping, scalping or uprooting shall be allowed on river and stream banks.</li> <li>• Tree cutting permit to be obtained prior to cutting of protected trees on site.</li> </ul> <p><b>Management objective</b></p> <ul style="list-style-type: none"> <li>• Minimise interference by vegetation to flow of electricity</li> <li>• Minimise possibility of erosion due to removal of vegetation</li> </ul> <p><b>Measurable target</b></p> <ul style="list-style-type: none"> <li>• No vegetation interference with structures and statutory distances upon completion of the contract</li> <li>• Protected Trees in accordance to the <b>National Forestry Act No. 84 of 1998</b> may not be pruned or cut without the issuing of a valid Tree Permit from the Department of Agriculture, Forestry and Fisheries. EO must be contacted if the Contractor is unsure of the tree species.</li> <li>• Areas which are not to be constructed on within two months of time must not be cleared to reduce erosion risks.</li> </ul>	
FLORA (COMMON, RARE AND ENDANGERED PLANTS)	<b>National Biodiversity Act, Nature Conservation Ordinance (Transvaal) Act No. 12 of 1983</b>	<b>EPC 32-247</b>
	<ul style="list-style-type: none"> <li>• No endangered species flora must be removed or damaged. Where there is doubt, expert advice must be obtained.</li> <li>• When a rare or endangered plant is to be removed, the <b>Department of Agriculture, Forestry and Fisheries</b> must be contacted.</li> <li>• No person is allowed to sell, offer, keep or convey any weed in the country.</li> </ul>	



## CONSTRUCTION PHASE

Aspect and Impact	Applicable Legislation	Applicable Eskom Standards
<b>OIL MANAGEMENT</b>	<b>Occupational Health and Safety Act 85 of 1993</b>	<b>EPC 32-245</b>
	<ul style="list-style-type: none"> <li>Oil spill mop up kits must be kept on site and used in the case of an oil spill.</li> <li>In incidences where the spill is too large to treat with the Oil spill mop kits, an oil spill contractor must be contacted (Annexure B) and the incident must be reported to the EO within 24 hours.</li> <li>All spills to be recorded on the Environmental Incidences register.</li> </ul>	
<b>MATERIALS STORAGE</b>		
	<ul style="list-style-type: none"> <li>Storage of equipment and facilities should be selected and designed to ensure Safety of goods. Equipment shall be tested according to the Occupational Health and Safety Act 85 of 1993 and Hazardous Substances Act 15 of 1973 and shall be maintained so as to avoid Safety Risks.</li> <li>Specific Storage areas shall be clearly marked and demarcated.</li> </ul>	
<b>EROSION</b>		
	<ul style="list-style-type: none"> <li>Reasonable measures to prevent soil erosion shall be implemented at all times especially adjacent or in close proximity to the rivers and marshy areas, which are prone to erosion.</li> <li>Storm water run-off must be efficiently managed and must not cause erosion or damage to surrounding property.</li> </ul>	
<b>EXCAVATIONS</b>	<b>Occupational Health and Safety Act 85 of 1993</b>	<b>EPC 32-95</b>
	<ul style="list-style-type: none"> <li>All excavations shall be enclosed to prevent animals or people from accidentally falling into excavations.</li> </ul>	

## CONSTRUCTION PHASE

Aspect and Impact	Applicable Legislation	Applicable Eskom Standards
<b>CULTURAL AND HERITAGE ARTEFACTS</b>	<b>National Heritage Resources Act No. 25 of 1999</b>	<b>EPC 32-95</b>
	<ul style="list-style-type: none"> <li>Should any human remains or artefacts be discovered during construction, construction has to stop immediately and the ECO is to be notified</li> <li>The contractor must ensure that his workforce is aware of the necessity of reporting any possible historical or archaeological finds to the ECO so that appropriate action can be taken.</li> </ul>	
<b>HERBICIDE USAGE</b>	<b>Hazardous Substances Act</b>	<b>ESKPBAAD4, ESKASAAL0</b>
	<ul style="list-style-type: none"> <li>The Eskom Corporate Policy (ESKPBAAD4) and standard (ESKASAAL0) on herbicide use shall be adhered to.</li> </ul>	
<b>MONITORING</b>		<b>EPC 32- 95</b>
	<ul style="list-style-type: none"> <li>A monitoring program shall be instituted.</li> <li>ESKOM (Project Manager) and the contractor must establish the period and frequency.</li> </ul> <p><b>It is recommended that:</b></p> <ul style="list-style-type: none"> <li>This EMPr is viewed as a living document that should change to suit the needs of the project. This document is to be passed on the CNC for management of the assets.</li> <li>The EMPr must be presented and explained to the Construction team and/or contractors to sensitise them to pertinent environmental agreements and conditions.</li> <li>That site visits be conducted at intervals for the duration of the project by the relevant EO, contractor representatives and PM.</li> <li>A post-construction audit is conducted to identify non-conformance for which corrective action must be taken. Corrective action must take place before the contract is completed or signed off.</li> <li>The site must be reinstated and rehabilitated to its original condition.</li> </ul>	
<b>FINAL SITE INSPECTION</b>		
	<p>Final site inspection must be conducted to insure that site has been re-instated. Considering the condition of the land in the study area, upon which the development is to take place, the impact of this development seems to outweigh any negative impacts that might occur if mitigation measures are implemented effectively.</p>	

## Annexure A: Emergency Preparedness Plan



### EMERGENCY PREPAREDNESS PLAN 2022 - 2023 NORTH WEST OPERATING UNIT

In terms of EPC 32-95, it is the responsibility of the Senior Supervisor or next in charge to report an environmental incident to the Environmental Manager (EM) of the Operating Unit. This must be done by sending an SMS to the EM on 083 9666 104 within 24 hours of the incident and then after submit a flash report detailing the nature of the incident.

#### Environmental Resources to be contacted:

Name	Work area	Contact Details
1. Lusanda Ngesi <b>Environmental Manager</b>	North West Operating Unit	<b>083 966 6104</b> <a href="mailto:Maqaql@eskom.co.za">Maqaql@eskom.co.za</a>
2. Mpho Sebole <b>Senior Environmental Advisor</b>	North West Operating Unit	<b>082 560 5447/014 565 1133</b> <a href="mailto:SeboleMD@eskom.co.za">SeboleMD@eskom.co.za</a>
3. Mulalo Muelelwa <b>Environmental Officer</b>	North West Operating Unit	<b>018 464 6936 /071 8705 511</b> <a href="mailto:MuelelMM@eskom.co.za">MuelelMM@eskom.co.za</a>

**Oil spills** - the following oil spill clean-up companies can be contacted for a quotation. This quotation must be approved by the Senior Supervisor before approval can be given to the contractor. Major oil spills under emergency conditions may be authorised directly by the relevant Sector Manager.

COMPANY	CONTACT PERSON	TELEPHONE NUMBER	FAX NUMBER	24 HOUR SPILL RESPONSE
RAPID SPILL RESPONSE	CHRIS BADENHORST	086 111 3467	086 111 3509	0800 172 743
ENZA	JACO VAN DEVENTER	(011) 477 3892	086 642 8349	083 498 8798
DRIZIT ENVIRONMENTAL	MARTINUS STANDER	(011) 312 0218	0862180015	080 020 2202

**Bee Removals** – In the event that Bees are posing a safety issue on site, these bees must be removed by contacting Grant Arrand (Southern's Beekeepers Association) 083 652 0760

## Annexure B

### FLASH REPORT ESKOM EMPLOYEE INCIDENT NOTIFICATION FORM

(Incidents to be reported before the end of shift or day)

OP. UNIT:

DEPARTMENT

UNIT/SECTION

CC

EXACT LOCATION OF INCIDENT:

MANAGER/SUPERVISOR

TELEPHONE NUMBER:

CODE

NUMBER

FAX NUMBER:

CODE

NUMBER

DATE OF INCIDENT:

TIME OF INCIDENT:

INJURY TYPE:

FATAL

☐

DISABLING  
INJURY

☐

MEDICAL  
CASE

☐

FIRST  
AID

☐

OCCUPATIONAL  
DISEASE

☐

INCIDENT TYPE:

ELECTRICAL  
CONTACT

☐

VEHICLE  
INCIDENT

☐

ENVIRONMENTAL  
INCIDENT

☐

FIRE/EXPLOSION  
INCIDENT

☐

DAYS BOOKED OFF

BRIEF DESCRIPTION OF INCIDENT

FULL NAMES OF INJURED/DECEASED PERSONS

1. UN  
2. UN  
3. UN

4. UN  
5. UN  
6. UN

FULL NAME(S) OF THE DRIVER(S):  
(Eskom)

(Third Party)

MOTOR VEHICLE(S) REGISTRATION NUMBER(S):  
(Eskom)

(Third Party)

WITNESSES:

1. 3.  
2. 4.

SUBSTANCE ABUSE TEST RESULTS

Positive

Negative

Reported by

Tel no

Date