

GEMMA CLUSTER: NORTH WEST OPERATING UNIT LAND DEVELOPMENT ENVIRONMENTAL MANAGEMENT

ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPr) FOR MEETMEKAR EXTENSION ELECTRIFICATION PROJECT



Environmental Officer:	Name: Oarabile Mabula Office number: 014 565 1169 Cell: 076 867 7065 e-mail address: MabulaON@eskom.co.za
Project Name:	Meetmekaar Extension
Project Number:	NW-EBC-1306-773696-0001
Project Scope of Work:	The aim of this project is the electrification of 34 stands at Meetmekaar Extension. Electrical reticulation, i.e. conductor network, will be provided which can deliver 0.85kVA per stand. The supply to the development shall be from the existing Bodibe-Matile Duikerbos 22kV feeder supplied from Springbokpan/Bodibe substation, by means of a t-off between pole BMD47-48-5 and BMD47-48-6 with 3ph Fox conductor.
Completed	13 January 2023

1. INTRODUCTION	5
2. SCOPE OF EMPr	5
2.1. Purpose	5
2.2. EMPr Objetives	
2.3. EMPr Compliance	
2.4. Project Responsibilities	
3. ENVIRONMENTAL LEGISLATION FRAMEWORK	
4. ESKOM POLICIES AND PROCEDURES	9
5. GENERAL CONDITIONS AND CONTROL MEASURES	. 10

ACRONYMS

EMPr Environmental Management Programme

EO Environmental Officer

DWS Department of Water and Sanitation

DFFE 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

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 (EMPr): A programme 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 EMPr.

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 Programme are met.

1. INTRODUCTION

Eskom has been requested by Mahikeng Local Municipality to electrify Meetmekaar Extension. The development falls under Lichtenburg CNC and in the Mahikeng Local Municipality area. It is part of the 2022/23 Electrification Plan. The development consists of 34 stands. The houses are of brick and tin types. No other services have been installed and with electricity to be supplied by Eskom.

2. SCOPE OF EMPr

The Environmental Management Programme (EMPr) scope for Meetmekaar Extension Distribution Electrification project provides 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, monitored and impacted areas rehabilitated.

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 Management Programme (EMPr) describes how activities that could have a negative impact on the environment will be managed and monitored. This EMPr will ensure that all electrification projects are constructed in an environmentally friendly manner.

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 is to be given by the responsible EO for the project.
- An Environmental incident register is to be kept on site at all times.
- The EMPr must be available at all time on the construction site.

2.4. Project Responsibilities

PROJECT MANAGER/ CO-**ESKOM ENVIRONMENTAL** CONTRACTOR **ORDINATOR OFFICER** The Project Manager/ Coordinator The EO is responsible for the The Contractor is responsible for the overall execution of the activities in responsible for overall implementation of the EMPr during management of project and EMPr the construction phase as well as the construction phase including the implementation. The following liaison and reporting to Eskom & implementation and compliance at tasks will fall within his / her Contractor. The following tasks will all times with recommendations and responsibilities: fall within her responsibilities: conditions of the EMPr as well as implementation of findings during Be familiar with the Conduct audits during audits by the EO. Maintain an recommendations and construction and compile environmental register which keeps a record of all incidents which occur mitigation measures of this reports EMPr, and implement Liaise with the on the site during construction. These incidents include: these measures. construction team and the Ensure that site activities **Project Manager** on a daily basis comply Recommend corrective Public involvement / with the EMPr. action for non-compliance complaints Confine the construction incidents on Health and safety incidents site to the demarcated construction site Incidents involving Hazardous materials stored area. Ensure that the corrective Rectify transgressions measures on site through the implemented. implementation of corrective action.

3. ENVIRONMENTAL LEGISLATION FRAMEWORK

LEGISLATION	SECTION	RELATES TO
	Chapter 2	Bill of Rights.
The Constitution of South Africa	Section 24	Environmental rights.
	Section 25	Rights in property.
National Environmental Management Act No. 107 of 1998 (NEMA)	Section 2	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.
	Section 24 (a), (d) & (5)	Listed activities and Regulations
	Section 28	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	Pollution prevention and Water use.
National Environmental Management: Air Quality Act No. 39 of 2004	Sections 26-27 Section 32	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	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

	Section 11	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 12- 16	Prohibits the destruction/removal of protected trees without a permit.
Hazardous Substances Act	Section 3	Control of hazardous substances.
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	Reporting, Recording, Investigating, Costing and Following up of Incidents/Accidents
EPC 32-303	Requirements for the Safe Processing, Storing, Removing and Handling of Asbestos or Asbestos containing material.
DISASAAT8	Provision and Use of Personal Protective Equipment (PPE)
EPC 32-245	Environmental Procedure: Waste Procedure
EPC 32-247	Environmental Procedure: Procedure for vegetation clearance and maintenance within overhead power line servitudes and on Eskom owned land.
DST 34-440	Selection Purchase and Storage of Hazardous Material.

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-CO	USTRUC	TION P	HASE
I ILL-COI	4011100		IIAOL

Aspect and Impact	Applicable Legislation	Applicable Eskom Standards
	The Constitution (Act No 108 of 1996) – Chapter 2, 24 and 25.	Wayleave Agreements Servitudes
LANDOWNERS	The Eskom project manager or co-ordinator shall be responsible for ensuring that the land owners have been informed before an work is carried out on site.	
	National Environmental Management Act (No 107 of 1998)	EPC 32- 94
CONSTRUCTION CAMP	 The camp site needs to be adequately fenced off and construction signage visibly displayed on site Camp site needs to be equipped with an emergency assembly point Emergency assembly point signage should be visibly displayed on site 	

Aspect and Impact	Applicable Legislation	Applicable Eskom Standards
		EPC 32- 94
ACCESS	 No property may be accessed after normal working hours, work to be kept within normal working hours. 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. Access to the camp site will be managed by the appointed security on guard 	
		EPC 32- 95
GATES	Site camp gates shall be kept closed and locked at all times.	
		DISPVWAB1
 Environmental awareness training to be conducted prior to construction commencing on site Contractor personnel will have to implement the condition of the EMPr as per the training. 		u

Aspect and Impact	Applicable Legislation	Applicable Eskom Standards
		EPC 32- 247
SITE CLEARING	 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. Under no circumstance shall open or dug holes be left on site 	
		EPC 32-245
SANITATION AND ABLUTION FACILITIES	 Adequate ablution facilities to be readily available on site A registered service provider to be utilised Chemical toilets to be cleaned weekly Proof of waste manifest and disposal certificate to be obtained 	ed from service provider
STORAGE OF MATERIALS	Occupational Health and Safety Act 85 of 1993, Hazardous Substances Act	DST 34-440
(HAZARDOUS AND NON-HAZARDOUS	Material to be storage within a demarcated area with like material placed within the same area.	
	Occupational Health and Safety Act 85 of 1993	EPC 32-95
 HEALTH AND SAFETY It is the responsibility of Eskom to ensure that all construction and operational procedure relevant health and safety regulations. Contractors safety file needs to be approved prior to commencing on site 		
	Occupational Health and Safety Act 85 of 1993	
BARRICADING AND LIGHTING	 Every excavation which is accessible to the public or which is persons may be endangered, shall be backfilled prior at the The practise on site is to dig and plant on the same day 	s adjacent to public roads or thoroughfares, or whereby the safety of end of each working day.

COL	ICTDI	ICTION	IDHACE
CUI	ソフェスし		PHASE

Aspect and Impact	Applicable Legislation	Applicable Eskom Standards
	Occupational Health and Safety Act 85 of 1993, National Veld and Forest Act No. 101 of 1998	EPC 32-245.
FIRES	 No open fires are permitted on site or in the veld Site camp to be equipped with sufficient fire extinguishers In the event that equipment that might pose a fire hazard are used in the construction process, suitable firefighting equipment are 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 (see Annexure B). 	
	NEMA: Waste Act EPC 32-245	
WASTE MANAGEMENT	 A Waste Management Plan must be developed and adhered to by the contractor. Sufficient waste bins are to be made available on site and in the construction camp which make provision for the different waste streams generated on site These need to be adequately labelled Waste generated must be disposed at an appropriate licensed waste disposal site. No containers, scrap metal, conductor etc. may be left on site. Such scrap must be removed and taken to an appropriate disposal site. 	

Aspect and Impact	Applicable Legislation	Applicable Eskom Standards	
	Hazardous Substances Act	EPC 32-245, EPC 32-95	
HAZARDOUS SUBSTANCES	 No oil, diesel or other chemicals may be spilled or discarded anywhere. The site camp should be equipped with an oil spill mop up kit and personnel trained on its use. If an accidental spill occurs, it must be reported immediately to the site supervisor, clerk of work and the responsible Eskom environmental personnel by means of a flash report (Annexure A) and cleaned to the satisfaction of ESKOM and the landowner. All hazardous waste must be suitably enclosed, labelled, stored and removed as per legal guidelines. The storage area must be properly demarcated and cordoned. Drip trays must be used for stationary construction vehicles and for oil containing equipment e.g. transformers 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. 		
	Occupational Health and Safety Act 85 of 1993	DISASAAT8	
PERSONAL PROTECTIVE EQUIPTMENT	Act and the Regulation fulfilled.	the requirements as set out in the Occupational Health and Safety quipment provided to them and keep it clean and hygienic and in good	
	National Water Act No. 36 of 1998		
WATER MANAGEMENT	 There are no water resources within close proximity of the c Waste generated shall not be disposed of in any water reso No extraction of water from any water resource is permitted 	urces	

Aspect and Impact	Applicable Legislation	Applicable Eskom Standards		
DUST CONTROL	Occupational Health and Safety Act 85 of 1993	EPC 32- 95 EPC 32- 245		
DOOT CONTROL	The contractor to drive at moderate speed to minimise or avoid dust pollution.			
	Occupational Health and Safety Act 85 of 1993	EPC 32- 95		
NOISE CONTROL	 Noise levels will be more prominent during construction however it will be kept localised to the construction site and kept to stipulated site hours. 			
	Occupational Health and Safety Act 85 of 1993	EPC 32-95		
COMMUNITY ISSUES	 Property owners and local residents shall be treated with respect at all times. All complaints shall be reported, recorded (Public complaints register) and investigated in compliance with the NWOU procedure (EPC 32-95). 			
 Only bird friendly structures shall be utilised for the project In the event of bird incidents, the ESKOM EO must be contacted and an investigation conducted The EO will liaise with appropriate experts (EWT) on bird behaviour to identify and mitigate problem areas by appropriate action. 		EPC 32- 95		

Aspect and Impact	Applicable Legislation	Applicable Eskom Standards
	National Forestry Act No. 84 of 1998	EPC 32-247
BUSH CLEARANCE	Tree and bush clearance will be strictly limited to the minimum specified in Eskom construction specifications. Bush clearing will be kept within the projects foot print and unnecessary clearing will be prohibited. No vegetation will be left lying around on site. No vegetation clearing in the form of de-stumping, scalping or uprooting shall be allowed.	
	Occupational Health and Safety Act 85 of 1993	EPC 32-245
OIL MANAGEMENT	 Oil spill mop up kits must be kept on site and used in the case of an oil spill. In the event where the spill is too large to treat with the oil spill mop kits, a registered oil spill contractor must be contacted (Annexure B) and the incident must be reported to the EO. All spills to be recorded on the Environmental Incidences register. 	

Aspect and Impact	Applicable Legislation	Applicable Eskom Standards	
	National Heritage Resources Act No. 25 of 1999	EPC 32-95	
CULTURAL AND HERITAGE ARTEFACTS	 Should any human remains or artefacts be discovered during construction, construction to cease immediately and the ECO is to be notified 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. 		
		EPC 32- 95	
MONITORING	 explained to the Construction team and/or contractors to ser That site visits be conducted at intervals for the duration of the conducted at intervals. 	ge to suit the needs of the project. The EMPr must be presented and insitise them to pertinent environmental agreements and conditions. The project by the relevant EO, contractor representatives and PM. Conformance for which corrective action must be taken. Corrective igned off.	
FINAL SITE			
INSPECTION		oeen re-instated. Considering the condition of the land in the study of this development seems to outweigh any negative impacts that	



EMERGENCY PREPAREDNESS PLAN 2022-2023 GEMMA CLUSTER: NORTH WEST OPERATING UNIT

In terms of EPC 32-95, it is the responsibility of the Contractor or next in charge to report an environmental incident to the Environmental Officer (EO) for the project. This must be done by sending a flash report detailing the nature of the incident and an SMS to the EO on 076 867 7065 to assist rapidly.

ANNEXURE A: ENVIRONMNTAL RESOURCES

Name	Work area	Contact Details
Mpho Sebole Senior Environmental Advisor	Rustenburg	084 504 1730/ 014 592 7079 SeboleMD@eskom.co.za
Oarabile Mabula Environmental Quality and Management Officer	Rustenburg	076 867 7065/ 014 565 1169 <u>MabulaON@eskom.co.za</u>

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.

ANNEXURE B: OIL SPILLS

EMERGENCY NUMBERS IN CASE OF OIL/HAZARDOUS SUBSTANCE SPILLS (Including asbestos related incidents)

COMPANY	CONTACT PERSON	TELEPHONE NUMBER	FAX NUMBER	24 HOUR SPILL RESPONSE
ENSA	William Mafatshe	072 243 0967	086 642 8349	083 498 8798
RAPID ONAMANDLA	Johnny Makhonjwa	082 859 8174/ 086 111 3467	0861 766 7444	0800172743

ANNEXURE C: SNAKES REMOVAL

RUSTENBURG AREA (BOJANALA DISTRICT)				
NAME		CONTACT DETAILS		
Vasti Botha	North West Provincial Department of Conservation	083 761 7497 or 014 597 3598		
Gert Plom		082 4488 535 or 014 592 7478		
Paul Games	Herp Club	083 274-4960		
Eddy Owen		082 928-9595		
Louis Trichardt	Brits, Mooinooi and Hartebeespoort dam surroundings	076 588-1082		
Lee Jovanovic	Hartbeespoort dam surroundings	072 638-9250		
Rex Strydom	Hartebeespoort dam and Brits surroundings	082 469-2979		
DOTOUTESTD		DA DISTRICT)		
	OOM AREA (DR KENNETH KAUNI			
Siyabonga Mseleku	North West Provincial Department of	061 4785 931 or 053 928 0664		
Betty Swart	Conservation	082 347 8991or 018		
Detty Owart		299 6500		
Danie Swart	SPCA Potchefstroom	084 5018668 / 018 294 3856		
J Vorster	1 Mossel Street Stilfontein	072 6027471		
Le Roy Pretorius	Fire Department Potchefstroom	083 7555233 / 018 2995343		
EA Swart / J Dire / OJ Mmusi	DEDECT Sub Directorate Conservation Potchefstroom / Wolmaransstad	018 299 6648 / 2996653		
	Totollottoom/ Womananotta	018 5961997		
Betty Swart	North West Provincial Department of	082 347 8991		
	Conservation	018 299 6500		
VRYBURG ARE	VRYBURG AREA (DR RUTH SEGOMOTSI MOMPATI DISTRICT)			
Siyabonga Mseleku	North West Provincial Department of Conservation	061 4785 931 or 053 928 0664		
Estelle Buidemann		082 332 0858		

MMABATHO, ZEE	RUST and LICHTENBURG (NGAK	A MODIRI MOLEMA
	DISTRICT)	
Nanti Strydom	North West Provincial Department of	082 563 1163
	Conservation	
Chris van der	Conservationist	082 448 4852
Westhuizen	e-mail: xtremeviper@yahoo.com	
ANTIVENOM UNIT – NATIONAL HEALTH LABORATORY SERVICES		
Megan Saffer	Office Hours	011 386-6044
Pricilla Fleischer	Office Hours	011 386-6052
NHLS	24 hours	386-6000
SWITCHBOARD		
Dr Mark Blaylock	Emergency number for venom	083 463-3011
Dr Roger Blaylock	Emergency number for venom	083 652-0105
POISON INFORMATION CENTRES AND HOSPITALS		
NETCARE 911		
24-hour toll-free poison information hotline countrywide 0800 333 444		

ANNEXURE D: ANTIVENOM UNIT - NATIONAL HEALTH LABORATORY SERVICES

CONTACT PERSON		
Megan Saffer	Office Hours	011 386-6044
Pricilla Fleischer	Office Hours	011 386-6052
NHLS SWITCHBOARD	24 hours	011 386-6000
Dr Mark Blaylock	Emergency number for venom	083 463-3011
Dr Roger Blaylock	Emergency number for venom	083 652-0105
Cost of Antivenom:		
Office Hours:	Polyvalent R540.00 per 10ml	Monovalent R894.00 per 10ml
After Hours:		
This includes VAT.	Polyvalent R702.00 per 10ml Courier will be charged separately	Monovalent R1 162.00 per 10ml

ANNEXURE D: BEE REMOVAL

Bee Removals Steph Hartung - 084 911 3466 Southern Beekeepers Association - 083 652 0760 Removal Honey – 072 142 0505

ENDANGERED WILDLIFE TRUST

ESKOM-EWT Toll free number: 0860 111 535 or (011) 372-3600

e-mail: wep@ewt.org.za or constanth@ewt.org.za

OTHER EXTERNAL STAKHOLDERS THAT MAY NEED TO BE CONTACTED IN THE EVENT OF ENVIRONMENTAL EMERGENCIES:

No	DEPARTMENT	CONTACT DETAILS
1	Local Fire Department	As per Area (dial 121 from your cellphone)
2	Local Fire Protection Agency (FPA)	
3	South African Police Services (SAPS)	08600 10 111
4	Municipal Pollution Officers and Department of Health	As per Area (dial 121 from your cellphone)
5	Department of Water & Sanitation (DWS)	012 253 1093 or 012 253 1026
6	Department of Forestry, Fisheries and Environment (DFFE)	012 310 3911 or 012 310 3137