ENVIRONMENTAL IMPACT ASSESSMENT FOR DISTRIBUTION ACTIVITIES

Unique Identifier:

240-72597722

Revision:

1

Page:

18 of 70

# Annex B - Distribution Environmental Screening Document (DESD)

### Reticulation Powerlines and Ancillary Services

Ralified and accepted by	
Environmental Practitioner	
Environmental Specialist	
Head of Engineering Survey	MINICIPAL PROPERTY OF THE PROP
(one signature please) Accepted by Land Owner/s/Users I have seen the completed document recommendations made	X SekhukHuw F & ISTKICT MUNICIPALITY
Form completed by Mallome In consultation with: X. Louwal CAPACITY (e.g. land owner, specialls DATE COMPLETED: X	Make Signature:  Assessor/s  A

#### Instructions

- 1. Fill the report in as neatly and completely as possible.
- 2. Where the question / statement is not applicable mark N/A.
- 3. Indicate sensitive areas on a map and/or spanning plans.
- 4. When in doubt, consult the Environmental Practitioner in your region.

The purpose of this DESD is to:

- Determine whether or not the project should be subject to R543-7, published in terms of the National Environmental management Act 107 of 1998.
- Identify and mitigate the negative impact of Eskom's activities to a minimum in line with both Legislation and Eskom's Environmental Policies.
- This report is a guide to Route Selection, Construction and Field Services.

NOTE Complete the report before the survey!!!

This is not an office exercise.

Extra sheets of paper may be added and referenced if insufficient space has been provided.

## ENVIRONMENTAL IMPACT ASSESSMENT FOR DISTRIBUTION ACTIVITIES

Unique Identifier:

240-72597722

Revision:

1

Page:

19 of 70

## Annex B (continued)

1 Project description
Project name/Survey Request Dc Hung Dam (ung 2 Area Dc Houy dam Wuge Project number GM / 45 8 68 48 9 File number Rural scheme/ Feeder NA LEO I / DWAF Voltage 22 KU Supply from NDW 2-93 / 83
(scheme name, pole numbers for tee-off) Supply to
(Farm name, etc.)
2 Properties traversed
Ferm name  Compilation number 24.19.00  Line length (m) 11.51, 258 m  Farm name
Registration number and Division
Compilation numberLine length/Site area (m²)
3 Brief description of the surrounding area  The process to stopped the are new mores  The Many which are see new mores
Could the proposed project have an impact on or be constrained by any of the following environmental aspects?
Encircle the appropriate aspect, giving a description of the present state as well as an indication of the possible negative impact. Note that mitigating measures for these impacts are to be included in the Environmental Management Programme.

### ESKOM COPYRIGHT PROTECTED

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

### ENVIRONMENTAL IMPACT ASSESSMENT FOR DISTRIBUTION ACTIVITIES

Unique Identifier:

240-72597722

Revision:

1

Page:

20 of 70

Annex	E
fcontinue	ď

4 Physical	environment				
				olains OTHER	
Potential impac	cl (e.g. threat of pollu	ilon): Minima		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	MENTENNATURAL METANGEN
4,2 Soil:	sandy	(ocky)	clayey	OTHER	
Potential Impac	t (e.g. of erosion) .t.	history	***********************	gas OTHER	
Potential Impac	on: "Has A			,	
Comments/milig	galing measures:				
***************************************					

#### **ESKOM COPYRIGHT PROTECTED**

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

# ENVIRONMENTAL IMPACT ASSESSMENT FOR DISTRIBUTION ACTIVITIES

Unique Identifier:

240-72597722

Revision:

1

Page:

21 of 70

			Annex B (continued)				
5 Natural er	ıvironment						
5.1 Flora:	Indigenous	protec	oled)	exotic	O	THER	
Brief description							
Potential Impac	t (e.g. permit apr	lications				***************************************	
6.2 Fauna;	mamn	Z	birds			R	
(e.g. rare, prote	(e.g. threat of el	ectrocution, col	lslon, etc)	**************************************		migratory paths)	
Comments/mitig						meast	ıres;
6 Social env			**************************************	**************************************	**************************************		****
6.1 Restricted	nature/game reserves	hlking trails	tourism i	outes	parks	recreational areas	
Tesidential-) reas	green belts	sacred/holy grounds	OTHER				
Brief description	De Houx	e Den 9'	uye.	near	<b>'</b> 2 .		

### ESKOM COPYRIGHT PROTECTED

#### **ENVIRONMENTAL IMPACT ASSESSMENT FOR DISTRIBUTION ACTIVITIES**

Unique Identifier:

240-72597722

Revision:

Dane.

English Sales and Color to State Sta			rage:	22 01 70
		Annex E		
		nment, etc		
6.2 Visual aestheti		hidden		partially. Middle
Brief description	٧,	1		carin at
6.3 Natural heritage		archaeological	monuments	palaeontological
	significance	objects	monumenta	objects
	graves	meteorites	រព្យបខ	OTHER
Resource Act, No 26 the SAHRA. If line o	of 1999 be identifi r access road len	ed, the requirements igth exceeds 300m	s of Act 25 of 1999 SAHRA shall be	
Comments/mitigating		************************	*******************	
7 Economic env			***************************************	
941				
	rops	orchards	grazing	crop spraying
g	game farming	forestry areas	mining	OTHER
Brief description				131114413243444444444444444444444444444
***************************************		***************************************	*********************	***********************************

### ESKOM COPYRIGHT PROTECTED

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

# ENVIRONMENTAL IMPACT ASSESSMENT FOR DISTRIBUTION ACTIVITIES

Unique Identifier:

240-72597722

Revision:

1

Page:

23 of 70

## Annex B (continued)

Potential Impact	**********************	***************************************	anounum tananan kontaan marka ka k
7.1.1 Commercial:	factories	shops	OTHER
Potential impact	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	******************************	
***************************************			(1)((())(())(())(())(())(())(())(())(()
7.1.2 Infrastructure	roads pipelines	rallways communications sewage OTHER	lons power lines air fields
Brief description:(	lar tead	for Steelpout how the much	e ardeltioned
Potential impact	Asioninal	,	
**************************	********************		***************************************
Comments/mitigatin	g measures:		
*********************			(++++++++++++++++++++++++++++++++++++++
*******************	*********************		
		**********************************	

#### **ESKOM COPYRIGHT PROTECTED**

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

ENVIF	RONMENT	CALION: CONTOIRED DISCISSURE  'AL IMPACT ASSESSMENT FOR ACTIVITIES	8	Unique identifier: Revision: Page:	240-72597722 1 24 of 70
		Anne (contin			
What ir 1.	npact will the Physical	nls project have on elements 4 to 7?	ueuj		
No imp	acl (0)	Medium impaci (2)	High Im	pact (4)	
2.	Natural				
No Imp	act (0)	Medium Impact (2)	High im	pact (4)	
3.	Social	And a representative and an analysis of the second			
No Impa	act (0)	Medium Impact (2)	High im	pact (4)	
Overall This se above to	ction addre	osses the overall environmental Impa es (physical, natural and social) need 0	act of the to be cor	project. The impacts sidered to determine the	as assessed in the he overall impact
	Noi	mpact Medium Impact	High	Impact	
If the d Environ	meniai Sen	pact is between 2 and 4, contact flor Superintendent.	l the En	vironmental Managem	ent Officer or the
		utes been discussed with the relevan	il land ow	ner/s or users?	
Yes No	~				
Detalled	l study				
Is an <i>em</i>	vironmenta	assessment required in terms of Re	gulation F	15437	
Yes No		-			
Should a	betwij abi	olication be made to DWA?			
Yes No		•• ••			
Should th	te SAHRA	be notified?			
Yes _ No _					

### ESKOM COPYRIGHT PROTECTED

**ENVIRONMENTAL IMPACT ASSESSMENT FOR** 

DISTRIBUTION ACTIVITIES

Unique Identifier:

240-72597722

Revision:

1

Page:

25 of 70

### Annex C - Environmental Management Plan (Normative)

#### 1 General conditions

- 1.1 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 landowners have been informed before moving onto site.
- 1.2 No fences, gates or locks shall be damaged to obtain access onto a line route. Arrangements shall be made in advance to obtain permission for access.
- Use of private roads shall be arranged in advance. Any damage to private roads shall be repaired at the contractor's expense and to the satisfaction of the landowner. This shall be the responsibility of the project manager or co-ordinator.
- Gates shall be left as they are found, i.e. closed gates shall be kept closed and open gates shall be left open. Gates to adjacent properties or onto public roads shall be closed at all times. Any Eskom gates installed on the line route shall be kept closed and locked except while stringing is taking place. Open gates shall be guarded to prevent animals straying and unauthorised persons and vehicles entering into adjacent camps or properties.
- 1.5 Permission shall be obtained from landowners before any water is used.
- No fires shall be lit on private property. If fires are lit on Eskom's property or in the construction camp, provision shall be made that no accidental fires are started. No firewood shall be collected in the veld.
- 1.7 If activities that can cause a fire are carried out, fire extinguishers shall be available on site and in the construction camp.
- 1.8 No properly may be accessed after normal working hours except with the permission of the landowner. Privacy shall be respected at all times.
- 1.9 Eskom, Eskom's contractors and their employees shall at all times be courteous towards landowners, tenants and the local community.
- Eskom, Eskom's contractors and their employees shall not cause damage to property, crops or animals. Activities that may cause conflict with landowners, tenants, the local work force or the local community shall be avoided. Should conflict arise it shall be immediately reported to the Eskom project manager or co-ordiator.
- 1.11 Vehicles shall be driven at a moderate speed on private roads and stay within the statutory speed limit on public roads.
- 1.12 All movement of vehicles shall take place on the established Eskom servitude road or on private roads as agreed in advance. Keep to existing tracks. No movement shall take place through the veld. Special care shall be taken to prevent excess damage during wet weather.

ENVIRONMENTAL IMPACT ASSESSMENT FOR

**DISTRIBUTION ACTIVITIES** 

Unique Identifier:

240-72597722

Revision:

1

Page:

26 of 70

### Annex C (continued)

- 1.13 If any vehicle should get stuck, the damage shall be repaired immediately so that no deep ruts remain.
- Any damage to private property shall immediately be reported to Eskom and the owner. The damage shall be reclified immediately if possible and/or appropriate compensation shall be paid to the owner at the discretion of the project manager/co-ordinator in consultation with the property owner. A record of damages and rectifying action shall be kept. The landowner's satisfaction with the outcome of rectifying action shall be obtained in writing.
- 1.15 A proper system of waste management shall be instituted in the construction camp. This entails that sufficient waste bins are available on site and in the construction camp. The waste shall be dumped at an approved waste disposal site. No containers, scrap metal, conductor etc. shall be left on site.

All scrap shall be removed and taken to an appropriate disposal site. No oil, diesel or other chemicals shall be spilled or discarded anywhere. If an accidental spill occurs, it shall be reported immediately and cleaned to the satisfaction of Eskom and the landowner. No waste shall be left in the veid or on the line route.

- 1.18 Washing and tollet facilities shall be provided on site and in the construction camp. The facilities shall comply with Eskom standards and shall have the approval of the landowner.
- 1.17 No human excrement shall be left in the veld. If no tollet facilities are available such waste shall be buried immediately.
- 1.18 Herbicides shall only be applied with Eskom's permission and in accordance with the Eskom Policy on Herbicides ESKPBAAD4.
- Camp and office sites shall be dismantled and removed after completion of the construction phase of the project. The site shall be rehabilitated to as close as possible to its original condition to the satisfaction of the landowner, which shall be in writing.
- 1.20 All excavations shall be enclosed to prevent animals or people from accidentally failing into excavations.
- 1.21 No trees shall be cut or removed without prior permission from the landowner. Permits shall be obtained for the cutting and removal protected trees (protected trees shall be dealt with in 2, Special conditions).
- 1.22 Should any natural heritage object be found, or exposed during excavations, all work shall be terminated immediately and the finding reported to the Project Manager who shall inform the Eskom Environmental Practitioner and the SAHRA.

ENVIRONMENTAL IMPACT ASSESSMENT FOR DISTRIBUTION ACTIVITIES

Unique Identifier:

240-72597722

Revision:

1

Page:

27 of 70

#### Annex C (continued)

2 Special conditions					
(Specific Issues Identified protected trees, etc.).	during the scoping	as needing	attention i.e.	erosion berms	, bird flappers,
************************************	*******************	********		************	**********
*****************************					
					·
***************************************	**********************	**************		*****************	**********
**********************************	*******************	*************		***************************************	**********

### TYPICAL MITIGATION MEASURES

ENVIRONMENTAL CONCERNS	MITIGATION MEASURES
AGRICULTURE	
Loss of standing crop due to access road and tower work site.	<ul> <li>limit width of access and size of tower site.</li> <li>avoidance of crop areas.</li> <li>monetary compensation for crop loss.</li> <li>time construction to avoid growing season.</li> </ul>
Soil Compaction	<ul> <li>scheduling activities to times of the year when soils are least susceptible to compaction.</li> <li>stop activities when ground conditions are poor.</li> <li>use of equipment with low bearing capacity.</li> <li>chisel ploughing.</li> </ul>
Construction of new lines	<ul> <li>locate access roads along existing traffic routs.</li> </ul>
Topsoll – subsoll mixing/soll rulling	<ul> <li>scheduling activities.</li> <li>stop activity when ground conditions are poor.</li> <li>use of equipment with low bearing capacity.</li> <li>use of gravel roads.</li> <li>addition of manures to offset fertility loss.</li> <li>compensation for reduced soil pEAuctivity.</li> <li>removal of spoil and/or bentonite from foundation operations.</li> <li>Segregation of topsoil and subsoil.</li> </ul>
Disturbance to farm operations	<ul> <li>maintain contact with landowner/tenant regarding preferences.</li> </ul>
Loss of livestock	<ul> <li>employ noise control measures near sensitive livestock.</li> <li>Construction of farm gates.</li> <li>Securing farm gates.</li> <li>Clean-up construction materials which could be ingested.</li> <li>Compensation for lost, injured livestock.</li> </ul>
SOCIAL IMPACTS	, , , , , , , , , , , , , , , , , , , ,
	<ul> <li>welling down dry solls.</li> <li>chemical control of dust.</li> <li>cleaning roads to remove mud,</li> <li>temporary planting of grasses.</li> </ul>

### ESKOM COPYRIGHT PROTECTED

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

### ENVIRONMENTAL IMPACT ASSESSMENT FOR

DISTRIBUTION ACTIVITIES

Unique Identifier:

240-72597722

Revision: Page:

28 of 70

1

### Annex C (continued)

	(conlinued)
Aesthetics	screen with natural of planted vegetation restoration.     avoid linear access down the right-of-way.     addition of topsoil to gravel access roads.     hoarding construction sites.     installation of landscaping in advance of site completion.
I HICOMABILICA	select route and method of installation to suit landowners' conditions.     select timing of activity.
Heritage resources	<ul> <li>avoldance/isolation.</li> <li>design measures to make facility fess obtrusive.</li> <li>screening.</li> <li>alternate methods of equipment.</li> <li>protection by use of enclosures, barrier fencing, covering.</li> <li>salvage in conjunction with SAHRA.</li> </ul>
Tourism and recreation resources	- relocation in conjunction with SAHRA.  - design measures to make facility less obtrusive of disruptive.  - screening and restoration.  - minimise noise and dust.  - safety precautions to protect the public.  - scheduling to evoid peak use periods.
WATER QUALITY	- some divide to civoral peak use perious,
Sedimentation of streams due to erosion from the right-of way.	minimise use of slopes adjacent to streams during soils testing, construction and maintenance,     maintain a cover crop,     reals buffers.
Stream bank erosion.	- retain buffers.  - mechanical erosion control.  - retain shrubby stream bank vegetation and selectively cut or prune trees during line clearing/maintenance.  - selective spraying of herbicides.  - Mechanical erosion control.
Impedance of natural flow streams/others surface waters.	<ul> <li>use and maintenance of appropriate stream crossing device,</li> </ul>
Ponding or channelization of surface waters due to rulling.	<ul> <li>timing activities to stable ground conditions.</li> <li>use of gravel roads.</li> </ul>
Contamination of surface or ground vaters through spills or leaks of toxic substances.	<ul> <li>spill control material and procedures readily available.</li> <li>site selection where possible.</li> </ul>
Soll compaction/topsolf-subsoll mixing.	avoidance of rulling by vehicles where possible.     construction timing.     use of gravel roads.     use of vehicles with low bearing pressures.     stop activities when ground conditions.
	<ul> <li>stop activities when ground conditions are poor.</li> <li>avoidance of areas with high erosion potential.</li> <li>timing activities to the most stable ground conditions.</li> <li>slope stabilisation.</li> <li>mechanical erosion control.</li> <li>vegetation erosion control.</li> <li>recompaction of trenches.</li> <li>avoid trenching parallel to the fall of a slope.</li> </ul>

### ESKOM COPYRIGHT PROTECTED

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