

**ENVIRONMENTAL IMPACT ASSESSMENT FOR
DISTRIBUTION ACTIVITIES**

Unique Identifier: **240-72507722**
Revision: **1**
Page: **18 of 70**

Annex B - Distribution Environmental Screening Document (DESD)
(Informative)

Reticulation Powerlines and Ancillary Services

Ratified and accepted by
Environmental Practitioner
Environmental Specialist
Head of Engineering Survey
(use signature plates)

Accepted by Land Owner/Users

I have seen the completed document and accept the
recommendations made

Form completed by M. Ramoedi Assessor's Signature

in consultation with TARISA M KHARISA Signature

CAPACITY (e.g. find water specified): EMPLOYEES (CHIEF ENGINEER/MS)
DATE COMPLETED: 13/10/2023

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: *Modikwa Platinum Greater Tzaneba*
Request: *Mining Proprietors Area Local Municipality*
Project number: *GB676095765* File number:
Rural scheme: *Badikela* Voltage: *22kV*
Supply from: *SBS*
(scheme name: (add numbers for tee-off))
Supply to: *Hendriksplaats 281 KT*
(Farm name, etc.)

2 Properties traversed

Farm name: *Hendriksplaats 281 KT*
Registration number and Division: *281 KT* Sub-division: *0*
Compilation number: *2428 CA* Line length (m): *500m*
Farm name: *Hendriksplaats*
Registration number and Division: *281 KT* Sub-division:
Compilation number: *2428 CA* Line length/Size area (m²): *(500m) = 250000m²*

3 Brief description of the surrounding area

It is 30% veld area and 70% residential area for Modikwa Platinum mine employees. It is on hard terrain mixed with rocks. The existing line is to be dismantled of 500m.

Could the proposed project have an impact on or be constrained by any of the following environmental aspects?

Exclude 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.

Annex B
(continued)

4 Physical environment

4.1 Water streams rivers dams wetlands springs floodplains OTHER

Present condition Dryland

Potential impact (e.g. threat of pollution) Not foreseeable

4.2 Soil sandy loamy clayey OTHER

Present condition Both rocky, sandy and clayey

Potential impact (e.g. of erosion) Compact soil

4.3 Topography (mountains, ridges, hills, valleys, ravines, dunes, OTHER) Flat terrain

Present condition The terminal pole is at foot of a koppie

Potential impact (e.g. of erosion) Compact soil

Comments/mitigating measures

No compact

ENVIRONMENTAL IMPACT ASSESSMENT FOR DISTRIBUTION ACTIVITIES

Unique Identifier: 240-72597722
Revision: 1
Page: 21 of 70

Annex B
(continued)

5 Natural environment

5.1 Flora: indigenous protected exotic OTHER

Brief description and conservation status (e.g. rare, etc.) mention (threat/ush/press)

Line to be dismantled

Potential impact (e.g. permit applications) No permit required

5.2 Fauna: mammals birds OTHER

Domestic animals

Brief description and conservation status

(e.g. rare, protected, etc.) mention (graffe, elephants, eagles, vultures, etc.) mention migratory/pastor

Domestic animals are ordinary birds

Potential impact (e.g. threat of electrocution, collision, etc.)

A Line to be dismantled

Comments/mitigating measures

Check when dismantling the existing line

6 Social environment

6.1 Restricted areas: nature/game reserves parks recreational areas

Residential areas

green belts sacred/holy grounds OTHER Open land.

Brief description

Land used for grazing & residential

Potential impact (e.g. threat of encroachment, etc.)

No impact for line dismantling

ENVIRONMENTAL IMPACT ASSESSMENT FOR DISTRIBUTION ACTIVITIES

Unique Identifier: 240-72597722
Revision: 1
Page: 22 of 70

Annex B
(continued)

6.2 Visual aesthetics: (totally seen) (hidden) (partially)

Brief description: 30% early seen
40% hidden
30% partially seen

Potential impact: No impact

6.3 Natural heritage: cultural significance, archaeological objects, monuments, palaeontological objects, graves, artefacts, ruins, OTHER

Note: Should any natural heritage resource as listed above, or as defined in the National Heritage Resources Act No 25 of 1999 be identified, the requirements of Act 25 of 1999 shall be followed by notifying the SAHRA. If line or access road length exceeds 300m SAHRA shall be notified.

Potential impact: Dismantling of line

Comments/mitigating measures:

7 Economic environment

7.1 Land use: crops, orchards, (grazing) crop spraying, game farming, forestry areas, mining, OTHER Residential

Brief description: Land used for residential purposes for mine employees

Potential impact: No impact

Annex B
(continued)

7.1.1 Commercial: factories shops OTHER Residential

Brief description: Land used for residential.
Potential impact: NO impact

7.1.2 Infrastructure: roads gateways communications power lines air fields
pipelines sewerage OTHER

Brief description: Check for buried items when dismantling of line is done.
Potential impact: NO impact

Comments/mitigating measures: Check for underground in infrastructure when breaker, for line down.

**ENVIRONMENTAL IMPACT ASSESSMENT FOR
DISTRIBUTION ACTIVITIES**

Annex B
(continued)

What impact will this project have on elements 4 to 7?

1 Physical

No impact (0) Medium impact (2) High impact (4)

2 Natural

No impact (0) Medium impact (2) High impact (4)

3 Social

No impact (0) Medium impact (2) High impact (4)

Overall impact

This section addresses the overall environmental impact of the project. The impacts as assessed in the above three spheres (physical, natural and social) need to be considered to determine the overall impact.

0	2	4
No impact	Medium impact	High impact

If the overall impact is between 2 and 4, contact the Environmental Management Officer or the Environmental Senior Superintendent.

Alternatives

Have alternative routes been discussed with the relevant land owners or users?

Yes
No

Detailed study

Is an environmental assessment required in terms of Regulation R54.3?

Yes
No

Should a permit application be made to DWA?

Yes
No

Should the SAHRA be notified?

Yes
No

P.23

ENVIRONMENTAL IMPACT ASSESSMENT FOR DISTRIBUTION ACTIVITIES

Unique Identifier: 240-72597722
 Revision: 1
 Page: 24 of 70

Annex B
(continued)

What impact will this project have on elements 4 to 7?

1 Physical

No impact (0) Medium impact (2) High impact (4)

2 Natural

No impact (0) Medium impact (2) High impact (4)

3 Social

No impact (0) Medium impact (2) High impact (4)

Overall impact

This section addresses the overall environmental impact of the project. The impacts as assessed in the above three spheres (physical, natural and social) need to be considered to determine the overall impact.

0	2	4
No impact	Medium impact	High impact

If the overall impact is between 2 and 4, contact the Environmental Management Officer or the Environmental Senior Superintendent.

Alternatives

Have alternative routes been discussed with the relevant land owners or users?

Yes
 No

Detailed study

Is an environmental assessment required in terms of Regulation R543?

Yes
 No

Should a permit application be made to DWA?

Yes
 No

Should the SAHRA be notified?

Yes
 No

P. 23

Annex C - Environmental Management Plan
(Normative)

1 General conditions

- 1.1 The Eskom project manager or coordinator 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.
- 1.3 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 coordinator.
- 1.4 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.
- 1.6 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 property 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.
- 1.10 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 coordinator.
- 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 erosion damage during wet weather.

Annex C
(continued)

- 1.13 If any vehicle should get stuck, the damage shall be repaired immediately so that no deep ruts remain.
- 1.14 Any damage to private property shall immediately be reported to Eskom and the owner. The damage shall be rectified immediately if possible and/or appropriate compensation shall be paid to the owner at the discretion of the project manager and/or 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, conductors 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 veld or on the line route.
- 1.16 Washing and toilet 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 All human excrement shall be left in the veld. If no toilet 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 ESKPBAA04.
- 1.19 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 falling 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 during the scoping as needing attention i.e. erosion beams, tied flappers, protected trees, etc.)

TYPICAL MITIGATION MEASURES

ENVIRONMENTAL CONCERNS	MITIGATION MEASURES
AGRICULTURE	
Loss of standing crop due to access road and tower work site	<ul style="list-style-type: none"> limit width of access and size of tower site avoidance of crop areas monetary compensation for crop loss time construction to avoid growing season
Soil Compaction	<ul style="list-style-type: none"> scheduling activities to times of the year when soils are least susceptible to compaction stop activities when ground conditions are poor use of equipment with low bearing capacity crustal ploughing
Construction of new lines (typical - subsoil mixing/soil raking)	<ul style="list-style-type: none"> locate access roads along existing traffic routes scheduling activities stop activity when ground conditions are poor use of equipment with low bearing capacity use of gravel roads addition of manures to offset fertility loss compensation for reduced soil productivity removal of spoil and/or bentonite from foundation operations Segregation of topsoil and subsoil
Disturbance to farm operations	<ul style="list-style-type: none"> maintain contact with landowner/tenant regarding preferences
Loss of livestock	<ul style="list-style-type: none"> employ noise control measures near sensitive livestock Construction of farm gates Securing farm gates Clean-up construction materials which could be ingested Compensation for lost, injured livestock
SOCIAL IMPACTS	
Mud and Dust	<ul style="list-style-type: none"> wetting down dry soils Chemical control of dust clearing roads to remove mud temporary planting of grasses

**ENVIRONMENTAL IMPACT ASSESSMENT FOR
DISTRIBUTION ACTIVITIES**Unique Identifier: **240-72597722**Revised: **1**Page: **28 of 70****Annex C
(continued)**

Aesthetics	<ul style="list-style-type: none"> screen with natural or 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
Inconvenience	<ul style="list-style-type: none"> select route and method of installation to suit landowners' conditions select timing of activity
heritage resources	<ul style="list-style-type: none"> avoidance solution design measures to make facility less obtrusive screening alternate methods of equipment protection by use of enclosures, barrier fencing covering salvage in conjunction with SAHRA relocation in conjunction with SAHRA
Tourism and recreation resources	<ul style="list-style-type: none"> design measures to make facility less obtrusive or disruptive screening and restoration minimise noise and dust safety precautions to protect the public scheduling to avoid peak use periods
WATER QUALITY	
Sedimentation of streams due to erosion from the right-of-way	<ul style="list-style-type: none"> minimise use of slopes adjacent to streams during soil testing, construction and maintenance maintain a cover crop retain buffers
Stream bank erosion	<ul style="list-style-type: none"> 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/affects surface waters	<ul style="list-style-type: none"> use and maintenance of appropriate stream crossing device
Ponding or channelization of surface waters due to rutting	<ul style="list-style-type: none"> timing activities to stable ground conditions use of gravel traps
Contamination of surface or ground waters through spills or leaks of toxic substances	<ul style="list-style-type: none"> spill control material and procedures readily available site selection where possible
Soil compaction/topsoil-surface mixing	<ul style="list-style-type: none"> avoidance of rutting by vehicles where possible construction timing use of gravel roads use of vehicles with low bearing pressures stop activities when ground conditions are poor avoidance of areas with high erosion potential timing activities to the most stable ground conditions slope stabilisation mechanical erosion control vegetation erosion control recompaction of trenches avoid herding parallel to the fall of a slope
Windwater erosion	<ul style="list-style-type: none"> avoidance of areas with high erosion potential timing activities to the most stable ground conditions slope stabilisation mechanical erosion control vegetation erosion control recompaction of trenches avoid herding parallel to the fall of a slope