



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X 447· PRETORIA · 0001· Environment House · 473 Steve Biko Road, Arcadia · PRETORIA

DEA Reference: 14/12/16/3/3/1/2028

Enquiries: Ms Mathodi Mogorosi

Telephone: 012-399-9388 **E-mail:** mmogorosi@environment.gov.za

Ms Deidre Herbst
Eskom Holdings SOC Limited
Eskom Megawatt Park
1 Maxwell Drive Sunninghill
JOHANNESBURG
2157

Tel: 011 800 3501

Email: HerbstDL@eskom.co.za

PER MAIL / E-MAIL

Dear Ms Herbst

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, ACT NO. 107 OF 1998, AS AMENDED: GN R982/983, AS AMENDED: CONSTRUCTION OF A MAKE-UP AND RAW WATER SUPPLY PIPELINE AT THE MEDUPI COAL FIRED POWER STATION IN LEPHALALE, WITHIN THE LEPHALALE LOCAL MUNICIPALITY, LIMPOPO PROVINCE

With reference to the above application, please be advised that the Department has decided to grant authorisation. The Environmental Authorisation (EA) and reasons for the decision are attached herewith.

In terms of Regulation 4(2) of the Environmental Impact Assessment Regulations, 2014, as amended (the EIA Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 14 (fourteen) days of the date of the EA, of the Department's decision as well as the provisions regarding the submission of appeals that are contained in the Regulations.

In terms of the Promotion of Administrative Justice Act, Act No. 3 of 2000, you are entitled to the right to fair, lawful and reasonable administrative action; and to written reasons for administrative action that affects you negatively. Further, your attention is drawn to the provisions of the Protection of Personal Information Act, Act No. 4 of 2013 which stipulates that the Department should conduct itself in a responsible manner when collecting, processing, storing and sharing an individual or another entity's personal information by holding the Department accountable should the Department abuse or compromise your personal information in any way.

Your attention is drawn to Chapter 2 of National Environmental Management Act, Act No. 107 of 1998 National Appeal Regulations published under Government Notice R993 in Government Gazette No. 38303 dated 08 December 2014 (National Appeal Regulations, 2014), which prescribe the appeal procedure to be followed. Kindly include a copy of this document (National Appeal Regulations, 2014) with the letter of notification to interested and affected parties in this matter.

M.S

Should any person wish to lodge an appeal against this decision, he/she must submit the appeal to the appeal administrator, and a copy of the appeal to the applicant, any registered interested and affected party, and any organ of state with interest in the matter within 20 days from the date that the notification of the decision was sent to the registered interested and affected parties by the applicant; or the date that the notification of the decision was sent to the applicant by the Department, whichever is applicable.

Appeals must be submitted in writing in the prescribed form to:

The Director: Appeals and Legal Review of this Department at the below mentioned addresses.

By email: appealsdirector@environment.gov.za;

By hand: Environment House
473 Steve Biko
Arcadia
Pretoria
0083; or

By post: Private Bag X447
Pretoria
0001

Please note that in terms of Section 43(7) of the National Environmental Management Act, Act No. 107 of 1998, as amended, the lodging of an appeal will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged, you may not commence with the activity until such time that the appeal is finalised.

To obtain the prescribed appeal form and for guidance on the submission of appeals, please visit the Department's website at https://www.environment.gov.za/documents/forms#legal_authorisations or request a copy of the documents at appealsdirector@environment.gov.za.

Yours faithfully


Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations
Department of Environmental Affairs

Date: 03/10/2019

CC:	Mr. T Chifadza	WSP Environmental (Pty) Ltd	Tel: 011-361-1390	Email: Tutayi.Chifadza@wsp.com
	Mr. T Tshuketana	Limpopo Department of Economic Development, Environment and Tourism	Tel: 015-293-8300	Email: TshuketanaTL@ledet.gov.za



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Environmental Authorisation

In terms of Regulation 25 of the Environmental Impact Assessment Regulations, 2014, as amended

Construction of a Make-up and Raw Water Supply Pipeline at the Medupi Coal-fired Power Station in Lephale, within the Lephale Local Municipality, Limpopo Province

Waterberg District Municipality

Authorisation register number:	14/12/16/3/3/1/2028
Last amended:	First issue
Holder of authorisation:	ESKOM HOLDINGS SOC LIMITED
Location of activity:	LIMPOPO PROVINCE: Within Ward 2 of Lephale Local Municipality

This Environmental Authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

M.S

Decision

The Department is satisfied, on the basis of information available to it and subject to compliance with the conditions of this Environmental Authorisation, that the applicant should be authorised to undertake the activities specified below.

Non-compliance with a condition of this Environmental Authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, Act No. 107 of 1998, as amended and the EIA Regulations, 2014, as amended.

Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

Activities authorised

By virtue of the powers conferred on it by the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment Regulations, 2014, as amended, the Department hereby authorises –

ESKOM HOLDINGS SOC LIMITED

(hereafter referred to as the **holder of the authorisation**)

with the following contact details –

Ms. Deidre Herbst
Eskom Holdings SOC Limited
Eskom Megawatt Park
1 Maxwell Drive Sunninghill
JOHANNESBURG
2157

Tel: (011) 800 3501

Cell: (083) 660 1147

E-mail: HerbstDL@eskom.co.za

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notice 1, as amended (GN R983, as amended):

Listed activities	Activity/Project description
<p><u>GN R. 983 Item 9:</u></p> <p><i>The development of infrastructure exceeding 1000 metres in length for the bulk transportation of water or storm water –</i></p> <p><i>(i) with an internal diameter of 0.36 metres or more;</i></p>	<p>Construction of a raw water supply pipeline, comprising two (2) segments totalling approximately 5500 metres, for bulk transportation of raw water. The pipeline segments are approximately 2 500 metres (raw water pipeline) and 3 000 metres (make-up water pipeline), with an internal diameter of approximately 0.9m.</p>
<p><u>GN R. 983 Item 19:</u></p> <p><i>The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse;</i></p>	<p>The pipeline will comprise of underground and on-surface sections of the pipeline. For the underground sections, dredging, excavation and removal of soil of more than 10 cubic metres will be conducted so as to bury the pipeline underground. Infilling of the area will be done using the same material as backfill after the pipeline has been installed. The closest wetland is located approximately 10m away from the pipeline route, and may potentially be impacted on by the construction of the pipeline.</p>

as described in the Basic Assessment Report (BAR) dated June 2019 at:

Farm Name: Naauw Ontkomen 509 LQ, Portion 0; and Kuipersbult 511 LQ, Portion 0

21 Digit SG code:

T	0	L	Q	0	0	0	0	0	0	0	0	0	5	0	9	0	0	0	0	0
T	0	L	Q	0	0	0	0	0	0	0	0	0	5	1	1	0	0	0	0	0

Coordinates of the preferred raw water pipeline segment from the off-take point

Points	Latitude	Longitude
A	23°41'59.33"S	27°32'47.29"E
B	23°42'24.86"S	27°32'41.73"E
C	23°42'27.23"S	27°32'42.13"E
D	23°42'31.98"S	27°32'41.16"E
E	23°42'32.58"S	27°32'41.59"E
F	23°42'35.91"S	27°32'40.94"E
G	23°42'35.96"S	27°32'40.84"E
H	23°42'59.46"S	27°32'36.24"E
I	23°43'3.48"S	27°32'35.74"E
J	23°43'5.16"S	27°32'36.81"E
K	23°43'6.63"S	27°32'38.75"E
L	23°43'7.69"S	27°32'40.15"E
M	23°43'6.78"S	27°32'40.92"E
N	23°43'11.80"S	27°32'48.48"E
O	23°43'11.47"S	27°32'48.77"E
P	23°43'11.53"S	27°32'48.91"E
Q	23°43'11.08"S	27°32'49.30"E
R	23°43'10.96"S	27°32'49.10"E

Coordinates of the preferred make-up water pipeline segment from the holding dams

Points	Latitude	Longitude
S	23°43'11.81"S	27°32'37.39"E
T	23°43'11.42"S	27°32'36.83"E
U	23°43'7.57"S	27°32'40.08"E
V	23°43'6.56"S	27°32'38.80"E

MS

W	23°43'5.11"S	27°32'36.86"E
X	23°43'3.46"S	27°32'35.80"E
Y	23°42'59.43"S	27°32'36.32"E
Z	23°42'58.90"S	27°32'36.38"E
AA	23°42'57.05"S	27°32'42.80"E
AB	23°42'56.70"S	27°32'43.01"E
AC	23°42'42.93"S	27°33'31.13"E
AD	23°42'42.38"S	27°33'30.95"E
AE	23°42'41.07"S	27°33'35.59"E
AF	23°42'40.78"S	27°33'35.50"E
AG	23°42'39.85"S	27°33'38.92"E
AH	23°42'39.67"S	27°33'38.87"E
AI	23°42'39.63"S	27°33'39.02"E
AJ	23°42'39.80"S	27°33'39.08"E
AK	23°42'39.35"S	27°33'40.62"E
AL	23°42'31.97"S	27°33'35.96"E
AM	23°42'29.97"S	27°33'36.10"E
AN	23°42'29.45"S	27°33'37.07"E

the location indicated in the locality plan, attached as Annexure 2 of this authorisation.

- for the construction a make-up and raw water supply pipeline, approximately 5 500 metres in length, at the Medupi Coal Fired Power Station, in Lephalale, within Ward 2 of the Lephalale Local Municipality in the Limpopo Province, hereafter referred to as "the property". The pipeline is the only infrastructure to be constructed. Existing access roads and culverts will be used over the course of the project. The pipeline will comprise of two (2) segments:

- **Segment 1:** Raw water pipeline to transfer water from an offtake point of the MCWAP-2 pipeline on the north of the site, to Eskom's two holding reservoirs (Mokolo Water Reservoir or Crocodile West Water Reservoir). This pipeline has an internal diameter design of approximately 0.9 metres and a total length of 2 500 metres; and

- **Segment 2:** make-up water pipeline to convey water from the reservoirs to the Flue Gas Desulphurisation (FGD) Makeup Water Supply System within the Medupi Power Station site boundary. This pipeline has an internal diameter design of approximately 0.9 metres and a total length of 3 000 metres.

Conditions of this Environmental Authorisation

Scope of authorisation

1. The preferred pipeline route Alternative 2: aboveground at ash conveyor transfer house; Alternative 1: at the reservoir site for the raw water pipeline segment to reservoir; and Alternative 5A for the make-up water pipeline segment to the FGD System, for the construction of the 5500m make-up and raw water supply pipeline at the Medupi Coal-fired Power Station within Ward 2 of the Lephalale Local Municipality in the Limpopo Province, are approved, as per the geographic coordinates cited in the tables above.
2. Authorisation of the activity is subject to the conditions contained in this Environmental Authorisation, which form part of the Environmental Authorisation and are binding on the holder of the authorisation.
3. The holder of the authorisation is responsible for ensuring compliance with the conditions contained in this Environmental Authorisation. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the authorisation.
4. The activities authorised may only be carried out at the property as described above.
5. Any changes to, or deviations from, the project description set out in this Environmental Authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further Environmental Authorisation in terms of the regulations.
6. The holder of an Environmental Authorisation must apply for an amendment of the Environmental Authorisation with the Competent Authority for any alienation, transfer or change of ownership rights in the property on which the activity is to take place.
7. Construction must be completed within eight (08) years from the date of issue of this Environmental Authorisation. If construction is not completed within that period, the authorisation lapses, unless a further extension has been granted in terms of Regulation 27(3). If the authorisation lapses, a new application for environmental authorisation must be made for the development or continuation of the activity.

8. Commencement with one activity listed in terms of this Environmental Authorisation constitutes commencement of all authorised activities.

Notification of authorisation and right to appeal

9. The holder of the authorisation must notify every registered interested and affected party, in writing and within 14 (fourteen) calendar days of the date of this Environmental Authorisation, of the decision to authorise the activity.
10. The notification referred to must –
- 10.1. specify the date on which the authorisation was issued;
 - 10.2. inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014;
 - 10.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and
 - 10.4. give the reasons of the Competent Authority for the decision.

Commencement of the activity

11. The authorised activity shall not commence until the period for the submission of appeals has lapsed as per the National Appeal Regulations, 2014, and no appeal has been lodged against the decision. In terms of Section 43(7), an appeal under Section 43 of the National Environmental Management Act, Act No. 107 of 1998, as amended will suspend the Environmental Authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged you may not commence with the activity until such time that the appeal has been finalised.

Management of the activity

12. The Environmental Management Programme (EMPr) submitted as part of the Application for EA must be amended and submitted to the Department for written approval prior to commencement of the activity. The recommendations and mitigation measures recorded in the BAR dated June 2019 must be incorporated as part of the EMPr. Once approved, the EMPr must be implemented and adhered to. The EMPr must be amended to include:
- 12.1. The requirements and conditions of this environmental authorisation;

- 12.2. All recommendations and mitigation measures recorded in the BAR and the specialist reports as included in the final BAR dated June 2019; and
 - 12.3. A final development layout plan (with micro-siting of the pipelines' route) and all mitigation measures as dictated by the final development layout plan.
13. The final development layout plan to be included in the EMPr must indicate the following:
- 13.1. The final position of the pipeline within the approved corridor clearly showing the preferred alternatives for the two segments of the pipeline;
 - 13.2. All existing infrastructure associated with the development particularly along the pipeline route, particularly the existing roads that will be used during construction;
 - 13.3. All sensitive features e.g. wetlands, pans, drainage channels, and grave sites that will be affected by the pipeline; and
 - 13.4. All "no-go" and buffer areas.

Frequency and process of updating the EMPr

14. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 21 below, indicate insufficient mitigation of environmental impacts associated with the undertaking of the activity, or insufficient levels of compliance with the Environmental Authorisation or EMPr.
15. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
16. The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per Regulation 34 of GN R982 of 04 December 2014, as amended. The updated EMPr must have been subjected to a public participation process, which process has been agreed to by the Department, prior to submission of the updated EMPr to the Department for approval.
17. In assessing whether to grant approval of an EMPr which has been updated as a result of an audit, the Department will consider the processes prescribed in Regulation 35 of GN R982 of 04 December 2014, as amended. Prior to approving an amended EMPr, the Department may request such amendments to the EMPr as it deems appropriate to ensure that the EMPr sufficiently provides for avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity.
18. The holder of the authorisation may apply for an amendment of an EMPr, if such amendment is required before an audit is required. In assessing whether to grant such approval or not, the

Department will consider the processes and requirements prescribed in Regulation 37 of GN R982 of 04 December 2014, as amended.

Monitoring

19. The holder of the authorisation must appoint an experienced independent Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the mitigation/rehabilitation measures and recommendations referred to in this environmental authorisation are implemented and to ensure compliance with the provisions of the approved EMPr.
 - 19.1. The ECO must be appointed before commencement of any authorised activities.
 - 19.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
 - 19.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a schedule of tasks undertaken by the ECO.
 - 19.4. The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.

Recording and reporting to the Department

20. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this Environmental Authorisation, must be submitted to the *Director: Compliance Monitoring* of the Department at Directorcompliance@environment.gov.za.
21. The holder of the Environmental Authorisation must, for the period during which the Environmental Authorisation and EMPr remain valid, ensure that project compliance with the conditions of the Environmental Authorisation and the EMPr are audited, and that the audit reports are submitted to the *Director: Compliance Monitoring* of the Department at Directorcompliance@environment.gov.za.
22. The frequency of auditing and of submission of the environmental audit reports must be as per the frequency indicated in the EMPr, taking into account the processes for such auditing as prescribed in Regulation 34 of GN R982 of 04 December 2014, as amended.
23. The holder of the authorisation must, in addition, submit an environmental audit report to the Department within 30 days of completion of the construction phase (i.e. within 30 days of site

handover) and a final environmental audit report within 30 days of completion of rehabilitation activities.

24. The environmental audit reports must be compiled in accordance with Appendix 7 of the EIA Regulations, 2014, as amended, and must indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the Environmental Authorisation conditions as well as the requirements of the approved EMPr.
25. Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and Competent Authority in respect of this development.

Notification to authorities

26. A written notification of commencement must be given to the Department no later than fourteen (14) days prior to the commencement of the activity. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence, as well as a reference number.

Operation of the activity

27. A written notification of operation must be given to the Department no later than fourteen (14) days prior to the commencement of the activity operational phase.

Site closure and decommissioning

28. Should the activity ever cease or become redundant, the holder of the authorisation must undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and Competent Authority at that time.

Specific conditions

29. No activities must be allowed to encroach into a water resource without a Water Use Authorisation being in place from the Department of Water Affairs.
30. A 10 meter buffer must be demarcated as a no-go area around Wetland D1 identified in the wetland assessment report and no activities are to be allowed within it.

31. A permit must be obtained from the relevant nature conservation agency for the removal or destruction of any indigenous protected and endangered plant and animal species if required.
32. Dust suppression measures must be implemented at all times during the construction phase to limit the impacts of dust.
33. No exotic plants may be used for rehabilitation purposes. Only indigenous plants of the area may be utilised.
34. Vegetation clearing must be kept to an absolute minimum. Mitigation measures must be implemented to reduce the risk of erosion and the invasion of alien species.
35. Should any archaeological sites, artefacts, paleontological fossils or graves be exposed during construction work, work must be stopped immediately, the relevant heritage resource agency must be informed and the services of an accredited heritage professional must be obtained for an assessment of the heritage resources.
36. Construction must include design measures that allow surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface flows. Drainage measures must promote the dissipation of storm water run-off.
37. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal where appropriate. Any solid waste must be disposed of at a landfill licensed in terms of Section 20 (b) of the National Environment Management Waste Act, 2008 (Act No.59 of 2008).

General

38. A copy of this Environmental Authorisation, the audit and compliance monitoring reports, and the approved EMP, must be made available for inspection and copying-
 - 38.1. at the site of the authorised activity;
 - 38.2. to anyone on request; and
 - 38.3. where the holder of the Environmental Authorisation has a website, on such publicly accessible website.
39. National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the holder of the authorisation or his/her successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the holder of the authorisation with the

conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

Date of Environmental Authorisation: 03/10/2019



Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations

Department of Environmental Affairs

Annexure 1: Reasons for Decision

1. Information considered in making the decision

In reaching its decision, the Department took, *inter alia*, the following into consideration -

- a) The information contained in the BAR dated June 2019;
- b) The comments received from the Limpopo Department of Economic Development, Environment and Tourism, and other interested and affected parties as included in the BAR dated June 2019;
- c) Mitigation measures as proposed in the BAR dated June 2019 and the EMPr;
- d) The information contained in the specialist studies contained within Appendix F of the BAR; and
- e) The objectives and requirements of relevant legislation, policies and guidelines, including Section 2 of the National Environmental Management Act, Act No.107 of 1998, as amended.

2. Key factors considered in making the decision

All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below.

- a) The findings of all the specialist studies conducted and their recommended mitigation measures.
- b) The need for the project was sufficiently addressed. Medupi Power Station is being constructed with the installation of a Flue Gas Desulphurisation (FGD) system, to manage sulphur dioxide (SO₂) emissions, to each of the six 800 Megawatt (MW) coal fired steam electric generating units. The FGD Project will result in the addition of wet limestone open spray tower FGD systems to each of the operating units. To support the FGD operation, substantial raw water is required, and this water will be supplied from the Mokolo Crocodile Water Augmentation Project – Phase 2 (MCWAP-2). The water will be provided through a project by the Department of Water and Sanitation (DWS), and Eskom was provided an offtake point for its Make-up water supply. As such the development is needed to supply additional raw water to support the FGD system, in order to ensure compliance with SO₂ emission limits.

- c) The BAR dated June 2019 identified all relevant environmental legislation and guidelines that have been considered in the preparation of the BAR dated June 2019.
- d) The methodology used in assessing the potential impacts identified in the BAR dated June 2019 and the specialist studies have been adequately indicated.
- e) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2014, as amended, for public involvement.

3. Findings

After consideration of the information and factors listed above, the Department made the following findings -

- a) The identification and assessment of impacts are detailed in the BAR dated June 2019 and sufficient assessment of the key identified issues and impacts have been completed.
- b) The procedure followed for impact assessment is adequate for the decision-making process.
- c) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- d) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the BAR and will be implemented to manage the identified environmental impacts during the construction phase.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the Environmental Authorisation, the authorised activities will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, Act No. 107 of 1998, as amended, and that any potentially detrimental environmental impacts resulting from the authorised activities can be mitigated to acceptable levels. The Environmental Authorisation is accordingly granted.

Annexure 2: Locality Plan and Site Layout

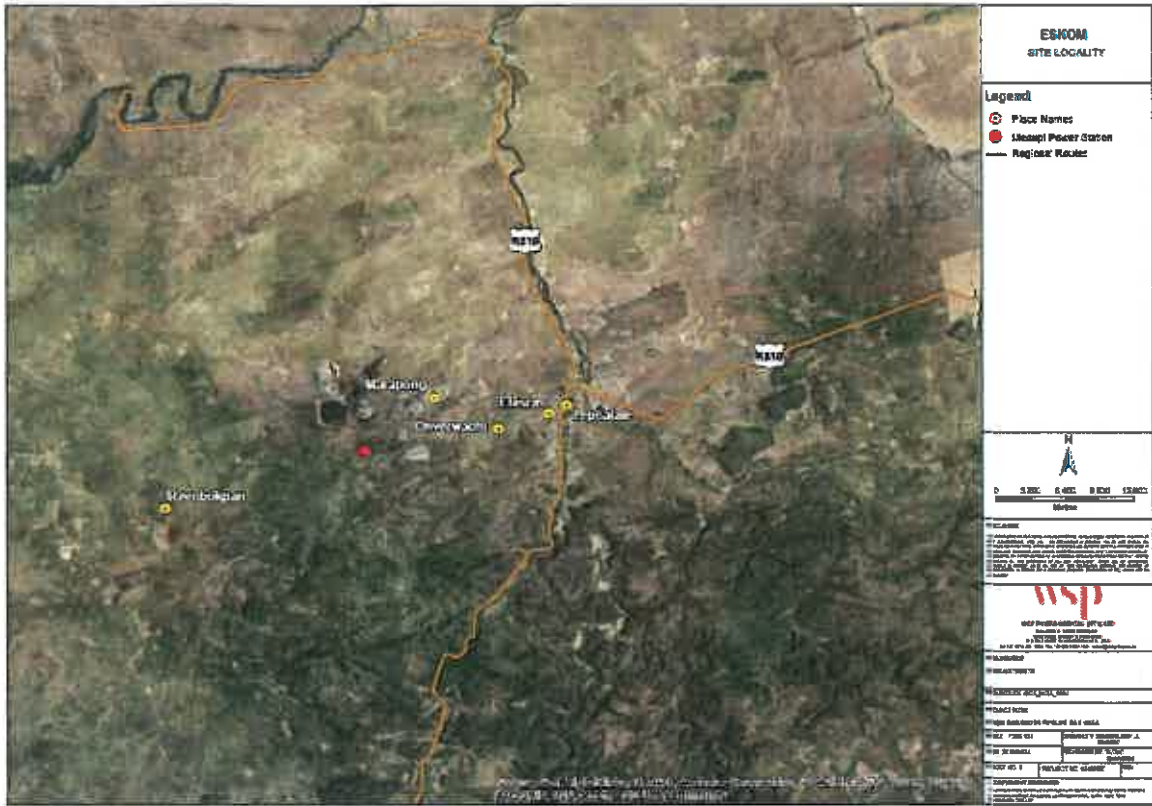


Figure 1: Site layout



Figure 2: Preferred Route layout (segment 1 shown in purple; segment 2 shown in green)

MS