



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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DEA Reference: 14/12/16/3/3/2/916

Enquiries: Ms Mmamohale Kabasa

Telephone: (012) 399 9420 E-mail: MKabasa@environment.gov.za

Mr Dick Berlijn
Alpha Solar Power Plant (RF) (Pty) Ltd
PO Box 785553
SANDTON
2146

Telephone Number: (001) 500 3680
Email Address: berlijn@subsolar.co.za

PER E-MAIL / MAIL

Dear Mr Berlijn

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GN R. 982/983/984/985 FOR THE 115 MW ALPHA PHOTOVOLTAIC SOLAR ENERGY FACILITY ON PORTION 3 OF THE FARM MIDDEL PAN 605 WEST OF THE TOWN OF VRYBURG WITHIN THE NALEDI LOCAL MUNICIPALITY IN THE NORTH WEST 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 (the 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 in respect of your application as well as the provisions regarding the submission of appeals that are contained in the Regulations.

Your attention is drawn to Chapter 2 of Government Notice No. R.993, which prescribes the appeal procedure to be followed. Kindly include a copy of this document with the letter of notification to interested and affected parties.

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:

Mr Z Hassam, Director: Appeals and Legal Review of this Department at the below mentioned addresses.

By email: appealsdirector@environment.gov.za;

M.S

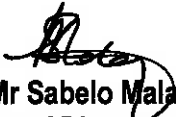
By hand: Environment House
473 Steve Biko,
Arcadia,
Pretoria,
0083; or

By post: Private Bag X447,
Pretoria,
0001;

Please note that in terms of section 43(7) of the National Environmental Management Act, 1998, 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: 29/11/2016

cc:	M Griesel	Environamics	Email: marelle@environamics.co.za
	O Skosana	North West DEDECT	Email: oskosana@nwpg.gov.za
	M Segupo	Naledi Local Municipality	Email: municipalmanager@naledi.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

Construction of the 115 MW Alpha Photovoltaic Solar Energy Facility on Portion 3 of the Farm Middel Pan 605, west of the town of Vryburg within the Naledi Local Municipality in the North West Province

Dr Ruth Segomotsi Mompoti District Municipality

Authorisation register number:	<i>14/12/16/3/3/2/916</i>
Last amended:	<i>First issue</i>
Holder of authorisation:	<i>Alpha Solar Power Plant (RF) (Pty) Ltd</i>
Location of activity:	<i>Portion 1 Middel Pan 605 Naledi Local Municipality Dr Ruth Segomotsi Mompoti District Municipality North West Province</i>

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.

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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, 1998 and the EIA regulations.

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, 1998 (Act No.107 of 1998) and the Environmental Impact Assessment Regulations, 2014 the Department hereby authorises –

ALPHA SOLAR POWER PLANT (RF) (PTY) LTD

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

with the following contact details –

Mr Dick Berlijn
PO Box 785553
SANDTON
2146

Telephone number: (001) 500 3680
Fax number: (086) 273 1614
Cell phone Number: (074) 248 8488
E-mail Address: berlijn@subsolar.co.za

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notices 1, 2 and 3 (GN R. 983, 984 & 985):

Activity number	Activity description
<p><u>GN R. 983: Activity 11:</u> <i>"The development of facilities or infrastructure for the transmission and distribution of electricity – (i) Outside urban area or industrial complexes with a capacity of more than 33 but less than 275 kilovolts..."</i></p>	<p>Activity 11(i) is triggered since the proposed PV SEF will transmit and distribute electricity of 132kV outside an urban area.</p>
<p><u>GN R. 983: Activity 28:</u> <i>"Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture or afforestation on or after 01 April 1998 and where such development: (ii) will occur outside an urban area, where the total land to be developed is bigger than 1hectare;"</i></p>	<p>Activity 28 is triggered since the farm has been previously cultivated and the property will be zoned to 'special'.</p>
<p><u>GN R. 984: Activity 1:</u> <i>"The development of facilities or infrastructure for the generation of electricity from a renewable resource where the electricity output is 20 megawatts or more, excluding where such development of facilities or infrastructure is for photovoltaic installations and occurs within an urban area."</i></p>	<p>The proposed PV SEF will generate up to 115MW electricity.</p>
<p><u>GN R. 984: Activity 15:</u> <i>"The clearance of an area of 20 hectares or more of indigenous vegetation."</i></p>	<p>In terms of vegetation type the site falls within the Ghaap Plateau Vaalbosveld vegetation type, which is described by Mucina and Rutherford (2006) as "least threatened". The site has not been lawfully disturbed during the preceding 10 years; therefore more than 20 hectares of indigenous vegetation will be removed.</p>

<p><u>GN R. 985: Activity 4:</u> <i>"The development of a road wider than 4 metres with a reserve less than 13, 5 metres.</i> <i>(e) In North West :</i> <i>(i) Outside urban areas, in:</i> <i>(ee) Critical biodiversity areas (Terrestrial Type 1 and 2) as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;..."</i></p>	<p>The site is located in a Critical Biodiversity Area (CBA) as described in bioregional plans, and will require an internal road network, between 5 and 6 metres.</p>
<p><u>GN R. 985: Activity 12</u> <i>"The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.</i> <i>(a) In North West province:</i> <i>(ii) Within critical biodiversity areas identified in bioregional plans;..."</i></p>	<p>The site is located in a CBA as described in bioregional plans, the site has not been lawfully disturbed during the preceding 10 years; therefore more than 300 square metres of indigenous vegetation will be removed.</p>

21 SG Code:

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as described in the Environmental Impact Assessment Report (EIAR) dated August 2016 at:

Facility	Latitude	Longitude
Corner 1	26° 58'20.39"S	24° 24'27.26"E
Corner 2	26° 57'47.05"S	24° 25'33.83"E
Corner 3	26° 58'54.83"S	24° 26'16.88"E
Corner 4	26° 59'04.74"S	24° 25'58.15"E
Corner 5	26° 58'28.53"S	24° 25'34.78"E
Corner 6	26° 58'25.43"S	24° 25'28.71"E
Corner 7	26° 58'26.79"S	24° 25'21.28"E

Corner 8	26° 58'33.00"S	24° 25'17.15"E
Corner 9	26° 58'40.57"S	24° 25'18.19"E
Corner 10	26° 58'40.82"S	24° 24'48.63"E
Corner 11	26° 58'35.77"S	24° 24'45.47"E
Corner 12	26° 58'32.32"S	24° 24'40.52"E
Corner 13	26° 58'31.79"S	24° 24'34.56"E
Substation	26° 57'48.40"S	24° 25'33.73"E
Loop-in loop-out lines (Alternative connection 1)		
1	26° 57'48.46"S	24° 25'34.03"E
2	26° 57'48.16"S	24° 25'33.85"E
3	26° 57'47.79"S	24° 25'33.66"E

- for the 115MW Alpha Solar Power Plant located on Portion 3 of the Farm Middel Pan 605, Registration Division IN, near Vryburg, situated within the Naledi Local Municipality in the North West Province, hereafter referred to as "the property".

The Alpha Solar Power Plant will comprise the following:

- Photovoltaic modules (monocrystalline, polycrystalline or thin-film solar modules);
- Mounting systems (fixed or single-axis horizontal trackers) for the PV arrays and related foundations;
- Internal cabling and string boxes;
- Medium voltage stations, hosting DC/AC inverters and LV/MV power transformers;
- Medium voltage receiving station(s);
- Workshop and warehouses;
- One small on-site high voltage substation with high voltage power transformers, stepping up the voltage to the voltage of the Eskom grid (132 kV) and a 132 kV busbar with metering and protection devices and a control building (also called 'switching station') to be located within the PV plant development area;
- Two new small sections of 132 kV line will be constructed allowing the Eskom 'Mookodi-Ganyesa' 132kV powerline adjacent to the project site to loop in and out of the 132kV busbar of the new on-site switching station;
- Electrical system and UPS (Uninterruptible Power Supply) devices;
- Lighting system;
- Grounding system;

- Access road and internal roads;
- Fencing of the site, alarm and video surveillance system;
- Water access point and water extraction on-site borehole(s) point, water supply pipelines and water treatment facilities; and,
- Sewage system (Ballam Waterslot or Lilliput system).

Technical details for the facility:

Component	Description/ Dimensions
Location of the site	29km west of Vryburg
PV Panel area	285 Ha
SG Codes	T0IN00000000060500003
Preferred site access	Access to the site will be from the secondary gravel road of the N14.
Export capacity	Up to 100MW (Installed capacity will be up to 115MW and the export capacity will be up to 100MW)
Proposed technology	Photovoltaic panels
Height of installed panels from ground level	3.5 meters
Width and length of internal roads	Access Road: width: 6m; length 9km Secondary internal roads – width: 5m, length:16km

Conditions of this Environmental Authorisation

Scope of authorisation

1. The 115 MW Alpha Solar Power Plant as described above is hereby approved.
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 environmental 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 environmental 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 environmental authorisation to apply for further environmental authorisation in terms of the regulations.
6. This activity must commence within a period of five (05) years from the date of issue of this environmental authorisation. If commencement of the activity does not occur within that period, the environmental authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.
7. Construction must be completed within five (05) years of the commencement of the activity on site.
8. Commencement with one activity listed in terms of this environmental authorisation constitutes commencement of all authorised activities.
9. The holder of an environmental authorisation must apply for an amendment of 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.

Notification of authorisation and right to appeal

10. 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.
11. The notification referred to must –
 - 11.1. specify the date on which the authorisation was issued;
 - 11.2. inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014;
 - 11.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and
 - 11.4. give the reasons of the competent authority for the decision.
12. The holder of the authorisation must publish a notice –
 - 12.1. informing interested and affected parties of the decision;
 - 12.2. informing interested and affected parties where the decision can be accessed; and
 - 12.3. drawing the attention of interested and affected parties to the fact that an appeal may be lodged against this decision in terms of the National Appeal Regulations, 2014.

Commencement of the activity

13. The authorised activity shall not commence until the period for the submission of appeals has lapsed as per the National Appeal Regulations, 2014. In terms of section 43(7), an appeal under section 43 of the National Environmental Management Act, 1998 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

14. The final development layout map as submitted with the EIAR dated August 2016 is not approved. The preferred development layout is located in an area with a high number of camel thorn trees; as such the layout plan must be submitted to the Department of Agriculture, Forestry and Fisheries for comments to determine adequate micro siting of the facility.
15. A copy of the final development layout map must be made available for comments by registered Interested and Affected Parties and the holder of this environmental authorisation must consider such comments. Once amended, the final development layout map must be submitted to the Department for written approval prior to commencement of the activity. All available biodiversity information must be used in the finalisation of the layout map. Existing infrastructure must be used as far as possible e.g. roads. The layout map must indicate the following:
 - 15.1. Cable routes (where they are not along internal roads);
 - 15.2. Position of photovoltaic panels and associated infrastructure;
 - 15.3. Internal roads indicating width;
 - 15.4. Wetlands, drainage lines, rivers, stream and water crossing of roads and cables;
 - 15.5. All sensitive features e.g. Important Bird Areas, Critical Biodiversity Areas, Ecological Support Areas, floral sensitive area, heritage sites, wetlands, pans and drainage channels that will be affected by the facility and associated infrastructure;
 - 15.6. Substation(s) inverters and/or transformer(s) sites including their entire footprint;
 - 15.7. Connection routes (including pylon positions) to the distribution/transmission network;
 - 15.8. All existing infrastructure on the site, such as roads;
 - 15.9. Soil heaps (temporary for topsoil and subsoil and permanently for excess material);
 - 15.10. Buildings, including accommodation; and,
 - 15.11. All "no-go" and buffer areas.

16. Furthermore, a shapefile of the approved development layout/footprint must be submitted to this Department within two months from the date of the decision. The shapefile must be created using the Hartebeesthoek 94 Datum and the data should be in Decimal Degree Format using the WGS 84 Spheroid. The shapefile must include at a minimum the following extensions i.e. .shp; .shx; .dbf; .prj; and, .xml (Metadata file). If specific symbology was assigned to the file, then the .avl and/or the .lyr file must also be included. Data must be mapped at a scale of 1:10 000 (please specify if an alternative scale was used). The metadata must include a description of the base data used for digitizing. The shapefile must be submitted in a zip file using the EIA application reference number as the title. The shape file must be submitted to:

Postal Address:

Department of Environmental Affairs
Private Bag X447
Pretoria
0001

Physical address:

Department of Environmental Affairs
Environment House
473 Steve Biko
Arcadia
Pretoria

For Attention: Mr Muhammad Essop
Integrated Environmental Authorisations
Strategic Infrastructure Developments
Telephone Number: (012) 399 9406
Email Address: MEssop@environment.gov.za

17. The Environmental Management Programme (EMPr) submitted as part of the EIAr is not approved and must be amended to include measures as dictated by the final site lay-out map and micro-siting; and the provisions of this environmental authorisation. The EMPr must be made available for comments by registered Interested and Affected Parties and the holder of this environmental authorisation must consider such comments. Once amended, the final EMPr must be submitted to the Department for

written approval prior to commencement of the activity. Once approved the EMPr must be implemented and adhered to.

18. The EMPr amendment must include the following:
 - 18.1. The requirements and conditions of this authorisation.
 - 18.2. All recommendations and mitigation measures recorded in the EIAR.
 - 18.3. All mitigation measures as listed in the specialist reports must be included in the EMPr and implemented.
 - 18.4. Adequate mitigation measures to minimize the water body effect/polarised light from the photovoltaic facility. These mitigation measures must be recommended by a suitably qualified ornithologist and must be made available to BirdLife SA for comments and support before being submitted to the Department for approval.
 - 18.5. Adequate mitigation measures to minimize the impacts on the camel thorn trees affected by the development. These mitigation measures must be recommended by a suitably qualified floral specialist and must be made available to DAFF for comments before being submitted to the Department for approval.
 - 18.6. The final site layout map.
 - 18.7. An alien invasive management plan to be implemented during construction and operation of the facility. The plan must include mitigation measures to reduce the invasion of alien species and ensure that the continuous monitoring and removal of alien species is undertaken.
 - 18.8. A plant rescue and protection plan which allows for the maximum transplant of conservation important species from areas to be transformed. This plan must be compiled by a vegetation specialist familiar with the site in consultation with the ECO and be implemented prior to commencement of the construction phase.
 - 18.9. A re-vegetation and habitat rehabilitation plan to be implemented during the construction and operation of the facility. Restoration must be undertaken as soon as possible after completion of construction activities to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habitats.
 - 18.10. A traffic management plan for the site access roads to ensure that no hazards would result from the increased truck traffic and that traffic flow would not be adversely impacted. This plan must include measures to minimize impacts on local commuters e.g. limiting construction vehicles travelling on public roadways during the morning and late afternoon commute time and avoid using roads through densely populated built-up areas so as not to disturb existing retail and commercial operations.
 - 18.11. The post construction avifaunal monitoring plan that is in line with Birdlife's most recent guideline.
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- 18.12. A storm water management plan to be implemented during the construction and operation of the facility. The plan must ensure compliance with applicable regulations and prevent off-site migration of contaminated storm water or increased soil erosion. The plan must include the construction of appropriate 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.
- 18.13. An erosion management plan for monitoring and rehabilitating erosion events associated with the facility. Appropriate erosion mitigation must form part of this plan to prevent and reduce the risk of any potential erosion.
- 18.14. An effective monitoring system to detect any leakage or spillage of all hazardous substances during their transportation, handling, use and storage. This must include precautionary measures to limit the possibility of oil and other toxic liquids from entering the soil or storm water systems.
- 18.15. A fire management plan to be implemented during the construction and operational phases.
- 18.16. Measures to protect hydrological features such as streams, rivers, pans, wetlands, dams and their catchments, and other environmental sensitive areas from construction impacts including the direct or indirect spillage of pollutants.
- 18.17. An environmental sensitivity map indicating environmental sensitive areas and features identified during the EIA process.
- 18.18. A map combining the final layout map superimposed (overlain) on the environmental sensitivity map. This map must reflect the proposed location of the turbine as stated in the EIAr and this authorisation.
19. The final amended EMPr (once approved) must be implemented and strictly enforced during all phases of the project. It shall be seen as a dynamic document and shall be included in all contract documentation for all phases of the development when approved.
20. Changes to the EMPr must be submitted to this Department for approval before such changes could be effected.
21. The Department reserves the right to amend the approved EMPr should any impacts that were not anticipated or covered in the EIAr be discovered.

Frequency and process of updating the EMPr

22. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 29 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.
23. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
 24. The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per Regulation 34 of GN R. 982. 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.
 25. 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 R.982. 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.
 26. The holder of the authorisation may apply for an amendment of an EMPr, if such amendment is required before an audit is required. The holder must notify the Department of its intention to amend the EMPr at least 60 days prior to submitting such amendments to the EMPr to the Department for approval. In assessing whether to grant such approval or not, the Department will consider the processes and requirements prescribed in Regulation 37 of GN R. 982.

Monitoring

27. 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.
 - 27.1. The ECO must be appointed before commencement of any authorised activities.
 - 27.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
 - 27.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
 - 27.4. 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

28. 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.
29. 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.
30. 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 R. 982.
31. The holder of the authorisation must, in addition, submit environmental audit reports 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.
32. The environmental audit reports must be compiled in accordance with Appendix 7 of the EIA Regulations, 2014 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.
33. 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

34. 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

35. 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

36. 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

37. If any heritage resources of archaeological or paleontological significance are discovered during construction activities, construction must cease and a Phase 2 rescue operation must be undertaken by a qualified specialist. The findings must be submitted to SAHRA and should they have implications to the layout or mitigation measures, these must be submitted to this Department with SAHRA's recommendations for review and consideration.
38. The footprint of the development must be limited to the areas required for actual construction works and operational activities. Vegetation clearing must be limited to the required footprint.
39. Areas outside of the development footprint, including sensitive areas and buffer areas, must be clearly demarcated (using fencing and signage) before construction commences and must be regarded as "no-go" areas. Contractors and construction workers must be clearly informed of the no-go areas.
40. A 200m buffer must be clearly demarcated around all identified wetlands.
41. Anti-collision devices such as bird flappers must be installed where powerlines cross avifaunal corridors (e.g. grasslands, rivers, wetlands, and dams). The input of an avifaunal specialist must be obtained for the fitting of the anti-collision devices onto specific sections of the line once the exact positions of the towers have been surveyed and pegged. Additional areas of high sensitivity along the preferred alignment must also be identified by the avifaunal specialist for the fitment of anti-collision devices. These devices must be according to Eskom's Transmission and EWT's Guidelines.
42. A pre-construction survey of the final development footprint must be conducted by a qualified floral specialist to identify protected species affected by the proposed development. Prior to the commencement of construction, a rescue and rehabilitation operation for these species which could survive translocation must be conducted.
43. Before the clearing of the site, the appropriate permits must be obtained from the DAFF for the removal of plants listed in the National Forest Act and from the relevant provincial department for the destruction of species protected in terms of the specific provincial legislation. Copies of the permits must be made available on request.

44. The holder of this authorisation must train safety representatives, managers and workers on workplace safety. The construction process must be compliant with all safety and health measures as prescribed by the relevant act.
45. All areas of disturbed soil must be reclaimed using only indigenous grass and shrubs. Reclamation activities shall be undertaken according to the rehabilitation plan to be included in the final EMPr.
46. Topsoil from all excavations and construction activities must be salvaged and reapplied during reclamation.
47. Watercourses outside the approved footprint/layout must be treated as "no-go" areas and demarcated as such. No vehicles, machinery, personnel, construction material, fuel, oil, bitumen or waste must be allowed into these areas without the express permission of and supervision by the ECO, except for rehabilitation work in these areas.
48. Anti-erosion measures such as silt fences must be installed in disturbed areas.
49. Cleared alien vegetation must be temporarily stored in a demarcated area. Once clearing is completed, they must be moved to a licenced waste disposal facility.
50. Signs must be placed along construction roads to identify speed limits, travel restrictions, and other standard traffic control information.
51. Roads must be designed so that changes to surface water runoff are avoided and erosion is not initiated.
52. Should abnormal loads have to be transported by road to the site, a permit must be obtained from the relevant Provincial and National Transport Authority.
53. Leakage of fuel must be avoided at all times and if spillage occurs, it must be remedied immediately. Spill kits must be made available on-site for the clean-up of spills.
54. No dumping or temporary storage of any materials may take place outside designated and demarcated laydown areas, and these must all be located within areas of low environmental sensitivity.
55. Hazardous substances must be stored in a bunded and designated area to avoid accidental leakage into the environment.
56. An integrated waste management approach must be implemented that is based on waste minimisation. Where waste is disposed of, such disposal shall only occur at a landfill licensed in terms of the National Environment Management Waste Act, 2008 (Act 59 of 2008).
57. The holder of this authorisation must take note that no temporary site camps will be allowed outside the footprint of the development area as the establishment of such structures might trigger a listed activity as defined in the Environmental Impact Assessment Regulations.

58. Foundations and trenches must be backfilled with originally excavated materials as much as possible. Excess excavation materials must be disposed of only in approved areas or, if suitable, stockpiled for use in reclamation activities.
59. Borrow materials must be obtained only from authorized and permitted sites. Permits must be kept on site by the ECO.
60. Dust suppression techniques must be implemented on all exposed surfaces during the construction phase. Such measures may include wet suppression, chemical stabilisation, the use of a wind fence, covering surfaces with straw chippings and re-vegetation of open areas.
61. The holder of this authorisation must reduce visual impacts during construction by minimising areas of surface disturbance, controlling erosion, using dust suppression techniques and restoring exposed soil as closely as possible to their original contour and vegetation.
62. Any vegetation clearing that needs to take place as part of maintenance activities (during the operational phase of the approved development), must be done in accordance to the approved EMPr.
63. Monitoring for erosion must take place to ensure that no erosion problems are occurring at the site as a result of the roads and other infrastructure. All erosion problems observed must be rectified as soon as possible as outlined in the erosion management plan within the EMPr.
64. Kerbs and storm water channels must be designed in such a way that they can allow small animals and reptiles to move freely.
65. The holder of the authorisation must comply with the Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983) Articles 7.1 and (3) b of Regulation 9238.
66. Top soil and subsoil must be stockpiled separately and replaced according to the correct profile i.e. topsoil replaced last. Stockpiles must not be situated such that they obstruct natural water pathways and drainage channels.
67. Top soil stockpiles must not exceed 2m in height, stockpiles older than 6 months must be enriched before they can be used to ensure the effectiveness of the topsoil.
68. Any fauna directly threatened by the construction activities must be removed to a safe location by a qualified person.
69. The recommendations of the EAP in the EIAR dated August 2015 and the specialist studies attached must be adhered to. In the event of any conflicting mitigation measures and conditions of the Environmental Authorisation, the specific condition of this Environmental Authorisation will take preference.

General

70. In terms of Section 43(7), an appeal under Section 43 of the National Environmental Management Act, 1998 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.
71. A copy of this authorisation and the approved EMPr must be kept at the property where the activity will be undertaken. The environmental authorisation and approved EMPr must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who undertakes work at the property.
72. 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 environmental authorisation as set out in this document or any other subsequent document emanating from these conditions of environmental authorisation.

Date of environmental authorisation: 29/11/2015



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 listed activities as applied for in the amended application form received on 26 February 2016.
- b) The information contained in the draft Scoping Report (SR) received 26 February.
- c) The information contained in the final SR received 11 April 2016.
- d) The information contained in the draft EIAr received 17 June 2016.
- e) The information contained in the final EIAr dated August 2016 and received 16 August 2016.
- f) The comments received from organs of state and interested and affected parties as included in the EIAr dated August 2016;
- g) Mitigation measures as proposed in the EIAr dated August 2016 and the draft EMPr.
- h) The information contained in the specialist studies contained in the EIAr dated August 2016 and as appears below:

Title	Prepared by	Date
Agriculture Impact Assessment	J Lanz	May 2016
Heritage Impact Assessment	J van Schalkwyk	January 2016
Avifauna Assessment	Dr AJ Williams – African Insights	May 2016
Visual Impact Assessment	J Botha of Phala Environmental Consultants	January 2016
Ecological Impact Assessment	RF Terblanche of Anthene Ecological CC	February 2016
Palaeontological Impact Assessment	JE Almond of Natura Viva CC PGS	February 2016
Traffic Impact Investigation	D van der Merwe – Bvi Consulting Engineers	April 2016
Wetland Impact Assessment	RF Terblanche of Anthene Ecological CC	February 2016
Social Impact Assessment	L Kruger	June 2016
Geological Impact Assessment	J Lanz	May 2016

- i) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act 107 of 1998).

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) Details provided of the qualifications of the Environmental Assessment Practitioner (EAP).
- b) The findings of all the specialist studies conducted and their recommended mitigation measures.
- c) The need for the proposed project stems from the provision of electricity to the national grid in terms of the Renewable Energy Independent Power Producers Procurement Programme (REIPPPP) as required by the Department of Energy.
- d) The EIA dated August 2016 identified all legislation and guidelines that have been considered in the preparation of the EIA.
- e) The description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity.
- f) The methodology used in assessing the potential impacts identified in the EIA dated August 2016 and the specialist studies have been adequately indicated.
- g) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2014 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 EIA dated August 2016 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) The proposed site for the electricity generation plant is situated in a transformed area.
- e) The information contained in the EIA dated August 2016 is deemed to be accurate and credible.

- f) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the EIAr 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 activity will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the authorised activity can be mitigated to acceptable levels. The environmental authorisation is accordingly granted.