



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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NEAS Ref: DEA/EIA/0001712/2013

DEA Reference: 14/12/16/3/3/2/471

Enquiries: Ms Mpho Monyai

Telephone: (012) 310 3938 Fax: (012) 320 7539 E-mail: mmonyai@environment.gov.za

Laura Luckhurst
PvAfrica Development (Pty) Ltd
PO Box 2671
CAPE TOWN
8000

Telephone Number: (021) 488 1010
Fax Number: (021) 424 1471

PER FACSIMILE / MAIL

Dear Luckhurst

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GN R. 543/544/546 FOR THE CONSTRUCTION OF 75MW PHOTOVOLTAIC PLANT ON THE REMAINING EXTENT OF PORTION 3 OF THE FARM ZUURWATER 62 NEAR AGGENEYS WITHIN THE KHAI MA LOCAL MUNICIPALITY, NORTHERN CAPE PROVINCE – PHASE 2

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 10(2) of the Environmental Impact Assessment Regulations, 2010 (the Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 12 (twelve) 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 7 of the Regulations, which prescribes the appeal procedure to be followed. This procedure is summarised in the attached document. Kindly include a copy of this document with the letter of notification to interested and affected parties.

Should the applicant or any other party wish to appeal any aspect of the decision a notice of intention to appeal must be lodged by all prospective appellants with the Minister, within 20 days of the date of the EA, by means of one of the following methods:

- By facsimile: 012 3207561;
- By post: Private Bag X447,
Pretoria, 0001; or
- By hand: 2nd Floor, Fedsure Building, North Tower,
Cnr. Lilian Ngoyi and Pretorius Streets,
Pretoria.

If the applicant wishes to lodge an appeal, it must also serve a copy of the notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection, should you intend to submit an appeal.

Please include the Department (*Attention: Director: Integrated Environmental Authorisations*) in the list of interested and affected parties, notified through your notification letter to interested and affected parties, for record purposes.

Appeals must be submitted in writing to:

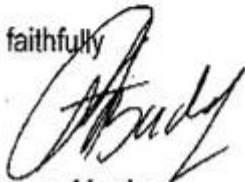
Mr Z Hassam, Director: Appeals and Legal Review, of this Department at the above mentioned addresses or fax number. Mr Hassam can also be contacted at:

Tel: 012-310-3271

Email: AppealsDirectorate@environment.gov.za

The authorised activities shall not commence within twenty (20) days of the date of signature of the authorisation. Further, please note that the Minister may, on receipt of appeals against the authorisation or conditions thereof suspend the authorisation pending the outcome of the appeals procedure.

Yours faithfully



Mr Ishaam Abader

Deputy Director-General: Legal, Authorisations, Compliance and Enforcement

Department of Environmental Affairs

Date: 10/07/2014

CC:	Ms R Ajodhapersadh	Savannah Environmental (Pty) Ltd	Tel: (011) 656 3237	Fax: (086) 684 0547
	Mr K Manyatsha	Northern Cape DENC	Tel: (054) 332 2885	Fax: (054) 331 1155
	Mr W Andre	Khai Ma Local Municipality	Tel: (027) 712 8000	Fax: (027) 712 8040

APPEALS PROCEDURE IN TERMS OF CHAPTER 7 OF THE NEMA EIA REGULATIONS, 2010 (THE REGULATIONS) AS PER GN R. 543 OF 2010 TO BE FOLLOWED BY THE APPLICANT AND INTERESTED AND AFFECTED PARTIES UPON RECEIPT OF NOTIFICATION OF AN ENVIRONMENTAL AUTHORISATION (EA)

APPLICANT	INTERESTED AND AFFECTED PARTIES (IAPs)
1. Receive EA from the relevant Competent Authority (the Department of Environmental Affairs [DEA]).	1. Receive EA from Applicant/Consultant.
2. Within 12 days of date of the EA notify all IAPs of the EA and draw their attention to their right to appeal against the EA in terms of Chapter 7 of the Regulations.	2. N/A.
3. If you want to appeal against the EA, submit a notice of intention to appeal within 20 days of the date of the EA with the Minister of Water and Environmental Affairs (the Minister).	3. If you want to appeal against the EA, submit a notice of intention to appeal within 20 days of the date of the EA with the Minister of Water and Environmental Affairs (the Minister).
4. After having submitted your notice of intention to appeal to the Minister, provide each registered IAP with a copy of the notice of intention to appeal within 10 days of lodging the notice.	4. After having submitted your notice of intention to appeal to the Minister, provide the applicant with a copy of the notice of intention to appeal within 10 days of lodging the notice.
5. The Applicant must also serve on each IAP: <ul style="list-style-type: none"> a notice indicating where and for what period the appeal submission will be available for inspection. 	5. Appellant must also serve on the Applicant within 10 days of lodging the notice, <ul style="list-style-type: none"> a notice indicating where and for what period the appeal submission will be available for inspection by the applicant.
6. The appeal must be submitted in writing to the Minister within 30 days after the lapsing of the period of 20 days provided for the lodging of the notice of intention to appeal.	6. The appeal must be submitted to the Minister within 30 days after the lapsing of the period of 20 days provided for the lodging of the notice of intention to appeal.
7. Any IAP who received a notice of intention to appeal may submit a responding statement to that appeal to the Minister within 30 days from the date that the appeal submission was lodged with the Minister.	7. An Applicant who received notice of intention to may submit a responding statement to the appeal to the Minister within 30 days from the date that the appeal submission was lodged with the Minister.

NOTES:

1. **An appeal against a decision must be lodged with:-**
 - a) the Minister of Water and Environmental Affairs if the decision was issued by the Director- General of the Department of Environmental Affairs (or another official) acting in his/ her capacity as the delegated Competent Authority;
 - b) the Minister of Justice and Constitutional Development if the applicant is the Department of Water Affairs and the decision was issued by the Director- General of the Department of Environmental Affairs (or another official) acting in his/ her capacity as the delegated Competent Authority;
2. **An appeal lodged with:-**
 - a) the Minister of Water and Environmental Affairs must be submitted to the Department of Environmental Affairs;
 - b) the Minister of Justice and Constitutional Development must be submitted to the Department of Environmental Affairs;
3. **An appeal must be:-**
 - a) submitted in writing;
 - b) accompanied by:
 - a statement setting out the grounds of appeal;
 - supporting documentation which is referred to in the appeal; and
 - a statement that the appellant has complied with regulation 62 (2) or (3) together with copies of the notices referred to in regulation 62.



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Environmental Authorisation

In terms of Regulation 36 of the Environmental Impact Assessment Regulations, 2010

CONSTRUCTION OF THE 75MW PHOTOVOLTAIC PLANT ON PORTION 3 OF THE FARM
ZUURWATER NO. 62 NEAR AGGENEYS WITHIN THE KHAI MA LOCAL MUNICIPALITY,
NORTHERN CAPE PROVINCE – PHASE 2

Namakwa District Municipality

Authorisation register number:	14/12/16/3/3/2/471
NEAS reference number:	DEA/EIA/0001712/2013
Last amended:	Second issue
Holder of authorisation:	PVAFRICA DEVELOPMENT (PTY) LTD
Location of activity:	Portion 3 of the Farm Zuurwater No. 62 Khai Ma Local Municipality Namakwa District Municipality Northern Cape Province

This 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.

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 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 107 of 1998) and the Environmental Impact Assessment Regulations, 2010 the Department hereby authorises –

PVAFRICA DEVELOPMENT (PTY) LTD

with the following contact details –

Laura Luckhurst

PvAfrica Development (Pty) Ltd

PO Box 2671

CAPE TOWN

8000

Telephone Number: (021) 488 1010

Fax Number: (021) 424 1471

Cellphone Number: (082) 724 4009


E-mail Address: laura.luckhurst@firstsolar.com




to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notices 1; Listing Notice 2; and, Listing Notice 3 (GN R. 544, 545 & 546):

Listed activities	Activity/Project description
<p><u>GN R 544 Item 9:</u></p> <p><i>"The construction of facilities or infrastructure exceeding 1000 metres in length for the bulk transportation of water, sewage or storm water -</i></p> <p><i>(i) with a peak throughput of 120 litres per second or more"</i></p>	<p>A water supply pipeline will be required to be constructed.</p>
<p><u>GN R544 Item 10:</u></p> <p><i>"The construction of facilities or infrastructure for the transmission and distribution of electricity -</i></p> <p><i>(i) Outside urban areas or industrial complexes with a capacity of more than 33kV but less than 275kV"</i></p>	<p>Overhead power line with a capacity up to 275kV.</p>
<p><u>GN R544 Item 11:</u></p> <p><i>"The construction of:</i></p> <p><i>(iii) bridges;</i></p> <p><i>(x) buildings exceeding 50 square metres in size; or</i></p> <p><i>(xi) infrastructure or structures covering 50 square metres or more</i></p> <p><i>where such construction occurs within a watercourse or within 32 metres of a watercourse, measures from the edge of a watercourse."</i></p>	<p>Pans on the development site could be affected by the proposed development.</p>
<p><u>GN R544 Item 18:</u></p> <p><i>"The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock or more than 5 cubic metres from:</i></p> <p><i>(i) a watercourse"</i></p>	<p>Pans on the development site could be affected by the proposed development.</p>
<p><u>GN R545 Item 1:</u></p>	



<p>"The construction of facilities or infrastructure, for the generation of electricity where the output is 20 MW or more."</p>	<p>The PV facility would be 75MW in capacity</p>
<p>GN R545 Item 8: "The construction of facilities or infrastructure for the transmission and distribution of electricity with a capacity of 275 kilovolts or more, outside an urban area or industrial complex."</p>	<p>Overhead power line with a capacity of up to 275kV</p>
<p>GN R545 Item 15: "Physical alteration of undeveloped, vacant or derelict land for residential, retail, commercial, recreational, industrial or institutional use where the total area to be transformed is 20 hectares or more."</p>	<p>The development footprint would be in excess of more than 20ha.</p>
<p>GN R546 Item 2: "The construction of reservoirs for bulk water supply with a capacity of more than 250 cubic metres. (a) In Northern Cape province: iii. Outside urban areas, in: (dd) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans."</p>	<p>A reservoir is required for storage and supply of water to the facility. The site is located within a Critical Biodiversity Area.</p>
<p>GN546; Item: 4 "The construction of a road wider than 4 metres with a reserve less than 13,5 metres a) In Northern Cape province: ii. Outside urban areas, in: (ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans."</p>	<p>Access roads would be required to be constructed for the proposed facility. The site is located within a Critical Biodiversity Area.</p> 
<p>GN546; Item: 10 "The construction of facilities or infrastructure for the storage, or storage and handling of a dangerous good,</p>	<p>Hazardous materials will need to be stored on site during construction and</p>

<p>where such storage occurs in containers with a combined capacity of 30 but not exceeding 80 cubic metres</p> <p>(a) Northern Cape province:</p> <p>ii. Outside urban areas, in:</p> <p>(ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans."</p>	<p>operation. The site is located within a Critical Biodiversity Area.</p>
<p>GN546; Item: 12</p> <p>"The clearance of an area of 300 square metres or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation.</p> <p>b) Within critical biodiversity areas identified in bioregional plans."</p>	<p>Vegetation will be cleared for the construction of the facility. The site is located within a Critical Biodiversity Area.</p>
<p>GN546 Item: 13</p> <p>"The clearance of an area of 1 hectare or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation.</p> <p>(a) Critical biodiversity areas and ecological support areas as identified in systematic biodiversity plans adopted by the competent authority."</p>	<p>Vegetation will be cleared for the construction of the facility. The site is located within a Critical Biodiversity Area.</p>
<p>GN546; Item: 14</p> <p>"The clearance of an area of 5 hectares or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation.</p> <p>a) In Northern Cape:</p> <p>i. All areas outside urban areas."</p>	<p>Vegetation will be cleared for the construction of the facility. The site constitutes natural vegetation.</p>
<p>GN546 Item: 16</p> <p>"The construction of:</p> <p>(iii) buildings with a footprint exceeding 10 square metres in size; or</p> <p>(iv) infrastructure covering 10 square metres or more, where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the</p>	<p>Pans occur on the development site which could be affected by the proposed development.</p> 

<p>edge of a watercourse, excluding where such construction will occur behind the development setback line.</p> <p>a) In Northern Cape:</p> <p>ii. Outside urban areas, in:</p> <p>(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans."</p>	
<p>GN546; Item: 19</p> <p>"The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.</p> <p>a) In Northern Cape provinces:</p> <p>ii. Outside urban areas, in:</p> <p>(ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans."</p>	<p>Existing roads may need to be widened or lengthened. The site is located within a Critical Biodiversity Area.</p>

as described in the Environmental Impact Assessment Report (EIAR) dated January 2014 at:

DEA reference number	Description	Output	Area (Hectares)	coordinates for Central point of the unit	
				Latitude S	Longitude E
14/12/16/3/3/2/471	Phase 2	75 MW	209ha	29°19'13.77"S	18°45'10.93"E
	275 kV Power line X ~5.6 km length		Start point	29°17'48.07"S	18°48'10.28"E
			Middle point	29°18'12.02"S	18°46'6.23"E
			End point	29°19'1.88"S	18°45'46.90"E
	6 km main access road X 7m wide		Start point	29°19'26.71"S	18°45'43.37"E
			Middle point	29°19'25.34"S	18°45'42.44"E
			End point	29°19'23.33"S	18°45'41.40"E
	6 km water pipeline		Start point	29°17'56.16"S	18°48'16.63"E
			Middle point	29°18'54.35"S	18°45'51.64"E
			End point	29°19'42.81"S	18°44'59.49"E

- for the construction of the 75 MW Photovoltaic Plant and its associated infrastructure – Phase 2. This facility will be situated on the Portion 3 of the Farm Zuurwater 62 which is located within the Khai Ma Local Municipality in the Namakwa District Municipality, Northern Cape Province, hereafter referred to as “the property”.

The infrastructure associated with this facility include:

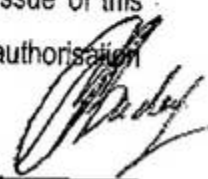
Component	Description / Dimensions
Location of the site	Portion 3 of the Farm Zuurwater No. 62, located adjacent to the N14 between Springbok and Pofadder, approximately 9km west of the town of Aggeneys within the Khai Ma Local Municipality, which falls within the Namakwa District Municipality.
Site access:	Main access to the site will be via a new access road from the N14. Internal access roads of up to 7m wide will be constructed.
Solar photovoltaic technology	Either static, tracking or thin film
Water use	Project Construction volume per Month 20 000 m ³
Panel Dimensions	1 200mm x 600mm (0.72m ²)
Number of Panels	930 000
Number of inverters	110
Distribution transformers	A typical medium voltage transformer is 3m wide, 3m long, and 3m high.
Main transformer / substation	33/275 kV; maximum area of 3720 m ²
Installed Panels height from the ground level	4m
Height of inverters	3m
Height of Transformers	3.5m
Internal power collection system poles	11m
Height of Buildings and office and workshop size	4m high and 1 100 m ² size of buildings foot print
Height of Fencing	3.5m

New overhead power line between the site and Aggeneis Substation	Up to 275kV and approximately 5.6km
Height of towers	50m
Water reservoir: shared infrastructure for all project phases	A reservoir with a capacity of 49 995m ³ and a total footprint of 20 000m ²
Water pipeline	Water pipeline with a maximum diameter of 203.2mm and maximum water flow of 3,000m ³ /day which is 351 litres per second.

Conditions of this Environmental Authorisation

Scope of authorisation

1. The construction of the 75MW photovoltaic plant on Portion 3 of the Farm Zuurwater 62 near Aggeneis within the Khai Ma Local Municipality, Northern Cape Province, with the coordinates above is approved.
2. Authorisation of the activity is subject to the conditions contained in this 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 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 authorisation in terms of the regulations.
6. This activity must commence within a period of three (03) years from the date of issue of this authorisation. If commencement of the activity does not occur within that period, the authorisation

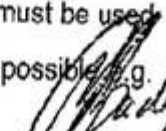


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- lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.
7. Commencement with one activity listed in terms of this authorisation constitutes commencement of all authorised activities.
 8. The holder of an environmental authorisation must notify the competent authority of any alienation, transfer and change of ownership rights in the property on which the activity is to take place.

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 12 (twelve) 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 Chapter 7 of the Environmental Impact Assessment Regulations, 2010;
 - 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.
11. The holder of the authorisation must publish a notice –
 - 11.1. informing interested and affected parties of the decision;
 - 11.2. informing interested and affected parties where the decision can be accessed; and
 - 11.3. drawing the attention of interested and affected parties to the fact that an appeal may be lodged against this decision in the newspaper(s) contemplated and used in terms of regulation 54(2)(c) and (d) and which newspaper was used for the placing of advertisements as part of the public participation process.

Management of the activity

12. A copy of 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:
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- 12.1 Position of solar facilities and its associated infrastructure;
 - 12.2 Foundation footprint;
 - 12.3 Internal roads indicating width;
 - 12.4 Wetlands, drainage lines, rivers, stream and water crossing of roads and cables;
 - 12.5 All sensitive features e.g. heritage sites, wetlands, pans and drainage channels that will be affected by the facility and associated infrastructure;
 - 12.6 Substation(s) inverters and/or transformer(s) sites including their entire footprint;
 - 12.7 Connection routes (including pylon positions) to the distribution/transmission network;
 - 12.8 All existing infrastructure on the site, especially roads;
 - 12.9 Buildings, including accommodation; and,
 - 12.10 All "no-go" and buffer areas.
13. Furthermore, a shapefile of the approved development layout/footprint must be submitted to this Department within two months from the date of this 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
Fedsure Forum Building (corner of Pretorius and Lillian Ngoyi Streets)
4th Floor South Tower
315 Pretorius Street
Pretoria, 0002



For Attention: Mr Muhammad Essop
Integrated Environmental Authorisations
Strategic Infrastructure Developments

Telephone Number: (012) 395 1734

Fax Number: (012) 395 7539

Email Address: MEssop@environment.gov.za

14. The Environmental Management Programme (EMPr) submitted as part of the EIAr dated January 2014 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 submitted to the Department for written approval prior to commencement of the activity. Once approved the EMPr must be implemented and adhered to.
15. The EMPr is amendable and 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.
16. Changes to the EMPr, which are environmentally defensible, shall be submitted to this Department for acceptance before such changes could be effected.
17. The Department reserves the right to amend the EMPr should any impacts that were not anticipated or covered in the EIAr dated January 2014 be discovered.
18. The provisions of the approved EMPr including recommendations and mitigation measures in the EIAr dated January 2014 and specialist studies shall be an extension of the conditions of this EA and therefore noncompliance with them would constitute noncompliance with the EA.
19. The EMPr amendment must include the following:
 - 19.1 All recommendations and mitigation measures recorded in the EIAr dated January 2014.
 - 19.2 All mitigation measures as listed in the specialist reports must be included in the EMPr and implemented.
 - 19.3 The requirements and conditions of this authorisation.
 - 19.4 The final site layout map.
 - 19.5 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 undertaken.



- 19.6 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.
- 19.7 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.
- 19.8 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.
- 19.9 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.
- 19.10 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.
- 19.11 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.
- 19.12 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.
- 19.13 An environmental sensitivity map indicating environmental sensitive areas and features identified during the EIA process.



19.14 A map combining the final layout map superimposed (overlain) on the environmental sensitivity map. This map must reflect the proposed location of the PV as stated in the EIAr dated January 2014 and this authorisation.

Environmental Control Officer (ECO) and duties

20. The holder of this authorisation must appoint an independent Environmental Control Officer (ECO) with experience or expertise in the field for the construction phase of the development. The ECO will have the responsibility to ensure that the conditions referred to in this authorisation are implemented and to ensure compliance with the provisions of the EMPr.
21. The ECO must be appointed before commencement of any authorised activity.
22. Once appointed, the name and contact details of the ECO must be submitted to the Director: Compliance Monitoring of this Department.
23. The ECO must meet with the contractors to discuss the conditions of the EA and the contents of the EMPr prior to any site clearing occurring.
24. 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.
25. The ECO must:
 - 25.1. Keep record of all activities on site, problems identified, transgressions noted and a schedule of tasks undertaken by the ECO.
 - 25.2. Keep and maintain a detailed incident (including spillage of bitumen, fuels, chemicals, or any other material) and complaint register on site indicating how these issues were addressed, what rehabilitation measures were taken and what preventative measures were implemented to avoid re-occurrence of incidents/complaints.
 - 25.3. Keep and maintain a daily site diary.
 - 25.4. Keep copies of all reports submitted to the Department.
 - 25.5. Keep and maintain a schedule of current site activities including the monitoring of such activities.
 - 25.6. Obtain and keep record of all documentation, permits, licences and authorisations such as waste disposal certificates, hazardous waste landfill site licences etc. required by this facility.
 - 25.7. Compile a monthly monitoring report.



Monitoring and reporting to the Department

26. The holder of this authorisation must keep all records relating to monitoring and auditing on site and make it available for inspection to any relevant and competent authority in respect of this development.
27. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this authorisation, must be submitted to the Director: Compliance Monitoring at this Department.

Environmental audit report

28. The holder of the authorisation must 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 within 30 days of completion of rehabilitation activities.
29. The environmental audit report must:
 - 29.1. Be compiled by an independent environmental auditor;
 - 29.2. Indicate the date of the audit, the name of the auditor and the outcome of the audit;
 - 29.3. Evaluate compliance with the requirements of the approved EMPr and this environmental authorisation;
 - 29.4. Include measures to be implemented to attend to any non-compliances or degradation noted;
 - 29.5. Include copies of any approvals granted by other authorities relevant to the development for the reporting period;
 - 29.6. Highlight any outstanding environmental issues that must be addressed, along with recommendations for ensuring these issues are appropriately addressed;
 - 29.7. Include a copy of this authorisation and the approved EMPr;
 - 29.8. Include all documentation such as waste disposal certificates, hazardous waste landfill site licences etc. pertaining to this authorisation; and
 - 29.9. Include evidence of adherence to the conditions of this authorisation and the EMPr where relevant such as training records and attendance records.

Commencement of the activity



30. The authorised activity shall not commence within twenty (20) days of the date of signature of the authorisation.
31. An appeal under section 43 of the National Environmental Management Act (NEMA), Act 107 of 1998 (as amended), does not suspend an environmental authorisation or exemption, or any provisions or conditions attached thereto, or any directive, unless the Minister, MEC or delegated organ of state directs otherwise.
32. Should you be notified by the Minister of a suspension of the authorisation pending appeal procedures, you may not commence with the activity until such time that the Minister allows you to commence with such an activity in writing.
33. The holder of this authorisation must obtain a Water Use Licence from the Department of Water Affairs (DWA) prior to the commencement of the project should the holder impact on any wetland or water resource. A copy of the license must be kept by the ECO.

Notification to authorities

34. Fourteen (14) days written notice must be given to the Department that the activity will commence. 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. This notification period may coincide with the Notice of Intent to Appeal period, within which construction may not commence.

Operation of the activity

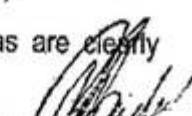
35. Fourteen (14) days written notice must be given to the Department that the activity operational phase will commence.
36. The holder of this authorisation must compile an operational EMPr for the operational phase of the activity or alternatively, if the holder has an existing operational environmental management system, it must be amended to include the operation of the authorised activity.
37. The EMPr must form part of the contract with the EPC Contractor appointed to construct the proposed facility, and must be used to ensure compliance with environmental specifications and management measures.

Site closure and decommissioning



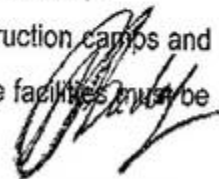
38. Should the activity ever cease or become redundant, the applicant shall undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time.

Specific conditions

39. Vegetation clearing must be limited to the authorised footprint.
40. The footprint of the development must be limited to the areas required for actual construction works and operational activities and the areas outside of the footprint must be clearly demarcated and regarded as "no-go" areas.
41. Vegetation clearing must be limited to the required footprint. Mitigation measures must be implemented to reduce the risk of erosion and the invasion of alien species.
42. Before the clearing of the site, the appropriate permits must be obtained from the Department of Agriculture, Forestry and Fisheries (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 kept by the ECO.
43. Construction activities must be restricted to demarcated areas to restrict the impact on sensitive environmental features.
44. 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.
45. Topsoil from all excavations and construction activities must be salvaged and reapplied during reclamation.
46. No exotic plants may be used for rehabilitation purposes; only indigenous plants of the area may be utilised.
47. No activities will be allowed to encroach into a water resource without a water use license being in place from the Department of Water Affairs.
48. Cleared alien vegetation must not be dumped on adjacent intact vegetation during clearing but must be temporarily stored in a demarcated area.
49. Removal of alien invasive species or other vegetation and follow-up procedures must be in accordance with the Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983).
50. The holder of this authorisation must ensure that all the "No-go" and buffer areas are clearly demarcated (using fencing and appropriate signage) before construction commences.
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51. Contractors and construction workers must be clearly informed of the no-go areas.
52. Disturbed areas must be rehabilitated as soon as possible after construction with locally indigenous plants to enhance the conservation of existing natural vegetation on site.
53. Wetlands, rivers and river riparian areas must be treated as "no-go" areas and appropriately 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.
54. No discharge of effluents or polluted water must be allowed into any rivers or wetland areas.
55. No spoil material, including stripped topsoil, must be temporarily stockpiled within 30 m of freshwater ecosystems identified to be of low or moderate conservation importance and 50 m of freshwater ecosystems identified to be of high conservation importance.
56. Workers must be made aware of the importance of not polluting rivers or wetlands and of not undertaking activities that could result in such pollution, and this awareness must be promoted throughout the construction phase.
57. Signs must be placed along construction roads to identify speed limits, travel restrictions, and other standard traffic control information. To minimize impacts on local commuter, consideration should be given to limiting construction vehicles travelling on public roadways during the morning and late afternoon commute time.
58. Internal access roads must be located to minimize stream crossings. All structures crossing streams must be located and constructed so that they do not decrease channel stability or increase water velocity.
59. A designated access to the site must be created and clearly marked to ensure safe entry and exit.
60. Signage must be erected at appropriate points warning of turning traffic and the construction site.
61. Construction vehicles carrying materials to the site should avoid using roads through densely populated built-up areas so as not to disturb existing retail and commercial operations.
62. Road borders should be regularly maintained to ensure that vegetation remains short and that they therefore serve as an effective firebreak.
63. Roads must be designed so that changes to surface water runoff are avoided and erosion is not initiated.
64. Should abnormal loads have to be transported by road to the site, a permit must be obtained from the relevant Provincial Government.
65. All construction vehicles should adhere to a low speed limit to avoid collisions with susceptible species such as snakes and tortoises.

66. 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.
67. The holder of this authorisation must train safety representatives, managers and workers in workplace safety. The construction process must be compliant with all safety and health measures as prescribed by the relevant act.
68. Liaison with land owners/farm managers must be done prior to construction in order to provide sufficient time for them to plan agricultural activities.
69. No unsupervised open fires for cooking or heating must be allowed on site.
70. Areas around fuel tanks must be bunded or contained in an appropriate manner as per the requirements of SABS 089:1999 Part 1.
71. Leakage of fuel must be avoided at all times and if spillage occurs, it must be remedied immediately.
72. Hazardous waste such as bitumen, oils, oily rags, paint tins etc. must be disposed of at an approved waste landfill site licensed to accept such waste.
73. 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.
74. Hazardous substances must not be stored where there could be accidental leakage into surface or subterranean water.
75. Hazardous and flammable substances must be stored and used in compliance to the applicable regulations and safety instructions. Furthermore, no chemicals must be stored nor may any vehicle maintenance occur within 350m of the temporal zone of wetlands, a drainage line with or without an extensive floodplain or hillside wetlands.
76. Temporary bunds must be constructed around chemical storage to contain possible spills.
77. Spill kits must be made available on-site for the clean-up of spills.
78. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling and re-use options where appropriate. Where solid waste is disposed of, such disposal shall only occur at a landfill licensed in terms of section 20(b) of the National Environment Management Waste Act, 2008 (Act 59 of 2008).
79. The holder of this authorisation must provide sanitation facilities within the construction camps and along the road so that workers do not pollute the surrounding environment. These facilities must be



- removed from the site when the construction phase is completed as well as associated waste to be disposed of at a registered waste disposal site.
80. 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, 2010.
 81. Underground cables and internal access roads must be aligned as much as possible along existing infrastructure to limit damage to vegetation and watercourses.
 82. 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.
 83. Borrow materials must be obtained only from authorized and permitted sites. Permits must be kept on site by the ECO.
 84. Anti-erosion measures such as silt fences must be installed in disturbed areas.
 85. Dust abatement techniques must be used before and during surface clearing, excavation, or blasting activities.
 86. Appropriate dust suppression techniques must be implemented on all exposed surfaces during periods of high wind. 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.
 87. The recommendations of the EAP in the EIAR (prepared by Savannah Environmental (Pty) Ltd and dated January 2014) and the specialist studies attached as Appendix E-J and appendix P of the EIAR 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

88. A copy of this authorisation and the approved EMPr must be kept at the property where the activity will be undertaken. The 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 works or undertakes work at the property.
89. The holder of the authorisation must notify both the Director: Integrated Environmental Authorisations and the Director: Compliance Monitoring at the Department, in writing and within 48 (forty eight) hours, if any condition of this authorisation cannot be or is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance.
90. 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 applicant or his 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 applicant 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: 10 JULY 2014



Mr Ishaam Abador

Deputy Director-General: Legal, Authorisations, Compliance and Enforcement
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 application form dated February 2013;
- b) The information contained in the EIAr dated January 2014;
- c) The comments received from the organs of state; Department of Water Affairs, Department of Agriculture Forestry & Fisheries, SAHRA, SANRAL, Northern Cape Department of Environment and Nature Conservation, SKA, and ESKOM as well as the interested and affected parties as included in the EIAr dated January 2014;
- d) Mitigation measures as proposed in the EIAr dated January 2014 and the EMPr;
- e) The information contained in the specialist studies contained within Appendix E-J and appendix P of the EIAr dated January 2014 included, *inter alia*:

Title	Prepared by	Date
Heritage Impact Assessment report;	McGregor Museum Department of Archaeology	May 2013
Palaeontological Impact Assessment report.	Natura Viva cc	September 2011
Visual Impact Assessment report	SRK Consulting (Pty) Ltd	May 2013
Agricultural potential Assessment Report	ECHO Soil Solutions cc	February 2013
Ecological Impact Assessment Report	Savannah Environmental PTY Ltd	November 2013
Socio-Economic Impact Assessment	SRK Consulting (Pty) Ltd	March 2013
Traffic Impact Assessment	Aurecon (Pty) Ltd	May 2013



- f) 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 (RRIPPPP) as required by the Department of Energy.
- d) The EIAr dated January 2014 identified all legislation and guidelines that have been considered in the preparation of the EIAr.
- 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 EIAr dated January 2014 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, 2010 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 EIAr dated January 2014 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 information contained in the EIAr dated January 2014 is accurate and credible.



- e) 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 process.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the proposed 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 proposed activity can be mitigated to acceptable levels. The environmental authorisation is accordingly granted.

