



## **environmental affairs**

Department:  
Environmental Affairs  
**REPUBLIC OF SOUTH AFRICA**

Private Bag X 447 · PRETORIA · 0001 · Fedsure Building · 315 Pretorius Street · PRETORIA  
Tel (+ 27 12) 310 3911 · Fax (+ 2712) 322 2682

**NEAS Reference:** DEAT/EIA/12067/2010

**DEA Reference:** 12/12/20/1832/1A

**Enquiries:** Ms Thulisile Nyalunga

**Telephone:** 012-310-3249 **Fax:** 012-320-7539 **E-mail:** TNyalunga@environment.gov.za

Dr Louis van Heerden  
Kaxu Solar One RF (Pty) Ltd  
PO Box 12395  
**CENTURION**  
0046

Tel no: 012 643 0033  
Fax no: 012 663 1881

### **PER FACSIMILE / MAIL**

Dear Dr Van Heerden

### **AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION ISSUED ON 18 APRIL 2011 FOR THE PROPOSED ESTABLISHMENT OF THE POFADDER SOLAR THERMAL PLANT (PHASE 1) AND ITS ASSOCIATED INFRASTRUCTURE, NORTHERN CAPE PROVINCE**

The Department's decision on the above application issued on 18 April 2011 and your correspondence dated 10 April 2013 refer.

Based on a review of the reason for requesting an amendment to the above authorisation, the Department, in terms of regulation 42 of the Environmental Impact Assessment Regulations, 2010, has decided to amend (split) the environmental authorisation (EA) dated 18 April 2011. The amended EA is attached.

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 Department's decision in respect of the amendment made 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 amendment 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: 0123207561;  
By post: Private Bag X447,  
Pretoria, 0001; or  
By hand: 2nd Floor, Fedsure Building, North Tower,  
Cnr. Lilian Ngoyi (Van der Walt) 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.

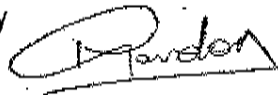
**Appeals must be submitted in writing to:**

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](mailto: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 amendment or conditions thereof suspend the authorisation pending the outcome of the appeals procedure.

Yours sincerely



**Mr Mark Gordon**  
**Chief Director: Integrated Environmental Authorisations**  
**Department of Environmental Affairs**  
**Date:** 26/06/2013

CC:	Ms K Jodas	Savannah Environmental (Pty) Ltd	Fax: 011 656 3237	Fax: 086 684 0547
	Mr M Mene	Khi Ma Local Municipality	Tel: 053-807-7430	Fax: (054) 933 0252
	Mr S Malaza	Compliance Monitoring (DEA)	Tel: 012-310-3397	Fax: 012-320-5744

**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)**

<b>APPLICANT</b>	<b>INTERESTED AND AFFECTED PARTIES (IAPs)</b>
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"> <li>• a notice indicating where and for what period the appeal submission will be available for inspection.</li> </ul>	5. Appellant must also serve on the Applicant within 10 days of lodging the notice, <ul style="list-style-type: none"> <li>• a notice indicating where and for what period the appeal submission will be available for inspection by the applicant.</li> </ul>
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:-**

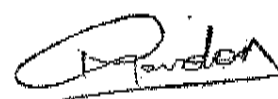
- a) the Minister of Water and Environmental Affairs if the decision was issued by the Director- General of the Department of Environmental Affairs (or another official) acting in his/ her capacity as the delegated Competent Authority;
- b) the Minister of Justice and Constitutional Development if the 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.





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**Enquiries:** Ms Thulisile Nyalunga

**Telephone:** 012-310-3249 **Fax:** 012-320-7539 **E-mail:** TNyalunga@environment.gov.za

Dr Louis van Heerden  
Xina Solar One RF (Pty) Ltd  
PO Box 12395  
**CENTURION**  
0046

Tel no: 012 643 0033

Fax no: 012 663 1881

### **PER FACSIMILE / MAIL**

Dear Dr Van Heerden

### **AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION ISSUED ON 18 APRIL 2011 FOR THE PROPOSED ESTABLISHMENT OF THE POFADDER SOLAR THERMAL PLANT (PHASE 2) AND ITS ASSOCIATED INFRASTRUCTURE, NORTHERN CAPE PROVINCE**

The Department's decision on the above application issued on 18 April 2011 and your correspondence dated 10 April 2013 refer.

Based on a review of the reason for requesting an amendment to the above authorisation, the Department, in terms of regulation 42 of the Environmental Impact Assessment Regulations, 2010, has decided to amend (split) the environmental authorisation (EA) dated 18 April 2011. The amended EA is attached.

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 Department's decision in respect of the amendment made 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 amendment 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: 0123207561;  
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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.

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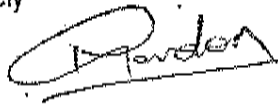
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Yours sincerely



**Mr Mark Gordon**  
**Chief Director: Integrated Environmental Authorisations**  
**Department of Environmental Affairs**  
Date: 26/06/2013

CC:	Ms K Jodas	Savannah Environmental (Pty) Ltd	Fax: 011 656 3237	Fax: 086 684 0547
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**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)**

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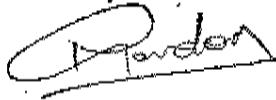
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**environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

## **Environmental Authorisation**

**In terms of regulation 36 of the Environmental Impact Assessment Regulations, 2010**

**Proposed construction of the 100MW Kaxu Solar One RF Pofadder Solar Thermal Plant Phase 1  
and its associated infrastructure on Portion 4 of the farm Scuit-Klip 92, Northern Cape Province**

**Namakwa District Municipality**

<b>Authorisation register number:</b>	12/12/20/1832/1A
<b>NEAS reference number:</b>	DEAT/EIA/12067/2010
<b>Last amended:</b>	<i>Second issue</i>
<b>Holder of authorisation:</b>	Kaxu Solar One RF (Pty) Ltd
<b>Location of activity:</b>	Northern Cape Province, Khai Ma Local Municipality

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 –

### **KAXU SOLAR ONE RF (PTY) LTD**

with the following contact details –

Dr Louis van Heerden

Kaxu Solar One RF (Pty) Ltd

PO Box 12395

**CENTURION**

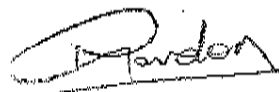
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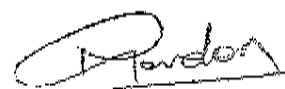
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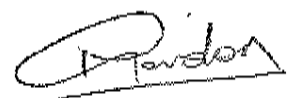


to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notices 1, 2 and 3 (GN R. 544, 545 & 546):

Listed activities	Activity/Project description
<p><u>GN R. 544 Activity 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 33 but less than 275 kilovolts.</i></p>	<p>A distribution line will connect a new on-site substation to Eskom's existing Paulputs Substation, which lies immediately to the west of the site.</p>
<p><u>GN R. 544 Activity 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, excluding where such construction will occur behind the development setback line.</i></p>	<p>Infrastructure will be required to be built with 32 m of non-perennial watercourses on site, as well as the Orange River (point of abstraction) and associated tributaries.</p>
<p><u>GN R. 544 Activity 23 (ii)</u></p> <p><i>The transformation of undeveloped, vacant or derelict land to -</i></p> <p><i>(ii) residential, retail, commercial, recreational, industrial or institutional use, outside an urban area and where the total area to be transformed is bigger than 1 hectare but less than 20 hectares.</i></p>	<p>The permanent infrastructure will occupy an area &gt;1ha.</p>
<p><u>GN R. 545 Activity 1</u></p> <p><i>The construction of facilities or infrastructure for the generation of electricity where the electricity output is 20 megawatts or more.</i></p>	<p>The proposed facility will have an electricity generation capacity of 100MW to be generated using Concentrating Solar Power (CSP) parabolic trough technology.</p>



Listed activities	Activity/Project description
<p><u>GN R. 545 Activity 3</u></p> <p><i>The construction of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 cubic metres.</i></p>	<p>The auxiliary steam boiler will be used to provide process steam to the facility (i.e. to supplement generation). The fuel for the boiler will be required to be stored at the facility and will have a storage capacity of more than 500 cubic metres.</p>
<p><u>GN R. 545 Activity 15</u></p> <p><i>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.</i></p>	<p>The permanent infrastructure will occupy an area &gt;20ha.</p>
<p><u>GN R. 546 Activity 12 (b)</u></p> <p><i>The clearance of an area of 300 square metres or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation:</i></p> <p><i>(b) Within critical biodiversity areas identified in bioregional plans.</i></p>	<p>An area of 1 ha or more of indigenous vegetation cover to be cleared in a terrestrial Critical Biodiversity Area classified as an Ecological Support Area (ESA) as identified in the Namakwa District's Biodiversity Plan.</p>
<p><u>GN R. 546 Activity 3</u></p> <p><i>The construction of masts or towers of any material or type used for telecommunication broadcasting or radio transmission purposes where the mast:</i></p> <p><i>(a) is to be placed on a site not previously used for this purpose, and</i></p> <p><i>(b) will exceed 15 metres in height</i></p>	<p>Microwave and/or telecommunications towers will be constructed as part of the power island of the power station.</p>
<p><u>GNR 546 Activity 2 (a) iii (dd)</u></p> <p><i>The construction of reservoirs for bulk water supply with a capacity of more than 250 cubic metres in the Northern Cape in the Northern Cape outside urban areas in dd)</i></p> <p><i>Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans.</i></p>	<p>Ancillary infrastructure includes water storage reservoirs on the site in a terrestrial Critical Biodiversity Area classified as an Ecological Support Area (ESA) as identified in the Namakwa District's Biodiversity Plan.</p>



Listed activities	Activity/Project description
<p><u>GN R. 546 Activity 4(a) ii (ee)</u></p> <p><i>The construction of a road wider than 4 metres with a reserve less than 13,5 metres.</i></p> <p><i>(a) In the Northern Cape</i></p> <p><i>ii. Outside urban areas in:</i></p> <p><i>(ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans</i></p>	<p>Access roads wider than 4 m will be constructed within a terrestrial Critical Biodiversity Area classified as an Ecological Support Area (ESA) as identified in the Namakwa District's Biodiversity Plan.</p>


- as described in the Environmental Impact Assessment Report (EIR) dated December 2010 at:

Preferred alternative	Latitude	Longitude
Approximate middle of the proposed development footprint	28°52'49.72"S	19°35'36.33"E

- for the proposed construction of a 100 MW commercial solar energy facility (referred to as the Pofadder Solar Thermal Plant Phase 1) and its associated infrastructure located approximately 30km north-east of Pofadder on Portion 4 of the farm Scuit-Klip 92 as described on page 3 of the Environmental Impact Assessment Report (EIR) dated December 2010, which falls within the jurisdiction of the Khai Ma Local Municipality of the Northern Cape Province, hereafter referred to as "the property".

The infrastructure associated with Phase 1 includes:

- 100MW to be generated from approximately 300 loops of parabolic troughs with an approximate height of 5m;
- Power islands which will include a steam turbine and generator (i.e. typically housed within a 2-storey building); a generator transformer and a small substation (i.e. located outside and adjacent to the 2-storey building); an auxiliary steam boiler and associated vessels (i.e. fossil fuel boiler/ steam generator), proposed to be fired by either diesel fuel or liquid petroleum gas (LPG); various heat exchangers, air cooled condenser, HVAC, water treatment plant and storage plant possibly including molten salt or direct steam.

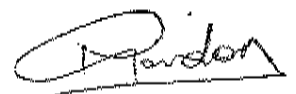


- An overhead power line feeding into the Eskom electricity network at the Paulputs Transmission Substation, which is situated adjacent to the site.
- An abstraction point at the Gariep (Orange) River and an associated water supply pipeline to the facility of approximately 30 km in length.
- A storage reservoir located within the boundaries of the identified site. The water stored within the reservoir will be used during the steam generation process (boiler makeup), for washing of the heliostats/mirrors, troughs and PV panels, potable water supply and fire protection supply.
- Lined evaporation ponds to allow for the evaporation of process waste water not to be re-used within the facility.
- External existing access road leading to the site from the R358 which branches off the N14 towards Onseepkans.
- Internal access roads for construction and maintenance purposes.
- Workshop, office and storage areas.

## **Conditions of this Environmental Authorisation**

### **Scope of authorisation**

1. The preferred site located on Portion 4 of the farm Scuit-klip 92, in the Northern Cape Province 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.
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6. This activity must commence within a period of three (3) years from the date of issue of this authorisation. If commencement of the activity does not occur within that period, the authorisation 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. The Environmental Management Plan/Programme (EMPr) submitted as part of the application for EA must be amended and submitted to the Department for written approval prior to
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commencement of the activity. The recommendations and mitigation measures recorded in the EIR dated December 2010 must be incorporated as part of the EMPr. Once approved, the EMPr must be implemented and adhered to.

13. All practical mitigation measures detailed within the EIR dated December 2010 and the specialist reports contained within Appendices F to K must be implemented.
14. Before construction can start, the applicant must submit a final layout plan to the Department for approval. The final layout should indicate the following:
  - Positions of solar facilities;
  - Foundation footprint;
  - Permanent laydown area footprint;
  - Construction period laydown footprint;
  - Internal roads indicating width (construction period width and operation period width) and with numbered sections between the other site elements which they serve (to make commenting on sections possible);
  - River, stream and water crossing of roads and cables indicating the type of bridging structures that will be used;
  - Substation(s) and/or transformer(s) sites including their entire footprint;
  - Cable routes and trench dimensions (where they are not along internal roads);
  - Connection routes to the distribution/transmission network;
  - Cut and fill areas along roads and at substation/transformer sites indicating the expected volume of each cut and fill;
  - Borrow pits;
  - Spoil heaps (temporary for topsoil and subsoil and permanently for excess material) ; and
  - Buildings including accommodation.
15. A comprehensive storm water management plan must be compiled for the development footprint prior to construction.

#### **Environmental Control Officer (ECO) and duties**

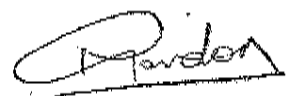
16. The holder of this authorisation must appoint an independent Environmental Control Officer (ECO) with experience or expertise in the field for the construction phase of the development. The ECO will have the responsibility to ensure that the conditions referred to in this authorisation are implemented and to ensure compliance with the provisions of the EMPr.



17. The ECO must be appointed before commencement of any authorised activity.
18. Once appointed, the name and contact details of the ECO must be submitted to the Director: Compliance Monitoring of the Department.
19. 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.
20. The ECO must:
  - 20.1 Keep record of all activities on site, problems identified, transgressions noted and a schedule of tasks undertaken by the ECO.
  - 20.2 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.
  - 20.3 Keep and maintain a daily site diary.
  - 20.4 Keep copies of all reports submitted to the Department.
  - 20.5 Keep and maintain a schedule of current site activities including the monitoring of such activities.
  - 20.6 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.
  - 20.7 Compile a monthly monitoring report.

#### **Recording and reporting to the Department**

21. 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.
22. 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 the Department.




### **Environmental audit report**

23. 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.
24. The environmental audit report must:
  - 24.1 Be compiled by an independent environmental auditor;
  - 24.2 Indicate the date of the audit, the name of the auditor and the outcome of the audit;
  - 24.3 Evaluate compliance with the requirements of the approved EMPr and this environmental authorisation;
  - 24.4 Include measures to be implemented to attend to any non-compliances or degradation noted;
  - 24.5 Include copies of any approvals granted by other authorities relevant to the development for the reporting period;
  - 24.6 Highlight any outstanding environmental issues that must be addressed, along with recommendations for ensuring these issues are appropriately addressed;
  - 24.7 Include a copy of this authorisation and the approved EMPr;
  - 24.8 Include all documentation such as waste disposal certificates, hazardous waste landfill site licences etc. pertaining to this authorisation; and
  - 24.9 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**

25. The authorised activity shall not commence within twenty (20) days of the date of signature of the authorisation.
26. 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.
27. 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.



### **Notification to authorities**

28. 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**


29. Fourteen (14) days written notice must be given to the Department that the activity operational phase will commence.
30. The holder of this authorisation must compile and submit an operational EMP to the Department for approval for the operational phase of the activity and if the holder has an existing operational environmental management system, it must be amended to include the operation of the authorised activity.

### **Site closure and decommissioning**

31. 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.

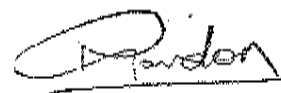
### **Specific conditions**

32. Clearance of indigenous vegetation must be kept to a minimum and rehabilitation of the cleared areas must start as soon as possible.
33. All species of special concern (SSC) must be identified and every effort must be made to rescue them.
34. Bird marker devices must preferably be placed on the earth wires as opposed to the conductors.
35. Appropriate bird deterrent devices must be placed at locations around the facility to lessen the impact.
36. Development in the north eastern area of the site must be minimal given the possibility of Lanner Falcons utilizing these mountainous areas as possible breeding sites.
- 



37. Monopole bird friendly structures must be utilized to minimise the number of electrocutions on the power line.
38. If the nest of a large bird species is detected within the vicinity of the area, then the Northern Cape Department of Environmental Affairs must be notified.
39. A procedure for the removal of nests must be written into the operating manual for the facility. The proponent must apply to the Northern Cape Provincial Department for a permit in order to relocate the nests of Sociable Weavers and White Browed Sparrow Weavers.
40. The *Aloe Dichotoma* tree is endemic to the Northern Cape; care must be taken as to not damage these trees. If removal of these trees must be done, the necessary permits must be obtained from the relevant Departments.
41. Alien invasive plants must be controlled on the site.
42. Disturbed areas must be rehabilitated as quickly as possible and an on-going monitoring programme must be established to detect, quantify and manage any alien species.
43. During construction, unnecessary disturbance to habitats must be strictly controlled and the footprint of the impact must be kept to a minimum.
44. Areas around fuel tanks must be bunded or contained in an appropriate manner as per the requirements of SABS 089:1999 Part 1.
45. Leakage of fuel must be avoided at all times and if spillage occurs, it must be remedied immediately.
46. Hazardous waste such as bitumen, oils, oily rags, paint tins etc. must be disposed of at an approved hazardous waste landfill site.
47. The applicant must ensure that streams, river, pans, wetlands, dams and their catchments are protected from erosion and direct or indirect spillage of pollutants.
48. During the construction phase of the development, an effective monitoring system must be put in place to detect any leakage or spillage of all hazardous substances during their transportation, handling, installation and storage. The applicant must ensure that precautionary measures to limit the possibility of oil and other toxic liquids from entering the soil or storm water system are in place.
49. Applications for all other relevant and required permits required to be obtained by the holder of this authorisation must be submitted to the relevant authorities. This includes permits for the rezoning of the land, transportation of all components (abnormal loads) to site, disturbance to heritage sites, disturbance of protected vegetation, and disturbance to any drainage lines or riparian vegetation and waste.

50. All overhead power line construction and maintenance activities must be undertaken in accordance with Eskom Transmission's Environmental Best Practice Standard.
51. A Water Use License Authorization (WULA) must be obtained from the Department of Water Affairs (DWA) for impact on any watercourse such as abstraction of water from a water resource, storing of water, impeding or diverting the flow of water in a watercourse, etc.
52. Construction personnel must minimise the amount of disturbance during the construction phase by staying within the boundaries of the 11km<sup>2</sup> construction areas.
53. A statutory building restriction of a 500m radius measured from an intersection on a national road or within 60 meters from the road reserve fence line is applicable on rural national roads.
54. As far as possible, any component of the facility which could potentially affect sensitive areas (i.e. primary drainage lines) must be shifted in order to avoid these sensitive areas, alternative mitigation measures as detailed in the EIR dated December 2010 must be implemented.
55. If any heritage resource of significance is exposed during construction, the South African Heritage Resource Authority (SAHRA) must be notified immediately.
56. Road alignments must be planned in such a way that the minimum of cut and fill operations are required.
57. Existing farm tracks must be re-used or upgraded to minimise the amount of change to the untransformed landscape.
58. Appropriate dust suppression techniques must be implemented on all exposed surfaces during periods of high wind. Such measures must include wet suppression, chemical stabilization, the use of a wind fence, covering surfaces with straw chippings and re-vegetation of open areas.
59. Appropriate erosion mitigation must be implemented to prevent any potential erosion.
60. The visual impact of the pipeline must be mitigated by placing the pipe underground, and rehabilitating the vegetation within the pipeline servitude.
61. The applicant must train safety representatives, managers and workers in workplace safety. All applicable safety standards and regulations, including for subcontractors must be enforced.
62. 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 NEMA Regulations, Government Notice 386 and 387 of 2006.
63. The potential fire hazards must be managed by ensuring that no unsupervised fires are permitted on site and that the construction personnel must be made aware of the consequences of starting fires on site to avoid damage to neighbouring farms.



64. Chemical ablution facilities must be available for the use of construction staff at all times during the construction period. 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 site.
65. An integrated waste management approach that is based on waste minimisation must be used and must incorporate reduction, recycling, re-use and disposal where appropriate. Any solid waste must be disposed of at waste disposal facility permitted in terms of Section 20(b) of the National Environment Management Waste Act, 2008 (Act No. 59 of 2008).

#### **General**

66. 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.
67. 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.
68. 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: 26/06/2012



**Mr Mark Gordon**  
**Chief Director: Integrated Environmental Authorisations**  
**Department of Environmental Affairs**

## **Annexure 1: Reasons for Decision**

### **1. Information considered in making the decision**

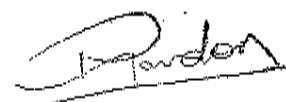
In reaching its decision, the Department took, *inter alia*, the following into consideration -

- a) The information contained in the EIR dated December 2010;
- b) The comments received from the various interested and affected parties (I&APs) as included in the EIR dated December 2010;
- c) Mitigation measures as proposed in the EIR dated December 2010 and the EMPr;
- d) The information contained in the specialist studies contained in the EIR dated December 2010; and
- e) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 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) The findings of all the specialist studies conducted and their recommended mitigation measures.
- b) The major benefit of the project is the strengthening of the existing electricity grid and will aid the government in achieving its goal of a 30% share of new power generation being derived from Independent Power Producers (IPP).
- c) The EIR dated December 2010 identified all legislation and guidelines that have been considered in the preparation of the EIR dated December 2010.
- d) The methodology used in assessing the potential impacts identified in the EIR dated December 2010 and the specialist studies have been adequately indicated.
- e) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 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 EIR dated December 2010 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 EIR dated December 2010 is accurate and credible.
- e) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the EIR 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.





**environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

## **Environmental Authorisation**

**In terms of regulation 36 of the Environmental Impact Assessment Regulations, 2010**

**Proposed construction of the 200MW Xina Solar One RF Pofadder Solar Thermal Plant Phase 2  
and its associated infrastructure on Portion 4 of the farm Scuit-Klip 92, Northern Cape Province**

**Namakwa District Municipality**

<b>Authorisation register number:</b>	12/12/20/1832/2A
<b>NEAS reference number:</b>	DEAT/EIA/12067/2010
<b>Last amended:</b>	<i>Second issue</i>
<b>Holder of authorisation:</b>	Xina Solar One RF (Pty) Ltd
<b>Location of activity:</b>	Northern Cape Province, Khai Ma Local Municipality

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 –

### **XINA SOLAR ONE RF (PTY) LTD**

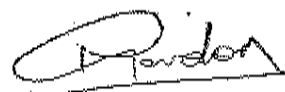
with the following contact details –

Dr Louis van Heerden  
Xina Solar One RF (Pty) Ltd  
PO Box 12395

### **CENTURION**

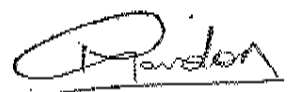
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Tel no: 012 643 0033  
Fax no: 012 663 1881  
Cell: 082 881 1579  
E-mail: Louis.vanheerden@solar.abengoa.com

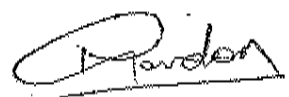


to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notices 1, 2 and 3 (GN R. 544, 545 & 546):

Listed activities	Activity/Project description
<p><u>GN R. 544 Activity 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 33 but less than 275 kilovolts.</i></p>	<p>A distribution line will connect a new on-site substation to Eskom's existing Paulputs Substation, which lies immediately to the west of the site.</p>
<p><u>GN R. 544 Activity 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, excluding where such construction will occur behind the development setback line.</i></p>	<p>Infrastructure will be required to be built with 32 m of non-perennial watercourses on site, as well as the Orange River (point of abstraction) and associated tributaries.</p>
<p><u>GN R. 545 Activity 1</u></p> <p><i>The construction of facilities or infrastructure for the generation of electricity where the electricity output is 20 megawatts or more.</i></p>	<p>The proposed facility will have an electricity generation capacity of 200MW to be generated using Concentrating Solar Power (CSP) power tower and heliostats technology.</p>
<p><u>GN R. 545 Activity 3</u></p> <p><i>The construction of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 cubic metres.</i></p>	<p>The auxiliary steam boiler will be used to provide process steam to the facility (i.e. to supplement generation). The fuel for the boiler will be required to be stored at the facility and will have a storage capacity of more than 500 cubic metres.</p>
<p><u>GN R. 545 Activity 15</u></p>	<p>The permanent infrastructure will occupy an</p>



Listed activities	Activity/Project description
<i>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.</i>	area >20ha.
<u>GN R. 546 Activity 12 (b)</u> <i>The clearance of an area of 300 square metres or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation:</i> <i>(b) Within critical biodiversity areas identified in bioregional plans.</i>	An area of 1 ha or more of indigenous vegetation cover to be cleared in a terrestrial Critical Biodiversity Area classified as an Ecological Support Area (ESA) as identified in the Namakwa District's Biodiversity Plan.
<u>GN R. 546 Activity 3</u> <i>The construction of masts or towers of any material or type used for telecommunication broadcasting or radio transmission purposes where the mast:</i> <i>(a) is to be placed on a site not previously used for this purpose, and</i> <i>(b) will exceed 15 metres in height</i>	Microwave and/or telecommunications towers will be constructed as part of the power island of the power station.
<u>GNR 546 Activity 2 (a) iii (dd)</u> <i>The construction of reservoirs for bulk water supply with a capacity of more than 250 cubic metres in the Northern Cape in the Northern Cape outside urban areas in dd)</i> <i>Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans.</i>	Ancillary infrastructure includes water storage reservoirs on the site in a terrestrial Critical Biodiversity Area classified as an Ecological Support Area (ESA) as identified in the Namakwa District's Biodiversity Plan.
<u>GN R. 546 Activity 4(a) ii (ee)</u> <i>The construction of a road wider than 4 metres with a reserve less than 13,5 metres.</i> <i>(a) In the Northern Cape</i> <i>ii. Outside urban areas in:</i> <i>(ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans</i>	Access roads wider than 4 m will be constructed within a terrestrial Critical Biodiversity Area classified as an Ecological Support Area (ESA) as identified in the Namakwa District's Biodiversity Plan.



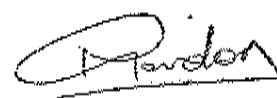
- as described in the Environmental Impact Assessment Report (EIR) dated December 2010 at:

Preferred alternative	Latitude	Longitude
Approximate middle of the proposed development footprint	28°53'43.66"S	19°35'34.82"E

- for the proposed construction of a 200 MW commercial solar energy facility (referred to as the Pofadder Solar Thermal Plant Phase 2) and its associated infrastructure located approximately 30km north-east of Pofadder on Portion 4 of the farm Scuit-Klip 92 as described on page 3 of the Environmental Impact Assessment Report (EIR) dated December 2010, which falls within the jurisdiction of the Khai Ma Local Municipality of the Northern Cape Province, hereafter referred to as "the property".

The infrastructure associated with Phase 2 includes:

- 200 MW to be generated from a field of heliostats/mirrors (i.e. approximately 6000 mirrors each approximately 120 m<sup>2</sup>, positioned on 6 m high pedestals) positioned around an approximately 200 m high power tower including the receiver.
- Power islands which will include a steam turbine and generator (i.e. typically housed within a 2-storey building); a generator transformer and a small substation (i.e. located outside and adjacent to the 2-storey building); an auxiliary steam boiler and associated vessels (i.e. fossil fuel boiler/ generator), proposed to be fired by either diesel fuel or liquid petroleum gas (LPG). Various heat exchangers, cooling plant and storage vessels (including direct steam).
- An overhead power line feeding into the Eskom electricity network at the Paulputs Transmission Substation, which is situated adjacent to the site.
- An abstraction point at the Gariep (Orange) River and an associated water supply pipeline to the facility of approximately 30 km in length (shared with Phase 1).
- A storage reservoir located within the boundaries of the identified site. The water stored within the reservoir will be used during the steam generation process (boiler makeup), for washing of the heliostats/mirrors, troughs and PV panels, potable water supply and fire protection supply (shared with Phase 1).
- Lined evaporation ponds to allow for the evaporation of process waste water not to be re-used within the facility (shared with Phase 1).

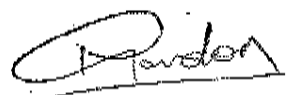


- External existing access road leading to the site from the R358 which branches off the N14 towards Onseepkans.
- Internal access roads for construction and maintenance purposes.
- Workshop, office and storage areas.

## **Conditions of this Environmental Authorisation**

### **Scope of authorisation**

1. The preferred site located on Portion 4 of the farm Scuit-klip 92, in the Northern Cape Province 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 (3) years from the date of issue of this authorisation. If commencement of the activity does not occur within that period, the authorisation 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.
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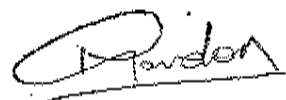


### **Notification of authorisation and right to appeal**

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. The Environmental Management Plan/Programme (EMPr) submitted as part of the application for EA must be amended and submitted to the Department for written approval prior to commencement of the activity. The recommendations and mitigation measures recorded in the EIR dated December 2010 must be incorporated as part of the EMPr. Once approved, the EMPr must be implemented and adhered to.
13. All practical mitigation measures detailed within the EIR dated December 2010 and the specialist reports contained within Appendices F to K must be implemented.
14. Before construction can start, the applicant must submit a final layout plan to the Department for approval. The final layout should indicate the following:
  - Positions of solar facilities;
  - Foundation footprint;

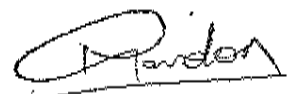




- Permanent laydown area footprint;
  - Construction period laydown footprint;
  - Internal roads indicating width (construction period width and operation period width) and with numbered sections between the other site elements which they serve (to make commenting on sections possible);
  - River, stream and water crossing of roads and cables indicating the type of bridging structures that will be used;
  - Substation(s) and/or transformer(s) sites including their entire footprint;
  - Cable routes and trench dimensions (where they are not along internal roads);
  - Connection routes to the distribution/transmission network;
  - Cut and fill areas along roads and at substation/transformer sites indicating the expected volume of each cut and fill;
  - Borrow pits;
  - Spoil heaps (temporary for topsoil and subsoil and permanently for excess material) ; and
  - Buildings including accommodation.
15. A comprehensive storm water management plan must be compiled for the development footprint prior to construction.

#### **Environmental Control Officer (ECO) and duties**

16. 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.
17. The ECO must be appointed before commencement of any authorised activity.
18. Once appointed, the name and contact details of the ECO must be submitted to the Director: Compliance Monitoring of the Department.
19. 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.
20. The ECO must:
- 20.1 Keep record of all activities on site, problems identified, transgressions noted and a schedule of tasks undertaken by the ECO.



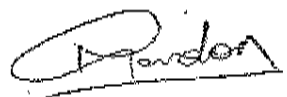
- 20.2 Keep and maintain a detailed incident (including spillage of bitumen, fuels, chemicals, or any other material) and complaint register on site indicating how these issues were addressed, what rehabilitation measures were taken and what preventative measures were implemented to avoid re-occurrence of incidents/complaints.
- 20.3 Keep and maintain a daily site diary.
- 20.4 Keep copies of all reports submitted to the Department.
- 20.5 Keep and maintain a schedule of current site activities including the monitoring of such activities.
- 20.6 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.
- 20.7 Compile a monthly monitoring report.

#### **Recording and reporting to the Department**

- 21. 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.
- 22. 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 the Department.

#### **Environmental audit report**

- 23. 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.
  - 24. The environmental audit report must:
    - 24.1 Be compiled by an independent environmental auditor;
    - 24.2 Indicate the date of the audit, the name of the auditor and the outcome of the audit;
    - 24.3 Evaluate compliance with the requirements of the approved EMPr and this environmental authorisation;
    - 24.4 Include measures to be implemented to attend to any non-compliances or degradation noted;
- 



- 24.5 Include copies of any approvals granted by other authorities relevant to the development for the reporting period;
- 24.6 Highlight any outstanding environmental issues that must be addressed, along with recommendations for ensuring these issues are appropriately addressed;
- 24.7 Include a copy of this authorisation and the approved EMPr;
- 24.8 Include all documentation such as waste disposal certificates, hazardous waste landfill site licences etc. pertaining to this authorisation; and
- 24.9 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**

- 25. The authorised activity shall not commence within twenty (20) days of the date of signature of the authorisation.
- 26. 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.
- 27. 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.

### **Notification to authorities**

- 28. 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**

- 29. Fourteen (14) days written notice must be given to the Department that the activity operational phase will commence.
- 



30. The holder of this authorisation must compile and submit an operational EMPr to the Department for approval for the operational phase of the activity and if the holder has an existing operational environmental management system, it must be amended to include the operation of the authorised activity.

#### **Site closure and decommissioning**

31. 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**

32. Clearance of indigenous vegetation must be kept to a minimum and rehabilitation of the cleared areas must start as soon as possible.
33. All species of special concern (SSC) must be identified and every effort must be made to rescue them.
34. Bird marker devices must preferably be placed on the earth wires as opposed to the conductors.
35. Appropriate bird deterrent devices must be placed at locations around the facility to lessen the impact.
36. Development in the north eastern area of the site must be minimal given the possibility of Lanner Falcons utilizing these mountainous areas as possible breeding sites.
37. Monopole bird friendly structures must be utilized to minimise the number of electrocutions on the power line.
38. If the nest of a large bird species is detected within the vicinity of the area, then the Northern Cape Department of Environmental Affairs must be notified.
39. A procedure for the removal of nests must be written into the operating manual for the facility. The proponent must apply to the Northern Cape Provincial Department for a permit in order to relocate the nests of Sociable Weavers and White Browed Sparrow Weavers.
40. The *Aloe Dichotoma* tree is endemic to the Northern Cape; care must be taken as to not damage these trees. If removal of these trees must be done, the necessary permits must be obtained from the relevant Departments.
41. Alien invasive plants must be controlled on the site.
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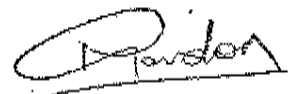
42. Disturbed areas must be rehabilitated as quickly as possible and an on-going monitoring programme must be established to detect, quantify and manage any alien species.
  43. During construction, unnecessary disturbance to habitats must be strictly controlled and the footprint of the impact must be kept to a minimum.
  44. Areas around fuel tanks must be bunded or contained in an appropriate manner as per the requirements of SABS 089:1999 Part 1.
  45. Leakage of fuel must be avoided at all times and if spillage occurs, it must be remedied immediately.
  46. Hazardous waste such as bitumen, oils, oily rags, paint tins etc. must be disposed of at an approved hazardous waste landfill site.
  47. The applicant must ensure that streams, river, pans, wetlands, dams and their catchments are protected from erosion and direct or indirect spillage of pollutants.
  48. During the construction phase of the development, an effective monitoring system must be put in place to detect any leakage or spillage of all hazardous substances during their transportation, handling, installation and storage. The applicant must ensure that precautionary measures to limit the possibility of oil and other toxic liquids from entering the soil or storm water system are in place.
  49. Applications for all other relevant and required permits required to be obtained by the holder of this authorisation must be submitted to the relevant authorities. This includes permits for the rezoning of the land, transportation of all components (abnormal loads) to site, disturbance to heritage sites, disturbance of protected vegetation, and disturbance to any drainage lines or riparian vegetation and waste.
  50. All overhead power line construction and maintenance activities must be undertaken in accordance with Eskom Transmission's Environmental Best Practice Standard.
  51. A Water Use License Authorization (WULA) must be obtained from the Department of Water Affairs (DWA) for impact on any watercourse such as abstraction of water from a water resource, storing of water, impeding or diverting the flow of water in a watercourse, etc.
  52. Construction personnel must minimise the amount of disturbance during the construction phase by staying within the boundaries of the 11km<sup>2</sup> construction areas.
  53. A statutory building restriction of a 500m radius measured from an intersection on a national road or within 60 meters from the road reserve fence line is applicable on rural national roads.
  54. As far as possible, any component of the facility which could potentially affect sensitive areas (i.e. primary drainage lines) must be shifted in order to avoid these sensitive areas, alternative mitigation measures as detailed in the EIR dated December 2010 must be implemented.
- 



55. If any heritage resource of significance is exposed during construction, the South African Heritage Resource Authority (SAHRA) must be notified immediately.
56. Road alignments must be planned in such a way that the minimum of cut and fill operations are required.
57. Existing farm tracks must be re-used or upgraded to minimise the amount of change to the untransformed landscape.
58. Appropriate dust suppression techniques must be implemented on all exposed surfaces during periods of high wind. Such measures must include wet suppression, chemical stabilization, the use of a wind fence, covering surfaces with straw chippings and re-vegetation of open areas.
59. Appropriate erosion mitigation must be implemented to prevent any potential erosion.
60. The visual impact of the pipeline must be mitigated by placing the pipe underground, and rehabilitating the vegetation within the pipeline servitude.
61. The applicant must train safety representatives, managers and workers in workplace safety. All applicable safety standards and regulations, including for subcontractors must be enforced.
62. 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 NEMA Regulations, Government Notice 386 and 387 of 2006.
63. The potential fire hazards must be managed by ensuring that no unsupervised fires are permitted on site and that the construction personnel must be made aware of the consequences of starting fires on site to avoid damage to neighbouring farms.
64. Chemical ablution facilities must be available for the use of construction staff at all times during the construction period. 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 site.
65. An integrated waste management approach that is based on waste minimisation must be used and must incorporate reduction, recycling, re-use and disposal where appropriate. Any solid waste must be disposed of at waste disposal facility permitted in terms of Section 20(b) of the National Environment Management Waste Act, 2008 (Act No. 59 of 2008).

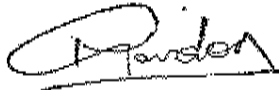
#### **General**

66. A copy of this authorisation and the approved EMP must be kept at the property where the activity will be undertaken. The authorisation and approved EMP 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.
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67. 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.
68. 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: 26/06/2013



**Mr Mark Gordon**

**Chief Director: Integrated Environmental Authorisations**

**Department of Environmental Affairs**

## **Annexure 1: Reasons for Decision**

### **1. Information considered in making the decision**


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

- a) The information contained in the EIR dated December 2010;
- b) The comments received from the various interested and affected parties (I&APs) as included in the EIR dated December 2010;
- c) Mitigation measures as proposed in the EIR dated December 2010 and the EMPr;
- d) The information contained in the specialist studies contained in the EIR dated December 2010; and
- e) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 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) The findings of all the specialist studies conducted and their recommended mitigation measures.
- b) The major benefit of the project is the strengthening of the existing electricity grid and will aid the government in achieving its goal of a 30% share of new power generation being derived from Independent Power Producers (IPP).
- c) The EIR dated December 2010 identified all legislation and guidelines that have been considered in the preparation of the EIR dated December 2010.
- d) The methodology used in assessing the potential impacts identified in the EIR dated December 2010 and the specialist studies have been adequately indicated.
- e) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2010 for public involvement.



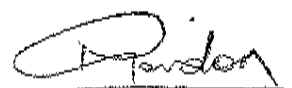


### **3. Findings**

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 EIR dated December 2010 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 EIR dated December 2010 is accurate and credible.
- e) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the EIR 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.





**environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

## **Environmental Authorisation**

**In terms of regulation 36 of the Environmental Impact Assessment Regulations, 2010**

**Proposed construction of the 10 MW Kau PV One RF Pofadder Solar Thermal Plant Phase 3 and its associated infrastructure on Portion 4 of the farm Scuit-Klip 92, Northern Cape Province**

**Namakwa District Municipality**

<b>Authorisation register number:</b>	12/12/20/1832/3A
<b>NEAS reference number:</b>	DEAT/EIA/12067/2010
<b>Last amended:</b>	<i>Second issue</i>
<b>Holder of authorisation:</b>	Kau PV One RF (Pty) Ltd
<b>Location of activity:</b>	Northern Cape Province, Khai Ma Local Municipality

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**

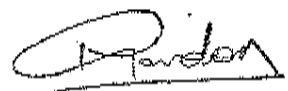
By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act 107 of 1998) and the Environmental Impact Assessment Regulations, 2010 the Department hereby authorises –

### **KAU PV ONE RF (PTY) LTD**

with the following contact details –

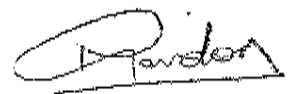
Dr Louis van Heerden  
Kau PV One RF (Pty) Ltd  
PO Box 12395  
**CENTURION**  
0046

Tel no: 012 643 0033  
Fax no: 012 663 1881  
Cell: 082 881 1579  
E-mail: Louis.vanheerden@solar.abengoa.com



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

Listed activities	Activity/Project description
<p><u>GN R. 544 Activity 1</u></p> <p><i>The construction of facilities or infrastructure for the generation of electricity where:</i></p> <p><i>i. the electricity output is more than 10 megawatts but less than 20 megawatts</i></p>	<p>The proposed facility will have an electricity generation capacity of 10MW to be generated using photovoltaic technology.</p>
<p><u>GN R. 544 Activity 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 33 but less than 275 kilovolts.</i></p>	<p>A 132 kV distribution line of approximately 2 km will cross the site and will connect to Eskom's existing Paulputs Transmission Substation, which lies immediately to the west of the site</p>
<p><u>GN R. 544 Activity 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, excluding where such construction will occur behind the development setback line.</i></p>	<p>Infrastructure will be required to be built with 32 m of non-perennial watercourses on site, as well as the Orange River (point of abstraction) and associated tributaries.</p>
<p><u>GN R. 545 Activity 3</u></p> <p><i>The construction of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 cubic metres.</i></p>	<p>The auxiliary steam boiler will be used to provide process steam to the facility (i.e. to supplement generation). The fuel for the boiler will be required to be stored at the facility and will have a storage capacity of more than 500 cubic metres.</p>
<p><u>GN R. 545 Activity 15</u></p>	<p>The permanent infrastructure will occupy an</p>



Listed activities	Activity/Project description
<i>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.</i>	area >20ha.
<u>GN R. 546 Activity 12 (b)</u> <i>The clearance of an area of 300 square metres or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation:</i> <i>(b) Within critical biodiversity areas identified in bioregional plans.</i>	An area of 1 ha or more of indigenous vegetation cover to be cleared in a terrestrial Critical Biodiversity Area classified as an Ecological Support Area (ESA) as identified in the Namakwa District's Biodiversity Plan.
<u>GN R. 546 Activity 3</u> <i>The construction of masts or towers of any material or type used for telecommunication broadcasting or radio transmission purposes where the mast:</i> <i>(a) is to be placed on a site not previously used for this purpose, and</i> <i>(b) will exceed 15 metres in height</i>	Microwave and/or telecommunications towers will be constructed as part of the power island of the power station.
<u>GNR 546 Activity 2 (a) iii (dd)</u> <i>The construction of reservoirs for bulk water supply with a capacity of more than 250 cubic metres in the Northern Cape in the Northern Cape outside urban areas in dd)</i> <i>Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans.</i>	Ancillary infrastructure includes water storage reservoirs on the site in a terrestrial Critical Biodiversity Area classified as an Ecological Support Area (ESA) as identified in the Namakwa District's Biodiversity Plan.
<u>GN R. 546 Activity 4(a) ii (ee)</u> <i>The construction of a road wider than 4 metres with a reserve less than 13,5 metres.</i> <i>(a) In the Northern Cape</i> <i>ii. Outside urban areas in:</i> <i>(ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans</i>	Access roads wider than 4 m will be constructed within a terrestrial Critical Biodiversity Area classified as an Ecological Support Area (ESA) as identified in the Namakwa District's Biodiversity Plan.



- as described in the Environmental Impact Assessment Report (EIR) dated December 2010 at:

Preferred alternative	Latitude	Longitude
Approximate middle of the proposed development footprint	28°52'53.48"S	19°34'29.05"E

- for the proposed construction of a 10 MW PV commercial solar energy facility (referred to as the Pofadder Solar Thermal Plant Phase 3) and its associated infrastructure located approximately 30km north-east of Pofadder on Portion 4 of the farm Scuit-Klip 92 as described on page 3 of the Environmental Impact Assessment Report (EIR) dated December 2010, which falls within the jurisdiction of the Khai Ma Local Municipality of the Northern Cape Province, hereafter referred to as "the property".

The infrastructure associated with Phase 3 includes:

- 10 MW to be generated from several rows of PV panels.
- A substation to facilitate the connection between the PV panels and the overhead power line.
- An overhead power line feeding into the Eskom electricity network at the Paulputs Substation, which is situated adjacent to the site.
- External access road leading to the site from the R358 which branches off the N14 towards Onseepkans.
- Internal access roads for construction and maintenance purposes.
- Workshop, office, and storage areas.

## Conditions of this Environmental Authorisation

### Scope of authorisation

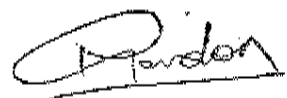
1. The preferred site located on Portion 4 of the farm Scuit-klip 92, in the Northern Cape Province is approved.
2. Authorisation of the activity is subject to the conditions contained in this authorisation, which form part of the environmental authorisation and are binding on the holder of the authorisation.
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 (3) years from the date of issue of this authorisation. If commencement of the activity does not occur within that period, the authorisation 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**

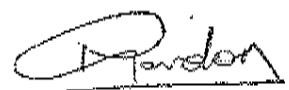
9. The holder of the authorisation must notify every registered interested and affected party, in writing and within 12 (twelve) calendar days of the date of this environmental authorisation, of the decision to authorise the activity.
  10. The notification referred to must –
    - 10.1. specify the 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. The Environmental Management Plan/Programme (EMPr) submitted as part of the application for EA must be amended and submitted to the Department for written approval prior to commencement of the activity. The recommendations and mitigation measures recorded in the EIR dated December 2010 must be incorporated as part of the EMPr. Once approved, the EMPr must be implemented and adhered to.
13. All practical mitigation measures detailed within the EIR dated December 2010 and the specialist reports contained within Appendices F to K must be implemented.
14. Before construction can start, the applicant must submit a final layout plan to the Department for approval. The final layout should indicate the following:
- Positions of solar facilities;
  - Foundation footprint;
  - Permanent laydown area footprint;
  - Construction period laydown footprint;
  - Internal roads indicating width (construction period width and operation period width) and with numbered sections between the other site elements which they serve (to make commenting on sections possible);
  - River, stream and water crossing of roads and cables indicating the type of bridging structures that will be used;
  - Substation(s) and/or transformer(s) sites including their entire footprint;
  - Cable routes and trench dimensions (where they are not along internal roads);
  - Connection routes to the distribution/transmission network;
  - Cut and fill areas along roads and at substation/transformer sites indicating the expected volume of each cut and fill;
  - Borrow pits;
  - Spoil heaps (temporary for topsoil and subsoil and permanently for excess material) ; and
  - Buildings including accommodation.
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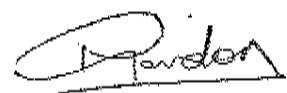
15. A comprehensive storm water management plan must be compiled for the development footprint prior to construction.

#### **Environmental Control Officer (ECO) and duties**

16. 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.
17. The ECO must be appointed before commencement of any authorised activity.
18. Once appointed, the name and contact details of the ECO must be submitted to the Director: Compliance Monitoring of the Department.
19. 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.
20. The ECO must:
- 20.1 Keep record of all activities on site, problems identified, transgressions noted and a schedule of tasks undertaken by the ECO.
  - 20.2 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.
  - 20.3 Keep and maintain a daily site diary.
  - 20.4 Keep copies of all reports submitted to the Department.
  - 20.5 Keep and maintain a schedule of current site activities including the monitoring of such activities.
  - 20.6 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.
  - 20.7 Compile a monthly monitoring report.

#### **Recording and reporting to the Department**

21. 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.
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22. 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 the Department.

#### **Environmental audit report**

23. 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.
24. The environmental audit report must:
- 24.1 Be compiled by an independent environmental auditor;
  - 24.2 Indicate the date of the audit, the name of the auditor and the outcome of the audit;
  - 24.3 Evaluate compliance with the requirements of the approved EMPr and this environmental authorisation;
  - 24.4 Include measures to be implemented to attend to any non-compliances or degradation noted;
  - 24.5 Include copies of any approvals granted by other authorities relevant to the development for the reporting period;
  - 24.6 Highlight any outstanding environmental issues that must be addressed, along with recommendations for ensuring these issues are appropriately addressed;
  - 24.7 Include a copy of this authorisation and the approved EMPr;
  - 24.8 Include all documentation such as waste disposal certificates, hazardous waste landfill site licences etc. pertaining to this authorisation; and
  - 24.9 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**

25. The authorised activity shall not commence within twenty (20) days of the date of signature of the authorisation.
26. 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.
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27. 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.

#### **Notification to authorities**

28. 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**

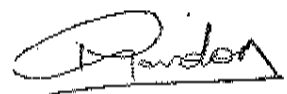
29. Fourteen (14) days written notice must be given to the Department that the activity operational phase will commence.
30. The holder of this authorisation must compile and submit an operational EMP to the Department for approval for the operational phase of the activity and if the holder has an existing operational environmental management system, it must be amended to include the operation of the authorised activity.

#### **Site closure and decommissioning**

31. 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**


32. Clearance of indigenous vegetation must be kept to a minimum and rehabilitation of the cleared areas must start as soon as possible.
33. All species of special concern (SSC) must be identified and every effort must be made to rescue them.
34. Bird marker devices must preferably be placed on the earth wires as opposed to the conductors.
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35. Appropriate bird deterrent devices must be placed at locations around the facility to lessen the impact.
  36. Development in the north eastern area of the site must be minimal given the possibility of Lanner Falcons utilizing these mountainous areas as possible breeding sites.
  37. Monopole bird friendly structures must be utilized to minimise the number of electrocutions on the power line.
  38. If the nest of a large bird species is detected within the vicinity of the area, then the Northern Cape Department of Environmental Affairs must be notified.
  39. A procedure for the removal of nests must be written into the operating manual for the facility. The proponent must apply to the Northern Cape Provincial Department for a permit in order to relocate the nests of Sociable Weavers and White Browed Sparrow Weavers.
  40. The *Aloe Dichotoma* tree is endemic to the Northern Cape; care must be taken as to not damage these trees. If removal of these trees must be done, the necessary permits must be obtained from the relevant Departments.
  41. Alien invasive plants must be controlled on the site.
  42. Disturbed areas must be rehabilitated as quickly as possible and an on-going monitoring programme must be established to detect, quantify and manage any alien species.
  43. During construction, unnecessary disturbance to habitats must be strictly controlled and the footprint of the impact must be kept to a minimum.
  44. Areas around fuel tanks must be bunded or contained in an appropriate manner as per the requirements of SABS 089:1999 Part 1.
  45. Leakage of fuel must be avoided at all times and if spillage occurs, it must be remedied immediately.
  46. Hazardous waste such as bitumen, oils, oily rags, paint tins etc. must be disposed of at an approved hazardous waste landfill site.
  47. The applicant must ensure that streams, river, pans, wetlands, dams and their catchments are protected from erosion and direct or indirect spillage of pollutants.
  48. During the construction phase of the development, an effective monitoring system must be put in place to detect any leakage or spillage of all hazardous substances during their transportation, handling, installation and storage. The applicant must ensure that precautionary measures to limit the possibility of oil and other toxic liquids from entering the soil or storm water system are in place.
  49. Applications for all other relevant and required permits required to be obtained by the holder of this authorisation must be submitted to the relevant authorities. This includes permits for the rezoning of the land, transportation of all components (abnormal loads) to site, disturbance to heritage sites,
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- disturbance of protected vegetation, and disturbance to any drainage lines or riparian vegetation and waste.
50. All overhead power line construction and maintenance activities must be undertaken in accordance with Eskom Transmission's Environmental Best Practice Standard.
  51. A Water Use License Authorization (WULA) must be obtained from the Department of Water Affairs (DWA) for impact on any watercourse such as abstraction of water from a water resource, storing of water, impeding or diverting the flow of water in a watercourse, etc.
  52. Construction personnel must minimise the amount of disturbance during the construction phase by staying within the boundaries of the 11km<sup>2</sup> construction areas.
  53. A statutory building restriction of a 500m radius measured from an intersection on a national road or within 60 meters from the road reserve fence line is applicable on rural national roads.
  54. As far as possible, any component of the facility which could potentially affect sensitive areas (i.e. primary drainage lines) must be shifted in order to avoid these sensitive areas, alternative mitigation measures as detailed in the EIR dated December 2010 must be implemented.
  55. If any heritage resource of significance is exposed during construction, the South African Heritage Resource Authority (SAHRA) must be notified immediately.
  56. Road alignments must be planned in such a way that the minimum of cut and fill operations are required.
  57. Existing farm tracks must be re-used or upgraded to minimise the amount of change to the untransformed landscape.
  58. Appropriate dust suppression techniques must be implemented on all exposed surfaces during periods of high wind. Such measures must include wet suppression, chemical stabilization, the use of a wind fence, covering surfaces with straw chippings and re-vegetation of open areas.
  59. Appropriate erosion mitigation must be implemented to prevent any potential erosion.
  60. The visual impact of the pipeline must be mitigated by placing the pipe underground, and rehabilitating the vegetation within the pipeline servitude.
  61. The applicant must train safety representatives, managers and workers in workplace safety. All applicable safety standards and regulations, including for subcontractors must be enforced.
  62. 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 NEMA Regulations, Government Notice 386 and 387 of 2006.
  63. The potential fire hazards must be managed by ensuring that no unsupervised fires are permitted on site and that the construction personnel must be made aware of the consequences of starting fires on site to avoid damage to neighbouring farms.
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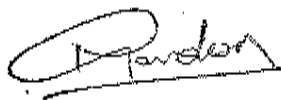


64. Chemical ablution facilities must be available for the use of construction staff at all times during the construction period. These facilities must be removed from the site when the construction phase is completed as well as associated waste to be disposed of at a registered waste site.
65. An integrated waste management approach that is based on waste minimisation must be used and must incorporate reduction, recycling, re-use and disposal where appropriate. Any solid waste must be disposed of at waste disposal facility permitted in terms of Section 20(b) of the National Environment Management Waste Act, 2008 (Act No. 59 of 2008).

#### **General**

66. 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.
67. 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.
68. 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: 26/06/2013



**Mr Mark Gordon**

**Chief Director: Integrated Environmental Authorisations**  
**Department of Environmental Affairs**

## **Annexure 1: Reasons for Decision**

### **1. Information considered in making the decision**

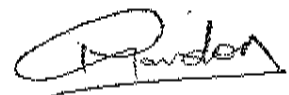
In reaching its decision, the Department took, *inter alia*, the following into consideration -

- a) The information contained in the EIR dated December 2010;
- b) The comments received from the various interested and affected parties (I&APs) as included in the EIR dated December 2010;
- c) Mitigation measures as proposed in the EIR dated December 2010 and the EMPr;
- d) The information contained in the specialist studies contained in the EIR dated December 2010; and
- e) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 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) The findings of all the specialist studies conducted and their recommended mitigation measures.
- b) The major benefit of the project is the strengthening of the existing electricity grid and will aid the government in achieving its goal of a 30% share of new power generation being derived from Independent Power Producers (IPP).
- c) The EIR dated December 2010 identified all legislation and guidelines that have been considered in the preparation of the EIR dated December 2010.
- d) The methodology used in assessing the potential impacts identified in the EIR dated December 2010 and the specialist studies have been adequately indicated.
- e) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 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 EIR dated December 2010 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 EIR dated December 2010 is accurate and credible.
- e) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the EIR 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.

