



## 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: DEA/EIA/0000525/2011**

**DEA Reference: 12/12/20/2430**

**Enquiries: Masina Litsokane**

**Telephone: 012-395-1778 Fax: 012-320-7539 E-mail: [MLitsokane@environment.gov.za](mailto:MLitsokane@environment.gov.za)**

Mr Werner Engelbrecht  
BioTherm Energy (Pty) Ltd  
Building 1 Leslie Ave East Design Quarter District  
**FOURWAYS**  
2055

Dear Mr Engelbrecht

**APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GN R. 543/544/545/546: PROPOSED 100MW ARIES II PHOTO-VOLTAIC SOLAR ENERGY FACILITY ON THE FARM KLEIN ZWART BAST NEAR KENHARDT NORTHERN CAPE PROVINCE**

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

In terms of regulation 10(2) of the Environmental Impact Assessment Regulations, 2010 (the Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 12 (twelve) days of the date of the EA, of the Department's decision in respect of your application as well as the provisions regarding the submission of appeals that are contained in the Regulations.

Your attention is drawn to Chapter 7 of the Regulations, which prescribes the appeal procedure to be followed. This procedure is summarised in the attached document. Kindly include a copy of this document with the letter of notification to interested and affected parties.

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

By facsimile: 012 320 7561;

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

Yours sincerely



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

Date: 28/03/2013

CC:	Mr. B Thorpe	EScience Associates(Pty) Ltd	Tel: 011-718-6380	Fax: 086-512-5681
	Ms. T Makaudi	DENC	Tel: 053-807-7464	Fax: 053-831-3530
	Mr A Vosloo	Kai! Garib Local Municipality	Tel: 054-431-6328	Fax: 054-461-6401
	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.



**environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

## Environmental Authorisation

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

Establishment of 100MW Aries II Photovoltaic Solar Energy Facility near Kenhardt

Siyanda District Municipality

<b>Authorisation register number:</b>	12/12/20/2430
<b>NEAS reference number:</b>	DEA/EIA/0000525/2011
<b>Last amended:</b>	First issue
<b>Holder of authorisation:</b>	BioTherm Energy (Pty) Ltd
<b>Location of activity:</b>	NORTHERN CAPE PROVINCE: On portion 1 (remaining extent) of the Farm Klein Zwart Bast 188 within Kail Garib 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 –

### **BIO THERM ENERGY (PTY) LTD**

with the following contact details –

Mr Werner Engelbrecht  
BioTherm Energy (Pty) Ltd  
Building 1 Leslie Ave East Design Quarter District

### **FOURWAYS**

**2055**

Tel: 011-367-4600

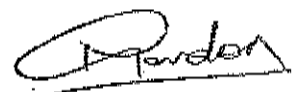
Fax: 086-554-5503

Cell: 082-566-8965

E-mail: [wengelbrecht@biothermenergy.com](mailto:wengelbrecht@biothermenergy.com)

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

Listed activities	Activity/Project description
<p><u>GN R. 545 Item 1:</u>  <i>The construction of facilities or infrastructure for the generation of electricity where the electricity output is 20MW or more</i></p>	<p>The proposed solar facility will have a power generation capacity of more than 20MW</p>
<p><u>GN R. 545 Item 8:</u>  <i>The construction of facilities or infrastructure for the transmission and distribution of electricity with the capacity of 275 kilovolts or more, outside an urban area or industrial complex.</i></p>	<p>The proposed solar facility will transmit and distribute more than 275 kilovolts to Aries Substation</p>
<p><u>GN R. 545 Item 15:</u>  <i>Physical alternation of undeveloped, vacant or derelict land for residential, retail, commercial, recreational, industrial or institutional use were the total area to be transformed is 20ha or more; except where such physical alternation takes place for:</i></p> <ul style="list-style-type: none"> <li><i>i. Linear development activities; or</i></li> <li><i>ii. Agriculture or afforestation where activity 16 in this Schedule will apply.</i></li> </ul>	<p>The proposed solar energy facility will be developed in phases and on completion the facility will be than 20ha in spatial extent</p>
<p><u>GN R. 546 Item 4:</u>  <i>The construction of road wider than 4m with reserve less than 13.5m.</i></p>	<p>An access road to the facility is required, although the site has exiting access roads a small road would to be constructed to the entrance of the facility</p>
<p><u>GN R. 546 Item 14:</u>  <i>The clearance of an area of 5ha or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation</i></p>	<p>The proposed site for development consists mostly of undisturbed Bushmanland Arid Grassland, more than 5ha of this vegetation would be removed.</p>



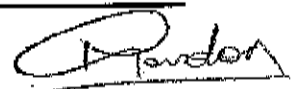
at:

Alternative S1	Latitude	Longitude
Preferred Site	29°29'17.64"S	20°45'42.88"E
	29°29'1.41"S	20°46'25.68"E
	29°29'40.64"S	20°46'53.28"E
	29°29'29.42"S	20°47'21.80"E
	29°29'48.85"S	20°47'31.98"E
	29°30'25.14"S	20°47'22.82"E
	29°30'40.06"S	20°46'47.82"E
	29°29'53.82"S	20°46'22.99"E
	29°30'0.30"S	20°46'4.34"E

- for the establishment of Aries II PV Solar Energy Facility on portion 1 (remaining extent) of the Farm Klein Zwart Bast 188 near Kenhardt, within Kai! Garib Local Municipality in the Northern Cape Province hereafter referred to as "the property".

Key components of the proposed power plant and supporting infrastructure include:

- Foundations to support the PV panels.
- The plant consists of arrays of photovoltaic (PV) panels with a generation capacity of 100 MW.
- Access and inside roads/paths.
- Trenching – all DC and AC wiring within the PV plant must be buried underground.
- Inverter/transformer building-- 6 m X 3 m brick buildings located within the PV array each containing an inverter and a step up transformer will be constructed in the plant.
- Combined guard house/ control room – One (1) brick building of approximately 100m<sup>2</sup> on the perimeter of the plant. The buildings will be a standard height of approximately 3 m.
- Connection to grid: The grid connection requires transformation of the voltage from 480 V to between 22,000 V and 400,000 V depending on the available infrastructure. The normal components and size of a distribution rated electrical substation will be required.
- A small switching station for the plant will be located on the outside of the control room.



## Conditions of this Environmental Authorisation

### Scope of authorisation

1. The proposed 100MW Aries II Photovoltaic Solar Energy Facility with a total footprint of 194ha is hereby 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 draft Environmental Management Programme (EMPr) submitted as part of the Application for EA is hereby approved. This EMPr must be implemented and adhered to.
13. Should there be changes in the operation and management of the authorised activities; the EMP must be amended to accommodate those changes and be submitted to this Department for written approval before implementation.

#### **Monitoring**

14. The applicant must appoint an independent Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the mitigation/rehabilitation measures and recommendations referred to in this authorisation are implemented and to ensure compliance with the provisions of the EMPr.
  - 14.1. The ECO must be appointed before commencement of any authorised activity/ies.
  - 14.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
  - 14.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.

- 14.4. The ECO shall remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.

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

15. 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.
16. 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.
17. The environmental audit report must indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the environmental authorisation conditions as well as the requirements of the EMPr.
18. Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.

#### **Commencement of the activity**

19. The authorised activity shall not commence within twenty (20) days of the date of signature of the authorisation.
20. 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.
21. 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**

22. 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, as well as a reference number. This notification period may coincide with the notice of intent to appeal period.

### **Operation of the activity**

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

### **Site closure and decommissioning**

24. 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**

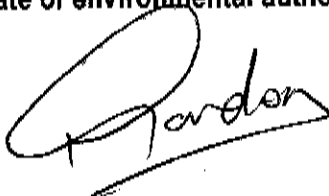
25. No activities will be allowed to encroach into water resources without a water use authorisation being in place from the Department of Water Affairs.
26. A permit must be obtained from the relevant provincial nature conservation authorities for the removal or destruction of indigenous protected and endangered plant and animal species.
27. Copies of permits in respect of 25 above required must be submitted to the Department for record keeping.

### **General**

28. 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.

29. 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.
30. 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: 28/3/2013



**Mr Mark Gordon**

**Chief Director: Integrated Environmental Authorisations**

**Department of Environmental Affairs**

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

### **1. Key factors 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 November 2012;
- b) The comments received from the organs of state and interested and affected parties as included in the EIR dated November 2012;
- c) Mitigation measures as proposed in the EIR dated November 2012 and the draft EMP;
- d) The information contained in the specialist studies contained within Appendix 7 of the EIR; and
- e) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act 107 of 1998).

### **2. Key factors considered in making the decision**

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

- a) The findings of all the specialist studies conducted and their recommended mitigation measures.
- b) The need for the proposed project stems from the provision of electricity to the national grid in terms of the REFIT programme and the provision of electricity from Independent Power Producers as required by the Department of Energy.
- c) There are drainage systems present within the proposed site for development and they are considered to be of high sensitivity. However, the preferred layout alternative accommodates a buffer of 50m from the drainage systems.
- d) The EIR dated November 2012 identified all legislation and guidelines that have been considered in the preparation of the EIR dated November 2012.
- e) The identification and assessment of impacts are detailed in the EIR dated November 2012 and sufficient assessment of the key identified issues and impacts have been completed.
- f) The methodology used in assessing the potential impacts identified in the EIR dated November 2012 and the specialist studies have been adequately indicated.

- g) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2010 for public involvement.

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 application is accordingly granted.

