



# forestry, fisheries & the environment

Department  
Forestry, Fisheries and the Environment  
REPUBLIC OF SOUTH AFRICA

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

DFFE Reference: 14/12/16/3/3/1/2413

Enquiries: Ms Juliet Mahlangu

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

Telephone Number: +2701 500 3680  
E-mail Address: [berlijn@subsolar.co.za](mailto:berlijn@subsolar.co.za)

## PER MAIL / EMAIL

Dear Mr Berlijn

### **APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, ACT NO. 107 OF 1998, AS AMENDED: FOR THE DEVELOPMENT OF A POWER LINE FOR THE GAMMA AND KHUBU SOLAR POWER PLANTS NEAR VRYBURG, NORTH WEST PROVINCE**

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

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

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

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

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

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sent to the registered interested and affected parties by the applicant; or the date that the notification of the decision was sent to the applicant by the Department, whichever is applicable.

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

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

By email: [appeals@environment.gov.za](mailto:appeals@environment.gov.za)

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

By post: Private Bag X447  
Pretoria  
0001

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

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

Yours faithfully



Mr Sabelo Malaza  
Chief Director: Integrated Environmental Authorisations  
Department of Forestry, Fisheries and the Environment  
Date: 23/11/2021

cc:	Mrs Carli van Niekerk	Environamics	Email: <a href="mailto:carli@environamics.co.za">carli@environamics.co.za</a>
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**forestry, fisheries  
& the environment**

Department:  
Forestry, Fisheries and the Environment  
REPUBLIC OF SOUTH AFRICA

## Environmental Authorisation

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

The development of a Power Line for the Gamma and Khubu Solar Power Plants Near Vryburg, North  
West Province

Dr Ruth S. Mompoti District Municipality

<b>Authorisation register number:</b>	14/12/16/3/3/1/2413
<b>Last amended:</b>	First issue
<b>Holder of authorisation:</b>	Gamma Solar Power Plant (RF) (Pty) Ltd
<b>Location of activity:</b>	Portion 2 of the farm Hartsboom No.734, Portion 1 of the farm Hartsboom No. 734,Portion 10 of the Farm Champions Kloof No. 731,Portion 9 of the Farm Champions Kloof No.731,Portion 5 of the Farm Champions Kloof No. 731,Remaining Extent of Portion 4 of the Farm Champions Kloof No. 731; Naledi Local Municipalities, Dr Ruth S. Mompoti District Municipality; NORTH WEST PROVINCE

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

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## Decision

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

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

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

## Activities authorised

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

### **GAMMA SOLAR POWER PLANT (RF) (PTY) LTD**

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

with the following contact details –

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

Telephone Number: +2701 500 3680

E-mail Address: [berlijn@subsolar.co.za](mailto:berlijn@subsolar.co.za)

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notice 1 and Listing Notice 3 of the EIA Regulations, 2014 as amended:

Activity number	Activity description
<p><u>Listing Notice 1, Item 11:</u></p> <p><i>"The development of facilities or infrastructure for the transmission and distribution of electricity-</i></p> <p><i>(ii) Inside urban areas or industrial complexes with a capacity of 275kV or more."</i></p>	<p>The development of a 132kV single-circuit power line (and 132kV Substation) is required to enable the connection of the authorised Gamma and Khubu SPPs (DFFE ref.: 14/12/16/3/3/2/917 &amp; 912) to the national grid network. A 100m wide and ~4,5km long grid connection corridor is being assessed for the placement of the power line route and substation. The power line is proposed to connect into the proposed new Mookodi-Magopela 132kV power line.</p>
<p><u>Listing Notice 1, Item 12</u></p> <p><u>The development of</u></p> <p><i>(ii) infrastructure or structures with a physical footprint of 100 square meters or more (a) within a watercourse or (b) within 32 meters of a watercourse, measured from the edge of a watercourse.</i></p>	<p>The power line requires the development of a service road and pylon infrastructure which will exceed 100 square meters in extent. Surface water features, including wetlands and rivers, are present within the grid connection corridor that will need to be crossed by the service road.</p>
<p><u>Listing Notice 1, Item 19:</u></p> <p><i>"The infilling or depositing of any material of more than 10m<sup>3</sup> into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock from a watercourse."</i></p>	<p>The power line requires the development of a service road. Surface water features, including wetlands and drainage channels, are present within the grid connection corridor that will need to be crossed by the service road. This will require the removal and moving of soils of more than 10 cubic meters.</p>

<p><u>Listing Notice 1, Item 27:</u></p> <p>"</p> <p><i>The clearance of 1 hectares or more, but less than 20 hectares of indigenous vegetation.</i></p>	<p>The development of the 132kV substation proposed as part of the project will require the clearance of 3 hectare of indigenous vegetation.</p>
<p><u>Listing Notice 3, Item 4(h)(iv):</u></p> <p><i>The development of a road wider than 4 metres with a reserve less than 13,5 metres, in the North West Province, within a Critical biodiversity area as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans.</i></p>	<p>A service road will be required during the construction and operational phase of the project.</p>
<p><u>Listing Notice 3, Item 15:</u></p> <p><i>The clearance of an area of 300 square meters or more of indigenous vegetation in the (h) North West within (iv) areas within a Critical biodiversity area as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans.</i></p>	<p>The power line, substation and the associated service road will require more than 300 square meters of vegetation clearance. Surface water features, including wetlands and rivers, are present within the grid connection corridor that will need to be crossed by the service road.</p>

**SG 21 Code**

T	0	H	N	0	0	0	0	0	0	0	0	0	7	3	4	0	0	0	0	2
T	0	H	N	0	0	0	0	0	0	0	0	0	7	3	4	0	0	0	0	1
T	0	H	N	0	0	0	0	0	0	0	0	0	7	3	1	0	0	0	1	0
T	0	H	N	0	0	0	0	0	0	0	0	0	7	3	1	0	0	0	0	9
T	0	H	N	0	0	0	0	0	0	0	0	0	7	3	1	0	0	0	0	5
T	0	H	N	0	0	0	0	0	0	0	0	0	7	3	1	0	0	0	0	0

**Power line corridor**

Points	Latitude	Longitude
1	27° 3'28.23"S	24°47'31.39"E
2	34° 01' 53.878" S	24°47'37.06"E
3	27° 3'40.27"S	24°47'35.73"E
4	27° 3'43.99"S	24°47'43.79"E
5	27° 4'37.15"S	24°45'27.07"E

6	27° 4'44.54"S	24°45'27.29"E
7	27° 4'19.81"S	24°45'26.15"E
8	27° 5'0.64"S	24°45'27.81"E
9	27° 4'19.85"S	24°45'4.88"E
10	27° 5'0.87"S	24°45'4.81"E

**Gamma/Khubu Substation**

Points	Latitude	Longitude
A	27° 3'23.74"S	24°47'29.05"E
B	27° 3'21.80"S	24°47'35.85"E
C	27° 3'26.31"S	24°47'37.59"E
D	27° 3'28.43"S	24°47'30.81"E

**Protea Collector Substation/Switching Station**

PointS	Latitude	Longitude
A	27° 4'47.37"S	24°45'7.73"E
B	27° 4'47.50"S	24°45'13.19"E
C	27° 4'50.73"S	24°45'13.14"E
D	27° 4'50.65"S	24°45'7.69"E

- for the Development of a power line for the Gamma and Khubu Solar Power Plants Near Vryburg, North West Province.

Technical details of the Power Line:

Component	Description/ Dimensions
Location of the site	South-west and crosses the Harts River and N18, North West province
Proposed technology	132 kV double-circuit overhead power line
Structure Height	Power lines ~32m
Length of the power line	Approximately 4,5km
Grid connection corridor width	Approximately 200m
Substation capacity	132kV
Substation footprint	1 hectare

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Servitude width	Approximately 40m
Service road width	Approximately 5m
Surface area to be covered	Approximately 15 hectares
Surface area to be cleared	Approximately 3 hectares

## Conditions of this Environmental Authorisation

### Scope of authorisation

1. A 132kV overhead power line and substation connecting the authorised Gamma and Khubu SPPs to the proposed new Mookodi-Magopela 132kV power line.
2. Authorisation of the activity is subject to the conditions contained in this Environmental Authorisation, which form part of the Environmental Authorisation and are binding on the holder of the authorisation.
3. The holder of the authorisation is responsible for ensuring compliance with the conditions contained in this Environmental Authorisation. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the authorisation.
4. The activities authorised may only be carried out at the property as described above.
5. Any changes to, or deviations from, the project description set out in this Environmental Authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further Environmental Authorisation in terms of the regulations.
6. The holder of an Environmental Authorisation must apply for an amendment of the Environmental Authorisation with the Competent Authority for any alienation, transfer or change of ownership rights in the property on which the activity is to take place.
7. This activity must commence within a period of ten (10) years from the date of issue of this Environmental 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.
8. Construction must be completed within five (05) years of the commencement of the activity on site.



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

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

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

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

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

#### **Management of the activity**

13. The site layout map attached as Figure A of the BAR dated 30 September 2021 is approved.
14. The Environmental Management Programme (EMPr) submitted as part of the BAR dated 30 September 2021 is approved and must be implemented and adhered to.
15. The EMPr must be implemented and strictly enforced during all phases of the project. It shall be seen as a dynamic document and shall be included in all contract documentation for all phases of the development when approved.

16. Changes to the approved EMPr must be submitted in accordance to the EIA Regulations applicable at the time.
17. The Department reserves the right to amend the approved EMPr should any impacts that were not anticipated or covered in the BAR be discovered.

#### **Frequency and process of updating the EMPr**

18. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 28 below, indicate insufficient mitigation of environmental impacts associated with the undertaking of the activity, or insufficient levels of compliance with the environmental authorisation or EMPr.
19. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
20. The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per Regulation 34 of the EIA Regulations, 2014 as amended. The updated EMPr must have been subjected to a public participation process, which process has been agreed to by the Department, prior to submission of the updated EMPr to the Department for approval.
21. In assessing whether to grant approval of an EMPr which has been updated as a result of an audit, the Department will consider the processes prescribed in Regulation 35 of the EIA Regulations, 2014 as amended. Prior to approving an amended EMPr, the Department may request such amendments to the EMPr as it deems appropriate to ensure that the EMPr sufficiently provides for avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity.
22. The holder of the authorisation must apply for an amendment of an EMPr, if such amendment is required before an audit is required. The amendment process is prescribed in Regulation 37 of the EIA Regulations, 2014, as amended. The holder of the authorisation must request comments on the proposed amendments to the impact management outcomes of the EMPr or amendments to the closure objectives of the closure plan from potentially interested and affected parties, including the competent authority, by using any of the methods provided for in the Act for a period of at least 30 days.

#### **Monitoring**

23. The holder of the authorisation must appoint an experienced Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the

mitigation/rehabilitation measures and recommendations referred to in this environmental authorisation are implemented and to ensure compliance with the provisions of the approved EMPr.

- 23.1. The ECO must be appointed before commencement of any authorised activities.
- 23.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
- 23.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
- 23.4. The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.

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

24. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this environmental authorisation, must be submitted to the *Director: Compliance Monitoring* of the Department.
25. The holder of the environmental authorisation must, for the period during which the environmental authorisation and EMPr remain valid, ensure that project compliance with the conditions of the environmental authorisation and the EMPr are audited, and that the audit reports are submitted to the *Director: Compliance Monitoring* of the Department.
26. The frequency of auditing and of submission of the environmental audit reports must be as per the frequency indicated in the EMPr, taking into account the processes for such auditing as prescribed in Regulation 34 of the EIA Regulations, 2014 as amended.
27. The holder of the authorisation must, in addition, submit environmental audit reports to the Department within 30 days of completion of the construction phase (i.e. within 30 days of site handover) and a final environmental audit report within 30 days of completion of rehabilitation activities.
28. The environmental audit reports must be compiled in accordance with Appendix 7 of the EIA Regulations, 2014 as amended and must indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the environmental authorisation conditions as well as the requirements of the approved EMPr.
29. Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.

### **Notification to authorities**

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

### **Operation of the activity**

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

### **Site closure and decommissioning**

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

### **Specific conditions**

33. A 20m no-development buffer is implemented around the pan located within the corridor. No pylon footings or access roads may be placed within the 20m buffer.
34. A 20m no-development buffer is implemented around the ruin located within the corridor. No pylon footings or access roads may be placed within the 20m buffer.
35. A final walk down of the approved powerline route is conducted by a palaeontologist to identify and demarcate any exposures of the Boomplaas Formation stromatolites located within the powerline alignment. Further, it is recommended that any exposures identified through this process are demarcated with security tape and protected with a no-go buffer of 20m. No pylon footings or access roads may be placed within the 20m buffer.
36. If concentrations of archaeological heritage material and human remains are uncovered during construction, all work must cease immediately and be reported to the South African Heritage Resources Agency (SAHRA) (021 642 4502) so that systematic and professional investigation/excavation can be undertaken.
37. Should archaeologically sites or graves be exposed during construction work, it must immediately be reported to a heritage practitioner so that an investigation and evaluation of the finds can be made.

38. Recommendations of the specialist studies contained in the BAR dated September 2021 must be implemented to reduce the risk of erosion and the invasion of alien species.
39. Construction must include design measures that allow surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface flows. Drainage measures must promote the dissipation of storm water run-off.
40. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal where appropriate. Any solid waste must be disposed of at a landfill licensed in terms of Section 20 (b) of the National Environment Management Waste Act, 2008 (Act No.59 of 2008).

### General

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

Date of Environmental Authorisation: 23/11/2021



**Mr Sabelo Malaza**  
**Chief Director: Integrated Environmental Authorisations**  
**Department of Forestry, Fisheries and the Environment**

## Annexure 1: Reasons for Decision

### 1. Information considered in making the decision

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

- a) The listed activities as applied for in the application form received on 13 August 2021.
- b) The information contained in the BAR dated September 2019.
- c) Mitigation measures as proposed in the BAR.
- d) The information contained in the specialist studies contained within the appendices of the BAR dated September 2021 and as appears below:

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

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

- a) The findings of all the specialist studies conducted and their recommended mitigation measures.
- b) The need for the proposed project stems from the provision of electricity to the national grid.
- c) The BAR dated September 2021 identified all legislation and guidelines that have been considered in the preparation of the BAR.
- d) The location of the authorised solar power plant.
- e) The methodology used in assessing the potential impacts identified in the BAR dated September 2021 and the specialist studies have been adequately indicated.
- f) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the BAR Regulations, 2014 as amended for public involvement.

### 3. Findings

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

- a) The identification and assessment of impacts are detailed in the BAR dated September 2021 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 information contained in the BAR dated September 2021 is deemed to be accurate and credible.

- d) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- e) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the BAR and will be implemented to manage the identified environmental impacts during the construction phase.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the authorised activities will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the authorised activities can be mitigated to acceptable levels. The environmental authorisation is accordingly granted.

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