



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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DEA Reference: 14/12/16/3/3/2/905

Enquiries: Ms Thabile Sangweni

Telephone: (012) 399 9409 **E-mail:** TSangweni@environment.gov.za

Mr Pancho Ndebele
FG Emvelo (Pty) Ltd
Private Bag X9
BENMORE
2196

Telephone Number: (011) 523 6299
Email Address: pancho@emvelo.co.za

PER EMAIL / MAIL

Dear Mr Ndebele

REFUSAL OF ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) FOR THE 150 MW ILANGA CONCENTRATED SOLAR POWER TOWER 7 SOLAR ENERGY FACILITY ON PORTION 2 OF THE FARM MATJIESRIVIER 41 AND PORTION 4 OF THE FARM TROOILAPS PAN 53 NEAR UPINGTON WITHIN THE KHEIS LOCAL MUNICIPALITY IN THE NORTHERN CAPE PROVINCE

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

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

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

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

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

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

By email: appealsdirector@environment.gov.za;

MS

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

By post: Private Bag X447,
Pretoria,
0001;

Please note that in terms of section 43(7) of the National Environmental Management Act, 1998, the lodging of an appeal will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged, you may not commence with the activity until such time that the appeal is finalised.

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

Yours faithfully


Mr Sabelo Malaza
Chief Director: Integrated Environmental Authorisations
Department of Environmental Affairs
Date: 25/11/2016

cc:	Ms J Thomas	Savannah Environmental (Pty) Ltd.	Tel: (011) 656 3237	Email: joanne@savannahsa.com
	Ms B Fisher	NCDENC	Tel: (053) 807 7431	Email: BFisher@ncpg.gov.za
	Mr Z Hassam	Appeals Authority (DEA)	Tel: (012) 399 9356	Email: AppealsDirectorate@environment.gov.za



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Refusal of Environmental Authorisation

In terms of Regulation 24(1)(b) of the Environmental Impact Assessment Regulations, 2014

The 150 MW Ilanga Concentrated Solar Power Tower 7 Solar Energy Facility on Portion 2 of the Farm Matjiesrivier 41 and Portion 4 of the Farm Trooilaps Pan 53 near Upington within the Kheis Local Municipality in the Northern Cape Province

Siyanda District Municipality

Application Reference Number:	<i>14/12/16/3/3/2/905</i>
Applicant:	<i>FG Emvelo (Pty) Ltd</i>
Location of activity:	<i>Portion 2 of Matjiesrivier 41 Portion 4 of the Farm Trooilaps Pan 53 Kheis Local Municipality Northern Cape Province</i>

Decision

The Department is satisfied, on the basis of information available to it, that the applicant should not be authorised to undertake the activity specified below.

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

Activities refused

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, 2014 the Department hereby refuses Environmental Authorisation for –

FG EMVELO (PTY) LTD

with the following contact details –

Mr Pancho Ndebele
FG Emvelo (Pty) Ltd
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2196

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to undertake the following activities (hereafter referred to as "the activity") indicated in Regulations GN R. 983 and GN R. 984:

Activity number	Activity description
<p><u>GN R. 983 Item 11:</u></p> <p><i>"The development 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 275kV."</i></p>	<p>A 132 kV substation will be constructed on site in order to connect the CSP facility to the national grid.</p>
<p><u>GN R. 983 Item 12:</u></p> <p><i>"The development of –</i></p> <p><i>(xii) Infrastructures or structures with a physical footprint of 100 square metres or more;</i></p> <p><i>Where such development occurs –</i></p> <p><i>(a) Within a watercourse; or</i></p> <p><i>(c) If no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse."</i></p>	<p>Infrastructure with a physical footprint of more than 100 square metres associated with the CSP facility will be constructed within or within 32 metres of a non-perennial drainage line.</p>
<p><u>GN R. 983 Item 14:</u></p> <p><i>"The development of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres."</i></p>	<p>The facilities or infrastructure for the storage or for the storage and handling, of a dangerous good will be required. The storage containers will have a combined capacity of 80 but not exceeding 500 cubic metres.</p>
<p><u>GN R. 983 Item 19:</u></p> <p><i>"The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from –</i></p> <p><i>(i) a watercourse"</i></p>	<p>The facility and/or associated infrastructure will require the infilling or depositing of any material of more than 5 cubic metres into, or the excavation or moving of soil or rock of more than 5 cubic metres from a watercourse (ephemeral drainage lines).</p>
<p><u>GN R. 983 Item 24:</u></p> <p><i>"The development of –</i></p>	<p>The construction of the CSP facility will require an access road that is potentially wider than 8m where no reserve exists.</p>

<p>(ii) <i>a road with a reserve wider than 13,5 metres, or where no reserve exists where the road is wider than 8 metres.</i>"</p>	
<p><u>GN R. 983 Item 28:</u> <i>"Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture or afforestation on or after 01 April 1998 and where such development</i> <i>(ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare."</i></p>	<p>The development footprint for the proposed CSP facility will cover an area greater than 1 hectare on land currently zoned for agriculture.</p>
<p><u>GN R. 983 Item 56:</u> <i>"The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre –</i> <i>(ii) where no reserve exists, where the existing road is wider than 8 metres, excluding where the widening or lengthening occur inside urban areas."</i></p>	<p>Existing roads will be used as far as possible. Construction of the CSP facility will require the widening of an access road by potentially more than 6m where no reserve exists. The upgrading of the road might also exceed 1km.</p>
<p><u>GN R. 984 Item 1:</u> <i>"The development of facilities or infrastructure for the generation of electricity from a renewable resource where the electricity output is 20 megawatts or more."</i></p>	<p>The facility will consist of a CSP facility utilising tower technology with a generation capacity of up to 150 MW on an area greater than 1 hectare on land currently zoned for agriculture.</p>
<p><u>GN R. 984 Item 6:</u> <i>"The development of facilities or infrastructure for any process or activity which requires a permit or license in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent."</i></p>	<p>A Water Use License will be required for the discharge of wastewater to the evaporation dams as well as for impacts on drainage lines and the abstraction of water from the Gariep River.</p>
<p><u>GN R. 984 Item 15:</u> <i>"The clearance of an area of 20 hectares or more of indigenous vegetation."</i></p>	<p>The development footprint for the proposed CSP facility (infrastructure and associated areas) will require clearance of vegetation of an area greater than 20 hectares.</p>

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

21 SG Code:

C	0	3	6	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	2
C	0	3	6	0	0	0	0	0	0	0	0	0	0	5	3	0	0	0	0	4

- for the 150 MW Ilanga Concentrated Solar Power Tower 7 Solar Energy Facility and its associated infrastructure located on Portion 2 of the Farm Matjiesrivier 41 and Portion 4 of the Farm Trooilaps Pan 53 within the Kheis Local Municipality in the Northern Cape Province, hereafter referred to as “the property”.

The 150 MW Ilanga Concentrated Solar Power Tower 7 Solar Energy Facility will comprise the following:

- Central tower of up to 270m with a molten salt receiver on top of the tower;
- Waste management infrastructure including evaporation dams and a wastewater treatment facility;
- Access roads to the site and internal access roads;
- On site substation and associated 132 kV powerline linking the facility to the Karoshoek Solar Valley Substation or to the national electricity grid;
- Karoshoek Solar Valley Substation and associated powerlines 132 – 400 kV lines connecting to the national grid;
- A water supply pipeline from the Gariep River (including water treatment and storage reservoirs);
- Operational buildings, including offices and workshops;
- The solar collector field consisting of heliostats, all systems and infrastructure related to the control and operation of the heliostats;
- The power block/power island comprising of a conventional steam turbine generator with the ACC and associated feed water system;
- Molten salt circuit which includes the thermal storage tanks for storing low and high temperature liquid salt, a central solar thermal tower receiver, pipelined and molten salt to steam heat exchangers; and,
- Auxiliary facilities and infrastructure consisting of the switch yard, step up transformers, up to 132 kV power evacuation lines, access routes, water supplies and facility start up generators.

Legislative Requirements

Scope of authorisation

1. Authorisation is refused for the proposed 150 MW Ilanga Concentrated Solar Power Tower 7 Solar Energy Facility and its associated infrastructure located on Portion 2 of the Farm Matjiesrivier 41 and Portion 4 of the Farm Trooilaps Pan 53 within the Kheis Local Municipality in the Northern Cape Province.

Notification of authorisation and right to appeal

2. 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 refuse the activity.
3. The notification referred to must –
 - 3.1. specify the date on which the authorisation was issued;
 - 3.2. inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014;
 - 3.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and
 - 3.4. give the reasons of the competent authority for the decision.
4. The holder of the authorisation must publish a notice –
 - 4.1. informing interested and affected parties of the decision;
 - 4.2. informing interested and affected parties where the decision can be accessed; and
 - 4.3. drawing the attention of interested and affected parties to the fact that an appeal may be lodged against this decision in terms of the National Appeal Regulations, 2014.
5. A shapefile of the refused preferred development layout/footprint must be submitted to this Department within two months from the date of this decision. The shapefile must be created using the Hartebeesthoek 94 Datum and the data should be in Decimal Degree Format using the WGS 84 Spheroid. The shapefile must include at a minimum the following extensions i.e. .shp; .shx; .dbf; .prj; and, .xml (Metadata file). If specific symbology was assigned to the file, then the .avl and/or the .lyr file must also be included. Data must be mapped at a scale of 1:10 000 (please specify if an alternative scale was used). The metadata must include a description of the base data used for digitizing. The shapefile must be submitted in a zip file using the EIA application reference number as the title.

The shape file must be submitted to:

Postal Address:

Department of Environmental Affairs
Private Bag X447
Pretoria
0001

Physical address:

Department of Environmental Affairs
Environment House
473 Steve Biko Road,
Arcadia,
Pretoria

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

Date of refusal of environmental authorisation: 25/11/2016



Mr Sabelo Malaza
Chief Director: Integrated Environmental Authorisations
Department of Environmental Affairs

Annexure 1: Reasons for Decision

1. Information considered in making the decision

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

- a) The information contained in the application form dated 27 January 2016.
- b) The information contained in the Draft Scoping Report (SR) received on 27 January 2016 and the comments provided by this Department on 29 February 2016.
- c) The information contained in the Final SR received on 10 March 2016 and accepted on 22 April 2016.
- d) The information contained in the Draft Environmental Impact Assessment Report (EIAr) received on 08 July 2016 and the comments provided by this Department on 08 August 2016.
- e) The information contained in the Final EIAr received on 15 August 2016.
- f) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act 107 of 1998).

2. Key factors considered in making the decision

A summary of the issues which, in the Department's view, were of the most significance is set out below-

- a) Concerns raised and comments provided by Interested and Affected Parties as well as authorities submitted as part of the EIAr dated August 2016.
- b) Cumulative impacts on protected species.
- c) Consideration of specialist recommendations.
- d) Consideration of water source alternatives.
- e) Comments raised by this Department during the EIA process.

3. Findings

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

- a) The cumulative impacts on protected species *Boscia albitrunca* and *Boscia foetida* are unacceptable. Further investigation into a possible offset agreement is required to reduce the ecological impacts to an acceptable level.

- b) The hydrological impact assessment requested by the Department of Environmental Affairs: Strategic Infrastructure Developments Unit in their comments on the draft SR, acceptance of FSR and comments on the draft EIAr dated 29 February, 22 April 2016 and 08 August 2016, respectively was not undertaken.
- c) Mitigation for impacts on bats cannot be guaranteed.
- d) No alternative water sources have been investigated and assessed.
- e) No commitment or confirmation of the availability of water on the Gariiep River from the Department of Water and Sanitation was provided.
- f) Comments from Birdlife South Africa regarding the seasons in which the site visits for the avifaunal study were undertaken, the uncertainty regarding the prediction and mitigation of impacts, the avifaunal specialist's reliance of the priority list drawn by the Birds and Wind Energy Specialist Group (given that these applications are CSP facilities) as well as the uncertainty regarding the effectiveness of proposed mitigation measures were not adequately addressed.

In view of the above, the competent authority is of the opinion that the proposed listed activities will conflict with the general objectives of integrated environmental management stipulated in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the listed activities may not be mitigated to acceptable levels and should therefore be prevented altogether.