



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: 14/12/16/3/3/2/2163^p

Enquiries: Ms. Matlhodi Mogorosi

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

Telephone Number: (078) 335 9550
Cell phone Number: (+46 76) 941 8927
Email Address: berlijn@subsolar.co.za

PER EMAIL / MAIL

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 THE 150MW ORYX PHOTOVOLTAIC SOLAR POWER PLANT AND ASSOCIATED INFRASTRUCTURE NEAR WELKOM/VIRGINIA WITHIN THE MATJHABENG LOCAL MUNICIPALITY IN THE FREE STATE PROVINCE

With reference to the above application, please be advised that the Department has decided to grant authorisation. The Environmental Authorisation (EA) and the 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 fourteen (14) days from the date of the decision, as well as 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 the 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 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@dfre.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 or request a copy of the documents at appeals@dfre.gov.za.

Yours faithfully



Ms. Milicent Solomons
Acting Chief Director: Integrated Environmental Authorisations
Department of Forestry, Fisheries and the Environment
Date: 03/04/2023.

cc:	Ms. Lisa Opperman	Environamics cc	Email: lisa@environamics.co.za
	Ms. Grace Mkhosana	Free State Department of Economic, Small Business Development, Tourism & Environmental Affairs	Email: mkhosana@detea.fs.gov.za
	Mr. M F Lephena	Matjhabeng Local Municipality	Email: tshidi.lenong@matjhabeng.co.za



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 the 150MW Oryx Photovoltaic Solar Power Plant and associated infrastructure near Welkom/Virginia within the Matjhabeng Local Municipality in the Free State Province
Lejweleputswa District Municipality

Authorisation register number:	14/12/16/3/3/2/2163
Last amended:	First issue
Holder of authorisation:	Oryx Solar Power Plant (RF) (Pty) Ltd
Location of activity:	Portion 2 (Beverley) of the Farm Kalkoenkrans No. 225 Matjhabeng Local Municipality Lejweleputswa District Municipality Free State Province

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

Decision

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

Non-compliance with a condition of this 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 –

Oryx Solar Power Plant (RF) (Pty) Ltd

with the following contact details –

Mr. Dick Berlijn
PO Box 785553
SANDTON
2146

Telephone Number: (078) 335 9550
Cell phone Number: (+46 76) 941 8927
Email Address: berlijn@subsolar.co.za

to undertake the following activities (hereafter referred to as “the activity”) indicated in Listing Notice 1, Listing Notice 2, and Listing Notice 3 of the EIA Regulations, 2014 as amended:

Activity number	Activity description
<p><u>Listing Notice 1, Item 11:</u> <i>“The development of facilities or infrastructure for the transmission and distribution of electricity- (i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts.”</i></p>	<p>The proposed photovoltaic solar facility will transmit and distribute electricity of 132 kilovolts outside an urban area. The infrastructure for the distribution of electricity will include a power line (132kV), an on-site HV/MV substation, and a switching station (132kV). It is expected that generation from the facility will tie in with either the Oryx 2 - Theseus 132kV overhead powerline or via a loop-in loop-out connection (Option 1).</p>
<p><u>Listing Notice 1, Item 12:</u> <i>“The development of- (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs- (a) within a watercourse.”</i></p>	<p>The activity is triggered based on the presence of wetlands (including a valley bottom wetland and a hill slope seep wetland) located within the development footprint proposed for the Oryx Solar Power Plant. Should the development footprint be optimized to avoid the wetlands, this listed activity will no longer be relevant.</p>
<p><u>Listing Notice 1, Item 14:</u> <i>“The development and related operation 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 proposed development will need to develop infrastructure for the storage and handling of dangerous goods (diesel) in containers with a combined capacity of 80 cubic metres. The capacity will not exceed 500 cubic metres.</p>

<p><u>Listing Notice 1, Item 19:</u></p> <p><i>“The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse.”</i></p>	<p>The activity is applied for based on the presence of wetlands (including a valley bottom wetland and a hill slope seep wetland) located within the development footprint proposed for the Oryx Solar Power Plant. The development footprint of the SPP includes these surface water features and will result in the removal of more than 10 cubic meters of rock from the watercourse. Should the development footprint be optimized to avoid the wetlands, this listed activity will no longer be relevant.</p>
<p><u>Listing Notice 1, Item 24:</u></p> <p><i>“The development of a road-</i> <i>(ii) with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres.”</i></p>	<p>The internal roads will vary between 6 and 12 meters in width. The internal roads will be 6m in width and the perimeter road will be up to 12m in width.</p>
<p><u>Listing Notice 1, Item 28:</u></p> <p><i>“Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes 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>Portions of the affected property have been used for grazing and the property will be re-zoned to “special” use for the proposed development. The development footprint of the solar power plant will be 256 hectares.</p>
<p><u>Listing Notice 1, Item 56:</u></p> <p><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.”</i></p>	<p>The existing access to the affected property does not have a reserve and will need to be widened by more than 6 metres.</p>

<p><u>Listing Notice 2, Item 1:</u></p> <p><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 proposed photovoltaic solar facility will generate up to 150MW of electricity through the use of a renewable resource.</p>
<p><u>Listing Notice 2, Item 15:</u></p> <p><i>“The clearance of an area of 20 hectares or more of indigenous vegetation.”</i></p>	<p>In terms of vegetation type, the site falls within the Vaal-Vet Sandy Grassland and the Highveld Alluvial Vegetation which can be described as Endangered and least threatened. The activity is applicable as portions of the site have not been lawfully disturbed during the preceding ten years; therefore, more than 20 hectares of indigenous vegetation will be removed. The development footprint of the solar power plant will be 256ha in extent.</p>
<p><u>Listing Notice 3, Item 4:</u></p> <p><i>“The development of a road wider than 4 metres with a reserve less than 13,5 metres –</i></p> <p><i>(b) in the Free State;</i></p> <p><i>(i) in areas outside urban areas;</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>Internal and perimeter access roads with a width of between 6 and 12 meters will be constructed and a section of the development footprint is located within a CBA 1 area</p>
<p><u>Listing Notice 3, Item 10:</u></p> <p><i>“The development and related operation 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 30 but not exceeding 80 cubic metres.</i></p> <p><i>(b) in the Free State;</i></p> <p><i>(i) in areas outside urban areas;</i></p>	<p>The proposed development will need to develop infrastructure for the storage and handling of dangerous goods (diesel and oils) in containers with a capacity exceeding 30 but not exceeding 80 cubic metres. The project is located within the Free State Province and a section of the development footprint is located within a CBA 1 area. Furthermore, wetlands (including a valley bottom wetland and a hill slope seep wetland) are located</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>within the development footprint proposed for the Oryx Solar Power Plant.</p>
<p><u>Listing Notice 3, Item 12:</u> <i>“The clearance of an area of 300 square metres or more of indigenous vegetation; (b) in the Free State; (i) Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004; (ii) Within critical biodiversity areas identified in bioregional plans; (vi) Areas within a watercourse or wetland; or within 100 metres from the edge of a watercourse or wetland.”</i></p>	<p>The proposed development is located in the Free State province and portions of the site have not been lawfully disturbed during the preceding ten years therefore indigenous vegetation is present on the site. In terms of vegetation type, the site falls within the Vaal-Vet Sandy Grassland and the Highveld Alluvial Vegetation which can be described as Endangered and least threatened. Furthermore, wetlands (including a valley bottom wetland and a hill slope seep wetland) are located within the development footprint proposed for the Oryx Solar Power Plant. The development footprint of the solar power plant will be 256ha in extent.</p>
<p><u>Listing Notice 3, Item 14:</u> <i>“The development of- (ii) infrastructure or structures with a physical footprint of 10 square metres or more; where such development occurs- (a) within a watercourse; (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse; (b) in the Free State; (i) in areas outside urban areas; (ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans.”</i></p>	<p>The activity is applicable due to the presence of wetlands (including a valley bottom wetland and a hill slope seep wetland) located within the development footprint proposed for the Oryx Solar Power Plant. A section of the development footprint is located within a CBA 1 area.</p>

<p>Listing Notice 3, Item 18:</p> <p><i>"The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.</i></p> <p><i>(b) in the Free State;</i></p> <p><i>(i) in areas outside urban areas;</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><i>(hh) Areas within a watercourse or wetland; or within 100 metres from the edge of a watercourse or wetland."</i></p>	<p>The existing access road to the site will need to be widened by more than 4 metres. The project is located within the Free State Province and outside urban areas. Wetlands (including a valley bottom wetland and a hill slope seep wetland) are located within the development footprint proposed for the Oryx Solar Power Plant. A section of the development footprint is located within a CBA 1 area.</p>
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as described in the Environmental Impact Assessment Report (EIAR) dated November 2022 at:

SG 21 Code

Farm names & Portion numbers	SG 21 Digit Code
Portion 2 (Beverley) of the Farm Kalkoenkrans No. 225	F03300000000022500002

Coordinates			
Project Site		Latitude	Longitude
	A	28°11'3.23"S	26°44'1.89"E
	B	28°9'52.51"S	26°45'8.74"E
	C	28°10'23.27"S	26°45'36.78"E
	D	28°10'52.29"S	26°45'13.13"E
	E	28°11'5.82"S	26°44'59.55"E
	F	28°11'0.78"S	26°44'49.46"E
	G	28°11'1.03"S	26°44'48.79"E
	H	28°11'22.55"S	26°44'37.75"E
Proposed Access	1	28°10'46.97"S	26°44'17.23"E
100m wide Power	1	28°10'51.61"S	26°44'17.19"E
Line	2	28°10'49.02"S	26°44'19.68"E
Corridor	3	28°10'49.35"S	26°44'20.15"E
(Option 1)	4	28°10'52.99"S	26°44'21.68"E
	5	28°10'54.10"S	26°44'18.23"E
Battery	A	28°10'51.94"S	26°44'21.59"E
Storage			
(BESS)	B	28°10'49.29"S	26°44'29.85"E
	C	28°10'55.38"S	26°44'29.83"E
	D	28°10'58.33"S	26°44'24.24"E
	A	28°10'54.10"S	26°44'18.22"E
	B	28°10'53.00"S	26°44'21.66"E

Substation corner coordinates	C	28°10'57.47"S	26°44'23.54"E
	D	28°10'58.62"S	26°44'20.08"E

- for the development of the 150MW Oryx Solar Power Plant and associated infrastructure near Welkom/Virginia, within the Matjhabeng Local Municipality in the Free State Province. hereafter referred to as "the property".

The main infrastructure associated with the facility includes the following:

- PV Panels and associated infrastructure.
- Wiring to Central Inverters.
- Grid infrastructure:
 - Power line – 132kV;
 - On- site Substation – 130MVA (High Voltage – 132kV; Medium Voltage – 33kV).
- Supporting infrastructure:
 - Office (~200m²);
 - Switch gear and relay room (~400m²);
 - Staff lockers and changing room (~200m²); and
 - Security control (~60m²).
- Battery Energy Storage Facility - Up to 500MW Battery Storage Facility with a maximum height of 8m and a maximum volume of 1740m³ of batteries and associated operational, safety, and control infrastructure.
- Roads.
- Fencing.

Below is a table for the details or dimensions of the 150MW Oryx Photovoltaic Solar Power Plant and associated infrastructure:

Component	Description/ Dimensions
Height of PV panels	6m
Area of PV Array	256ha (development footprint)
Number of inverters required	Minimum 50
Area occupied by inverter / transformer stations / substations / BESS	Central inverters+ LV/MV trafo: 20m ² HV/MV substation with switching station: 15 000m ² BESS: 40 000m ²
Capacity of on-site substation	132kV
Capacity of the power line	132kV

Area occupied by both permanent and construction laydown areas	Permanent Laydown Area: 256ha Construction Laydown Area: ~2000m ²
Area occupied by buildings	Security Room: ~60m ² Office: ~200m ² Staff Locker and Changing Room: ~200m ²
Battery storage facility	Maximum height: 8m Maximum volume: 1740m ³
Length of internal roads	Approximately 15 km
Width of internal roads	Between 6m & 12m
Grid connection corridor width	Between 100 and up to 115m in width
Grid connection corridor length	Option 1: 133m (technically preferred option)
Power line servitude width	32m
	Water storage facilities will be located on-site. This will include a raw water and fire water tank, a demineralisation water tank, and a tank for partially treated water.

15.

Conditions of this Environmental Authorisation

Scope of authorisation

1. The development of the 150MW Oryx Photovoltaic Solar Power Plant and Grid Connection Corridor Option 1 to connect the facility to the existing Oryx 2 - Theseus 132kV overhead powerline and other associated infrastructure near Welkom and Virginia, within Ward 9 of the Matjhabeng Local Municipality in the Lejweleputswa District Municipality in the Free State Province, as per the geographic coordinates cited in the table above is hereby approved.
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 the 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.

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 14 (fourteen) 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 the National Appeal Regulations, 2014;
 - 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.

Commencement of the activity

11. 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

12. The site layout plan attached in Appendix H1 of the EIAR and labelled "*Layout Map: Oryx Solar Power Plant near Virginia, Free State Province*" for the Oryx Solar Power Plant is not approved. A final site layout plan for the PV facility and associated infrastructure, as determined by the detailed engineering phase and micro-siting, and all mitigation measures as dictated by the final site layout plan, must be submitted to the Department for written approval prior to the commencement of the activity. All available biodiversity information must be used in the finalisation of the layout map. Existing infrastructure must be used as far as possible e.g., roads. A copy of the final site layout map must be made available for comments to registered Interested and Affected Parties and the holder of this environmental authorisation must consider such comments. The layout map must indicate the following:
 - 12.1. The position of the solar PV panels;

- 12.2. The on-site substation/switching station;
 - 12.3. Battery Energy Storage Facility;
 - 12.4. The final delineation of the centreline of the powerline within the 100m and up to 115m in width Grid Connection Corridor Option 1 which will connect the facility to the existing Oryx 2 - Theseus 132kV overhead powerline;
 - 12.5. The specific position of the pylon structures and foundation footprints;
 - 12.6. Access road to be obtained via the Beatrix Shaft 4 Rd off the R30 to the north of the site, internal site road network;
 - 12.7. All associated infrastructure;
 - 12.8. All existing infrastructure on the site, especially roads;
 - 12.9. All sensitive features; and
 - 12.10. All "no-go" and buffer areas.
13. The generic Environmental Management Programmes (EMPrs) for the onsite substation and powerline, submitted as part of the EIAr dated November 2022, are approved. The approved final site layout plan indicating the on-site substation and powerline must be appended to the generic EMPrs.
 14. The EMPr for the PV facility, submitted as part of the EIAr is not approved and must be amended to include measures as dictated by the final site layout map and micro-siting, and the provisions of this environmental authorisation. The EMPr must be made available for comments to registered Interested and Affected Parties and the holder of this environmental authorisation must consider such comments. Once amended, the final EMPr must be submitted to the Department for written approval prior to the commencement of the activity.
 15. The EMPr amendment must include the following:
 - 15.1. The requirements and conditions of this environmental authorisation;
 - 15.2. All recommendations and mitigation measures recorded in the EIAr, and the specialist reports as included in the EIAr dated November 2022;
 - 15.3. A re-vegetation and habitat rehabilitation plan. Restoration must be undertaken as soon as possible after the completion of construction activities to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habitats;
 - 15.4. A traffic management plan for the site access road to ensure that no hazards would result from the increased truck traffic and that traffic flow would not be adversely impacted. This plan must include measures to minimise impacts on local commuters e.g., limiting construction vehicles travelling on public roadways during the morning and late afternoon commute time and avoid using roads through densely populated built-up areas so as not to disturb existing retail and commercial operations, including farming operations;

- 15.5. An erosion management plan for monitoring and rehabilitating erosion events associated with the facility. Erosion mitigation must form part of this plan to prevent and reduce the risk of any potential erosion;
- 15.6. A chance-finds procedure, to be implemented in the event of fossils being uncovered;
- 15.7. An effective monitoring system to detect any leakage or spillage of any hazardous substances during their transportation, handling, use, or storage. This must include precautionary measures to limit the possibility of oil and other toxic liquids from entering the soil or stormwater systems;
- 15.8. A fire management plan; and
- 15.9. The final site layout map.
16. Once approved, the EMPr must be implemented and strictly adhered to. It shall be seen as a dynamic document and shall be included in all contract documentation for the development when approved.
17. Changes to the approved EMPr must be submitted in accordance with the EIA Regulations applicable at the time.
18. The Department reserves the right to amend the approved EMPr should any impacts that were not anticipated or covered in the EIAr be discovered.

Frequency and process of updating the EMPr

19. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 26 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.
20. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
21. 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.
22. 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.

23. 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

24. 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.
- 24.1. The ECO must be appointed before the commencement of any authorised activities.
- 24.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
- 24.3. The ECO must keep a record of all activities on site, problems identified, transgressions noted, and a task schedule of tasks undertaken by the ECO.
- 24.4. 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

25. 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.
26. 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.
27. The frequency of auditing and 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.

28. 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.
29. 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.
30. 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

31. A written notification of commencement must be given to the Department no later than fourteen (14) days before 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

32. 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

33. 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

34. No activities, which require a water use license, must be allowed to encroach into a water resource without a water use authorisation being in place from the Department of Water and Sanitation.


35. A permit must be obtained from the relevant Department for the removal or destruction of indigenous, protected, or endangered plant or animal species (if any) and a copy of such permit/s must be submitted to the Department for record keeping.
36. A botanist must be appointed to perform a final walkthrough of the facility to identify areas that require protection and to identify species of conservation concern that can be translocated and/or require permits. The findings of the final walkthrough must inform the final site layout plan in condition 12 above.
37. No exotic plants may be used for rehabilitation purposes. Only indigenous plants of the area may be utilised.
38. Foundations and trenches must be backfilled with originally excavated materials as much as possible. Excess excavation materials must be disposed of only in approved areas or, if suitable, stockpiled for use in reclamation activities.
39. The washing of panels during maintenance must be done with biodegradable soaps to avoid soil contamination.
40. The powerline must be marked with recommended bird flight diverters (such as brightly coloured 'aviation' balls, thickened wire spirals, or flapping devices) on potential areas of high impact as identified by an avifauna specialist, to increase the visibility of the lines for collision-susceptible species.
41. If any evidence of archaeological sites or remains (e.g., remnants of stone-made structures, indigenous ceramics, bones, stone artefacts, ostrich eggshell fragments, marine shell, and charcoal/ash concentrations), unmarked human burials, fossils or other categories of heritage resources are uncovered during construction, work in the immediate area must be halted, SAHRA must be alerted immediately, and a professional archaeologist or palaeontologist (depending on the nature of the finds) must be contacted as soon as possible to inspect the findings.
42. 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 stormwater run-off.
43. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, reuse, 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

44. A copy of this Environmental Authorisation, the audit and compliance monitoring reports, and the approved EMPr, must be made available for inspection and copying-

- 44.1. at the site of the authorised activity;
 - 44.2. to anyone on request; and
 - 44.3. where the holder of the Environmental Authorisation has a website, on such publicly accessible websites.
45. 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 after 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 the authorisation.

Date of Environmental Authorisation: 03/04/2023.



Ms. Milicent Solomons

Acting 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 27 May 2022.
- b) The information contained in the final EIAr dated November 2022.
- c) The comments received from interested and affected parties as included in the EIAr dated November 2022.
- d) Mitigation measures as proposed in the EIAr and the EMPr dated November 2022.
- e) The information contained in the specialist studies contained within the appendices of the EIAr dated November 2022 and as appears below:

Title	Prepared by	Date
Terrestrial Ecology Impact Assessment	AGES	March 2022
Wetland/Riparian Impact Assessment	AGES	March 2022
Avifauna Impact Assessment	Agreenco Environmental Projects (Pty) Ltd	March 2022
Heritage Impact Assessment	J A van Schalkwyk	April 2022
Agriculture Compliance Statement	Johann Lanz	April 2022
Visual Impact Assessment	Donaway Environmental Consultants	May 2022
Palaeontology Impact Assessment	Banzai Environmental (Pty) Ltd	May 2022
Social Impact Assessment	Donaway Environmental Consultants	May 2022
Traffic Impact Assessment	BVi Consulting Engineers Western	May 2022
EMPr	Environamics cc	November 2022

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 response to the growing electricity demand, fuelled by increasing economic growth and social development and placing increasing pressure on South Africa's

existing power generation capacity. Coupled with this, is the growing awareness of environmentally responsible development, the impacts of climate change, and the need for sustainable development. In addition, the primary rationale for the proposed solar photovoltaic (PV) facility is to add new generation capacity from renewable energy to the national electricity mix and to aid in achieving the targeted goal of all new installed generating capacity being derived from renewable energy forms, as targeted by DMRE.

- c) The EIAr dated November 2022 identified all legislations and guidelines that have been considered in the preparation of the EIAr.
- d) The location of the proposed 150MW Oryx Solar Power Plant and associated infrastructure.
- e) The methodology used in assessing the potential impacts identified in the EIAr dated November 2022 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 EIA 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 EIAr dated November 2022 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 EIAr dated November 2022 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 EIAr 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**.

Annexure 1: Locality Map

