



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: 14/12/16/3/3/1/2739
Enquiries: Ms Olivia Letlalo
Telephone: (012) 399 8815 **E-mail:** oletlalo@dfffe.gov.za

Mr Warren Morse
Vlakfontein Solar PV1 (Pty) Ltd
Postnet Suite #53
Private Bag X 21
HOWARD PLACE
7450

Telephone Number: 021 685 3240
Cell phone Number: 083 760 9586
Email Address: warren@mulilo.com

PER E-MAIL / MAIL

Dear Mr Morse

ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, ACT NO. 107 OF 1998, AS AMENDED FOR THE PROPOSED DEVELOPMENT OF VLAKFONTEIN SOLAR PHOTOVOLTAIC (PV) 1 ON THE REMAINDER OF VLAKFONTEIN NO 15 AND PORTION 1 OF THE FARM JACKALSFONTEIN NO 443, VILJOENSKROON, 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 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 of 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 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.

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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@dffe.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@dffe.gov.za

Yours faithfully



Mr Sabelo Malaza
Chief Director: Integrated Environmental Authorisations
Department of Forestry, Fisheries, and the Environment
Date: 10/09/2023

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|-----|--|--|---|--|
| cc: | Susanna Nel and Annelize Erasmus | Landscape Dynamics Environmental Consultants (Pty) Ltd | Cell: 082 566 4530/ 082 888 4060 | Email: info@landscapedynamics.co.za |
| | Ms Grace Mkhosana | Department of Economic, Small Business Development, Tourism and Environmental Affairs (DESTEA) | Tel: 051 400 4812/7 Cell: 082 789 4611 | Email: mkhosana@destea.gov.za |
| | MManager Mncedisi Simon Mqwathi care of Seithati Monyaki (Acting) | Moghaka Local Municipality (LM) | Tel: 056 216 9125 / 9377 / 9378 | Email: mms@moghaka.gov.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

Proposed development of Vlakfontein Solar Photovoltaic (PV) 1 on the Remainder of Vlakfontein No 15 and Portion 1 of Jackalsfontein No 443, Viljoenskroon, Free State Province

Fezile Dabi District Municipality

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| Application Register Number: | <i>14/12/16/3/3/1/2739</i> |
| Applicant: | <i>Vlakfontein Solar PV1 (Pty) Ltd</i> |
| Location of activity: | <i>Remainder of Vlakfontein No 15, and Portion 1 of Jackalsfontein No 443, Viljoenskroon, Moqhaka Local Municipality, Fezile Dabi District Municipality, Free State Province</i> |

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 –

Vlakfontein Solar PV1 (Pty) Ltd

with the following contact details –

Mr Warren Morse
Postnet Suite #53
Private Bag X 21
HOWARD PLACE
7450

Telephone Number: 021 685 3240
Cell phone Number: 083 760 9586
Email Address: warren@mulilo.com

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 |
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| <p><u>Listing Notice 1, Activity 11(i):</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 275 kilovolts.</i></p> | <p>An onsite 132kV Independent Power Producer (IPP) Substation forms part of the project components for which Environmental Authorisation is required with this application.</p> |
| <p><u>Listing Notice 1, Activity 12(ii)(c):</u></p> <p><i>“The development of—</i></p> <p><i>(ii) infrastructure or structures with a physical footprint of 100 square metres or more, where such development occurs—</i></p> <p><i>(a) within a watercourse.</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>An existing access road will be upgraded and developed across a seepage area. This road will be approximately 6m in width and approximately 265m in length where it crosses the seepage area. A surface area of at least 1 590m² will ultimately be affected.</p> <p>There are four depressions / degraded wetlands modified by agricultural activities which were confirmed by the aquatic ecologist as having a low aquatic sensitivity and can be developed. These areas are approximately 4,66ha; 3,33ha; 0,83ha, and 0,5ha, in extent. The combined total surface area is therefore approximately 9,32ha which equals 93 200m².</p> |
| <p><u>Listing Notice 1, Activity 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, shell grot, pebbles or rock of more than 10 cubic metres from a watercourse,</i></p> | <p>An existing road will be upgraded and developed across a seepage area. It will be approximately 6m in width and approximately 265m in length where it crosses this seepage area. A surface area of at least 1 590m² will ultimately be affected; therefore, infilling or depositing of more than 10m³ will be required in this area.</p> <p>In addition, there are four depressions/degraded wetlands modified by agricultural activities which were confirmed by the aquatic ecologist as having a low aquatic sensitivity</p> |

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| | <p>and can be development. This covers an area of approximately 93 200m³; therefore, combine infilling or depositing of more than 10m³ will also be required in these areas.</p> |
| <p><u>Listing Notice 1, Activity 24(ii):</u> <i>The development of a road— (ii) where no reserve exists where the road is wider than 8 metres.</i></p> | <p>The following roads are planned:</p> <ul style="list-style-type: none"> - The main access to the facility will be approximately 8m wide. - Internal roads will be constructed up to 6m wide. <p>The approval of this activity will ensure that additional width, if any, required for the access points, turning circles and bends can take place.</p> |
| <p><u>Listing Notice 1, Activity 28(ii):</u> <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: (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 of the Vlakfontein Solar PV1 facility will be developed on approximately 151ha which contain areas previously cropped and uncropped outside an urban area.</p> |
| <p><u>Listing Notice 2, Activity 1:</u> <i>The development of facilities or infrastructure for the generation of electricity from a renewable resource where the electricity output is 20 MW or more, excluding where such development of facilities or infrastructure is for photovoltaic installations & occurs. (a) within an urban area; or (b) on existing infrastructure.</i></p> | <p>A solar PV facility of up to 100MW with associated infrastructure will be constructed outside an urban area.</p> |
| <p><u>Listing Notice 2, Activity 15:</u> <i>The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such</i></p> | <ul style="list-style-type: none"> - The combined properties' size is 493ha in extent of which the development footprint will affect |

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| <p><i>clearance of indigenous vegetation is required for,</i></p> <p><i>(i) the undertaking of a linear activity; or</i></p> <p><i>(ii) maintenance purposes undertaken in accordance with a maintenance management plan.</i></p> | <p>approximately 151ha of previously cropped and uncropped land.</p> <ul style="list-style-type: none"> - Indigenous vegetation of more than 20ha will be removed within the total project area. |
| <p><u>Listing Notice 3, Activity 4(b)(i)(ee)(gg)</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. Free State</i></p> <p><i>i. 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>(gg) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA</i></p> | <p>Listing Notice 3 is applicable because the development site lies outside urban areas; and</p> <ul style="list-style-type: none"> - according to the DFFE Screening Tool Report the entire site falls within a Critical Biodiversity Area. - according to the Protected Areas Register the Mispah Game Farm (Nature Reserve) is situated approximately 1,2km north-west of the PV site. <p>The activity is applicable because:</p> <ul style="list-style-type: none"> - The main access to the IPP substation area off the Vermaasdrift Road (S643) will be constructed to a width of approximately 8m. - All other internal roads will be constructed to a width of approximately 6m. |
| <p><u>Listing Notice 3, Activity 10(b)(i)(ee)(gg)</u></p> <p><i>The development and related operation of facilities or infrastructure, for the 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. Free State</i></p> <p><i>i. 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>(gg) 5 kilometres from any other protected area identified in terms of NEMPAA.</i></p> | <p>Listing Notice 3 is applicable because the development site lies outside urban areas; and</p> <ul style="list-style-type: none"> - according to the DFFE Screening Tool Report the entire site falls within a Critical Biodiversity Area. - according to the Protected Areas Register the Mispah Game Farm (Nature Reserve) is situated approximately 1,2km north-west of the PV site. <p>The applicable project activities are the following:</p> <ul style="list-style-type: none"> - Storage of dangerous goods (Including lubrications, oils, paints, fuel/diesel. etc.) will be required. The exact storage capacity has not yet been determined, but it will be 30m³ or more, but less than 80m³. |

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| | <p>- Diesel/fuel is generally required for the following purposes:</p> <ul style="list-style-type: none"> • During construction for construction vehicles as well as generators for the construction camp and commissioning whilst waiting for the Eskom grid connection works to be completed. • During operations required for Operations & Maintenance vehicles at the PV plants but also required for backup diesel generators at the substation. The Generators supply auxiliary power to the substation's protection and communications systems, should there be outages on the grid. This is an Eskom requirement together with a battery room at the substations to act as UPS for these critical systems. |
| <p><u>Listing Notice 3, Activity 12(b)(i)(ii)</u></p> <p><i>The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.</i></p> <p><i>b. In the Free State</i></p> <p><i>i. Within any critically endangered ecosystem listed in terms of section 52 of the NEMBA.</i></p> <p><i>ii. Within critical biodiversity areas identified in bioregional plans.</i></p> | <p>Listing Notice 3 is applicable because the development site lies outside urban areas; and</p> <ul style="list-style-type: none"> - according to the DFFE Screening Tool Report the entire site falls within a Critical Biodiversity Area. - The ecologist confirmed that the vegetation of the study area belongs to the endangered Vaal-Vet Sandy Grassland vegetation type (Gh 10) (Mucina & Rutherford 2006). - A watercourse (seepage area) to be excluded from the development area and depressions/degraded small wetlands that will form part of the PV area occur on site. <p>The applicable project components/ activities are the following:</p> <ul style="list-style-type: none"> - the development footprint will affect approximately 151ha of previously cropped and uncropped land indigenous vegetation of way more than 300m² will be removed. - PV solar panels as well as roads will be constructed that requires clearance of indigenous vegetation exceeding |

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| | <p>300m³ to take place within 100m from the edge of the above-mentioned watercourses.</p> |
| <p>Listing Notice 3, Activity <u>14(ii)(a)(c)(b)(i)(ff)(hh)</u> <i>The development of</i> <i>(ii) infrastructure or structures with a physical footprint of 10 square metres or more, where such development occurs</i> <i>(a) within a watercourse; or</i> <i>(c) if no development setback has been adopted within 32 metres of a watercourse, measured from the edge of a watercourse,</i> <i>b. Free State</i> <i>i. Outside urban areas</i> <i>(ff) Critical biodiversity areas</i> <i>(hh) Areas within 5 kilometres from any other protected area identified in terms of NEMPAA</i></p> | <p>Listing Notice 3 is applicable because the development site lies outside urban areas; and</p> <ul style="list-style-type: none"> - according to the DFFE Screening Tool Report the entire site falls within a Critical Biodiversity Area. - according to the Protected Areas Register the Mispah Game Farm (Nature Reserve) is situated approximately 1,2km north-west of the PV site. <p>The applicable project components/ activities are the following:</p> <ul style="list-style-type: none"> - An existing access road will be upgraded and developed across a delineated seepage area. This road will be approximately 6m in width and approximately 265m in length where it crosses the delineated seepage area. A surface area of at least 1 590m² will ultimately be affected. - There are also four depressions / degraded wetlands modified by agricultural activities which were confirmed by the aquatic ecologist as having a low aquatic sensitivity and can be development. These areas are approximately 4,66ha; 3,33ha; 0,83ha, and 0,5ha in extent. The combined total surface area is therefore approximately 9,32ha which equals 93 200m². |
| <p>Listing Notice 3, Activity 18(b)(i)(ee)(gg)(hh) <i>The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.</i> <i>b. Free State</i> <i>i. Outside urban areas:</i> <i>(ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans,</i></p> | <p>Listing Notice 3 is applicable because the development site lies outside urban areas; and</p> <ul style="list-style-type: none"> - according to the DFFE Screening Tool Report the entire site falls within a Critical Biodiversity Area. - according to the Protected Areas Register the Mispah Game Farm (Nature Reserve) is situated approximately 1,2km north-west of the PV site. <p>The applicable project components/ activities are the following:</p> |

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| <p>(gg) Areas within 5 kilometres from any other protected area identified in terms of NEMPAA; or (hh) Areas within a watercourse or wetland; or within 100 metres from the edge of a watercourse or wetland;</p> | <p>- Existing roads will be widened by more than 4 metres and/or lengthened by more than 1km within 100m from the edge of a watercourse / wetland.</p> |
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as described in the final Basic Assessment Report (BAR) dated May 2023:

21 Digit SG Codes

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F | 0 | 3 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 0 |
| F | 0 | 3 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 1 |

Co-ordinate Points of the Properties for the listed activities

| Point | Latitude | Longitude |
|---|---------------|---------------|
| Vlaktefontein Solar PV1 Development Site | | |
| A | 27°00'13.27"S | 26°51'12.46"E |
| B | 27°00'37.50"S | 26°52'09.94"E |
| C | 27°00'36.19"S | 26°52'13.30"E |
| D | 27°01'13.63"S | 26°52'31.96"E |
| E | 27°01'25.62"S | 26°51'52.51"E |
| F | 27°00'47.53"S | 26°51'44.17"E |
| G | 27°00'48.55"S | 26°51'41.57"E |
| H | 27°00'57.52"S | 26°51'32.57"E |
| I | 27°00'35.67"S | 26°51'19.51"E |
| J | 27°00'24.83"S | 26°51'13.51"E |
| IPP Substation | | |
| Northern point | 27°00'17.85"S | 26°51'20.64"E |
| Eastern point | 27°00'19.22"S | 26°51'23.85"E |
| Southern point | 27°00'22.16"S | 26°51'22.34"E |
| Western point | 27°00'20.86"S | 26°51'19.11"E |
| Operations & Maintenance Buildings | | |
| Northern point | 27°00'19.22"S | 26°51'23.85"E |
| Eastern point | 27°00'20.62"S | 26°51'27.17"E |
| Southern point | 27°00'23.56"S | 26°51'25.66"E |
| Western point | 27°00'22.16"S | 26°51'22.34"E |

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| BESS Area | | |
|--|---------------|---------------|
| Northern point | 27°00'20.62"S | 26°51'27.17"E |
| Eastern point | 27°00'24.71"S | 26°51'37.03"E |
| Southern point | 27°00'29.18"S | 26°51'34.72"E |
| Western point | 27°00'25.13"S | 26°51'24.85"E |
| Diesel storage | | |
| Northern point | 27°00'21.49"S | 26°51'20.66"E |
| Eastern point | 27°00'22.16"S | 26°51'22.34"E |
| Southern point | 27°00'23.64"S | 26°51'21.59"E |
| Western point | 27°00'22.96"S | 26°51'19.92"E |
| Laydown area | | |
| North-west point | 27°00'19.22"S | 26°51'15.34"E |
| North-eastern point 1 | 27°00'21.49"S | 26°51'20.66"E |
| North-eastern point 2 | 27°00'22.96"S | 26°51'19.92"E |
| North-eastern point 3 | 27°00'23.64"S | 26°51'21.59"E |
| North-eastern point 4 | 27°00'22.16"S | 26°51'22.34"E |
| North-eastern point 5 | 27°00'23.53"S | 26°51'25.59"E |
| North-eastern point 6 | 27°00'25.12"S | 26°51'24.79"E |
| South-eastern point | 27°00'26.93"S | 26°51'29.36"E |
| South-western point | 27°00'27.04"S | 26°51'18.51"E |
| Western point | 27°00'21.34"S | 26°51'15.41"E |
| Primary (main) access road | | |
| Entrance of the S643 (Vermaasdrift Road) | 27°00'36.07"S | 26°51'19.21"E |
| Turning point 1 | 27°00'34.22"S | 26°51'21.85"E |
| Turning point 2 | 27°00'33.56"S | 26°51'22.28"E |
| Turning point 3 | 27°00'27.68"S | 26°51'19.61"E |
| End point | 27°00'22.16"S | 26°51'22.34"E |

- for the proposed Vlakfontein Solar PV1 on the Remainder of Vlakfontein No 15, and Portion 1 of Jackalsfontein No 443, Viljoenskroon, Free State Province, hereafter referred to as "the property".

Infrastructure associated with the Vlakfontein Solar PV1 Facility will include the following:

| Infrastructure | Specifications |
|----------------|---|
| Solar PV Array | The Solar PV Array includes the following components: |

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| | <ul style="list-style-type: none"> ▪ Bifacial PV Modules ▪ Mounting structures using single axis tracking technology ▪ Inverters ▪ Combiner Boxes ▪ Transformers ▪ Cabling between panels ▪ Total PV area is approximately 151ha. |
| Onsite 132kV Independent Power Producer (IPP) Substation | <p>The IPP Substation includes the following components:</p> <ul style="list-style-type: none"> ▪ HV Step-up transformer ▪ MV Interconnection building ▪ Total area approximately 100m x 100m (1ha) |
| Access and internal roads | <ul style="list-style-type: none"> ▪ Main access to the IPP substation area is required directly off Vermaasdrift Road (S643), approximately 8m wide. The length of the road is approximately 498m. The coordinates of the access point are: 27° 0'36.07"S 26°51'19.21"E ▪ Existing internal farm roads to be utilised where possible, ▪ Internal roads to be constructed up to 6m wide. ▪ Regraveling of roads to take place if required by the provincial roads authority. |
| Laydown area | <ul style="list-style-type: none"> ▪ A temporary construction site area of approximately 4ha directly adjacent to the IPP and Eskom substation will be required. ▪ Temporary infrastructure will be rehabilitated following the completion of the construction phase, where it is not required for the operation phase. |
| Battery Energy Storage System (BESS) | <ul style="list-style-type: none"> ▪ Solid State Batteries (SSB) is the preferred battery technology. ▪ It will be delivered pre-assembled. ▪ It will be constructed on approximately 4.5ha. |
| Storage of Dangerous Goods | <ul style="list-style-type: none"> ▪ Storage of dangerous goods (Including lubrications, oils, paints, fuel/diesel, etc.) with a combined capacity of less than 80 cubic metres is required. ▪ Diesel/fuel is generally required for the following purposes: <ul style="list-style-type: none"> - During construction for construction vehicles as well as generators for the construction camp and commissioning whilst waiting for the Eskom grid connection works to be completed. |

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| | <p>- During operations, diesel is required for vehicles at the PV plant as well as for backup diesel generators at the substation. The Generators supply auxiliary power to the substation's protection and communications systems, should there be outages on the grid. This is an Eskom requirement together with a battery room at the substations to act as UPS for these critical systems.</p> |
| Ancillary facilities | <ul style="list-style-type: none">▪ Operations and Maintenance Building▪ Site Offices▪ Construction camps▪ Storage Warehouse▪ Workshop▪ Guard House▪ Ablutions with conservancy tanks▪ During the construction phase, temporary sanitation facilities will be provided (i.e., chemical toilets) and these toilets will be regularly serviced by a licensed company. |

Conditions of this Environmental Authorisation

Scope of authorisation

1. The development of the Vlakfontein Solar PV1 on the Remainder of Vlakfontein No 15 and Portion 1 of Jackalsfontein No 443, Viljoenskroon, Free State Province is approved as per the geographic coordinates cited in the table above.
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 for the activity to be undertaken.
8. Construction must be completed within ten (10) 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 –
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- 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.

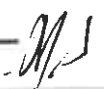
Management of the activity

13. Vlakfontein Solar PV facility: Layout Map dated 14 February 2022 attached to the final BAR is not approved.
14. A copy of the final site layout map must be made available for comments to the registered Interested and Affected Parties and the holder of this environmental authorisation must consider such comments. Once amended, the final development layout map must be submitted to the Department for written approval prior to commencement of the activity. Existing infrastructure must be used as far as possible e.g., roads. The layout map must indicate the following:
 - 14.1. Solar PV array comprising PV modules.
 - 14.2. Inverters and transformers.
 - 14.3. Cabling between the panels.
 - 14.4. On-site substation.
 - 14.5. Construction laydown areas, storage area, buildings, and their coordinates.
 - 14.6. Office buildings.
 - 14.7. Cabling from the onsite substation to the collector substation (either underground or overhead).
 - 14.8. Access roads and internal distribution roads road (length and width).
 - 14.9. Water supply pipelines.
 - 14.10. Battery Energy Storage System and coordinates.

- 14.11. Proposed grid connection.
- 14.12. All infrastructure coordinates; and
- 14.13. All sensitive features, and all “no-go” and buffer areas as identified by various specialists i.e., vegetation units 2 and 5, aquatic buffer of 20m and 100m, heritage sites buffer of 20m around VK4 site, 40m around CVK100 site, and 100m around CVK101 site and 15m development buffer from the roads.
15. The Environmental Management Programme (EMPr) for the PV facility and the unsigned generic EMPr for the on-site substation submitted as part of the BAR are not approved and must be amended to include measures as dictated by the final site lay-out map and the update of risk assessment on BESS technology. The Stakeholder Engagement Plan (SEP) and Community Health, Safety and Security Plan (CHSSP) must be appended to the EMPr. The EMPr must be made available for comments by 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 commencement of the activity. Once approved the EMPr must be implemented and adhered to.
16. 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.
17. Changes to the approved EMPr must be submitted in accordance to 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 BAR 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 25 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 because 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 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 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 of submission of the environmental audit reports must be as per the frequency indicated in the EMPr, considering 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 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

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.

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Specific conditions

34. The highly sensitive areas as identified by botanical and heritage specialists must be clearly demarcated as no-go areas.
35. Migratory fences must be erected adjacent to the conserved wetlands and seasonal stream and buffer zones.
36. A 15m development exclusion buffer of the farm roads as a non-development buffer outside of the 1.2km distance from the Mercury Substation must be implemented.
37. The footprint of the development and access routes must be limited to the areas required for actual construction works.
38. A permit must be obtained from the relevant authorities for the removal or disturbance of any TOPs, Red Data listed or provincially protected species prior construction.
39. A Section 50 approval must be obtained from the management authority of Mispah Game Farm (Nature Reserve) prior to construction of the proposed development.
40. An on-going alien vegetation removal programmes as well as the rehabilitation and revegetation of the seasonal wetlands and seasonal stream's buffer zones must be implemented.
41. No exotic plants must be used for rehabilitation purposes. Only indigenous plants of the area must be utilised.
42. Should any archaeological sites, artefacts, paleontological fossils, or graves be exposed during construction work, work in the immediate vicinity of the find must be stopped, the South African Heritage Resources Agency (SAHRA) must be informed, and the services of an accredited heritage professional obtained for an assessment of the heritage resources.
43. Hazardous substances must be stored in a bunded and designated area to avoid accidental leakage into the environment.
44. 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

45. A copy of this Environmental Authorisation, the audit and compliance monitoring reports, and the approved EMPr, must be made available for inspection and copying-
 - 45.1. at the site of the authorised activity,
 - 45.2. to anyone on request; and

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- 45.3. Where the holder of the Environmental Authorisation has a website, on such publicly accessible website.
46. 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: 10/07/2023



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 03 April 2023, and the amended application form received 17 May 2023.
- b) The information contained in the final BAR dated May 2023.
- c) The information contained in the email of 22 June 2023 confirming the engagement with the Protected Area management authority and dated 23 June 2023 confirming the location of the Protected Area and the development footprint.
- d) The comments received from all interested and affected parties as included in the final BAR dated May 2023.
- e) Mitigation measures as proposed in the EMPr for the facility and the generic EMPrs included in the final BAR dated May 2023.
- f) The information contained in the specialist studies contained within the appendices of the final BAR.

2. Key factors considered in making the decision

All information presented to the Department was considered 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 ties in with the national government policies, plans, and programmes which have relevance to energy planning and production.
- c) The final BAR dated May 2023 identified all legislations and guidelines that have been considered in the preparation of the BAR.
- d) The methodology used in assessing the potential impacts identified in the final BAR dated May 2023 and the specialist studies have been adequately indicated.
- e) A sufficient public participation process was undertaken, and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 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 final BAR dated May 2023 and sufficient assessment of the key identified issues and impacts have been completed.
- b) The procedure followed for impact assessment is adequate for the decision-making process.
- c) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- d) 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