



## environmental affairs

Department:  
Environmental Affairs  
**REPUBLIC OF SOUTH AFRICA**

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

**DEA Reference:** 14/12/16/3/3/1/1960

**Enquiries:** Mr Lunga Dlova

**Telephone:** 012-399 8524 **E-mail:** [LDlova@environment.gov.za](mailto:LDlova@environment.gov.za)

Mr Alan Wolfrohm  
Highlands South Wind Energy Facility RF (Pty) Ltd  
PO Box 762  
Wilderness  
**WESTERN CAPE**  
6560

Telephone Number: +27 (0)82 529 4909  
Email Address: [MrWolf@wkn-windcurrent.com](mailto:MrWolf@wkn-windcurrent.com)

### **PER E-MAIL / MAIL**

Dear Mr Wolfrohm

### **APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GN R. 983/984/985 FOR THE PROPOSED HIGHLANDS SOUTH WIND ENERGY FACILITY AND ASSOCIATED INFRASTRUCTURE NEAR SOMERSET EAST WITHIN THE BLUE CRANE ROUTE LOCAL MUNICIPALITY, EASTERN CAPE PROVINCE**

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

In terms of regulation 4(2) of the Environmental Impact Assessment Regulations, 2014 as amended, 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. An appellant must submit an 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.

By post: Private Bag X447,  
Pretoria, 0001; or

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

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If the applicant wishes to lodge an appeal, it must also serve a copy of the notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection, should you intend to submit an appeal.

**Appeals must be submitted in writing to:**

Director: Appeals and Legal Review, of this Department at the above mentioned addresses and can also be contacted at:

Tel: (012) 399 9356

Email: [Appeals@environment.gov.za](mailto:Appeals@environment.gov.za)

Please note that in terms of section 43(7) of the National Environmental Management Act (NEMA), 1998, an appeal under section 43 of that Act 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.

For guidance on appeals submitted to the Minister in terms of National Environmental Management Act (NEMA) and the SEMAs, please find a copy of the guideline on the administration of appeals on the Department's website: ([https://www.environment.gov.za/documents/forms#legal\\_authorisations](https://www.environment.gov.za/documents/forms#legal_authorisations)).

Kindly include a copy of this document with the letter of notification to interested and affected parties.

Yours faithfully

  
**Mr Sabelo Malaza**  
**Chief Director: Integrated Environmental Authorisations**  
**Department of Environmental Affairs**  
Date: 21/01/2020

|     |                 |   |                     |   |
|-----|-----------------|---|---------------------|---|
| cc: | Ashlin Bodasing | Arcus Consultancy Services South Africa (Pty) Ltd   | Tel: (021) 412 1529 | Email: <a href="mailto:ashlinb@arcusconsulting.co.za">ashlinb@arcusconsulting.co.za</a> |
|     | Zirk Jordaan    | Zirk Jordaan Family Trust   | Tel: 0875501434     | Email: <a href="mailto:zirk@jabama.co.za">zirk@jabama.co.za</a>                         |
|     | Thabiso Klaas   | Blue Crane Route Local Municipality   | Tel: 042 243 6400   | Email: <a href="mailto:mmanager@bcm.gov.za">mmanager@bcm.gov.za</a>                     |
|     | Gerry Pienaar   | Eastern Cape Department of Finance, Economic Development, Environmental Affairs and Tourism | Tel: 043 605 7051   | Email: <a href="mailto:gerry.pienaar@dedea.gov.za">gerry.pienaar@dedea.gov.za</a>       |



## environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

# Environmental Authorisation

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

Highlands South Wind Energy Facility and Associated Infrastructure near Somerset East within the  
Blue Crane Route Local Municipality in the Eastern Cape Province

Sarah Baartman District Municipality

|                                       |  |
|---------------------------------------|--|
| <b>Authorisation register number:</b> | <i>14/12/16/3/3/1/1960</i>   |
| <b>Last amended:</b>                  | <i>First issue</i>   |
| <b>Holder of authorisation:</b>       | <i>Highlands South Wind Energy Facility<br/>RF (Pty) Ltd.</i>  |
| <b>Location of activity:</b>          | <i>EASTERN CAPE PROVINCE:<br/>Farm 105 Doorn River, Farm 105 –<br/>Portion 0, Remaining Extent; Farm 143<br/>Nels Kraal, Farm 143 – Portion 0; Farm<br/>146 Kiepersol, Farm 146 – Portion 1;<br/>Farm 361 Highlands, Farm 361 –<br/>Portion 0, Remaining Extent; within<br/>Ward 6 of the Blue Crane Route Local<br/>Municipality.</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, 1998 and the EIA regulations.

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

## Activities authorised

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

**HIGHLANDS SOUTH WIND ENERGY FACILITY RF (PTY) LTD**  
(hereafter referred to as the **holder of the authorisation**)

with the following contact details –

Mr Alan Wolfromm  
Highlands South Wind Energy Facility RF (Pty) Ltd  
PO Box 762  
Wilderness  
**WESTERN CAPE**  
6560

Telephone Number: +27 (0)82 529 4909  
Email Address: [MrWolf@wkn-windcurrent.com](mailto:MrWolf@wkn-windcurrent.com)

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notice 1, Listing Notice 2 and Listing Notice 3 as amended (GN R. 983, 984 and 985 as amended):

| Activity number  | Activity description   |
|--|--|
| <p><u>Listing Notice 1 GN R 327 (as amended) Activity 11:</u><br/>                     The development of facilities or infrastructure for the transmission and distribution of electricity—<br/>                     (i) Outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts.</p>   | <p>Medium voltage power lines will be installed to transfer electricity from the turbines to an on-site substation. Cables will be installed underground where feasible.</p>   |
| <p><u>Listing Notice 1 GN R 327 (as amended) Activity 12:</u><br/>                     The development of (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs<br/>                     (a) within a watercourse<br/>                     (c) if no development setback exists within 32 m of a watercourse, measured from the edge of a watercourse.</p> | <p>Infrastructure will be required at 9 water-crossings and within 32 metres of a watercourse that covers an area of more than 100 m<sup>2</sup>.</p>  |
| <p><u>Listing Notice 1 GN R 327 (as amended) Activity 19:</u><br/>                     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;</p>   | <p>The construction of the Highlands South Wind Energy Facility includes the excavation of soil in watercourses/drainage line areas, and infilling/deposition will exceed 5 cubic metres and in some instances will exceed 10 cubic metres. Figure 7.2 shows the location of water crossings.<br/>                     The construction of associated infrastructure, such as access tracks crossing watercourses will require excavation and/or infilling of watercourse areas.</p> |
| <p><u>Listing Notice 1 GN R 327 (as amended) Activity 24:</u><br/>                     The development of a road—<br/>                     (ii) with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres;</p>   | <p>Access roads of 6 - 12 metres will be required between turbines.</p>  |

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| <p><u>Listing Notice 1 GN R 327 (as amended) Activity 27:</u><br/>The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation</p>   | <p>The infrastructure and building area of the proposed Highlands South WEF will require clearing of at least 1 hectare of indigenous vegetation in total.</p>  |
| <p><u>Listing Notice 1 GN R 327 (as amended) Activity 28:</u><br/>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:<br/>(ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare.</p> | <p>Construction of the proposed development will change the land use from agriculture to mixed – agriculture and electricity generation and transmission. The proposed development is outside an urban area and has a footprint that will exceed 1 hectare.</p> |
| <p><u>Listing Notice 1 GN R 327 (as amended) Activity 48:</u><br/>The expansion of—<br/>(i) infrastructure or structures where the physical footprint is expanded by 100 square metres or more; where such expansion occurs—<br/>(a) within a watercourse;<br/>(c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse;</p>                                | <p>Existing bridges over watercourses will need to be expanded or widened.</p>  |
| <p><u>Listing Notice 1 GN R 327 (as amended) Activity 56:</u><br/>The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre-<br/>(ii) where no reserve exists, where the existing road is wider than 8 metres; excluding where widening or lengthening occur inside urban areas.</p>  | <p>Existing farm access roads need to be widened or lengthened. These roads currently have no road reserve and will be wider than 8m in some areas.</p>   |
| <p><u>Listing Notice 2 GN R 325 (as amended) Activity 1:</u><br/>The development of facilities or infrastructure for the generation of electricity from a renewable resource where the electricity output is 20 megawatts or more.</p>  | <p>The Highlands South Wind Energy Facility will consist of up to 15 turbines for electricity generation with a combined capacity of more than 20 MW.</p>   |

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| <p><u>Listing Notice 2 GN R 325 (as amended) Activity 6:</u><br/>                 The development of facilities or infrastructure for any process or activity which requires a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent.</p>  | <p>The construction of the WEF will require a Water Use License in terms of the National Water Act, 1998 (Act No. 36 of 1998).</p>  |
| <p><u>Listing Notice 3 GN R 324 (as amended) Activity 4:</u><br/>                 The development of a road wider than 4 metres with a reserve less than 13,5 metres<br/>                 a. Eastern Cape<br/>                 i. Outside urban areas:<br/>                 (bb) National Protected Area Expansion Strategy Focus areas;<br/>                 (ee) Critical Biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</p>   | <p>Internal and external access roads will be constructed, which are wider than 4m. The site falls outside of an urban area and parts of the site fall within a National Protected Area Expansion Strategy Focus areas (NPAESF) and a Tier 2 CBA.</p> |
| <p><u>Listing Notice 3 GN R 324 (as amended) Activity 10:</u><br/>                 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.<br/>                 a. Eastern Cape<br/>                 i. Outside urban areas:<br/>                 (bb) National Protected Area Expansion Strategy Focus areas;<br/>                 (ee) Critical Biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</p> | <p>Substation will require the use of transformer oils/other hazardous substances during the operational phase.</p>   |
| <p><u>Listing Notice 3 GN R324 (as amended) Activity 12:</u><br/>                 The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance</p>   | <p>The proposed development will require the clearance of natural vegetation in excess of 300 m<sup>2</sup> in areas of natural vegetation. Parts of the site fall within a Tier 2 Critical Biodiversity Area.</p>                                    |

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| <p>purposes undertaken in accordance with a maintenance management plan.</p> <p>a. Eastern Cape</p> <p>ii. Within critical biodiversity areas identified in bioregional plans;</p>   |   |
| <p><u>Listing Notice 3 GN R324 (as amended) Activity 14:</u></p> <p>The development of—</p> <p>(ii) infrastructure or structures with a physical footprint of 10 square metres or more; where such development occurs—</p> <p>(a) within a watercourse;</p> <p>(c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;</p> <p>a. Eastern Cape</p> <p>i. Outside urban areas:</p> <p>(bb) National Protected Area Expansion Strategy Focus areas;</p> <p>(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</p> | <p>Bridges and associated road infrastructure will be constructed within 32 m of watercourse(s) at the applied for water crossings. The site lies outside of an urban area and a portion of the site falls with an NPAESF area and a Tier 2 Critical Biodiversity Area.</p> |
| <p><u>Listing Notice 3 GN R324 (as amended) Activity 18:</u></p> <p>The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.</p> <p>a. Eastern Cape</p> <p>i. Outside urban areas:</p> <p>(bb) National Protected Area Expansion Strategy Focus areas;</p> <p>(ee) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</p>   | <p>Existing farm roads will need to be widened or lengthened. The site lies outside urban areas, and a portion of the site falls with an NPAESF area and a Tier 2 Critical Biodiversity Area.</p>   |

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| <p><u>Listing Notice 3 GN R324 (as amended) Activity 23:</u><br/>                 The expansion of—<br/>                 (ii) infrastructure or structures where the physical footprint is expanded by 10 square metres or more; where such expansion occurs—<br/>                 (a) within a watercourse;<br/>                 (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;<br/>                 a. Eastern Cape<br/>                 i. Outside urban areas: (bb) National Protected Area Expansion Strategy Focus areas;<br/>                 (ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</p> | <p>The construction of the WEF will include the expansion of existing bridges by more than 10 m<sup>2</sup> over watercourses. The site lies outside of any urban area, and parts of the site fall within a Critical Biodiversity Area.</p> |
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as described in the final Basic Assessment Report (BAR) dated November 2019 at:

Farm Names:

- Farm 105 Doorn River,
- Farm 105 – Portion 0, Remaining Extent;
- Farm 143 Nels Kraal,
- Farm 143 – Portion 0;
- Farm 146 Kiepersol,
- Farm 146 – Portion 1;
- Farm 361 Highlands, and
- Farm 361 – Portion 0, Remaining Extent;

**21 SG Codes:**

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

**Wind Turbine Layout Design Coordinates**

| Turbine | Longitude      | Latitude      |
|---------|----------------|---------------|
| T29     | -32°46'51.40 " | 25°22'9.10 "  |
| T27     | -32°46'9.14 "  | 25°22'22.67 " |
| T28     | -32°46'22.18 " | 25°22'54.18 " |
| T30     | -32°47'3.48 "  | 25°21'54.16 " |
| T34     | -32°47'46.68 " | 25°23'3.03 "  |
| T31     | -32°47'13.08 " | 25°22'7.90 "  |
| T32     | -32°47'24.00 " | 25°22'51.10 " |
| T33     | -32°47'39.17 " | 25°22'3.15 "  |
| T35     | -32°48'3.94 "  | 25°21'31.62 " |
| T36     | -32°48'27.09 " | 25°22'58.41 " |
| T38     | -32°48'43.49 " | 25°22'45.29 " |
| T37     | -32°48'35.81 " | 25°22'12.46 " |
| T40     | -32°48'56.68 " | 25°22'12.63 " |
| T39     | -32°48'46.80 " | 25°21'34.46 " |
| T41     | -32°48'59.94 " | 25°20'44.24 " |

The location indicated in the locality plan (Annexure 2), attached in this environmental authorisation.

- for the proposed Highlands South Wind Energy Facility and Associated Infrastructure, located 20 km from the town of Somerset East in the Eastern Cape Province, hereafter referred to as "the property".

Technical details for the Highlands South Wind Farm:

| Component                     | Description/ Dimensions                     |
|-------------------------------|---|
| Type of technology            | Onshore Wind Turbine electricity generators |
| Structure height (Tip Height) | Between 125 m and 200 m                     |

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|--|--|
| Surface area to be covered (including associated infrastructure such as roads) | Typically in wind energy facilities, the amount of surface area covered by turbines and associated infrastructure such as roads is less than 1% of the total site. The footprint of the facility is estimated at 51.4ha.                               |
| Structure orientation  | Conventional three bladed horizontal axis wind turbine generator mounted on a single vertical tower structure.   |
| Laydown area dimensions (Construction period and Operation)                    | Permanent laydown area and the temporary construction laydown area will both be approximately up to 1 hectare each.  |
| Generation capacity of the facility as a whole at delivery points              | 15 Turbines x Maximum of 6 MW per turbine = 90 MW<br>Maximum Generation Capacity   |
| Location of the site   | 20 km west of Somerset East, Eastern Cape  |
| Facility Area  | The Proposed development site is approximately 10 000 hectares. This is the total area covered, in which all three phases will be located. The actual infrastructure footprint will be around 1% of this for the Highlands South Wind Energy Facility. |
| Number of Turbines   | Up to 15 turbines  |
| Site Access  | 32°41'20.53"S<br>25°21'31.02"E<br>(R63)  |
| Hub Height from ground level   | up to 135 metres   |
| Blade Length   | up to 75 metres  |
| Rotor Diameter   | up to 150 metres   |
| Area occupied by inverter transformer stations/substations                     | 1.1 hectares   |
| Capacity of on-site substation   | 66/132 kV  |
| Centre point coordinates of on-site substation                                 | 32°47'25.30"S<br>25°22'27.45"E   |
| Area occupied by both permanent and construction laydown areas                 | 1 hectare permanent laydown area<br>1 hectare construction laydown area  |

|   |                     |
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| Operations and maintenance buildings (O&M building) with parking area | 200 m x 200 m       |
| Length of internal roads  | approximately 50 km |

## Conditions of this Environmental Authorisation

### Scope of authorisation

1. The proposed Highlands South Wind Energy Facility and Associated Infrastructure including grid connection infrastructure with a maximum output capacity of up to 90MW consisting of up to 15 turbines with a generating capacity of up to 6MW each, is hereby approved on the farms mentioned above on page 7.
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 **five (05)** years from the date of issue of this environmental authorisation. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.
8. Commencement with one activity listed in terms of this environmental authorisation constitutes commencement of all authorised activities.

### **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.
11. The holder of the authorisation must publish a notice –
  - 11.1. informing interested and affected parties of the decision;
  - 11.2. informing interested and affected parties where the decision can be accessed; and
  - 11.3. drawing the attention of interested and affected parties to the fact that an appeal may be lodged against this decision in terms of the National Appeal Regulations, 2014.

### **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. In terms of section 43(7), an appeal under section 43 of the National Environmental Management Act, 1998 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. A copy of the final site layout map 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 development layout map must be submitted to the Department for written approval prior to commencement of the activity.

14. All available biodiversity information must be used in the finalisation of the layout map. The results of the pre-construction bird and bat monitoring assessments, including all recommendations proposed by the revised final BAR dated November 2019, must inform the final layout and the construction schedule of the facility. The final placement of turbines must follow a micro-siting procedure involving a walk-through and identification of any sensitive areas by botanical, avifaunal, bat, aquatic and heritage specialists. Existing infrastructure must be used as far as possible e.g. roads. The layout map must indicate the following:
  - 14.1. Cable routes (where they are not along internal roads);
  - 14.2. Final position of wind turbines and associated infrastructure (taking into consideration the preferred Alternative layout for the facility presented in the revised final BAR dated November 2019;
  - 14.3. The final site access road for access during construction and during the future operational and ultimate decommissioning phase of the facility as presented and assessed in the dated November 2019.
  - 14.4. Internal roads indicating width;
  - 14.5. Wetlands, drainage lines, rivers, stream and water crossing of roads and cables;
  - 14.6. All sensitive features e.g. Critical Biodiversity Areas, Ecological Support Areas, heritage sites, wetlands, pans and drainage channels that will be affected by the facility and associated infrastructure;
  - 14.7. Substation(s) inverters and/or transformer(s) sites including their entire footprint;
  - 14.8. Connection routes (including pylon positions) to the distribution/transmission network;
  - 14.9. All existing infrastructure on the site, such as roads;
  - 14.10. Soil heaps (temporary for topsoil and subsoil and permanently for excess material);
  - 14.11. Buildings, including accommodation; and,
  - 14.12. All "no-go" and buffer areas.
15. Furthermore, a shapefile of the approved development layout/footprint must be submitted to this Department within **two (2) 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  
Arcadia  
Pretoria

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

16. The Environmental Management Programme (EMPr) submitted as part of the revised final BAR is not approved and must be amended to include measures as dictated by the final site lay-out 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 commencement of the activity. Once approved, the EMPr must be implemented and adhered to. It must be included in all contract documentation for all phases of the development when approved.
  
17. The EMPr amendment must include the following:
  - 17.1. An Electromagnetic Compatibility (EMC) Control Plan, which identifies potential risk, mitigation measures and appropriate test and acceptable procedures during the design and construction of this facility. The EMC Control Plan must be made available to the Square Kilometre Array South Africa (SKA-SA) for acceptance and the SKA-SA accepted EMC Control Plan must be submitted to this Department for approval prior to construction.

- 17.2. All recommendations and mitigation measures recorded in the revised final BAR.
- 17.3. All mitigation measures as listed in the specialist reports attached to the revised final BAR.
- 17.4. The requirements and conditions of this authorisation. In the event of any conflicting mitigation measures between the revised final BAR, specialist reports and the conditions of the Environmental Authorisation, the specific condition of this Environmental Authorisation will take preference.
- 17.5. The final site layout map.
- 17.6. An alien invasive management plan to be implemented during construction and operation of the facility. The plan must include mitigation measures to reduce the invasion of alien species and ensure that the continuous monitoring and removal of alien species is undertaken.
- 17.7. A plant rescue and protection plan which allows for the maximum transplant of conservation important species from areas to be transformed. This plan must be compiled by a vegetation specialist familiar with the site in consultation with the ECO and be implemented prior to commencement of the construction phase.
- 17.8. A re-vegetation and habitat rehabilitation plan to be implemented as soon as possible after completion of construction activities, to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habitats.
- 17.9. A traffic management plan for the site access roads 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 minimize 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.
- 17.10. A construction and operational avifauna and bat monitoring plan, developed according to the latest BirdLife South Africa/Endangered Wildlife Trust: Best practice guidelines for avian monitoring and impact mitigation at proposed wind energy development sites in Southern Africa and the latest South African Bat Assessment Advisory Panel's (SABAAP) guidelines.
- 17.11. A storm water management plan to be implemented during the construction and operation of the facility. The plan must ensure compliance with applicable regulations and prevent off-site migration of contaminated storm water or increased soil erosion. The plan must include the construction of appropriate design measures that allow surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface flows. Drainage measures must promote the dissipation of storm water run-off.



- 17.12. An erosion management plan for monitoring and rehabilitating erosion events associated with the facility. Appropriate erosion mitigation must form part of this plan to prevent and reduce the risk of any potential erosion.
- 17.13. An effective monitoring system to detect any leakage or spillage of all hazardous substances during their transportation, handling, use and storage. This must include precautionary measures to limit the possibility of oil and other toxic liquids from entering the soil or storm water systems.
- 17.14. A fire management plan to be implemented during the construction and operational phases.
- 17.15. Measures to protect hydrological features such as streams, rivers, pans, wetlands, dams and their catchments, and other environmental sensitive areas from construction impacts including the direct or indirect spillage of pollutants.
- 17.16. An environmental sensitivity map indicating environmental sensitive areas and features identified during the EIA process.
- 17.17. A map combining the final layout map superimposed (overlain) on the environmental sensitivity map. This map must reflect the location of the turbines as stated in the BAR and this authorisation.

#### **Frequency and process of updating the EMPr (once approved)**

18. 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.
19. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
20. The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per Regulation 34 of GN R. 982. The updated EMPr must have been subjected to a public participation process, which process has been agreed to by the Department, prior to submission of the updated EMPr to the Department for approval.
21. In assessing whether to grant approval of an EMPr which has been updated as a result of an audit, the Department will consider the processes prescribed in Regulation 35 of GN R.982. Prior to approving an amended EMPr, the Department may request such amendments to the EMPr as it deems appropriate to ensure that the EMPr sufficiently provides for avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity.

22. The holder of the authorisation may apply for an amendment of an EMPr, if such amendment is required before an audit is required. In assessing whether to grant such approval or not, the Department will consider the processes and requirements prescribed in Regulation 37 of GN R. 982.

### **Monitoring**

23. The holder of the authorisation must appoint an experienced independent Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the mitigation/rehabilitation measures and recommendations referred to in this environmental authorisation are implemented and to ensure compliance with the provisions of the approved EMPr.
- 23.1. The ECO must be appointed before commencement of any authorised activities.
- 23.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
- 23.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a schedule of tasks undertaken by the ECO.
- 23.4. The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.

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

24. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this environmental authorisation, must be submitted to the *Director: Compliance Monitoring* of the Department.
25. The holder of the environmental authorisation must, for the period during which the environmental authorisation and EMPr remain valid, ensure that project compliance with the conditions of the environmental authorisation and the EMPr are audited, and that the audit reports are submitted to the *Director: Compliance Monitoring* of the Department.
26. The frequency of auditing and of submission of the environmental audit reports must be as per the frequency indicated in the EMPr, taking into account the processes for such auditing as prescribed in Regulation 34 of GN R. 982.
27. The holder of the authorisation must, in addition, submit environmental audit reports to the Department within 30 days of completion of the construction phase (i.e. within 30 days of site handover) and a final environmental audit report within 30 days of completion of rehabilitation activities.

28. The environmental audit reports must be compiled in accordance with Appendix 7 of the EIA Regulations, 2014 and must indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the environmental authorisation conditions as well as the requirements of the approved EMPr.
29. Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.

#### **Notification to authorities**

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

#### **Operation of the activity**

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

#### **Site closure and decommissioning**

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

#### **Specific conditions**

33. A pre-construction walk through must be conducted by a heritage specialist, aquatic specialist, ecologist, bat specialist and avifaunal specialist, to ensure that the micro-siting of the facility infrastructure, including the turbines, access roads, onsite substation and power line alignments have the least possible impact, that all protected plant species and sensitive habitats impacted are identified and that any nests/breeding/roosting activity of priority species are identified.
34. A minimum 30 metres buffer must be maintained around all graves, ruins and buildings.

35. 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 found during construction, the South African Heritage Resources Agency (SAHRA) must be alerted immediately, work in the immediate area must be halted if required by SAHRA, and a professional archaeologist or palaeontologist, depending on the nature of the finds, must be contacted to inspect the findings.
  36. Avifauna and bat monitoring must occur during the construction period and continue for at least three years during the operation of the facility. The results of this monitoring must be made available to the Department of Environmental Affairs (DEA), Birdlife South Africa (BLSA) and the South African Bat Assessment Advisory Panel (SABAAP) and also must further advise the EMPr where necessary.
  37. A 200 metres no-go buffer must be applied around all identified water points as they serve as focal points for bird activity.
  38. All developments within 500 metres of watercourses must comply with the National Water Act.
  39. No turbines must be constructed in no-go areas, while associated infrastructure (roads, power lines and substations) must be avoided where possible in these areas.
  40. The turbine blade must not protrude into the no-go areas, and therefore the bases must be constructed suitably far from these areas.
  41. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling and re-use options where appropriate. Where solid waste is disposed of, such disposal shall only occur at a landfill licensed in terms of section 20(b) of the National Environment Management Waste Act, 2008 (Act 59 of 2008).
  42. The development footprint must exclude the area identified as a potential target for the protected area expansion (NPAES).
  43. Anti-collision devices such as bird flappers must be installed where power lines cross avifaunal corridors.
  44. Search, rescue and relocation of Red Data, protected and endangered species, medicinal plants must be undertaken and permits must be obtained from relevant authorities.
  45. All disturbed and cleared areas must be re-vegetated with indigenous perennial shrubs and grasses from the local area.
  46. Concurrent rehabilitation and alien vegetation control program within all sensitive areas must be implemented in terms of Conservation of Agricultural Resources Act, 43 of 1983 (CARA) and National Environmental Management: Biodiversity Act, 10 of 2004 (NEMBA).
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**General**

47. A copy of this environmental authorisation, the audit and compliance monitoring reports, and the approved EMPr, must be made available for inspection and copying-
- 47.1. at the site of the authorised activity;
  - 47.2. to anyone on request; and
  - 47.3. where the holder of the environmental authorisation has a website, on such publicly accessible website.
48. 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: 21/01/2020

  
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 listed activities as applied for in the amended application form received on 18 November 2019.
- b) The findings of the site inspection held on 05 December 2018.
- c) The information contained in the revised final BAR dated November 2019.
- d) Mitigation measures as proposed in the revised final BAR and the EMPr dated November 2019.
- e) The information contained in the specialist studies contained within the appendices of the revised final BAR dated November 2019.

### 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 project stems from the provision of electricity to the national grid in terms of the Renewable Energy Independent Power Producers Procurement Programme (RRIPPPP) as required by the Department of Energy.
- c) The revised final BAR dated November 2019 identified all relevant environmental legislation and guidelines that have been considered in the preparation of the revised final BAR dated November 2019.
- d) The location of turbines as presented in the revised final BAR dated November 2019.
- e) The majority of the development footprint falls within the Camdeboo Escarpment NPAES Focus Area, the area has been identified as a potential target for the protected area expansion.
- f) The methodology used in assessing the potential impacts identified in the revised final BAR dated November 2019 and the specialist studies have been adequately indicated.
- g) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2014 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 revised final BAR dated November 2019 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 revised final BAR dated November 2019 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 final 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.

## Annexure 2: Locality Plan

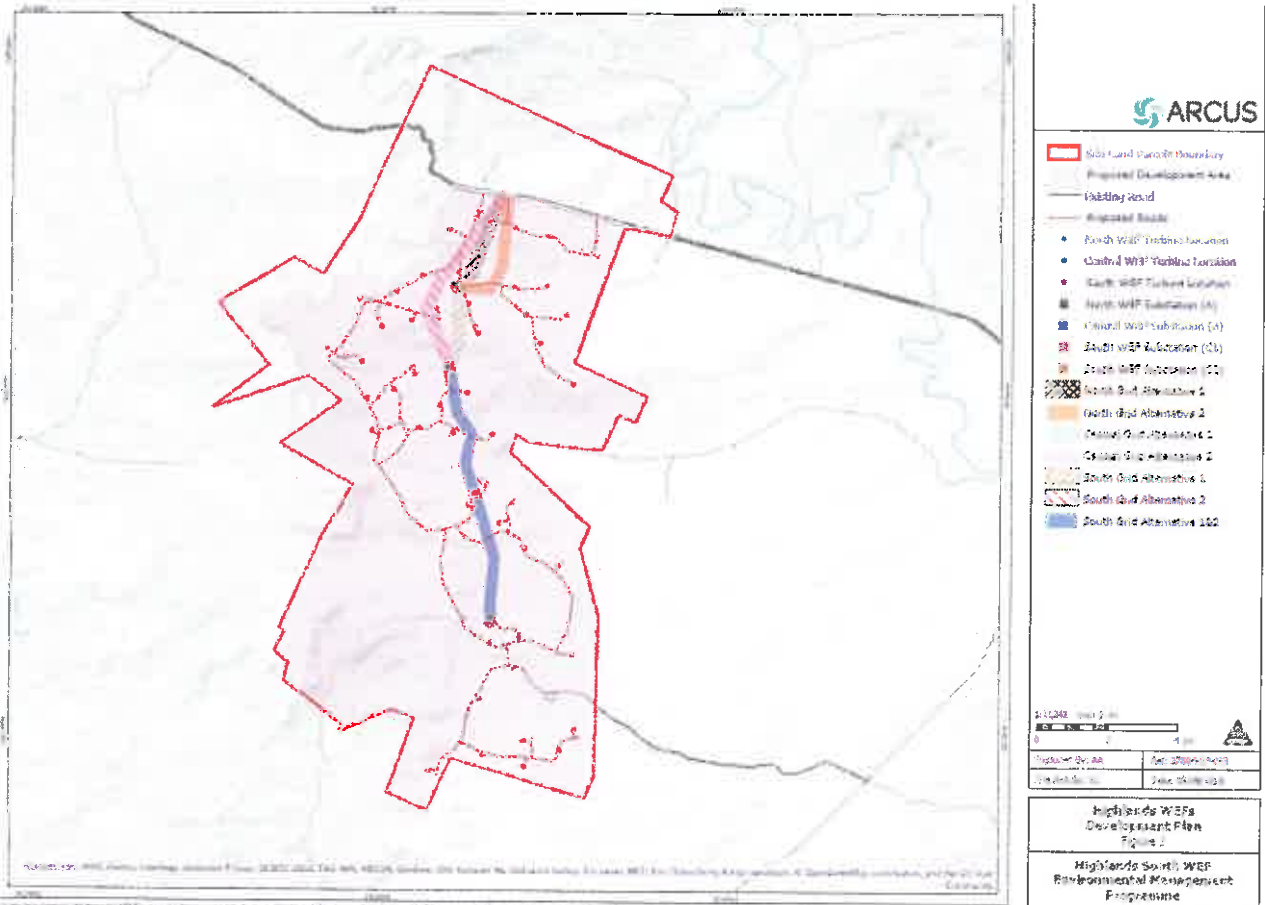


Figure 1: The development area for the Highlands Wind Energy Facility