



forestry, fisheries & the environment

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

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DFFE Reference: 14/12/16/3/3/1/3019

Enquiries: Mr Lunga Dlova

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Ms Michelle Herbert
Kariega Wind Farm (Pty) Ltd
PO Box 23101
CLAREMONT
7735

Telephone Number: 021 670 1402

Email Address: Michelle.Herbert@aced.co.za

PER E-MAIL

Dear Ms Herbert

ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, ACT NO. 107 OF 1998, AS AMENDED FOR THE PROPOSED KARIEGA FOUR WIND ENERGY FACILITY AND ASSOCIATED INFRASTRUCTURE NEAR ABERDEEN IN THE DR BEYERS NAUDE LOCAL MUNICIPALITY AND SARAH BAARTMAN DISTRICT MUNICIPALITY, EASTERN CAPE PROVINCE AND BEAUFORT WEST LOCAL MUNICIPALITY AND CENTRAL KAROO DISTRICT MUNICIPALITY, WESTERN 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 (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, 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



Batho pele- putting people first

The processing of personal information by the Department of Forestry, Fisheries and the Environment is done lawfully and not excessive to the purpose of processing in compliance with the POPI Act, any codes of conduct issued by the Information Regulator in terms of the POPI Act and / or relevant legislation providing appropriate security safeguards for the processing of personal information of others.

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procedure to be followed. Kindly include a copy of this document (National Appeal Regulations, 2014) with the letter of notification to interested and affected parties in this matter.

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

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

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

By email: appeals@dfre.gov.za,

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

By post: Private Bag X447
Pretoria
0001

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

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

Yours faithfully


Dr Sabelo Maleza
Chief Director: Integrated Environmental Authorisations
Department of Forestry, Fisheries and the Environment
Date: 10/11/2024

cc:	Dirk Pretorius	EnviroAgri (Pty) Ltd	Email: dirk@enviroagri.com
	Dayalan Govender	Department of Economic Development, Environmental Affairs & Tourism (DEDEAT)	Email: dayalan.govender@dedea.gov.za
	Dr Edward Martin Rankwana	Dr Beyers Naude Local Municipality	Email: mmoffice@bnlm.gov.za
	Gavin Benjamin	Department Environmental Affairs and Development Planning	Email: Gavin.Benjamin@westerncape.gov.za
	Mr. C.B. Wright	Beaufort West Local Municipality	Email: manager.techservice@beaufortwestmun.co.za



forestry, fisheries & the environment

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

Environmental Authorisation

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

The Kariëga Four Wind Energy Facility and associated infrastructure near Aberdeen in the Dr Beyers Naude Local Municipality, Eastern Cape Province and Beaufort West Local Municipality, Western Cape Province

The Sarah Baartman District Municipality and Central Karoo District Municipality

Application Register Number:	14/12/16/3/3/1/3019
Applicant:	Kariëga Wind Farm (Pty) Ltd
Location of activity:	Kariëga 4 WEF is situated approximately 35km east of Aberdeen in the Dr Beyers Naude Local Municipality in the Eastern Cape Province and Beaufort West Local Municipality in the Western Cape Province.

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

Decision

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

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

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

Activities Authorised

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

KARIEGA WIND FARM (PTY) LTD

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

with the following contact details –

Ms Michelle Herbert
Kariega Wind Farm (Pty) Ltd
PO Box 23101
CLAREMONT
7735

Telephone Number: 021 670 1402

Email Address: Michelle.Herbert@aced.co.za

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

Activity number	Activity description
<u>Listing Notice 1, Activity 11(i):</u> <i>“The development of facilities or infrastructure for the transmission and distribution of electricity—</i> <i>(i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts.</i>	Two on site substations adjacent each other (wind farm substation and Eskom substation) will be required for the Kariaga 4 WEF which will step up power from 33 kV to 132 kV. A BESS (export Capacity of up to 250MW, Storage Capacity 1000MWh) will be constructed adjacent the substations. Turbines will be linked to each other and the wind farm substation via subterranean medium voltage cables (~33 kV).
<u>Listing Notice 1, Activity 12(ii)(a)(c):</u> <i>“The development of—</i> <i>(ii) infrastructure or structures with a physical footprint of 100 square metres or more,</i> <i>where such development occurs—</i> <i>(a) within a watercourse.</i> <i>(c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse.</i>	Drainage lines are scattered across the proposed site. The proposed roads, underground powerlines and/ or other infrastructure are to cross several drainage lines and be within 32 metres thereof.
<u>Listing Notice 1, Activity 19:</u> <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>	The infilling or depositing of any material of more than 10 m³ into a watercourse will be triggered with the construction of internal service roads or cables across drainage lines.
<u>Listing Notice 1, Activity 24:</u> <i>The development of a road-</i> <i>(i) for which an environmental authorisation was obtained for the route determination in terms of activity</i>	Permanent roads up 20m wide (with no formal reserve) for crawler cranes may be required for the proposed WEF.

5 in Government Notice 387 of 2006 or activity 18 in Government Notice 545 of 2010; or (ii) with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres.	Construction road width of ~ 12m road surface width (i.e. wider than 8 meters), 1m for side drains either side, 6m one side of the road surface for MV cable trenches and associated disturbance.
<u>Listing Notice 1, Activity 28(ii):</u> 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.	The proposed farm portions on which the project is proposed are being used for agriculture, i.e. livestock grazing and game farming. The development will occur outside urban areas and is significantly larger than 1 ha. The development type is classified as mixed and industrial and include wind turbines, concrete tower factory, batching plants, substations and BESS.
<u>Listing Notice 1, Activity 56(ii):</u> The widening of a road by more than 6 m, or lengthening of a road by more than 1 km – (ii) where no reserve exists, where the existing road is wider than 8 metres; excluding where widening or lengthening occur inside urban areas.	Some sections of existing roads are wider than 8m and may be widened to up to 20m wide or lengthened by more than 1km. The roads are all outside urban areas.
<u>Listing Notice 2, Activity 1:</u> The development of facilities or infrastructure for the generation of electricity from a renewable resource where the electricity output is 20 MW or more.	The wind farm will have a maximum generation capacity of up to 420 MW.
<u>Listing Notice 2, Activity 4:</u> 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 more than 500 cubic metres.	The approximate area of 5 ha has been designated for a BESS within the substation and O&M Complex. The BESS (export Capacity of up to 250MW, Storage Capacity 1000MWh) would likely use lithium-ion technology (or other more efficient technology that may be available at the time of construction). The BESS will contain material, e.g.

	lithium salts, that would be classified as "dangerous good" and these are housed in above ground containers. Lithium-ion batteries pose characteristics listed in the SANS 10234, supplement 2008, Hazard Statements in section 4.2.3, namely physical hazards, health hazards or environmental hazards. Diesel fuel will be stored on site at the construction camp in tanks of $\pm 23\text{m}^3$ each of which there would be at least three per site, i.e. $\pm 69\text{m}^3$. Diesel poses characteristics listed in the SANS 10234, supplement 2008, Hazard Statements in section 4.2.3, namely physical hazards, health hazards or environmental hazards. Concrete tower factory and batching plants will store cement which can be classified as "dangerous good" since it poses characteristics listed in the SANS 10234, supplement 2008, Hazard Statements in section 4.2.3, namely health hazards or environmental hazards.
<u>Listing Notice 2, Activity 15:</u> <i>The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for,</i> <i>(i) the undertaking of a linear activity; or</i> <i>(ii) maintenance purposes undertaken in accordance with a maintenance management plan.</i>	Physical alteration of undeveloped land for the WEF would take place and would require clearing of indigenous vegetation. The total area to be cleared is expected to be approximately 271,83 ha (of which 138ha roads which are excluded from this activity).
<u>Listing Notice 3, Activity 4</u> <i>The development of a road wider than 4 metres with a reserve less than 13,5 metres.</i> <i>a. Eastern Cape</i> <i>i. Outside urban areas:</i>	Road width of up to 15-20m wide, 12m road surface width, 1m for side drains either side, 6m one side of the road surface for MV cable trenches and associated disturbance (topsoil, subsoil and vehicle

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(ee) <i>Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans,</i> i. <i>Western Cape</i> ii. <i>Areas outside urban areas;</i> (aa) <i>Areas containing indigenous vegetation;</i>	movement). No formal road reserve will be proclaimed. Identified CBA as per 2019 Eastern Cape Biodiversity Conservation Plan (ECBCP) and areas of indigenous vegetation in the Western Cape.
<u>Listing Notice 3, Activity 10</u> <i>The development and related operation of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of 30 but not exceeding 80 cubic metres.</i> i. <i>Western Cape</i> ii. <i>All areas outside urban areas;</i>	BESS will contain material, e.g. lithium salts, that will be classified as “dangerous good” and these are housed in above ground containers. Lithium-ion batteries pose characteristics listed in the SANS 10234, supplement 2008, Hazard Statements in section 4.2.3, namely physical hazards, health hazards or environmental hazards. This activity will take place outside urban areas.
<u>Listing Notice 3, Activity 12</u> <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> a. <i>Eastern Cape</i> ii. <i>Within critical biodiversity areas identified in bioregional plans.</i> i. <i>Western Cape</i> ii. <i>Within critical biodiversity areas identified in bioregional plans.</i>	Some internal roads will cross a watercourse mapped as freshwater CBA in terms of the ECBCP 2019. During the construction of these roads more than 300m² of indigenous vegetation will be cleared.
<u>Listing Notice 3, Activity 14</u> <i>The development of</i> (ii) <i>infrastructure or structures with a physical footprint of 10 square metres or more, where such development occurs</i>	The Wind Energy Facility (WEF) will require infrastructure with a physical footprint exceeding 10m² in or within 32m of a watercourse drainage features, ephemeral washes or streams present

<i>(a) within a watercourse;</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>a. Eastern Cape</i> <i>i. Outside urban areas</i> <i>(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans.</i> <i>i. Western Cape</i> <i>i. Outside urban areas</i> <i>(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans.</i>	within the project site. The WEF is located within areas mapped as CBA and ESA as identified in the ECBCP 2019 and falls outside of an urban area. The ESA are relevant since the ECBCP 2019 views ESA as areas which provide ecosystem services.
<u>Listing Notice 3, Activity 18(a)(i)(ii)</u> <i>The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.</i> <i>a. Eastern Cape</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> <i>(ii) Areas on the watercourse side of the development setback line or within 100 metres from the edge of a watercourse where no such setback line has been determined.</i> <i>i. Western Cape</i> <i>ii. All areas outside urban areas:</i> <i>(aa) Areas containing indigenous vegetation.</i>	Existing farm roads within the WEF site will be widened to up to 20m or lengthened by more than 1km. The project site is located in the Eastern Cape, outside of an urban area, and some of the road sections will cross CBAs identified in the 2019 ECBCP and be in or within 100m of the edge of a watercourse.
<u>Listing Notice 3, Activity 23</u> <i>The expansion of-</i>	Existing road infrastructure within the development footprint will be expanded upon. The road

(ii) infrastructure or structures where the physical footprint is expanded by 10 square metres or more; where such expansion occurs-

(a) within a watercourse;

(b) in front of a development setback adopted in the prescribed manner; or

(c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;

a. Eastern Cape.

i. Outside urban areas:

(ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;

i. Western Cape

i. Outside urban areas:

(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;

infrastructure cross freshwater CBAs identified in the 2019 ECBCP where associated infrastructure (e.g. culverts) will be expanded upon in or within 32m of a watercourse.

as described in the Basic Assessment Report (BAR) dated 11 September 2024:

21 Digit SG Codes:

FARM NAME	PORTION	FARM NO.	SG
SARELS RIVIER 141	RE	141	C05200000000014100000
KEUNA 74	RE	74	C00100000000007400000
KEUNA 74	1	74	C00100000000007400001
KEUNA 74	2	74	C00100000000007400002
KEUNA 74	3	74	C00100000000007400003
TAFEL KOP 75	RE	75	C00100000000007500000
TAFEL KOP 75	1	75	C00100000000007500001
BEENKRAAL 90	RE	90	C00100000000009000000
PRETORUIS KUIL 89	RE	89	C00100000000008900000
KLIPDRIFT 73	RE	73	C00100000000007300000
FARM 91	RE	91	C00100000000009100000

Co-ordinate points of the properties for the listed activities:

Point	Latitude	Longitude
Centrepont coordinates for proposed Kariega 4 WEF infrastructure (excluding roads):		
K4 Laydown	32°19'27.11"S	23°37'47.50"E
K4 Site Camp	32°19'27.53"S	23°37'43.15"E
K4 Batching	32°19'26.84"S	23°37'37.76"E
K4 Laydown Alt 1	32°20'4.22"S	23°37'50.56"E
K4 Site Camp Alt 1	32°20'1.76"S	23°37'53.32"E
K4 Batching Alt 1	32°20'7.14"S	23°37'48.40"E
K4 Batching Alt 2	32°19'23.03"S	23°37'51.98"E
K4 Substation	32°20'17.40"S	23°38'27.91"E
K4 BESS	32°20'18.53"S	23°38'34.13"E
Access 1 Main	32°30'57.74"S	23°36'33.12"E
Access 2	32°30'23.39"S	23°39'58.74"E
Access 3	32°29'0.33"S	23°41'53.55"E
Access 4	32°23'19.89"S	23°44'8.61"E
Access 5	32°17'57.50"S	23°36'36.33"E

- for the Kariega Four Wind Energy Facility and associated infrastructure near Aberdeen in the Dr Beyers Naude Local Municipality and Sarah Baartman District Municipality, Eastern Cape Province and Beaufort West Local Municipality and Central Karoo District Municipality, Western Cape Province, hereafter referred to as "the property".

The main and ancillary infrastructure components applied for include:

- Up to 42 wind turbines
- Access and facility roads
- Substation and Eskom Switching Station
- Operations and Maintenance (O&M) Complex
- Battery Energy Storage System (BESS)
- Concrete tower factory
- Medium Voltage (MV) Collector cables
- Construction Laydown area & Site Camp

- Batching plant and stockpile areas

Details of the infrastructure associated for the Kariaga 4 Wind Energy Facility is as follows:

Component	Description
Turbines	- o Up to 42 turbines § Up to 420 MW total generation capacity § Up to 10MW each § Hub height (HH) up to 150m (tower) § Rotor diameter (RD) up to 200m (consists of rotor and three blades) § Includes nacelle and generator This is the maximum specification for assessment purposes and depends on technology available at the time of construction.
	- o Turbine foundations § Up to 30 m in diameter § Up to ~3 m deep § Construction (disturbance) footprint of approximately 32 m x 32 m= 1024m². § Total turbine footprint ~4,3ha (1024m²x42 turbines)
	- o Crane Hardstands (permanent) § Up to 150m X 100m= 15000m² § Total crane hardstand footprint ~63ha (15000m²x42 turbines) - o Temporary laydown/ assembly areas (temporary, construction phase) § Up to 150m X 15m § Total Temporary laydown/ assembly areas footprint ~9,45 (2250m²x42 turbines). The exact position and orientation of the hardstands and laydowns will be determined during the detailed design / micro siting of infrastructure.
	- o Access roads & Site roads § Five Potential access points are proposed: § K4 Access 1, 32°30'57.74"S; 23°36'33.12"E (Directly from R61) § K4 Access 2, 32°30'23.39"S; 23°39'58.74"E (Directly from R61) § K4 Access 3 (main), 32°29'0.33"S; 23°41'53.55"E (via R61 over Farm RE/4/92)

	§ K4 Access 4, 32°23'19.89"S; 23°44'8.61"E (via R61, Aberdeen/Murraysburg road and over Farm 1/72, Farm 1/95, Farm 5/72) § K4 Access 5, 32°17'57.50"S; 23°36'36.33"E (via R61, Aberdeen/Murraysburg road and over Farm RE/140 and Farm RE/139) One or all access points may be utilised, given the extent of the site. - o Access roads and internal site roads § Road width of 15-20m wide • 12m road surface width, 1m for side drains either side, 6m one side of the road surface for MV cable trenches and associated disturbance (topsoil, subsoil and vehicle movement). • Existing roads ±66km • Total ±126 km (31km shared with Kariega 2 and 49km shared with Kariega 3) • Total road footprint ~252ha (126km x 20m width) § Post construction roads will be rehabilitated down to 5-10m width • 8m wide road surface, 1m side drain either side • Total road footprint ~126ha (126km x 10m width) - o All roads will have a gravel wearing course (imported from offsite borrow pits) - o Where possible, existing tracks will be followed. - o All roads associated with the WEF will remain indefinitely and be available for use by landowner post construction. - o Turning areas § Required to allow heavy and abnormal vehicles to turn safely. § Strategic points on site and at end of roads To be identified during detailed design / micro siting
Substation and O&M Complex	- o On-site Substation and O&M Building ▪ Up to ~1 ha ▪ Up to 132kV ▪ Includes site office, workshop, parking, storeroom and ablution facilities - o Substation – Eskom switching station ▪ Up to ~1 ha
Battery Energy Storage System	o Battery Energy Storage System (BESS) Areas

	- Up to ~5ha (Adjacent O&M Complex) - Lithium-Ion Battery - Export Capacity of up to 250MW - Storage Capacity 1000MWh - Storage duration 4hrs
MV Collector cables	- o Medium Voltage (MV) cables - up to 33kV - From each turbine to the on-site substation - Underground parallel to the roads within the road reserve (no additional footprint, no overhead MV)
Construction Laydown area & Site Camp	- o Laydown area ~1ha per phase - o Site camp ~1ha per phase The site camp and adjacent laydown area will include temporary site offices, stores, workshops, turbine storage areas, fuel storage, worker mess and ablution facilities etc. These areas will be rehabilitated after construction.
Batching plant and stockpile area	- o Concrete batch plant (temporary, construction phase) 0,5ha per phase - include cement silos, stockpile areas, parking and turning areas, quality test area, and the batch plant itself. - Batching areas situated adjacent laydown area
Water and Electricity (Construction)	- o Construction period (18-24 months) water requirement. 5 to 30 kℓ per day - used for road construction; hardstand compaction; concrete tower production, concrete foundations; cleaning equipment and dust suppression. - o Operational phase (approximately 25 years) water requirement. - About 8kℓ per month for 11 months of the year. - Approximately 2070kℓ (30kℓ/km of road, 69 km) for 1 month of the year for annual road maintenance (grading and compacting of the roads). - Water header tanks will be used to provide potable water.

	▪ Potable water will be sourced from the property, or from the municipality or neighbouring farmers Trucked to site as required during the construction and operational phases. - o Sanitation on site during the construction and operational phases ▪ Portable toilets and conservancy/septic tanks. ▪ Wastewater to be collected at regular intervals. ▪ Transported to Municipal Wastewater Treatment Works; or ▪ Treated on site and with treated water used for dust suppression and roadworks. Electricity for construction could be obtained from temporary diesel generators and possibly small scale mobile photovoltaic units.
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Conditions of this Environmental Authorisation

Scope of authorisation

1. The development of Kariega Four Wind Energy Facility and associated infrastructure near Aberdeen in the Dr Beyers Naude Local Municipality and Sarah Baartman District Municipality, Eastern Cape Province and Beaufort West Local Municipality and Central Karoo District Municipality, Western Cape Province is approved as per the geographic coordinates cited in the table above and Annexure 2: Kariega 4 Wind Energy Turbine Coordinates.
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 five (05) years of the commencement of the activity on site. The continuation of any such activities after this period has lapsed may trigger one or more listed and/or specified activities, including Activity 32 of Listing Notice 1. Such continuation without the required environmental authorisation will constitute an offence or offences in terms of Section 49A(1)(a) read with Section 24F(1)(a) of the National Environmental Management Act 107 of 1998 (NEMA).
9. Commencement with one activity listed in terms of this Environmental Authorisation constitutes commencement of all authorised activities.

Notification of authorisation and right to appeal

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

Commencement of the activity

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

Management of the activity

13. The adjusted Kariega 4 Wind Energy Facility: Layout Map attached as "Annexure L: Kariega 4 WEF Map" on the BAR dated 11 September 2024 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. Post the recommended final walkdown, the layout map must indicate the following:
 - 14.1. Positions of the wind turbines and all associated infrastructure as well as its coordinates.
 - 14.2. All preferred turbine positions must be clearly numbered.
 - 14.3. All supporting onsite infrastructure e.g., roads (existing and proposed).
 - 14.4. Permanent laydown area footprint.
 - 14.5. Substation(s) and/or transformer(s) sites including their entire footprint.
 - 14.6. Connection routes (including pylon positions) to the distribution/transmission network.
 - 14.7. All existing infrastructure on the site and
 - 14.8. All sensitive features, and all "no-go" and buffer areas as identified by various specialists inclusive of the outcome of the final walkdown.
15. The Environmental Management Programme (EMPr) for the Kariega 4 Wind Energy Facility submitted as part of the BAR dated 11 September 2024 is not approved and must be amended to include measures as dictated by the final site lay-out map. 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 with the EIA Regulations applicable at the time.
18. The Department reserves the right to amend the approved EMPr should any impacts that were not anticipated or covered in the 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 26 below, indicate insufficient mitigation of environmental impacts associated with the undertaking of the activity, or insufficient levels of compliance with the Environmental Authorisation or EMPr.
20. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
21. The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per Regulation 34 of the EIA Regulations, 2014 as amended. The updated EMPr must have been subjected to a public participation process, which process has been agreed to by the Department, prior to submission of the updated EMPr to the Department for approval.
22. In assessing whether to grant approval of an EMPr which has been updated 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.

Specific conditions

34. A pre-construction avifaunal walk down must be conducted to identify any sensitivities that may arise between the conclusion of the Basic Assessment process and the construction phase.
35. Final micro-siting must be undertaken prior to construction considering all mitigation measures recommended within the BAR dated 11 September 2024 and associated specialist studies.
36. A post-construction inspection must be conducted by an avifaunal specialist to confirm that all aspects have been appropriately handled and in particular that road and hard stand verges do not provide additional substrate for raptor prey species (particularly small mammals). Therefore, it is recommended that within the first year of operations a full assessment of this aspect be made by the ornithologist contracted for post-construction monitoring
37. The highly sensitive areas as identified by ecological and heritage specialists must be clearly demarcated as no-go areas.

38. Turbines and ancillary infrastructure, which coincide with highly sensitive areas and Medium-High sensitive areas must be moved.
39. The footprint of the development and access routes must be limited to the areas required for actual construction works.
40. 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.
41. 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.
42. No exotic plants must be used for rehabilitation purposes. Only indigenous plants of the area must be utilised.
43. 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) or Eastern Cape Provincial Heritage Resources Authority (ECPHRA) and / Heritage Western Cape (HWC) must be informed, and the services of an accredited heritage professional obtained for an assessment of the heritage resources.
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. The recommendations of the EAP in the BAR dated 11 September 2024 and the specialist studies attached must be adhered to. In the event of any conflicting mitigation measures and conditions of the Environmental Authorisation, the specific condition of this Environmental Authorisation will take preference.
46. A copy of this Environmental Authorisation, the audit and compliance monitoring reports, and the approved EMP, must be made available for inspection and copying-
 - 46.1. at the site of the authorised activity,
 - 46.2. to anyone on request; and
 - 46.3. Where the holder of the Environmental Authorisation has a website, on such publicly accessible website.
47. 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: 10/11/2024



Dr 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 20 June 2024.
- b) The information contained in the BAR dated 11 September 2024.
- c) The comments received from all interested and affected parties as included in the BAR dated 11 September 2024.
- d) Mitigation measures as proposed in the EMPr for the facility included in the BAR dated 11 September 2024.
- e) The information contained in the specialist studies contained within the appendices of the BAR dated 11 September 2024 and as appears below:

Title	Prepared by	Date
Social Statement	Tony Barbour Environmental Consulting	May 2024
Agricultural Compliance Statement	Johann Lanz	May 2024
Preliminary Geotechnical & Environmental Geology Report	Outeniqua Geotechnical Services	February 2024
Visual Impact Assessment	Visual Resource Management Africa	May 2024
Shadow Flicker Assessment	Visual Resource Management Africa	May 2024
Environmental Noise Impact Assessment	Enviro Acoustic Research	May 2024
Avifaunal Impact Assessment	WildSkies Ecological Services	February 2024
Bat Monitoring and Impact Assessment	Inkululeko Wildlife Services	March 2023 – updated February and May 2024
Terrestrial Biodiversity and Species Specialist Assessment	EnviroSci	June 2024
Aquatic Biodiversity Specialist Assessment	EnviroSci	June 2024
Heritage Impact Assessment	CTS Heritage	April 2024
Traffic Impact Assessment	iWink Consulting (Pty) Ltd	May 2024

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 BAR dated 11 September 2024 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 BAR dated 11 September 2024 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 BAR dated 11 September 2024 and sufficient assessment of the key identified issues and impacts have been completed.
- b) The procedure followed for impact assessment is adequate for the decision-making process.
- c) The information contained in the BAR dated 11 September 2024 is deemed to be accurate and credible.
- d) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- e) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the BAR dated 11 September 2024 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: Kariaga 4 Wind Farm Turbine Coordinates

Kariaga 3 Wind Turbine	Latitude	Longitude
P4 - WTG 1	32°23'59.457"S	23°38'34.066"E
P4 - WTG 2	32°23'50.24"S	23°38'48.95"E
P4 - WTG 3	32°23'19.46"S	23°39'9.04"E
P4 - WTG 4	32°23'16.35"S	23°39'28.05"E
P4 - WTG 5	32°23'11.709"S	23°39'45.929"E
P3 - WTG 6	32°23'1.070"S	23°39'58.913"E
P4 - WTG 7	32°22'38.095"S	23°40'22.508"E
P3 - WTG 8	32°21'54.001"S	23°41'25.120"E
P4 - WTG 9	32°21'42.754"S	23°41'37.262"E
P4 - WTG 10	32°21'32.831"S	23°41'49.801"E
P4 - WTG 11	32°22'48.654"S	23°41'32.028"E
P4 - WTG 12	32°22'38.124"S	23°41'45.521"E
P3 - WTG 13	32°23'6.745"S	23°37'52.087"E
P4 - WTG 14	32°22'48.280"S	23°37'56.894"E
P4 - WTG 15	32°21'48.997"S	23°40'5.407"E
P4 - WTG 16	32°21'37.032"S	23°40'16.242"E
P4 - WTG 17	32°21'28.530"S	23°40'31.796"E
P4 - WTG 18	32°21'3.647"S	23°41'2.012"E
P4 - WTG 19	32°20'59.777"S	23°41'21.891"E
P4 - WTG 20	32°22'25.739"S	23°37'28.183"E
P4 - WTG 21	32°22'16.897"S	23°37'44.054"E
P4 - WTG 22	32°22'4.138"S	23°37'53.775"E
P4 - WTG 23	32°21'51.973"S	23°38'4.151"E
P4 - WTG 24	32°21'52.626"S	23°36'47.365"E
P4 - WTG 25	32°21'14.830"S	23°36'27.194"E
P4 - WTG 26	32°20'40.786"S	23°37'11.268"E
P4 - WTG 27	32°20'26.744"S	23°37'25.456"E
P4 - WTG 28	32°19'58.186"S	23°38'0.204"E
P4 - WTG 29	32°19'9.49"S	23°38'58.49"E
P4 - WTG 32	32°20'41.530"S	23°36'4.792"E
P4 - WTG 33	32°20'9.972"S	23°36'39.861"E

P4 - WTG 34	32°19'41.298"S	23°37'9.171"E
P4 - WTG 35	32°19'19.629"S	23°37'53.051"E
P4 - WTG 36	32°19'7.897"S	23°38'6.720"E
P4 - WTG 40	32°20'16.096"S	23°34'53.949"E
P4 - WTG 41	32°19'58.784"S	23°35'12.490"E
P4 - WTG 42	32°19'20.299"S	23°36'31.568"E
P4 - WTG 43	32°18'55.986"S	23°37'9.039"E
P3 - WTG 46	32°19'42.110"S	23°34'49.274"E
P4 - WTG 47	32°18'10.326"S	23°36'53.575"E
P4 - WTG 48	32°18'39.09"S	23°34'43.61"E
P4 - WTG 49	32°18'15.310"S	23°35'7.368"E

Annexure 3: Locality Map

