



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X 447· PRETORIA · 0001· Environment House · 473 Steve Biko Road · Arcadia· PRETORIA
Tel (+ 27 12) 399 9372

DEA Reference: 14/12/16/3/3/2/464

Enquiries: Milicent Solomons

Telephone: (012) 399 9382 E-mail: Msolomons@environment.gov.za

Mr Hylton Newcombe
Inyanda Energy Projects (Pty) Ltd
PO Box 2350
FOURWAYS
2055

Cell phone Number: (083) 395 8179
Email Address: hylton@newind.co.za

PER EMAIL / MAIL

Dear Mr Newcombe

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) FOR THE 187.2MW INYANDA – ROODEPLAAT WIND ENERGY FACILITY WITHIN THE SUNDAYS RIVER VALLEY LOCAL MUNICIPALITY IN THE 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 10(2) of the Environmental Impact Assessment Regulations, 2010 (the Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 12 (twelve) 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 7 of the Regulations, which prescribes the appeal procedure to be followed. This procedure is summarised in the attached document. Kindly include a copy of this document with the letter of notification to interested and affected parties.

Should the applicant or any other party wish to appeal any aspect of the decision a notice of intention to appeal must be lodged by all prospective appellants with the Minister, within 20 days of the date of the EA, by means of one of the following methods:

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:

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

Tel: (012) 399 9356

Email: AppealsDirectorate@environment.gov.za

Yours faithfully



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

Date: 05/04/2018

CC:	Mr R Gardiner	SRK Consulting (Pty) Ltd	Tel: (011) 787 3059	Email: rgardiner@srk.co.za
	Ms D Govender	Eastern Cape DEDEAT	Tel: (041) 508 5811	Email: Dayalan.Govender@dedea.gov.za
	Mr Z Hassam	Appeals Authority (DEA)	Tel: (012) 399 9356	Email: AppealsDirectorate@environment.gov.za

APPEALS PROCEDURE IN TERMS OF CHAPTER 7 OF THE NEMA EIA REGULATIONS, 2010 (THE REGULATIONS) AS PER GN R.543 OF 2010 TO BE FOLLOWED BY THE APPLICANT AND INTERESTED AND AFFECTED PARTIES UPON RECEIPT OF NOTIFICATION OF AN ENVIRONMENTAL AUTHORISATION (EA)

APPLICANT	INTERESTED AND AFFECTED PARTIES (IAPs)
1. Receive EA from the relevant Competent Authority (the Department of Environmental Affairs (DEA)).	1. Receive EA from Applicant/Consultant.
2. Within 12 days of date of the EA notify all IAPs of the EA and draw their attention to their right to appeal against the EA in terms of Chapter 7 of the Regulations.	2. N/A.
3. If you want to appeal against the EA, submit a notice of intention to appeal within 20 days of the date of the EA with the Minister of Environmental Affairs (the Minister).	3. If you want to appeal against the EA, submit a notice of intention to appeal within 20 days of the date of the EA with the Minister of Environmental Affairs (the Minister).
4. After having submitted your notice of intention to appeal to the Minister, provide each registered IAP with a copy of the notice of intention to appeal within 10 days of lodging the notice.	4. After having submitted your notice of intention to appeal to the Minister, provide the applicant with a copy of the notice of intention to appeal within 10 days of lodging the notice.
5. The Applicant must also serve on each IAP: <ul style="list-style-type: none"> • a notice indicating where and for what period the appeal submission will be available for inspection. 	5. Appellant must also serve on the Applicant within 10 days of lodging the notice, <ul style="list-style-type: none"> • a notice indicating where and for what period the appeal submission will be available for inspection by the applicant.
6. The appeal must be submitted in writing to the Minister within 30 days after the lapsing of the period of 20 days provided for the lodging of the notice of intention to appeal.	6. The appeal must be submitted to the Minister within 30 days after the lapsing of the period of 20 days provided for the lodging of the notice of intention to appeal.
7. Any IAP who received a notice of intention to appeal may submit a responding statement to that appeal to the Minister within 30 days from the date that the appeal submission was lodged with the Minister.	7. An Applicant who received notice of intention to may submit a responding statement to the appeal to the Minister within 30 days from the date that the appeal submission was lodged with the Minister.

NOTES:

1. An appeal must be:-

- a) submitted in writing;
- b) accompanied by:
 - a statement setting out the grounds of appeal;
 - supporting documentation which is referred to in the appeal; and
 - a statement that the appellant has complied with regulation 62 (2) or (3) together with copies of the notices referred to in regulation 62.



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Environmental Authorisation

In terms of Regulation 36 of the Environmental Impact Assessment Regulations, 2010

THE 187.2MW INYANDA – ROODEPLAAT WIND ENERGY FACILITY WITHIN THE SUNDAYS RIVER
VALLEY LOCAL MUNICIPALITY IN THE EASTERN CAPE PROVINCE

CACADU DISTRICT MUNICIPALITY

Application Reference Number:	14/12/16/3/3/2/464
Applicant:	<i>Inyanda Energy Projects (Pty) Ltd</i>
Location of activity:	<i>Portion 3 of the Farm 170; Portion 1 of the Farm 245; Portion 1 of the Farm 246; Remaining Extent of the Farm 246; Portion 1 of the Farm 247; The Farm 248; Portion 1 of the Farm 277; Remaining Extent of the Farm 277; Portion 1 of the Farm 278; Portion 2 of the Farm 278; Portion 3 of the Farm 278; Portion 4 of the Farm 278; Remaining Extent of the Farm 278; Portion 3 of the Farm 279;</i>

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	<p><i>Portion 4 of the Farm 279;</i> <i>Remaining Extent of the Farm 279;</i> <i>Portion 1 of the Farm 280;</i> <i>Remaining Extent of the Farm 346;</i> <i>Portion 3 of the Farm 347;</i> <i>Portion 1 of the Farm 348;</i> <i>Portion 1 of the Farm 588;</i> <i>Portion 2 of the Farm 588;</i> <i>Sundays River Valley Local</i> <i>Municipality;</i> <i>Cacadu District Municipality;</i> <i>Eastern Cape Province</i></p>
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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, 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 107 of 1998) and the Environmental Impact Assessment Regulations, 2010 the Department hereby grants environmental authorisation for –

INYANDA ENERGY PROJECTS (PTY) LTD

with the following contact details –

Mr Hylton Newcombe

PO Box 2350

FOURWAYS

2055

Cell phone Number: (083) 395 8179

E-mail Address: hylton@newind.co.za

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notices 1, 2 and 3 (GN R. 543, R. 544, R. 545 and R. 546) of 18 June 2010:

<p><u>GN R. 544: Activity 10:</u></p> <p><i>"The construction of facilities or infrastructure for the transmission and distribution of electricity:</i></p> <p><i>(i) outside urban areas or industrial complexes with a capacity of more than 33 kilovolts but less than 275 kilovolts."</i></p>	<p>A substation will be constructed on site, which will collect power generated by the turbines, step up the voltage to 132kV, and then transfer this power via an overhead powerline to Eskom infrastructure.</p>
<p><u>GN R. 544: Activity 11:</u></p> <p><i>"The construction of ;</i></p> <p><i>(xi) infrastructure or structures covering 50 square metres or more</i></p> <p><i>where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line."</i></p>	<p>The project will involve upgrades to roads and storm water infrastructure at watercourse crossings or 32m thereof.</p>
<p><u>GN R. 544: Activity 18:</u></p> <p><i>"The infilling or depositing of any material or more than 5 cubic metres into or the dredging, excavation, removal or moving of soil, sand, pebbles or rock of more than 5 cubic metres from:</i></p> <p><i>(j) a watercourse.</i></p> <p><i>but excluding where such infilling, depositing, dredging, excavation, removal or moving</i></p> <p><i>(i) is for maintenance purposes undertaken in accordance with a management plan agreed to by the relevant environmental authority; or</i></p> <p><i>(ii) occurs behind the development setback line."</i></p>	<p>The construction of internal roads between turbines will not cross any watercourses however, the upgrading of existing gravel roads will require upgrading of storm water infrastructure, which will involve excavations of material exceeding 5m³. Underground electrical cables may cross drainage lines or watercourses.</p>
<p><u>GN R. 545: Activity 1:</u></p> <p><i>"The construction of facilities or infrastructure for the generation of electricity where the electricity output is 20 megawatts or more."</i></p>	<p>The development would have a power output of up to 187.2MW.</p>

<p><u>GN R. 545: Activity 15:</u> "Physical alteration of undeveloped, vacant or derelict land for industrial use where the total area to be transformed is 20 hectares or more."</p>	<p>The permanent footprint of the development would be approximately 60ha.</p>
<p><u>GN R. 546: Activity 2:</u> "The construction of reservoirs for bulk water supply with a capacity of more than 250 cubic meters. (a) In the Eastern Cape iii Outside urban areas, in: (aa) National Protected Area Expansion Strategy Focus areas; (dd) Critical biodiversity areas as identified in systematic biodiversity plans."</p>	<p>Temporary water storage capacity of approximately 300m³ will be required during the construction phase. The temporary storage will most likely be in multiple plastic containers as opposed to one single reservoir.</p>
<p><u>GN R. 546: Activity 4:</u> "The construction of a road wider than 4 m with a reserve less than 13.5 m. (a) In Eastern Cape ii Outside urban areas, in: (bb) National Protected Area Expansion Strategy Focus areas; (ee) Critical biodiversity areas as identified in systematic biodiversity plans; (gg) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve."</p>	<p>Roads will need to be constructed that will link the turbines and other infrastructure components.</p>
<p><u>GN R. 546: Activity 10:</u> "The construction 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 meters. (a) in Eastern Cape (ii) Outside urban areas in:</p>	<p>During construction, the contractor is likely to require a temporary facility for the storage of fuel, probably at the construction plant storage area. Storage of oils would also be required, and it is likely that the combined storage would be between 30m³ to 80m³.</p>

<p><i>(bb) National Protected Area Expansion Strategy Focus areas;</i></p> <p><i>(ee) Critical biodiversity areas as identified in systematic biodiversity plans."</i></p>	
<p><u>GN R. 546: Activity 12:</u></p> <p><i>"The clearance of an area of 300 square metres or more of vegetation where 75% or more of the vegetative cover / constitutes indigenous vegetation.</i></p> <p><i>(a) Within any critically endangered or endangered ecosystem terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;</i></p> <p><i>(b) Within critical biodiversity areas identified in bioregional plans."</i></p>	<p>The powerline alternatives will intersect the Albany Alluvial Vegetation, which is listed as an endangered ecosystem. Clearance of indigenous vegetation will amount to more than 60ha.</p>
<p><u>GN R. 546: Activity 13:</u></p> <p><i>"The clearance of an area of 1 hectare or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation, except where such removal is required for: (2) the undertaking of a linear activity falling below the thresholds mentioned in Listing Notice 1 in terms of GN No. 544 of 2010.</i></p> <p><i>(b) National Protected Area Expansion Strategy Focus areas</i></p> <p><i>(c) In Eastern Cape</i></p> <p><i>ii. Outside urban areas, the following:</i></p> <p><i>(bb) National Protected Area Expansion Strategy Focus areas;</i></p> <p><i>(ff) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve."</i></p>	<p>Temporary and permanent clearance of indigenous vegetation in excess of 60ha will be required.</p>

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<p><u>GN R. 546: Activity 14:</u></p> <p><i>"The clearance of an area of 5 hectares or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation.</i></p> <p><i>(a) In Eastern Cape</i></p> <p><i>(i) All areas outside urban areas."</i></p>	<p>Temporary and permanent clearance of indigenous vegetation in excess of 60ha will be required.</p>
<p><u>GN R. 546: Activity 16:</u></p> <p><i>"The construction of</i></p> <p><i>(iv) infrastructure covering 10 square metres or more where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.</i></p> <p><i>(a) In Eastern Cape</i></p> <p><i>(ii) Outside urban areas, in:</i></p> <p><i>(bb) National Protected Area Expansion Strategy Focus areas;</i></p> <p><i>(ff) Critical biodiversity areas as identified in systematic biodiversity plans;</i></p> <p><i>(hh) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve."</i></p>	<p>A number of internal roads and storm water infrastructure will require upgrading, and in many cases, these cross or are within 32m of watercourses.</p>
<p><u>GN R. 546: Activity 19:</u></p> <p><i>"The widening of a road by more than 4 meters, or the lengthening of a road by more than 1 kilometer.</i></p> <p><i>(a) In Northern Cape</i></p> <p><i>(ii) Outside urban areas, in:</i></p> <p><i>(ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</i></p> <p><i>(gg) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area</i></p>	<p>Existing farm roads may be widened as part of the development. Existing tracks are generally very narrow and widening thereof is likely to be by more than 4m to meet the 6m road width requirement for construction vehicles.</p>

identified in terms of NEMPAA or from the core area of a biosphere reserve."

as described in the Environmental Impact Assessment Report (EIAr) dated November 2016 and the addendum to the EIAr dated August 2017 at:

Site alternative:

Label	X_DMS	Y_DMS	Label	X_DMS	Y_DMS
S1	25° 2' 32.777" E	33° 29' 42.257" S	S2	25° 3' 32.214" E	33° 30' 15.886" S
S3	25° 3' 42.685" E	33° 30' 34.853" S	S4	25° 3' 45.983" E	33° 30' 33.546" S
S5	25° 3' 40.324" E	33° 31' 6.252" S	S6	25° 3' 56.104" E	33° 31' 7.565" S
S7	25° 3' 59.427" E	33° 31' 19.835" S	S8	25° 4' 19.989" E	33° 31' 40.291" S
S9	25° 6' 30.397" E	33° 31' 42.101" S	S10	25° 6' 47.486" E	33° 32' 23.401" S
S11	25° 4' 59.296" E	33° 32' 24.417" S	S12	25° 4' 34.028" E	33° 34' 29.828" S
S13	25° 4' 27.911" E	33° 34' 48.558" S	S14	25° 4' 57.885" E	33° 35' 7.381" S
S15	25° 5' 16.365" E	33° 34' 43.424" S	S16	25° 5' 57.403" E	33° 34' 56.599" S
S17	25° 6' 10.363" E	33° 36' 21.803" S	S18	25° 5' 36.971" E	33° 36' 24.007" S
S19	25° 5' 49.413" E	33° 37' 21.594" S	S20	25° 6' 25.299" E	33° 37' 42.409" S
S21	25° 6' 51.470" E	33° 38' 39.979" S	S22	25° 7' 29.138" E	33° 38' 43.852" S
S23	25° 6' 20.147" E	33° 41' 20.207" S	S24	25° 5' 2.708" E	33° 40' 17.902" S
S25	25° 5' 28.085" E	33° 38' 28.031" S	S26	25° 4' 17.933" E	33° 37' 44.009" S
S27	25° 4' 11.611" E	33° 38' 40.838" S	S28	25° 3' 21.822" E	33° 38' 26.632" S
S29	25° 2' 41.595" E	33° 40' 23.216" S	S30	25° 2' 31.698" E	33° 40' 19.020" S
S31	25° 1' 31.319" E	33° 41' 13.179" S	S32	25° 0' 40.114" E	33° 40' 40.142" S
S33	25° 0' 48.013" E	33° 40' 17.283" S	S34	25° 0' 27.030" E	33° 40' 6.200" S
S35	25° 0' 32.750" E	33° 40' 2.489" S	S36	25° 0' 42.925" E	33° 40' 1.367" S
S37	25° 1' 30.885" E	33° 38' 45.333" S	S38	25° 2' 15.612" E	33° 38' 12.769" S
S39	25° 2' 5.243" E	33° 38' 15.929" S	S40	25° 1' 44.702" E	33° 37' 52.664" S
S41	25° 0' 34.438" E	33° 37' 37.632" S	S42	25° 0' 18.989" E	33° 35' 16.983" S
S43	25° 1' 28.219" E	33° 33' 39.809" S	S44	25° 1' 5.192" E	33° 33' 35.777" S
S45	25° 1' 18.466" E	33° 32' 15.790" S	S46	25° 1' 47.263" E	33° 32' 17.729" S
S47	25° 2' 5.665" E	33° 30' 58.350" S	S48	25° 2' 1.600" E	33° 30' 57.637" S

S49	25° 2' 13.854" E	33° 30' 33.132" S	S50	25° 2' 22.468" E	33° 30' 27.585" S
S51	25° 2' 21.679" E	33° 30' 25.822" S			

Preferred Powerline Route:

Label	X_DMS	Y_DMS	Label	X_DMS	Y_DMS
P1	25° 19' 36.501"E	33° 28' 51.518" S	P2	25° 19' 34.958" E	33° 28' 52.289" S
P3	25° 19' 35.730"E	33° 28' 53.161" S	P4	25° 19' 5.247" E	33° 29' 7.746" S
P5	25° 19' 16.028"E	33° 29' 17.231" S	P6	25° 17' 22.483" E	33° 31' 21.653" S
P7	25° 16' 55.790"E	33° 31' 19.975" S	P8	25° 15' 55.589" E	33° 33' 26.275" S
P9	25° 10' 34.853"E	33° 32' 29.344" S	P10	25° 8' 10.955" E	33° 32' 34.056" S
P11	25° 7' 21.443"E	33° 32' 41.399" S	P12	25° 6' 54.284" E	33° 32' 22.845" S
P13	25° 4' 59.296"E	33° 32' 24.417" S	P14	25° 4' 7.103" E	33° 35' 50.953" S
P15	25° 4' 1.118"E	33° 35' 48.284" S			

- for the development of the 187.2MW Inyanda – Roodeplaat Wind Energy Facility on Portion 3 of the Farm 170; Portion 1 of the Farm 245; Portion 1 of the Farm 246; Remaining Extent of the Farm 246; Portion 1 of the Farm 247; The Farm 248; Portion 1 of the Farm 277; Remaining Extent of the Farm 277; Portion 1 of the Farm 278; Portion 2 of the Farm 278; Portion 3 of the Farm 278; Portion 4 of the Farm 278; Remaining Extent of the Farm 278; Portion 3 of the Farm 279; Portion 4 of the Farm 279; Remaining Extent of the Farm 279; Portion 1 of the Farm 280; Remaining Extent of the Farm 346; Portion 3 of the Farm 347; Portion 1 of the Farm 348; Portion 1 of the Farm 588; Portion 2 of the Farm 588; Sundays River Valley Local Municipality; Cacadu District Municipality, in the Eastern Cape Province, hereafter referred to as "the property".

The infrastructure associated with this facility includes:

- Up to 47 wind turbines with a rotor diameter of 130m mounted on top of a 85m high steel/hybrid steel and concrete tower;
- Concrete or rock adaptor foundations to support the wind turbine towers;
- Internal access roads to each turbine, approximately 6m wide;
- Underground cables connecting the wind turbines to the on-site substation;
- 132kV electrical substation;
- Upgrading of existing roads for the transportation of turbine components to the wind energy facility;

- Buildings to house the control instrumentation, as well as a store room for the maintenance equipment; and,
- Construction compound, on-site staff accommodation, and a concrete batching plant.

The portions of the project as outlined in the S31L notice issued by the Eastern Cape Department of Economic Development, Environmental Affairs and Tourism are not approved as part of this Environmental Authorisation.

Conditions of this Environmental Authorisation

Scope of authorisation

1. The construction of the Inyanda – Roodeplaat Wind Energy Facility and its associated infrastructure with a maximum of 47 wind turbines with a total output capacity of 187.2MW as described above is hereby approved.
2. The portions of the project as outlined in the S31L notice issued by the Eastern Cape Department of Economic Development, Environmental Affairs and Tourism are not approved as part of this Environmental Authorisation. The relevant competent authority must approve the respective portions, and proof of such approval must be provided to this Department in writing prior to commencement of construction.
3. Turbine positions 15, 47, 48, 52 and 53 are not approved and must be removed from the development.
4. Authorisation of the activity is subject to the conditions contained in this authorisation, which form part of the environmental authorisation and are binding on the holder of the authorisation.
5. 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.
6. The activities authorised may only be carried out at the property as described above.
7. Any changes to, or deviations from, the project description set out in this 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 authorisation in terms of the regulations.

8. This activity must commence within a period of five (05) years from the date of issue of this 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.
9. Commencement with one activity listed in terms of this authorisation constitutes commencement of all authorised activities.
10. This authorisation does not negate the holder of the authorisations responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.
11. The holder of an environmental authorisation must notify the competent authority of any alienation, transfer and change of ownership rights in the property on which the activity is to take place.

Notification of authorisation and right to appeal

12. The holder of the authorisation must notify every registered interested and affected party, in writing and within 12 (twelve) calendar days of the date of this environmental authorisation, of the decision to authorise the activity.
13. The notification referred to must –
 - 13.1. specify the date on which the authorisation was issued;
 - 13.2. inform the interested and affected party of the appeal procedure provided for in Chapter 7 of the Environmental Impact Assessment Regulations, 2010;
 - 13.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and,
 - 13.4. give the reasons of the competent authority for the decision.
14. The holder of the authorisation must publish a notice –
 - 14.1. informing interested and affected parties of the decision;
 - 14.2. informing interested and affected parties where the decision can be accessed; and,
 - 14.3. drawing the attention of interested and affected parties to the fact that an appeal may be lodged against this decision in the newspaper(s) contemplated and used in terms of regulation 54(2)(c) and (d) and which newspaper was used for the placing of advertisements as part of the public participation process.

Management of the activity

15. A copy of the final development 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. All available biodiversity information must be used in the finalisation of the layout map. Existing infrastructure must be used as far as possible e.g. roads. The layout map must indicate the following:

- 15.1. The portions of the project as outlined in the S31L notice issued by the Eastern Cape Department of Economic Development, Environmental Affairs and Tourism, which are not approved as part of this Environmental Authorisation.
 - 15.2. The location of turbines not approved as indicated in Condition 40 herein.
 - 15.3. Cable routes (where they are not along internal roads);
 - 15.4. Position of wind turbines and associated infrastructure;
 - 15.5. Internal roads indicating width;
 - 15.6. Wetlands, drainage lines, rivers, stream and water crossing of roads and cables;
 - 15.7. 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;
 - 15.8. Substation(s) inverters and/or transformer(s) sites including their entire footprint;
 - 15.9. Connection routes (including pylon positions) to the distribution/transmission network;
 - 15.10. All existing infrastructure on the site, such as roads;
 - 15.11. Soil heaps (temporary for topsoil and subsoil and permanently for excess material);
 - 15.12. Buildings, including accommodation; and,
 - 15.13. All "no-go" and buffer areas.
16. Furthermore, a shapefile of the approved development layout/footprint must be submitted to this Department within two months from the date of this decision. The shapefile must be created using the Hartebeesthoek 94 Datum and the data should be in Decimal Degree Format using the WGS 84 Spheroid. The shapefile must include at a minimum the following extensions i.e. .shp; .shx; .dbf; .prj; and, .xml (Metadata file). If specific symbology was assigned to the file, then the .avl and/or the .lyr file must also be included. Data must be mapped at a scale of 1:10 000 (please specify if an alternative scale was used). The metadata must include a description of the base data used for digitizing. The shapefile must be submitted in a zip file using the EIA application reference number as the title. The shape file must be submitted to:

Postal Address:

Department of Environmental Affairs
Private Bag X447
Pretoria
0001

Physical address:

Department of Environmental Affairs
Environment House
473 Steve Biko
Arcadia
Pretoria

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

17. The Environmental Management Programme (EMPr) submitted as part of the EIAr 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 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.
18. The EMPr amendment must include the following:
 - 18.1. The approved offset plan as detailed in Condition 37 – 38 herein.
 - 18.2. The requirements and conditions of this authorisation.
 - 18.3. All recommendations and mitigation measures recorded in the EIAr.
 - 18.4. All mitigation measures as listed in the specialist reports must be included in the EMPr and implemented.
 - 18.5. The final site layout map.

- 18.6. 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.
- 18.7. 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.
- 18.8. A re-vegetation and habitat rehabilitation plan to be implemented during the construction and operation of the facility. Restoration must be undertaken 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.
- 18.9. 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.
- 18.10. A construction and operational avifauna and bat monitoring plan.
- 18.11. 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.
- 18.12. 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.
- 18.13. 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.
- 18.14. A fire management plan to be implemented during the construction and operational phases.
- 18.15. 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.

- 18.16. An environmental sensitivity map indicating environmental sensitive areas and features identified during the EIA process.
- 18.17. A map combining the final layout map superimposed (overlain) on the environmental sensitivity map. This map must reflect the proposed location of the turbine as stated in the EIAr and this authorisation.
19. The final amended EMPr (once approved) 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.
20. Changes to the EMPr must be submitted to this Department for approval before such changes could be effected.
21. The Department reserves the right to amend the approved EMPr should any impacts that were not anticipated or covered in the EIAr be discovered.

Environmental Control Officer (ECO) and duties

22. The holder of this authorisation must appoint an independent and qualified Environmental Control Officer (ECO) with experience or expertise in undertaking ECO functions. The ECO will have the responsibility to ensure that the conditions referred to in this environmental authorisation are implemented and to ensure compliance with the provisions of the approved EMPr.
23. The ECO must be appointed before commencement of any authorised activity.
24. Once appointed, the name and contact details of the ECO must be submitted to the Director: Compliance Monitoring of this Department.
25. The ECO must meet with the contractors to discuss the conditions of the EA and the contents of the EMPr prior to any site clearing occurring.
26. 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.
27. Records relating to monitoring and auditing must be kept on site and made available for inspection to the competent authority in respect of this development.
28. The duties of the ECO must include the following:
 - 28.1. Keeping record of all activities on site, problems identified, transgressions noted and a schedule of tasks undertaken by the ECO.
 - 28.2. Keeping and maintaining a detailed incident (including spillage of bitumen, fuels, chemicals, or any other material) and complaint register on site indicating how these issues were addressed, what

rehabilitation measures were taken and what preventative measures were implemented to avoid re-occurrence of incidents/complaints.

- 28.3. Keeping and maintaining a daily site diary.
- 28.4. Keeping copies of all reports submitted to the Department.
- 28.5. Keeping and maintaining a schedule of current site activities including the monitoring of such activities.
- 28.6. Obtaining and keeping record of all documentation, permits, licences and authorisations such as waste disposal certificates, hazardous waste landfill site licences etc. required by this facility.
- 28.7. Compiling a monthly monitoring report.

Recording and reporting to the Department

29. The holder of this authorisation must keep all records relating to monitoring and auditing on site and make it available for inspection to any relevant and competent authority in respect of this development.
30. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this authorisation, must be submitted to the Director: Compliance Monitoring at this Department.

Environmental audit report

31. The holder of the authorisation must submit an environmental audit report to the Director: Compliance Monitoring of the Department within 30 days of completion of the construction phase (i.e. within 30 days of site handover) and within 30 days of completion of rehabilitation activities.
32. The environmental audit report must:
 - 32.1. Be compiled by an independent environmental auditor;
 - 32.2. Indicate the date of the audit, the name of the auditor and the outcome of the audit;
 - 32.3. Evaluate compliance with the requirements of the approved EMPr and this environmental authorisation;
 - 32.4. Include measures to be implemented to attend to any non-compliances or degradation noted;
 - 32.5. Include copies of any approvals granted by other authorities relevant to the development for the reporting period;
 - 32.6. Highlight any outstanding environmental issues that must be addressed, along with recommendations for ensuring these issues are appropriately addressed;
 - 32.7. Include a copy of this authorisation and the approved EMPr;

- 32.8. Include all documentation such as waste disposal certificates, hazardous waste landfill site licences etc. pertaining to this authorisation; and
- 32.9. Include evidence of adherence to the conditions of this authorisation and the EMPr where relevant such as training records and attendance records.

Commencement of the activity

33. The authorised activity shall not commence within twenty (20) days of the date of signature of the environmental authorisation.

Notification to authorities

34. 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. This notification period may coincide with the Notice of Intent to Appeal period.

Operation of the activity

35. 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

36. Should the activity ever cease or become redundant, the holder of this environmental authorisation shall 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

Offset Requirements

37. The holder of the Environmental Authorisation must design and detail an appropriate offset that meets the following criteria –
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- 37.1. As the development is within a Critical Biodiversity Areas: Irreplaceable (CBA1) / Critical Biodiversity Areas: Important or Optimal (CBA2) / Ecological Support Area (ESA) / or Natural Area the offset area must be a single area [X]¹ times the size of the area affected by the Wind Energy Facility, i.e. the area contained by a straight line drawn between the outermost rotor sweep of the outermost turbines;
 - 37.2. The offset area must comprise the same or similar biodiversity components and landscape features as those in the affected area;
 - 37.3. The offset area must be protected by declaring it a protected area under the National Environmental Management: Protected Areas Act (Act 57 of 2003).
 - 37.4. The offset must contribute to the long-term protection of biodiversity priority areas and improve their ecological condition and functioning, thereby resulting in tangible and measurable positive outcomes for biodiversity conservation in the region.
 - 37.5. The offset detail and design must follow an ecosystem based approach and must consider the loss of ecological as well as avifaunal species.
38. The offset design detailing the proposed offset intervention that meets the above criteria must be submitted to the relevant conservation management authority, the Department of Environmental Affairs: Directorate: Biodiversity and Conservation for review and comment and the holder of this Environmental Authorisation must consider such comments. Once amended based on the comments, the final offset design as well as the comments received must be submitted to the Department: Chief Directorate: Integrated Environmental Authorisations for written approval prior to commencement of the activity. The offset design document submitted for consideration must –
- 38.1. Provide sufficient detail to properly inform a decision on whether the offset will adequately and sustainably counterbalance the remaining impact;
 - 38.2. Be structured in a way that facilitates its inclusion in the Environmental Management Programme;
 - 38.3. Provide a description of, and contact details for, all the parties required to ensure the efficient and effective implementation of the offset;
 - 38.4. Provide evidence that all the parties required to ensure the success of the offset fully understand their role in the offset and their willingness to fulfil this role;
 - 38.5. Provide evidence of suitable resource provision (human, financial and/or technical resources) for, and contractual commitment to, implementing the offset including: (i) Land acquisition – the probable costs of acquiring or securing a sufficient area of suitable land, including transaction costs; (ii) Protection – the costs associated with obtaining formal protection, including advertising and

¹ Where X = 30: 1 if the windfarm is in a Critical Biodiversity Area: Irreplaceable (CBA1); 10: 1 if in a Critical Biodiversity Area: Important or Optimal (CBA2); 5: 1 if in an Ecological Support Area (ESA); or 2: 1 if in Other Natural Area.

public participation costs; (iii) Restoration and maintenance - the costs of restoration and management of the offset area for a period of no less than thirty (30) years, including the costs of any environmental impact assessment required for restoration works where applicable; and (iv) Compliance monitoring and reporting – the costs of monitoring and auditing performance and compliance for a period of no less than thirty (30) years.

Turbines position

39. Up to 47 wind turbines are approved.
40. Turbine positions 15, 47, 48, 52 and 53 are not approved and must be removed from the development.
41. All wind turbines must avoid all areas designated as “no-go” areas as well as their buffers.
42. The final placement of turbines must follow a micro siting procedure involving a walk-through and identification of any sensitive areas by botanical, avifaunal, bats, aquatic and heritage specialists.
43. Exclusion of sensitive ecological, aquatic, avifaunal, bats, heritage and paleontological areas from construction activities must inform micro siting of all development activities.
44. Should any occupied farm buildings be affected by shadow flicker, the holder of this Environmental Authorisation must provide mitigation measures to reduce the impact to an acceptable level as advised by a suitably qualified specialist.

Avifauna and bats

45. No turbines must be constructed in no-go areas, while associated infrastructure (roads, powerlines and substations) must be avoided where possible in these areas.
46. Prior to construction, an avifaunal specialist must conduct a site walkthrough, covering the final road and powerline routes as well as the final turbine positions, to identify any nests/breeding/roosting activity of priority species, as well as any additional sensitive habitats. The results thereto must inform the final construction schedule in close proximity to that specific area, including reducing construction time, scheduling activities around avian breeding and/or movement schedules, and lowering levels of associated noise.
47. Care must be taken not to create habitat for prey species that could draw priority raptors into the area and expose them to collision risk.

48. The following curtailment schedule must be implemented:

A 90 Degree feathering of blades below manufacturers cut in speed, with reduced power mode settings between manufacturers' cut-in speed and mitigation cut-in conditions.

	Terms of mitigation implementation to be applied to turbines 16, 36, 40, 41, 42, 51
Period of peak activity (times to implement curtailment/ mitigation)	Start of October – end of November
	Sunset – 04:00
Environmental conditions in which turbines must be mitigated	Below 8 m/s (measured at 61m); Above 13.0°C (measured at 5m)

	Terms of mitigation implementation to be applied to turbines 4, 12
Period of peak activity (times to implement curtailment/ mitigation)	Mid October – end of February
	Sunset – 22:00 and 00:00 – 04:00 (Oct, Nov)
	Sunset – sunrise (Dec, Jan, Feb)
Environmental conditions in which turbines must be mitigated	Oct, Nov: Below 9 m/s (measured at 61m); Above 14.0°C (measured at 5m)
	Dec, Jan, Feb: Below 9 m/s (measured at 61m); Above 14.0°C (measured at 5m)

	Terms of mitigation implementation to be applied to turbines 19, 37
Period of peak activity (times to implement curtailment/ mitigation)	Mid-August – end August 2013; Sunset – 21:00
	1 January – end of February; Sunset – 00:00
Environmental conditions in which turbines must be mitigated	Aug: Below 8 m/s (measured at 61m); Above 15.0°C (measured at 5m)
	Jan, Feb: Below 9 m/s (measured at 61m); Above 18.0°C (measured at 5m)

The levels of curtailment must be adjusted according to the results of the operational monitoring, based on robust mortality data.

49. A construction and operational avifauna and bat monitoring plan must be developed and implemented 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.
50. As an absolute minimum, avifauna and bat monitoring, must occur during the construction period and continue for at least two years during the operation of the facility. The results of this monitoring must be made available to the DEA, Birdlife South Africa (BLSA) and the South African Bat Assessment Advisory Panel (SABAAP) and must further advise the EMPr where necessary.
51. The results of the pre-construction bird and bat monitoring assessments including all recommendations proposed by the reports included in the EIAr dated November 2016 and the addendum to the EIAr dated August 2017, must inform the final layout and the construction schedule of the facility.
52. The holder must ensure the implementation of an operational monitoring plan to survey impacts resulting from the infrastructure on the bird communities with focus on assessing the displacement and disturbance effects of the development on the bird communities, as well as bird collisions and continue to gather information on the bird communities present in the area and monitor the effectiveness of the mitigation measures for a minimum duration of at least three years.
53. The facility must be designed in a manner that prevents infrastructure components from being used as perching or roosting substrates by birds and bats, as such is prohibited.
54. Anti-collision devices such as bird flappers must be installed where powerlines cross avifaunal corridors (e.g. grasslands, rivers, wetlands, and dams). The input of an avifaunal specialist must be obtained for the fitting of the anti-collision devices onto specific sections of the line once the exact positions of the towers have been surveyed and pegged. Additional areas of high sensitivity along the preferred alignment must also be identified by the avifaunal specialist for the fitment of anti-collision devices. These devices must be according to Eskom's Transmission and EWT's Guidelines.
55. A pre-construction walk through of the approved powerline alignment and turbine positions by a bat specialist, avifaunal specialist and ecologist, must be conducted to ensure that the micro-siting of the turbines, pylons and powerline alignments have the least possible impact, there are no nest sites of priority species on or close to the construction corridor and all protected plant species impacted are identified.

Vegetation, wetlands and water resources

56. All internal powerline/cables must follow internal access roads.
 57. All powerlines linking the turbines to the onsite substation must be buried.
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58. The 'no-go' areas of the development property must be clearly demarcated and must be excluded from the final layout plan.
 59. All watercourses are regarded as sensitive. All developments within 500m of watercourses must comply with the National Water Act.
 60. An aquatic specialist must conduct an in-depth site walkover prior to the construction phase commencing, after the proposed construction footprint has been confirmed and demarcated. This is to assess the footprint for any freshwater habitats, allowing for slight alterations in the footprint, to prevent any impacts on the freshwater habitats due to the actions conducted during the construction phase.
 61. Relevant permits must be obtained from relevant authorities for any removal or destruction of Threatened or Protected Species (TOPs).
 62. Before the clearing of the site, the appropriate permits must be obtained from the Department of Agriculture, Forestry and Fisheries (DAFF) for the removal of plants listed in the National Forest Act and from the relevant provincial department for the destruction of species protected in terms of the specific provincial legislation. Copies of the permits must be kept by the ECO.
 63. Construction activities must be restricted to demarcated areas to restrict the impact on sensitive environmental features.
 64. All areas of disturbed soil must be reclaimed using only indigenous grass and shrubs. Reclamation activities shall be undertaken according to the rehabilitation plan to be included in the final EMPr.
 65. Topsoil from all excavations and construction activities must be salvaged and reapplied during reclamation.
 66. No exotic plants must be used for rehabilitation purposes; only indigenous plants of the area must be utilised.
 67. No activities will be allowed to encroach into a water resource without a Water Use License being in place from the Department of Water and Sanitation.
 68. Cleared alien vegetation must not be dumped on adjacent intact vegetation during clearing but must be temporarily stored in a demarcated area.
 69. Removal of alien invasive species or other vegetation and follow-up procedures must be in accordance with the Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983).
 70. Contractors and construction workers must be clearly informed of the no-go areas.
 71. Where roads pass right next to major water bodies, provisions must be made for fauna such as toads to pass under the roads by using culverts or similar structures.
 72. Bridge design must be such that it minimises impact to riparian areas with minimal alterations to water flow and must allow the movement of fauna and flora.
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73. The final development area should be surveyed for species suitable for search and rescue, which should be trans-located prior to the commencement of construction.
74. The 'no-go' areas of the development property must be clearly demarcated and must be avoided.
75. Electric fencing should not have any strands within 30cm of the ground, which should be sufficient to allow smaller mammals, reptiles and tortoises to pass through, but still remain effective as a security barrier.
76. Disturbed areas must be rehabilitated as soon as possible after construction with locally indigenous plants to enhance the conservation of existing natural vegetation on site.
77. Wetlands, rivers and river riparian areas must be treated as "no-go" areas and demarcated as such. No vehicles, machinery, personnel, construction material, fuel, oil, bitumen or waste must be allowed into these areas without the express permission of and supervision of the ECO, except for rehabilitation work in these areas.
78. Workers must be made aware of the importance of not destroying or damaging the vegetation along rivers and wetland areas and this awareness must be promoted throughout the construction phase.
79. Freshwater ecosystems located in close proximity to the construction areas must be inspected on a regular basis by the ECO for signs of disturbance from construction activities. If signs of disturbance are noted, immediate action must be taken to remedy the situation and, if necessary, a freshwater ecologist must be consulted for advice on the most suitable remediation measures.
80. No discharge of effluents or polluted water must be allowed into any rivers or wetland areas.
81. If construction areas are to be pumped of water (e.g. after rains), this water must be pumped into an appropriate settlement area, and not allowed to flow into any rivers or wetland areas.
82. Workers must be made aware of the importance of not polluting rivers or wetlands and of not undertaking activities that could result in such pollution, and this awareness must be promoted throughout the construction phase.
83. Freshwater ecosystems located in close proximity to the site must be inspected on a regular basis (but especially after rainfall) by the ECO for signs of sedimentation and pollution. If signs of sedimentation or pollution are noted, immediate action must be taken to remedy the situation and, if necessary, a freshwater ecologist must be consulted for advice on the most suitable remediation measures.

Roads and transportation

84. Existing road infrastructure must be used as far as possible for providing access to the proposed turbine positions. Where no road infrastructure exists, new roads must be placed within existing disturbed areas or environmental conditions must be taken into account to ensure that minimum amount of damage is caused to natural habitats.
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85. Signs must be placed along construction roads to identify speed limits, travel restrictions, and other standard traffic control information. To minimize impacts on local commuters, consideration must be given to limiting construction vehicles travelling on public roadways during the morning and late afternoon commute time.
86. Internal access roads must be located to minimize stream crossings. All structures crossing streams must be located and constructed such that they do not decrease channel stability or increase water velocity.
87. A designated access to the site must be created and clearly marked to ensure safe entry and exit.
88. Signage must be erected at appropriate points warning of turning traffic and the construction site.
89. Necessary permits must be obtained for the oversized construction vehicles to transport turbine components.
90. Construction vehicles carrying materials to the site must avoid using roads through densely populated built-up areas so as not to disturb existing retail and commercial operations.
91. Signs must be placed along construction roads to identify speed limits, travel restrictions, and other standard traffic control information to minimize impacts on possible faunal species.
92. Road borders must be regularly maintained to ensure that vegetation remains short and that they therefore serve as an effective firebreak.
93. Roads must be designed such that changes to surface water runoff are avoided and erosion is not initiated.
94. All construction vehicles must adhere to a low speed limit to avoid collisions with susceptible species such as snakes and tortoises.

Noise

95. The potential noise impact must be re-evaluated should the layout be changed such that any wind turbines are located closer than 1,000m from a confirmed noise sensitive area.
96. Routine noise measurements must be conducted during the operation of the facility and a complaints register must be opened and made available to affected parties and to the Department on request.
97. The holder of this authorisation must ensure that the construction staff working in areas where the 8-hour ambient noise levels exceed 75dBA wear ear protection equipment.
98. The holder of this authorisation must ensure that all equipment and machinery are well maintained and equipped with silencers.
99. The holder of this authorisation must provide a prior warning to the community when a noisy activity e.g. blasting is to take place.

100. Positions of turbines jeopardizing compliance with accepted noise levels must be revised during the micro-siting of the units in question and predicted noise levels re-modelled by the noise specialist, in order to ensure that the predicted noise levels are less than 45dB(A).
101. Construction staff must be trained in actions to minimise noise impacts.
102. The holder of this authorisation must ensure that the National Noise Control Regulations and SANS10103:2008 are adhered to and measures to limit noise from the work site are implemented.

Visual resources

103. The holder of this authorisation must reduce visual impacts during construction by minimising areas of surface disturbance, controlling erosion, using dust suppression techniques and restoring exposed soil as closely as possible to their original contour and vegetation.
104. A lighting engineer must be consulted to assist in the planning and placement of light fixtures in order to reduce visual impacts associated with glare and light trespass.
105. Lighting of main structures (turbines) and ancillary buildings must be designed to minimise light pollution without compromising safety, and turbines must be lit according to Civil Aviation Regulations.
106. Signage on or near wind turbines must be avoided unless they serve to inform the public about wind turbines and their function.
107. Commercial messages and graffiti on turbines are prohibited.

Human health and safety

108. A health and safety programme must be developed to protect both workers and the general public during construction, operation and decommissioning of the energy facility. The programme must establish a safety zone for wind turbines from residences and occupied buildings, roads, right-of-ways and other public access areas that is sufficient to prevent accidents resulting from the operation of the wind turbines.
109. Potential interference with public safety communication systems (e.g. radio traffic related to emergency activities) must be avoided.
110. The holder of this authorisation must obtain approval from the South Africa Civil Aviation Authority that the wind facility will not interfere with the performance of aerodrome radio Communication, Navigation and Surveillance (CNS) equipment, especially the radar, prior to commencement of the activity. A copy of the approval must be kept on site by the ECO.

111. The holder of this authorisation must ensure that the operation of the wind facility complies with the relevant communication regulations or guidelines relating to electromagnetic interference, e.g. microwave, radio and television transmissions.
112. The holder of this authorisation must obtain approval from the South Africa Weather Services (WeatherSA) that the energy facility will not interfere with the performance of their equipment, especially radar, prior to commencement of the activity. A copy of the approval must be kept on site by the ECO.
113. The holder of this authorisation must train safety representatives, managers and workers in workplace safety. The construction process must be compliant with all safety and health measures as prescribed by the relevant act.
114. Liaison with land owners/farm managers must be done prior to construction in order to provide sufficient time for them to plan agricultural activities.
115. No unsupervised open fires for cooking or heating must be allowed on site.

Hazardous materials and waste management

116. Areas around fuel tanks must be bunded or contained in an appropriate manner as per the requirements of SABS 089:1999 Part 1.
 117. Leakage of fuel must be avoided at all times and if spillage occurs, it must be remedied immediately.
 118. Hazardous waste such as bitumen, oils, oily rags, paint tins etc. must be disposed of at an approved waste landfill site licensed to accept such waste.
 119. No dumping or temporary storage of any materials may take place outside designated and demarcated laydown areas, and these must all be located within areas of low environmental sensitivity.
 120. Hazardous substances must not be stored where there could be accidental leakage into surface or subterranean water.
 121. Hazardous and flammable substances must be stored and used in compliance to the applicable regulations and safety instructions. Furthermore, no chemicals must be stored nor may any vehicle maintenance occur within 350m of the temporal zone of wetlands, a drainage line with or without an extensive floodplain or hillside wetlands.
 122. Temporary bunds must be constructed around chemical storage to contain possible spills.
 123. Spill kits must be made available on-site for the clean-up of spills.
 124. 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).
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125. The holder of this authorisation must provide sanitation facilities within the construction camps and along the road so that workers do not pollute the surrounding environment. These facilities must be removed from the site when the construction phase is completed as well as associated waste to be disposed of at a registered waste disposal site.
126. The holder of this authorisation must take note that no temporary site camps will be allowed outside the footprint of the development area as the establishment of such structures might trigger a listed activity as defined in the Environmental Impact Assessment Regulations, 2014.
127. The holder of this authorisation must provide sanitation facilities for the operation staff.

Excavation and blasting activities

128. Underground cables and internal access roads must be aligned as much as possible along existing infrastructure to limit damage to vegetation and watercourses.
129. Foundations and trenches must be backfilled with originally excavated materials as much as possible. Excess excavation materials must be disposed of only in approved areas or, if suitable, stockpiled for use in reclamation activities.
130. Borrow materials must be obtained only from authorised and permitted sites. Permits must be kept on site by the ECO.
131. Anti-erosion measures such as silt fences must be installed in disturbed areas.

Air emissions

132. Dust abatement techniques must be used before and during surface clearing, excavation, or blasting activities.
133. Appropriate dust suppression techniques must be implemented on all exposed surfaces during periods of high wind. Such measures may include wet suppression, chemical stabilisation, the use of a wind fence, covering surfaces with straw chippings and re-vegetation of open areas.

Historical / cultural / paleontological resources

134. Should construction activities be within 100 metres from archaeological sites and historical sites, the sites must be demarcated and fenced off.

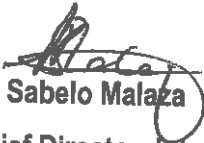
135. If concentrations of archaeological heritage material, fossils and human remains are uncovered during construction, all work must cease immediately and be reported to the South African Heritage Resources Agency (SAHRA) so that a systematic and professional investigation / excavation can be undertaken.
136. Construction managers/foremen must be informed before construction starts of the possible types of heritage sites and cultural material that may be encountered and the procedures to follow when they find sites.
137. All buffers and no-go areas stipulated in the EIAr must be adhered to for both the facilities and all roads and powerlines.
138. All construction and maintenance crew and vehicles (except small vehicles which may use existing farm tracks) must be kept out of the buffer zones.
139. The final layout must be shown to the appointed archaeologist before implementation to confirm that all significant heritage resources have been adequately protected.

General

140. The recommendations of the EAP in the EIAr dated November 2016 and the addendum to the EIAr dated August 2017 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.
141. A copy of this environmental authorisation, the audit and compliance monitoring reports, and the approved EMPr, must be made available for inspection and copying-
 - 141.1. at the site of the authorised activity;
 - 141.2. to anyone on request; and
 - 141.3. where the holder of the environmental authorisation has a website, on such publicly accessible website.

142. 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: 05/04/2018



Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations
Department of Environmental Affairs

Annexure 1: Reasons for Decision

1. Information considered in making the decision

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

- a) The information contained in the application form.
- b) The information contained in the amended application form received on 18 November 2016.
- c) The information contained in the EIAr dated November 2016.
- d) The information contained in the addendum to the EIAr dated August 2017.
- e) The comments received in the EIAr, the addendum to the EIAr and the comments submitted to the Department.
- f) Mitigation measures as proposed in the EIAr, the addendum to the EIAr and the EMPr.
- g) The information contained in the specialist studies contained within the EIAr and the addendum to the EIAr.
- h) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act 107 of 1998).

2. Key factors considered in making the decision

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 and desirability of the project.
- c) Description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity.
- d) EMPr measures for the pre-construction, construction and rehabilitation phases of the development included in the EIAr dated November 2016 and the addendum to the EIAr dated August 2017.
- e) The location of the proposed wind energy facility.
- f) All legislation and guidelines that have been considered in the preparation of the EIAr dated November 2016 and the addendum to the EIAr dated August 2017.

- g) The methodology used in assessing the potential impacts identified in the EIAr dated November 2016 and the addendum to the EIAr dated August 2017.
- h) The mitigation measures and recommendations proposed by the EAP and specialists as contained in the EIAr dated November 2016 and the addendum to the EIAr dated August 2017.

3. Findings

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

- a) The identification and assessment of impacts are detailed in the EIAr dated November 2016 and the addendum to the EIAr dated August 2017 and sufficient assessment of the key identified issues and impacts have been completed.
- b) The procedure followed for impact assessment is adequate for the decision-making process.
- c) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- d) Given the impact on the environment despite the mitigation measures provided, the remaining impact must be counterbalanced through interventions that increase protection and improve management in order to achieve a net biodiversity and ecological infrastructure gain from the development.
- e) The reduction in the number of turbines due to the recommendations of the specialists.
- f) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the EIAr and will be implemented to manage the identified environmental impacts during the construction phase.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the authorised activities will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the authorised activities can be mitigated to acceptable levels. The environmental authorisation is accordingly granted.