



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

APPLICATION FORM FOR AMENDMENT OF AN ENVIRONMENTAL AUTHORISATION

	(For official use only)
File Reference Number:	
NEAS Reference Number:	DEA/EIA/
Date Received:	

Application for authorisation in terms of the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment (EIA) Regulations, 2014, as amended (the Regulations)

PROJECT TITLE

ESTABLISHMENT OF A WIND ENERGY FACILITY SITUATED ON THE EASTERN PLATEAU (SOUTH) NEAR DE AAR, NORTHERN CAPE PROVINCE (DEA REFERENCE NUMBER: 12/12/20/2463/1)

Indicate if the **DRAFT** report accompanies the application

Yes
No

PRE-APPLICATION CONSULTATION

Was a pre-application meeting held		No	
Date of the pre-application meeting	Not Applicable		
Reference number of pre-application meeting held	Not Applicable		
Was minutes compiled and submitted to the Department for approval		No	

A copy of the pre-application meeting minutes must be appended to this application as **APPENDIX 1**.

Kindly note the following:

- This form must be used to apply for the Amendment of an Environmental Authorisation where this Department is the Competent Authority. An amendment includes:
 - adding, substituting, removing or changing a condition or requirement of an Environmental Authorisation, or
 - updating or changing any details or correcting a technical error.
- This form is current as of 01 September 2018. It is the responsibility of the Applicant / Environmental Assessment Practitioner (EAP) to ascertain whether subsequent versions of the form have been published or produced by the Competent Authority. The latest available Departmental templates are available at <https://www.environment.gov.za/documents/forms>.
- An application fee is applicable (refer to **Section 2**). Proof of payment must accompany this application. The application will not be processed without proof of payment unless one of the exclusions provided for in the Fee Regulations is applicable AND such information in the exclusion section of this application form has been confirmed by this Department.
- A cover letter on your company letterhead indicating the nature of this application must be appended to this form i.e. new application for Environmental Authorisation, updated application for Environmental Authorisation.
- An electronic copy (in the form of a USB) of the signed application form must be submitted together with two hardcopies (one of which must contain the original signatures of both the Applicant and EAP).
- This form must be marked **“for Attention: Chief Director: Integrated Environmental Authorisations”** and submitted to the Department at the postal or physical addresses contained in this form.
- All documentation delivered to the physical address contained in this form must be delivered during the official Departmental Officer Hours which is visible on the Departmental gate.
- All EIA related documents (includes application forms, reports or any EIA related submissions) that are faxed; emailed; delivered to Security or placed in the Departmental Tender Box will not be accepted, only hardcopy submissions are accepted.

9. The required information must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. Spaces are provided in tabular format and will extend automatically when each space is filled with typing. A legible font type and size must be used when completing the form. The font size should not be smaller than 10pt (e.g. Arial 10).
10. Where applicable black out the boxes that are not applicable in the form.
11. The use of the phrase "not applicable" in the form must be done with circumspection. Where it is used in respect of material information that is required by the Competent Authority for assessing the application, this may result in the rejection of the application as provided for in the Regulations.
12. Unless protected by law, all information contained in and attached to this application, will become public information on receipt by the Competent Authority. Upon request during any stage of the application process, the Applicant / EAP must provide any registered interested and affected party with the information contained in and attached to this application.
13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report and declaration of interest of the specialist must also be submitted.
14. Please note that this form must be copied to the relevant Provincial Environmental Department(s).
15. Certified copy/ies of the Environmental Authorisation and all subsequent Amendments thereto, if applicable must be attached to this application as **APPENDIX 2**. Should a certified copy/ies of the Environmental Authorisation and subsequent Amendments thereto not be available an original commissioned Affidavit/Affirmation under oath undertaken by the must be appended to this application form.
16. An application for Environmental Authorisation/Amendment lapses if the applicant fails to meet any of the timeframes prescribed in terms of the EIA Regulations, 2014, as amended.

Departmental Details

Postal address:

Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Private Bag X447
Pretoria
0001

Physical address:

Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Environment House
473 Steve Biko Road
Arcadia

Queries must be directed to the Directorate: Coordination, Strategic Planning and Support at:
Email: EIAAdmin@environment.gov.za

1. COMPETENT AUTHORITY

Identified Competent Authority to consider the application:	Department of Environmental Affairs (DEA)
Reason(s) in terms of S24C of NEMA:	Renewable Energy Project

2. FEES

Applicants are required to tick the appropriate box below to indicate that either proof of payment is attached or that, in the applicant's view, an exclusion applies. Proof of payment or a motivation for exclusions must be attached as **APPENDIX 3** of this application form.

Proof of payment	<input checked="" type="checkbox"/>
Exclusion applies	<input type="checkbox"/>

An applicant is excluded from paying fees if:

- The activity is a community based project funded by a government grant; or
- The applicant is an organ of state.

TYPE OF EXCLUSION	Tick where applicable. Proper motivation must be attached to the application
The activity is a community based project funded by a government grant	<input type="checkbox"/>
The applicant is an organ of state	<input type="checkbox"/>

FEE AMOUNT	Fee
Application for an Amendment of an Environmental Authorisation	R2 000

Department of Environmental Affairs' banking details for the payment of application fees:

Payment Enquiries:
Email: eiafee@environment.gov.za

Banking details:
ABSA Bank
Branch code: 632005
Account number: 1044 2400 72
Current account

Reference number: Reference number to be provided in the specific format indicating centre point coordinates of site in decimal degrees to 5 or 6 decimal places: latitude/longitude
.....-30.58675/24.27524

Status: Tax exempted

3. GENERAL INFORMATION

Name of the Applicant:	Mulilo De Aar 2 South (Pty) Ltd		
RSA Identity/ Passport Number:	Not Applicable		
Name of contact person for applicant (if other):	Mr John Hamilton Cullum		
RSA Identity/ Passport Number:	6203175143084		
Responsible position, e.g. Director, CEO, etc.:	CEO		
Company/ Trading name (if any):	Mulilo De Aar 2 South (Pty) Ltd		
Company Registration Number:	2012/041424/07		
BBBEE status:	Level 4		
Physical address:	Top Floor, Golf Park 4, Raapenberg Rd, Mowbray, Cape Town, 7700		
Postal address:	P.O. Box 548, Howard Place, Cape Town		
Postal code:	7450	Cell:	083 760 9586
Telephone:	(021) 685 3240	Fax:	086 635 6809
E-mail:	johnny@mulilo.com		

Name of the landowner:	Landowner contact details are included in Appendix 4		
Name of contact person for landowner (if other):			
Postal address:			
Postal code:		Cell:	
Telephone:		Fax:	
E-mail:			

Name of Person in control of the land:	Landowner contact details are included in Appendix 4		
Name of contact person for person in control of the land:			
Postal address:			
Postal code:		Cell:	
Telephone:		Fax:	
E-mail:			

In instances where there is more than one landowner, please attach a list of those landowners with their contact details as **APPENDIX 4**.

Certified copy/ies of the Environmental Authorisation and subsequent Amendments thereto, if applicable must be attached to this application as **APPENDIX 2**. Should a certified copy/ies of the Environmental Authorisation and subsequent Amendments thereto not be available an original commissioned Affidavit/Affirmation under oath undertaken by the must be appended to this application form

Provincial Environmental Authority:	Northern Cape Department of Environment and Nature Conservation (DENC)		
Name of contact person:	Ms Leburu/ Mr Bryan Fisher		
Postal address:	Sasko Building, 90 Long Street, Kimberley		
Postal code:	8300	Cell:	
Telephone:	(053) 807 7300	Fax:	(053) 807 7328/67
E-mail:	tmakaudi@ncpg.gov.za		

Local Municipality:	Emthanjeni Local Municipality		
Name of contact person in (Environmental Section)	Mr S.G. Booysen (Superintendent)		
Postal address:	45 Voortrekker Street, De Aar		
Postal code:	7000	Cell:	072 818 3635
Telephone:	(053) 632 9100	Fax:	(053) 631 0105
E-mail:	Municipality unable to provide email address for Mr S.G. Booysen. Municipal Manager (Mr Isaac Visser) email address: visser@emthanjeni.co.za		

In instances where there is more than one Local/Provincial Authority involved, please attach a list of those Local/Provincial Authorities with their contact details as Error! Reference source not found..

4. ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) INFORMATION

Company of Environmental Assessment Practitioner:	Holland & Associates Environmental Consultants			
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	Level 4	Percentage Procurement recognition	100%
EAP name:	Nicole Holland			
EAP Qualifications:	BSc (Hons) Environmental and Geographical Science			
Professional affiliation/registration:	Ms. Holland is registered with the South African Council for Natural Scientific Professions (Reg No.: 400306/06). Member of the IAIAA (International Association for Impact Assessment (Western Cape Branch)). Founding Member of the Environmental Assessment Practitioners Association of South Africa.			
Physical address:	Unit B3C, Tokai Village Centre, Vans Road, Tokai, Cape Town, 7945			
Postal address:	P.O. Box 31108, Tokai, Cape Town			
Postal code:	7966	Cell:	083 464 5246	
Telephone:	083 464 5246	Fax:	086 762 6126	
E-mail:	nicole@hollandandassociates.net			

The appointed EAP must meet the requirements of Regulation 13 of GN R982 of 04 December 2014, as amended.

If appointed, the declaration of independence of the EAP and undertaking under oath or affirmation that all the information submitted or to be submitted for the purposes of the application is true and correct must be submitted as **APPENDIX 5**.

5. DETAILS OF IMPLEMENTATION OF PREVIOUS ENVIRONMENTAL AUTHORISATION

Was the activity commenced with during the validity period of the environmental authorisation? If yes, please describe the implementation of the previous environmental authorisation to date:		NO
The activity has not yet commenced.		

6. AMENDMENTS APPLIED FOR AND RELATED INFORMATION

Please indicate which of the following is relevant:

6.1. The holder of an environmental authorisation may at any time apply to the relevant Competent Authority for the amendment of the authorisation if:

(a) there is a material change in the circumstances which existed at the time of the granting of the environmental authorisation;		NO
(b) there has been a change of ownership in the property and transfer of rights and obligations must be provided for; or		NO
(c) any detail contained in the environmental authorisation must be amended, added, substituted, corrected, removed or updated.	YES	

Describe the amendments that are being applied for:

a) Proposed amendment to the project description, as amended:

The Applicant proposes to increase the rotor diameter of the turbines for the Mulilo De Aar 2 South Wind Energy Facility from the approved 160m to a rotor diameter of 165m. The proposed amendment would require an amendment to the project description included in the EA, as amended as follows:

	Approved	Proposed amendment (underlined)
Hub height from ground level	120m	120m
Rotor diameter	160m	<u>165m</u>
Maximum number of turbines	25 - 61	25 - 61
Permanent affected area (foundation size)	The foundation size would be 18.4m in diameter that narrows up to 10.6m at the surface (the visible portion) with a depth of 3.5m once completed.	The foundation size would be 18.4m in diameter that narrows up to 10.6m at the surface (the visible portion) with a depth of 3.5m once completed.
Generation capacity per turbine	2.3MW – 6.0 MW	2.3MW – 6.0 MW
Maximum output of the WEF	140MW	140MW

According to the Applicant, only the rotor diameter would increase by 5m (which is a 3% increase in the diameter, and would be a 6.35% increase in the swept area). The other dimensions of the turbines and generation capacity of the WEF would stay the same (i.e. as authorised). The 5m increase in rotor size will have no impact on the physical parameters and operation of the wind turbine. Furthermore, the layout of the WEF would remain as currently authorised. Relevant specialists confirmed that the proposed amendment will not result in an increased level of impact or change in the nature of impact, and therefore the amendment is a Part 1 amendment as per regulation 29 (a) of the 2014 NEMA EIA Regulations, as amended (known previously as the “non-substantive” amendment).

In light of the above, it is proposed that the following table included in the EA describing the turbine specifications (refer to page 2 of the EA amendment decision dated 6 September 2019 which replaced the turbine specifications as outlined in the EA dated 1 March 2013 as amended), be amended as follows (proposed amendment underlined):

From:

Component	Description/ Dimensions
Hub height from ground level	120m
Rotor diameter	160m
Maximum of turbines	25 - 61
Permanent affected areas (foundation size)	The foundation size would be 18.4m in diameter that narrows up to 10.6m at the surface (the visible portion) with a depth of 3.5, once completed
Generation capacity per turbine	2.3MW – 6.0MW
Maximum Output of the Wind Energy Facility	140MW

To:

Component	Description/ Dimensions
Hub height from ground level	120m
Rotor diameter	<u>165m</u>
Maximum of turbines	25 - 61
Permanent affected areas (foundation size)	The foundation size would be 18.4m in diameter that narrows up to 10.6m at the surface (the visible portion) with a depth of 3.5, once completed
Generation capacity per turbine	2.3MW – 6.0MW
Maximum Output of the Wind Energy Facility	140MW

Please provide the reasons and/or a motivation for the application for amendment:

The need for the proposed increase in rotor diameter is due to the wind turbine markets continuous development of larger wind turbines. These continuous developments and improvements allow wind turbines to be more efficient, resulting in cheaper electricity costs, fewer turbines per wind farm, and a reduced overall impact on the environment (Mulilo De Aar 2 South (Pty) Ltd).

Should the amendment being requested result due to **6.1 (b)** above, you are required to furnish the Department with a written undertaking that the new holder of the environmental authorisation is willing and able to assume responsibility of the environmental authorisation issued. Provide a short motivation and explanation below:

Not Applicable

7. ENVIRONMENTAL IMPACTS

Describe any negative environmental impacts that may occur if the application for amendment is granted, amongst others information on any increases in air emissions, waste generation, discharges to water and impacts of the natural or cultural environment must be included.

a) Proposed amendment to the project description, as amended:

Given that the WEF layout, and the internal reticulation lines would not change with the proposed amendment, the only actual change for the windfarm would be a 5m increase in rotor diameter. As indicated previously, the other dimensions of the turbines and generation capacity of the WEF would stay the same (i.e. as authorised), and the 5m increase in rotor size will have no impact on the physical parameters and operation of the wind turbine. In light of the above, the proposed amendment to the project description will not result in additional negative impacts to those that have already been assessed in the approved EIA and subsequent Part 2 Application for Amendment for the EA for the project in 2015, nor result in an increased level of impact.

Specialist comment has been obtained from the visual, avifaunal and bat specialists (refer to Appendix 6 for the specialist comments), which confirm that **the proposed amendment to the rotor diameter would not result in an increased level or change in the nature of impacts in terms of visual impacts or impacts on birds or bats**. No other specialist comments/ confirmations were deemed necessary for the proposed amendment.

(Note: Due consideration was given to determine which, if any, specialist comments should be obtained in terms of the proposed amendment. Specialist comment was obtained from the visual, avifauna and bat specialists, as a precautionary measure (in the unlikely event that the minor increase in the rotor diameter may have an impact on birds, bats or visual aesthetics), to inform the amendment application. The avifaunal, bat and visual specialists confirmed that the proposed amendment of the rotor diameter would not result in an increased level of impact or change in the nature of impacts, and therefore the amendment is a non-substantive amendment (Part 1 amendment). No other specialist comments are deemed necessary, as the proposed amendment would have no impact on such environmental aspects including: ecology; freshwater ecosystems; noise; palaeontology; heritage; and agriculture/ soils, given that the layout and footprint of the WEF would not change with the proposed amendment.

Describe any negative environmental impacts that may occur if the application for amendment is not granted.

a) Proposed amendment to the project description, as amended:

There would be no additional negative environmental impacts to those that have already been assessed in the EIA and subsequent Part 2 Application for Amendment for the EA in 2015, should the proposed amendment to the project description not be granted. However, the increased opportunity and likelihood for the reduced number of turbines (within the authorised range of turbines) at the WEF (and associated potential positive impacts, including, for example, that the priority birds may be less negatively impacted by the WEF and face a reduced risk as a result, and reduction in vegetation clearance) may not be realised. Furthermore, in terms of financial viability, should the amendment application not be granted, the maximum efficiency of the WEF may not be realised. The proponent's ability to bid a financial competitive project in the REIPPP Programme may be jeopardised and thus decreasing the likelihood of a successful bid. As a result the positive socio-economic benefits to the local community may not be realised.

Describe any positive environmental impacts that may occur if the application for amendment is granted, amongst others information on any reduction in the ecological footprint, air emissions, waste generation and discharges to water must be included.

a) Proposed amendment to the project description, as amended:

The proposed minor increase in the rotor diameter would enable the Applicant to utilise current wind turbine market technologies of larger wind turbines. These continuous developments and improvements in the wind turbine technologies for larger turbines allow wind turbines to be more efficient, resulting in cheaper electricity costs, fewer turbines per wind farm, and therefore a reduced overall impact on the environment. Furthermore, granting the amendment will optimise the potential efficiency of the project and consequently the economic competitiveness thereof. This in turn will increase the overall competitiveness of the project in the REIPPP Programme. Should the project be successful it would assist in reducing the country's reliance on coal to generate electricity. Instead, it will source energy from a renewable resource which in turn will assist the country in meeting its renewable energy generation targets.

8. AUTHORISATION FROM OTHER GOVERNMENT DEPARTMENTS

Are any permission, licenses or other authorisations required from any other departments before the requested amendments can be effected?	NO
-------------------------------------------------------------------------------------------------------------------------------------------	-----------

If yes, please complete the table below.

Name of department and contact person	Authorisation required	Authorisation applied for (Yes/ No)
Not Applicable		

9. RIGHTS OR INTERESTS OF OTHER PARTIES

In your opinion, will this proposed amendment adversely affect the rights and interests of other parties?	NO
-----------------------------------------------------------------------------------------------------------	-----------

Please provide a detailed motivation of your opinion.

Amending the project description of the EA will not adversely affect the rights and interests of other parties. The proposed amendment will not change the scope of the environmental authorisation, nor result in an increased level or change in the nature of impacts associated with the project.

NOTE: The Department is entitled to request further information if it believes it is necessary for the consideration of the application. If the application is for a substantive amendment or if the rights or interests of other parties are likely to be adversely affected, the Department will instruct the applicant to conduct a public participation process and to conduct any investigations and assessments that it deems necessary.

10. LIST OF APPENDICES

		SUBMITTED	
			NO
APPENDIX 1	Copy of the pre-application meeting minutes		
APPENDIX 2	Certified copy/ies of the Environmental Authorisation and all subsequent Amendments thereto or original commissioned Affidavit/Affirmation under oath	YES	
APPENDIX 3	Proof of Payment / Motivation for exclusion	YES	
APPENDIX 4	List of land owners (with contact details)	YES	
APPENDIX 5	Declaration of independence of the EAP and undertaking under oath or affirmation, if appointed	YES	
APPENDIX 6	Specialist comments <ul style="list-style-type: none"> - Visual - Avifaunal - Bats 		

11. DECLARATION

I, JOHN CULLUM, declare that I will comply with all my legal obligations in terms of this application and provide accurate information to everyone concerned in respect to this application.

Signature of the Applicant:

MULLILO DE AAR 2 SOUTH (PTY) LTD.

Name of Company or Organisation:

13/12/2019

Date:

**APPENDIX 1
COPY OF THE PRE-APPLICATION MEETING MINUTES
(Not Applicable)**

**APPENDIX 2
CERTIFIED COPY/IES OF THE ENVIRONMENTAL AUTHORISATION AND ALL SUBSEQUENT AMENDMENTS
THERE TO OR ORIGINAL COMMISSIONED AFFIDAVIT/AFFIRMATION UNDER OATH**



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X 447 · PRETORIA · 0001 · Fedsure Building · 315 Pretorius Street · PRETORIA
Tel (+ 27 12) 310 3911 · Fax (+ 2712) 322 2682

NEAS Reference: DEA/EIA/0000577/2011

DEA Reference: (12/12/20/2463/1

Enquiries: Mr Lerato Mokoena

Telephone: 012-310-3137 Fax: 012-320-7539 E-mail: lmokoena@environment.gov.za

Mr Johnny Hamilton Cullum
Mulilo Renewable Energy (Pty) Ltd
P.O. Box 50
CAPE TOWN INTERNATIONAL AIRPORT
7525

Fax: (021) 935 0505

PER FACSIMILE / MAIL

Dear Mr Cullum

ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GN R.543, 544, 545 and 546: WIND ENERGY FACILITY SITUATED ON THE PLATEAU (SOUTH) NEAR DE AAR, NORTHERN CAPE PROVINCE

With reference to the above application, please be advised that the Department has decided to accept the EIR dated April 2012 and 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 facsimile: 012 320 7561;

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

By hand: 2nd Floor, Fedsure Building, North Tower,
Cnr. Lilian Ngoyi (Van der Walt) and Pretorius Streets,
Pretoria.



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.

Please include the Department (*Attention: Director: Integrated Environmental Authorisations*) in the list of interested and affected parties, notified through your notification letter to interested and affected parties, for record purposes.

Appeals must be submitted in writing to:


Mr T Zwane, Senior Legal Administration Officer (Appeals), of this Department at the above mentioned addresses or fax number. Mr Zwane can also be contacted at:

Tel: 012-310-3929

Email: AppealsDirectorate@environment.gov.za

The authorised activity/ies shall not commence within twenty (20) days of the date of signature of the authorisation. Further, please note that the Minister may, on receipt of appeals against the authorisation or conditions thereof suspend the authorisation pending the outcome of the appeals procedure.

Yours sincerely



Mr Mark Gordon
Chief Director: Integrated Environmental Authorisations
Department of Environmental Affairs
 Date: 01 March 2013

CC:	Mr Simon Clarke	Aurecon	Tel: 021 526 6027	Fax: 086 667 3532
	Ms Anga Yaphi	NDENC	Tel: 054 332 2885	Fax: 054 331 1155
	Mr Isaac Visser	Emthanjeni Local Municipality	Tel: 053 632 9100	Fax: 053 631 0105
	Ms Nomzamo Mtubu	Renosterberg Local Municipality	Tel: 053 663 0041	Fax: 053 663 0180
	Mr T Zwane	Appeals Authority (DEA)	Tel: 012-310-3929	AppealsDirectorate@environment.gov.za
	Mr S Malaza	Compliance Monitoring (DEA)	Tel: 012-310-3397	Fax: 012-320-5744



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 Water and 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 Water and 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 against a decision must be lodged with:-**
 - a) the Minister of Water and Environmental Affairs if the decision was issued by the Director- General of the Department of Environmental Affairs (or another official) acting in his/ her capacity as the delegated Competent Authority;
 - b) the Minister of Justice and Constitutional Development if the applicant is the Department of Water Affairs and the decision was issued by the Director- General of the Department of Environmental Affairs (or another official) acting in his/ her capacity as the delegated Competent Authority;
2. **An appeal lodged with:-**
 - a) the Minister of Water and Environmental Affairs must be submitted to the Department of Environmental Affairs;
 - b) the Minister of Justice and Constitutional Development must be submitted to the Department of Environmental Affairs;
3. **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.



Handwritten signature



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA



Environmental Authorisation

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

Wind Energy Facility situated on the Eastern Plateau (South) near De Aar

Pixley ka Seme District Municipality

Authorisation register number:	<i>12/12/20/2463/1</i>
NEAS reference number:	<i>DEA/EIA/0000577/2011</i>
Last amended:	<i>First issue</i>
Holder of authorisation:	<i>MULILO RENEWABLE ENERGY (PTY) LTD</i>
Location of activity:	<i>NORTHERN CAPE PROVINCE: Within the Emthanjeni Local Municipality and Renosterberg Local Municipality</i>

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

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 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 authorises –

MULILO RENEWABLE ENERGY (PTY) LTD

with the following contact details –

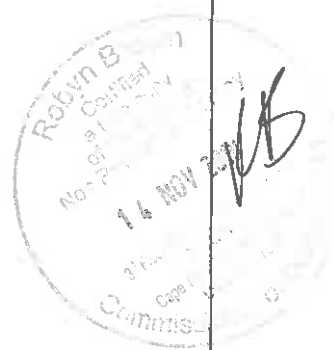
Mr Johnny Hamilton Cullum
Mulilo Renewable Energy (Pty) Ltd
P.O. Box 50
CAPE TOWN INTERNATIONAL AIRPORT
7525

Tel: (021) 934 5278
Fax: (021) 935 0505
E-mail: Johnny@mulilo.com

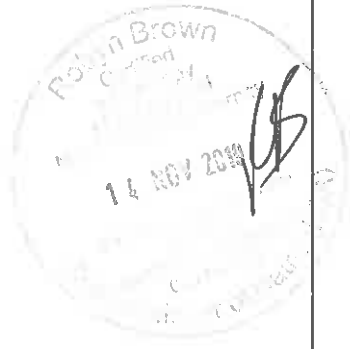


to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notices 1, 2 or 3 (GN R. 544, 545 & 546):

Listed activities	Activity/Project description
<p><u>GN R. 544 Item 10:</u> The construction of facilities or infrastructure for the transmission and distribution of electricity –</p> <p>(i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts; or</p> <p>(ii) inside urban areas or industrial complexes with a capacity of 275 kilovolts or more.</p>	<p>The wind turbine generators would be connected to a 22kV transmission line, where the power would be evacuated via five onsite substations into Eskom's existing 400kV, 220kV and 132kV transmission lines.</p>
<p><u>GN R. 544 Item 11:</u> The construction of:</p> <p>(i) canals;</p> <p>(ii) channels;</p> <p>(iii) bridges;</p> <p>(iv) dams;</p> <p>(v) weirs;</p> <p>(vi) bulk storm water outlet structures;</p> <p>(vii) marinas;</p> <p>(viii) jetties exceeding 50 square metres in size;</p> <p>(ix) slipways exceeding 50 square metres in size;</p> <p>(x) buildings exceeding 50 square metres in size; or</p> <p>(xi) infrastructure or structures covering 50 square metres or more</p> <p>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.</p>	<p>Wetlands and drainage lines are scattered across the proposed sites and one or more structures would need to be crossed by powerlines and access roads.</p>
<p><u>GN R. 544 Item 18:</u> The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand,</p>	<p>A number of roads would need to be constructed across drainage lines and would</p>



[Handwritten signature]

Listed activities	Activity/Project description
<p>shells, shell grit, pebbles or rock from</p> <ul style="list-style-type: none"> (i) a watercourse; (ii) the sea; (iii) the seashore; (iv) the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater- <p>but excluding where such infilling, depositing, dredging, excavation, removal or moving</p> <ul style="list-style-type: none"> (i) is for maintenance purposes undertaken in accordance with a management plan agreed to by the relevant environmental authority; or (ii) occurs behind the development setback line. 	<p>cumulatively result in the depositing of more than 5m³.</p> 
<p><u>GN R. 545 Item 1:</u></p> <p>The construction of facilities or infrastructure for the generation of electricity where the electricity output is 20 megawatts or more.</p>	
<p><u>GN R. 546 Item 14:</u></p> <p>The clearance of an area of 5 hectares or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation, except where such removal of vegetation is required for:</p> <ul style="list-style-type: none"> (1) purposes of agriculture or afforestation inside areas identified in spatial instruments adopted by the competent authority for agriculture or afforestation purposes; (2) the undertaking of a process or activity included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the activity is regarded to be excluded from this list; (3) the undertaking of a linear activity falling below the thresholds in Notice R554 of 2010. 	<p>A vegetated area of approximately 23700ha would need to be cleared for the proposed projects, which are located in a rural area. The vegetation is comprised of 75 % or more indigenous vegetation.</p>



Listed activities	Activity/Project description

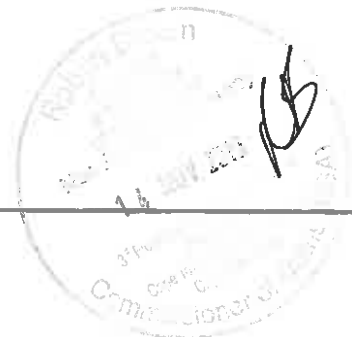
as described in the Environmental Impact Assessment Report (EIAR) dated April 2012 at:

Substation options	Latitude	Longitude
Hydra Substation	30° 42'55.64" S	24° 5'19.36" E
400kV Substation	30° 32' 7.52" S	24° 18' 9.36" E
400kV Substation	30° 32' 36.15" S	24° 16' 5.69" E
220kV Substation	30° 32' 37.40" S	24° 16' 4.74" E
132kV Substation	30° 32' 58.28" S	24° 15' 14.42" E

- for the construction of the Wind Energy Facility situated on the Eastern Plateau (South Site) near De Aar, on Slingshoek (Farm No.2 Portion 2 and Remainder) Slingshoek (Farm No.4 Portion 2); Knapdaar (Farm No.1 Portion 8); Maatjiesfontein (Farm No.5 Portion1); Vendussie Kuil (Farm No.165 Portions 2); Vendussie Kuil (Farm No.165 Portion 11 and Remainder) within the Emthanjeni Local Municipality and Renosterberg Local Municipality in the Northern Cape Province, hereafter referred to as "the property".

The infrastructure associated with this facility includes:

- The construction of approximately 103 wind turbines with a potential capacity of 155 – 258 MW.
- A permanent hard standing made of compacted gravel and approximately 20 50 m x 40 m would be constructed adjacent to each turbine location for the crane.
- A total of three construction laydowns in the south would be required with each having a footprint of approximately 200 x 400m.
- Gravel surface access roads of approximately 4 m wide would also be required between each turbine.
- Cables connecting each turbine would interconnect with overhead transmission lines that will follow the route of the access roads. Each turbine would have a transformer that steps up the voltage from 690 Volt to 22kilovolt (kV). This transformer is housed within each turbine tower or immediately outside the turbine.
- The cabling between the turbines would traverse the site to the three substations, where the power from all the turbines would be metered.



Handwritten signature

- The proposed substations and associated control buildings would have a footprint of approximately 200 x 100m.
- The electricity distribution infrastructure comprises of three existing distribution lines (1 x 132kV, 2 x 400kV and 2 x 220kV) traversing the site. The transmission lines terminate at Eskom's Hydra Substation located 9.5km to the north east of De Aar.

Conditions of this Environmental Authorisation

Scope of authorisation

1. The preferred wind energy facility on the South Site is approved.
2. Only one (1) substation must be constructed for the South Site.
3. 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.
4. 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.
5. The activities authorised may only be carried out at the property as described above.
6. 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.
7. This activity must commence within a period of three (3) years from the date of issue. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.
8. Commencement with one activity listed in terms of this authorisation constitutes commencement of all authorised activities.



9. The holder of an environmental authorisation has the responsibility to 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

10. 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.
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 Chapter 7 of the Environmental Impact Assessment (EIA) Regulations, 2010;
 - 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 for the decision.
12. The holder of the authorisation must publish a notice –
- 12.1. informing interested and affected parties of the decision;
 - 12.2. informing interested and affected parties where the decision can be accessed; and
 - 12.3. 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

13. A copy of the final site layout plan must be submitted with the amended EMPr 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 plan. The site layout plan must indicate the following:
- 13.1. Turbine positions;
 - 13.2. The preferred substation position;
 - 13.3. Foundation footprint;



- 13.4. Internal roads indicating width (construction period width and operation period width) and with numbered sections between the other site elements which they serve (to make commenting on sections possible);
 - 13.5. Wetlands, drainage lines, rivers, stream and water crossing of roads and cables indicating the type of bridging structures that will be used;
 - 13.6. The location of heritage sites;
 - 13.7. Sub-station(s) and/or transformer(s) sites including their entire footprint;
 - 13.8. Connection routes (including pylon positions) to the distribution/transmission network;
 - 13.9. All existing infrastructure on the site, especially roads;
 - 13.10. Buildings including accommodation;
 - 13.11. All "no-go" areas.
 - 13.12. A map combining the final layout plan superimposed (overlain) on the environmental sensitivity map. This map must reflect the proposed location of turbines as stated in the EIR dated April 2012 and this authorisation.
14. The final layout plan must also be superimposed (overlain) over an environmental sensitivity map to be submitted to the department.
15. The Environmental Management Plan (EMPr) submitted as part of the application for environmental authorisation must be amended and submitted with the abovementioned layout plan to the Department for written approval prior to commencement of the activity.
16. The EMPr amendments must include the following:
- 16.1. The requirements and conditions of this authorisation.
 - 16.2. A plant rescue and protection plan which allows for the maximum transplant of conservation important species from areas to be transformed.
 - 16.3. An open space management plan to be implemented during the construction and operation of the facility.
 - 16.4. A re-vegetation and habitat rehabilitation plan to be implemented during the construction and operation of the facility including timeframes for restoration which must indicate rehabilitation within the shortest possible time 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.
 - 16.5. A storm water management plan to be implemented during the construction and operation of the facility.
 - 16.6. An effective monitoring system to detect any leakage or spillage of all hazardous substances during their transportation, handling, use and storage.

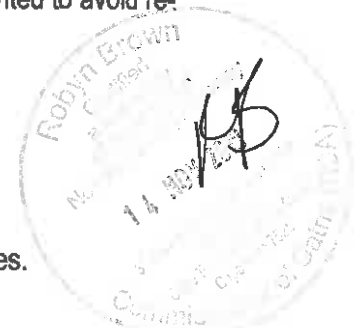


Robertson

- 16.7. An erosion management plan for monitoring and rehabilitating erosion events associated with the facility.
 - 16.8. A transportation plan for the transport of turbine components, main assembly cranes and other large pieces of equipment.
 - 16.9. An environmental sensitivity map indicating environmental sensitive areas and features identified during the EIA process.
 - 16.10. Measures to protect hydrological features such as streams, rivers, pans, wetlands, dams and their catchments, and other environmental sensitive areas from construction impacts including the direct or indirect spillage of pollutants.
17. The approved 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.
18. The provisions of the approved EMPr including are an extension of the conditions of this EA and therefore noncompliance with them would constitute noncompliance with the EA.

Environmental Control Officer (ECO) and duties

19. The applicant must appoint a suitably experienced independent Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the mitigation/rehabilitation measures and recommendations referred to in this authorisation are implemented and to ensure compliance with the provisions of the EMPr.
20. The ECO must be appointed before commencement of any authorised activity.
21. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
22. The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
23. A detailed incident (including spillage of bitumen, fuels, chemicals, or any other material) and complaint register must be kept 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.
24. In addition the ECO must maintain the following on site:
 - 24.1. A daily site diary;
 - 24.2. Copies of all reports submitted to the Department; and
 - 24.3. A schedule of current site activities including the monitoring of such activities.



25. The ECO shall remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.
26. 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.

Environmental audit report

27. 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 the Department.
28. The holder of the authorisation must submit an environmental audit report to 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.
29. The environmental audit report must:
 - 29.1. Be compiled by an independent environmental auditor;
 - 29.2. Indicate the date of the audit, the name of the auditor and the outcome of the audit;
 - 29.3. Evaluate compliance with the requirements of the approved EMPr and this environmental authorisation;
 - 29.4. Include measures to be implemented to attend to any non-compliances or degradation noted;
 - 29.5. Include copies of any approvals granted by other authorities relevant to the development for the reporting period; and
 - 29.6. Highlight any outstanding environmental issues that must be addressed, along with recommendations for ensuring these issues are appropriately addressed.
30. The audit report must be submitted prior to commencement of the operation phase of the project.

Commencement of the activity

31. The authorised activity shall not commence within twenty (20) days of the date of signature of the authorisation.
32. An appeal under section 43 of the National Environmental Management Act (NEMA), Act 107 of 1998 (as amended), does not suspend an environmental authorisation or exemption, or any provisions or conditions attached thereto, or any directive, unless the Minister, MEC or delegated organ of state directs otherwise.

33. Should you be notified by the Minister of a suspension of the authorisation pending appeal procedures, you may not commence with the activity until such time that the Minister allows you to commence with such an activity in writing.

Notification to authorities

34. Fourteen (14) days written notice must be given to the Department that the activity will commence. 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. Fourteen (14) days written notice must be given to the Department that the activity operational phase will commence.

Site closure and decommissioning

36. Should the activity ever cease or become redundant, the applicant 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

37. A 12 month long bird and bat monitoring programme must be implemented prior to the commencement of construction.
38. The bird and bat monitoring programme must be implemented through to the operation of the wind energy facility to determine the impact of the wind energy facility on birds and bats.
39. The results of the monitoring programme must be used to refine, improve and inform mitigation measures.
40. Reports regarding bird monitoring must be submitted to the relevant provincial environmental department, Birdlife South Africa, the Endangered Wildlife Trust (EWT), and this Department on a quarterly basis.

41. Bird flappers and/or diverters must be installed at all points where powerlines cross avifaunal corridors, wetlands, drainage line and pans.
42. A 100m buffer zone must be implemented from the edge of all cliffs, scarps and around rocky outcrops. No wind turbines must be erected within this buffer zone.
43. No wind turbines must be erected within 1km radius of the Verreaux's Eagle nests.
44. No wind turbines must be erected within 1.5km of the Martial Eagle nest.
45. No wind turbines must be erected within 1.5km of the Vendussiekul farm dam.
46. All plant species of concern must be identified during siting of the wind turbines and a search and rescue must be undertaken for such plants.
47. There must be continuous monitoring and removal of alien and invasive plant species within the wind energy facility.
48. Only indigenous plants of the area must be utilised for rehabilitation purposes.
49. Cleared alien vegetation must not be dumped on adjacent intact vegetation during clearing but should be temporarily stored in a demarcated area.
50. Contractors and construction workers must be clearly informed of all applicable buffer zones and no-go areas.
51. There must be no construction of access roads through wetlands and pans.
52. No wind turbines, pylons, substations and construction camps must be erected within 32m of wetlands and drainage lines, and within 75m of pans and dams.
53. Lay down areas and stockyards should be located in low visibility areas.
54. Liaison with land owners/farm managers is to be done prior to construction in order to provide sufficient time for them to plan agricultural activities.
55. No unsupervised open fires are allowed on site.
56. All fuel tanks must be store in a bunded area and constantly monitored for damage and leakage.
57. Any solid waste shall be disposed of at a landfill licensed in terms of section 20(b) of the National Environment Management Waste Act, 2008 (Act 59 of 2008).
58. Should any graves or fossil remains be found, all construction activities must be suspended and an archaeologist or palaeontologist must be contacted immediately. The discovered graves must be cordoned off.
59. A 500m buffer zone must be implemented around farm buildings which are older than 60years.
60. All rock kraals on site must be demarcated and labelled as no go areas. No wind turbine must be erected within rock kraals.



Pruden

General

61. A copy of this authorisation and the approved EMPr must be kept at the property where the activity will be undertaken. The authorisation must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who works or undertakes work at the property.
62. The holder of the authorisation must notify both the *Director: Integrated Environmental Authorisations* and the *Director: Compliance Monitoring* at the Department, in writing and within 48 (forty eight) hours, if any condition of this authorisation cannot be or is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance.
63. 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 applicant or his 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 applicant 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: 01 March 2013



Mr Mark Gordon

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 EIR dated April 2012;
- b) The comments received from interested and affected parties as included in the EIR dated April 2012;
- c) Mitigation measures as proposed in the EIR dated April 2012 and the EMPr;
- d) The information contained in the specialist studies contained within Appendix D of the EIR;
- e) Findings of the site visit conducted on 25 July 2012; and
- f) 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 for the proposed project stems from the need for clean and renewable energy sources to reduce the country's energy supply problems.
- c) The EIR dated April 2012 identified all legislation and guidelines that have been considered in the preparation of the EIR dated April 2012.
- d) The methodology used in assessing the potential impacts identified in the EIR dated April 2012 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, 2010 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 EIR dated April 2012 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.
- e) The EAP has indicated that the information contained in the EIR dated April 2012 is accurate and credible.
- f) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the EIR and will be implemented to manage the identified environmental impacts during the construction process.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the proposed activity 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 proposed activity can be mitigated to acceptable levels. The application is accordingly granted.





environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X 447 · PRETORIA · 0001 · Fedsure Building · 315 Pretorius Street · PRETORIA
Tel (+ 27 12) 310 3911 · Fax (+ 2712) 322 2682

NEAS Reference: DEA/EAI/AMEND/0000083/2013

DEA Reference: 12/12/20/2463/1

Enquiries: Mahlatse Shubane

Telephone: 012-395-1781 Fax: 012-320-7539 E-mail: mshubane@environment.gov.za

Mr Johnny Hamilton Cullum
Longyuan Mulilo De Aar 2 South (Pty) Ltd.
P. O. Box 50
CAPE TOWN INTERNATIONAL AIRPORT
7525

Tel: (021) 934 5278

Fax: (021) 935 0505

PER FACSIMILE / MAIL

Dear Mr Cullum

AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION (DEA REFERENCE NUMBER: 12/12/20/2463/1) ISSUED ON 01 MARCH 2013: FOR THE ESTABLISHMENT OF A WIND ENERGY FACILITY SITUATED ON THE EASTERN PLATEAU (SOUTH) NEAR DE AAR, NORTHERN CAPE PROVINCE

The Environmental Authorisation dated 01 March 2013 and amendment application form received by the Department on 13 May 2013, have reference.

Based on a review of the reasons for requesting an amendment to the above authorisation, the Department, in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2010, (EIA Regulations) hereby amends the EA issued on 01 March 2013 (EA: Ref number 12/12/20/2463/1) as follows –

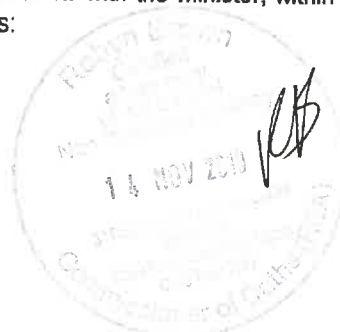
Any reference to "*Mulilo Renewable Energy (Pty) Ltd*" is herewith substituted with the Special Purpose Vehicle (SPV) name: "*Longyuan Mulilo De Aar 2 South (Pty) Ltd.*"

This amendment letter must be read in conjunction with the EA issued on 01 March 2013.

In terms of Regulation 10(2) of the EIA Regulations, 2010 you are instructed to notify all registered interested and affected parties, in writing and within 12 (twelve) days of the date of the Department's decision in respect of the amendment made 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 amendment 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 facsimile: 012 320 7561;
By post: Private Bag X447,
Pretoria, 0001; or
By hand: 2nd Floor, Fedsure Building, North Tower,
Cnr. Lilian Ngoyi (Van der Walt) and Pretorius Streets,
Pretoria.

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.

Please include the Department (*Attention: Director: Integrated Environmental Authorisations*) in the list of interested and affected parties, notified through your notification letter to interested and affected parties, for record purposes.

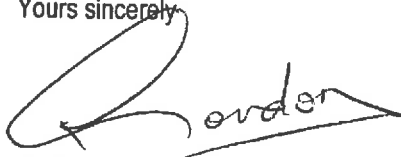
Appeals must be submitted in writing to:

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

Tel: 012-310-33271
Email: AppelasDirectorate@environment.gov.za

The authorised activities shall not commence within twenty (20) days of the date of signature of the authorisation. Further, please note that the Minister may, on receipt of appeals against the authorisation or conditions thereof suspend the authorisation pending the outcome of the appeals procedure.

Yours sincerely



Mr Mark Gordon
Chief Director: Integrated Environmental Authorisations
Department of Environmental Affairs

Date: 21.05.2013

CC:	Mr Simon Clark	Aurecon	Tel: 021-526-6027	Fax: 086-667-3532
	Ms Anga Yaphi	NDENC	Tel: 054-332-2885	Fax: 054-331-1155
	Mr Isaac Visser	Emthanjeni Local Municipality	Tel: 053-632-9100	Fax: 053-631-0105
	Ms Nomzamo Mtubu	Renosterberg Local Municipality	Tel: 053-663-0041	Fax: 053-660-0108
	Mr S Malaza	Compliance Monitoring	Tel: 012-310-3397	Fax: 012-320-5744



APPEALS PROCEDURE IN TERMS OF CHAPTER 7 OF THE NEMAEIA 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 Water and 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 Water and 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 against a decision must be lodged with:-**
 - a) the Minister of Water and Environmental Affairs if the decision was issued by the Director- General of the Department of Environmental Affairs (or another official) acting in his/ her capacity as the delegated Competent Authority;
 - b) the Minister of Justice and Constitutional Development if the applicant is the Department of Water Affairs and the decision was issued by the Director- General of the Department of Environmental Affairs (or another official) acting in his/ her capacity as the delegated Competent Authority;
2. **An appeal lodged with:-**
 - a) the Minister of Water and Environmental Affairs must be submitted to the Department of Environmental Affairs;
 - b) the Minister of Justice and Constitutional Development must be submitted to the Department of Environmental Affairs;
3. **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.



[Handwritten signature]



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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

DEA Reference: 12/12/20/2463/1

Enquiries: Mr Muhammad Essop

Telephone: (012) 399 9406 E-mail: MEssop@environment.gov.za

Ms Karen Versfeld
Longyuan Mulilo De Aar 2 South (Pty) Ltd
PO Box 50
CAPE TOWN INTERNATIONAL AIRPORT
7525

Fax number: (021) 935 0505
Telephone number: (021) 934 5278

PER FACSIMILE / MAIL

Dear Ms Versfeld

AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION (12/12/20/2463/1) ISSUED ON 01 MARCH 2013 FOR THE PROPOSED WIND ENERGY FACILITY SITUATED ON THE PLATEAU (SOUTH) NEAR DE AAR, NORTHERN CAPE PROVINCE

The Environmental Authorisation (EA) issued for the above application by this Department on 01 March 2013 and your application for amendment to the EA received by this Department on 31 July 2014 refer.

Based on a review of the reason for requesting an amendment to the above EA, this Department, in terms of Regulation 42 of the Environmental Impact Assessment Regulations, 2010, has decided to amend the EA dated 01 March 2013 as follows:

Amendment 1: Amendment to extend the validity period:

The validity period of the Environmental Authorisation is hereby extended for a period of 02 (two) years from the date of signature of this amendment decision. 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.

Amendment 2: Amendment to the property descriptions of the EA:

Page 5 of the EA:

From:

"- for the construction of the Wind Energy Facility situated on the Eastern Plateau (South Site) near De Aar, on Slingshoek (Farm No. 2 Portion 2 and Remainder); Slingshoek (Farm No. 4 Portion 2); Knapdaar (Farm No. 1 Portion 8); Maatjiesfontein Farm (Farm No. 5 Portion 1); Vendussiekuil (Farm No. 165 Portion 2); Vendussiekuil (Farm No. 165 Portion 11 and Remainder) within the Emthanjeni Local Municipality and Renosterberg Local Municipality in the Northern Cape Province, hereafter referred to as "the property".



To:

"- for the construction of the Wind Energy Facility situated on the Eastern Plateau (South Site) near De Aar, on Slingers Hoek (Farm No. 2 Remainder of Portion 2 and Remainder); Slingers Hoek (Farm No. 2 Portion 4); Knapdaar (Farm No. 8 Portion 1); Maatjes Fontain Farm (Farm No. 1 Portion 5); Vendussie Kuil (Farm No. 165 Remainder of Portion 2); Vendussie Kuil (Farm No. 165 Portion 11 and Remainder) within the Emthanjeni Local Municipality and Renosterberg Local Municipality in the Northern Cape Province, hereafter referred to as "the property"."

Amendment 3: Amendment to Condition 43:

Condition 43 on Page 12:

From:

"No wind turbines must be erected within 1km radius of the Verreaux's Eagle nests."

To:

"No wind turbines must be erected within 800m radius of the Booted Eagle and the Verreaux's Eagle nests at:

Nest 1 Booted Eagle: 30°34'47.15"S 24°15'0.52"E;

Nest 2 Booted Eagle: 30°34'47.03"S 24°15'10.23"E;

Nest 3 Booted Eagle: 30°34'36.09"S 24°14'55.49"E;

Nest 5 Verreaux's Eagle: 30°35'5.26"S 24°14'49.55"E; and,

Nest 6 Verreaux's Eagle: 30°35'41.56"S 24°15'50.57"E."

Amendment 4: Amendment to Condition 44:

Condition 44 on Page 12 is hereby removed.

Amendment 5: Amendment to Condition 45:

Condition 45 on Page 12:

From:

"No wind turbines must be erected within 1.5km of the Vendussiekul farm dam".

To:

"No wind turbines must be erected within 500m of the Vendussiekul farm dam".

Furthermore, this Department requires that a shapefile of the approved development layout/footprint be submitted to this Department within two (2) months from the date of this letter. 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, 0083

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



This proposed amendment letter must be read in conjunction with the EA dated 01 March 2013 as amended.

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 Department's decision in respect of the amendments made 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 amendment decision a notice of intention to appeal must be lodged by all prospective appellants with the Minister, within 20 days of the date of this decision, by means of one of the following methods:

- By post: Private Bag X447,
Pretoria, 0001; or
- By hand: Environment House
473 Steve Biko,
Arcadia,
Pretoria, 0083

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:

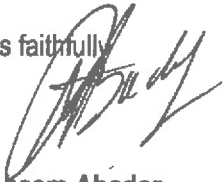
Mr Z Hassam, Director: Appeals and Legal Review, of this Department at the above mentioned addresses. Mr Hassam can also be contacted at:

Tel: (012) 399 9356

Email: AppealsDirectorate@environment.gov.za

Please note that the Minister may, on receipt of appeals against the decision suspend the authorisation pending the outcome of the appeals procedure.

Yours faithfully



Mr Ishaam Abader

**Deputy Director-General: Legal, Authorisations, Compliance and Enforcement
Department of Environmental Affairs**

Date:

14/05/2014

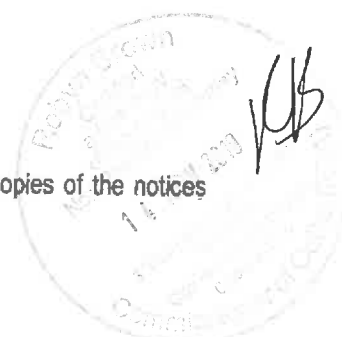


APPEALS PROCEDURE IN TERMS OF CHAPTER 7 OF THE NEMA EIA REGULATIONS, 2010 (THE REGULATIONS) AS PER GN R.543 OF 2010 TO BE FOLLOWED BY THE APPLICANT AND INTERESTED AND AFFECTED PARTIES UPON RECEIPT OF NOTIFICATION OF A DECISION

APPLICANT	INTERESTED AND AFFECTED PARTIES (IAPs)
1. Receive decision from the relevant Competent Authority (the Department of Environmental Affairs [DEA]).	1. Receive decision from Applicant/Consultant.
2. Within 12 days of date of the decision notify all IAPs of the decision and draw their attention to their right to appeal against the decision in terms of Chapter 7 of the Regulations.	2. N/A.
3. If you want to appeal against the decision, submit a notice of intention to appeal within 20 days of the date of the decision with the Minister of Water and Environmental Affairs (the Minister).	3. If you want to appeal against the decision, submit a notice of intention to appeal within 20 days of the date of the decision with the Minister of Water and 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 against a decision must be lodged with:-**
 - a) the Minister of Water and Environmental Affairs if the decision was issued by the Director-General of the Department of Environmental Affairs (or another official) acting in his/her capacity as the delegated Competent Authority;
 - b) the Minister of Justice and Constitutional Development if the applicant is the Department of Water Affairs and the decision was issued by the Director-General of the Department of Environmental Affairs (or another official) acting in his/her capacity as the delegated Competent Authority;
2. **An appeal lodged with:-**
 - a) the Minister of Water and Environmental Affairs must be submitted to the Department of Environmental Affairs;
 - b) the Minister of Justice and Constitutional Development must be submitted to the Department of Environmental Affairs;
3. **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

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

DEA Reference: 12/12/20/2463/1/AM3

Enquiries: Dikeledi Mokotong

Telephone: (012) 399 8801 E-mail: dmokotong@environment.gov.za

Mr Jonny Hamilton Cullum
Longyuan Mulilo De Aar 2 South (Pty) Ltd
PO Box 50
CAPE TOWN INTERNATIONAL AIRPORT
7525

Telephone Number: (021) 934 5278
Email Address: karen@mulilo.com

PER EMAIL/MAIL

Dear Mr Cullum

AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION ISSUED ON 01 MARCH 2013 FOR THE ESTABLISHMENT OF A WIND ENERGY FACILITY SITUATED ON THE EASTERN PLATEAU (SOUTH) NEAR DE AAR WITHIN THE EMTHANJENI LOCAL MUNICIPALITY, PIXLEY KA SEME DISTRICT MUNICIPALITY, NORTHERN CAPE PROVINCE

The Environmental Authorisation (EA) dated 01 March 2013, your application for an amendment to the EA dated 24 June 2015, the acknowledgement letter dated 29 June 2015, the draft report received for comment on 04 August 2015, the comments issued by this Department on 25 August 2015 and the report received on 17 September 2015 refer.

Based on a review of the reason for requesting an amendment to the above EA, this Department, in terms of Chapter 5 of the Environmental Impact Assessment Regulations, 2014, has decided to amend the EA dated 01 March 2013 as amended as follows:

Amendment 1: Amendment of project description in the EA:

Page 05 of the EA dated 01 March 2013:

From:

"A permanent hard standing made of compacted gravel and approximately 20 50 m x 40 m would be constructed adjacent to each turbine location for the crane."

To:

"A permanent hard standing made of compacted gravel and approximately 50 m x 40 m would be constructed adjacent to each turbine location for the crane."



101

Amendment 2: Amendment of turbine specifications in the EA:

The applicant wishes to amend the EA for the abovementioned project by amending the project description as follows:

- Reduce the number of turbine from 103 to either 61 or 30;
- Increasing the hub heights from 100m to a minimum of 90m and a maximum of 120m;
- Increasing the rotor diameters from 120m to a minimum of 100m and a maximum of 160m;
- Increasing the generation size of the turbines from 1.5MW – 2.5MW to 2.3MW – 4.0MW; and,
- The foundation size would be 18.4m in diameter that narrows up to 10.6m at the surface (the visible portion) with a depth of 3.5m once completed.

The following table is hereby included on page 05 of the EA and will replace the turbine specifications as outlined in the EA dated 01 March 2013 as amended:

Component	Description/ Dimensions
<i>Hub height from ground level</i>	120m
<i>Rotor diameter</i>	160m
<i>Maximum of turbines</i>	61
<i>Permanent affected area (foundation size)</i>	<i>The foundation size would be 18.4m in diameter that narrows up to 10.6m at the surface (the visible portion) with a depth of 3.5m once completed.</i>
<i>Generation capacity per turbine</i>	2.3 MW – 4.0MW
<i>Maximum Output of the Wind Energy Facility</i>	140MW

It must be noted that whilst the applicant applied for a range of parameters in the number of turbines, the hub height and rotor diameter, following a review of the motivation report provided and consultation with the specialist studies, this Department has decided to authorise the specifications as described in the table above.

This proposed amendment letter must be read in conjunction with the EA dated 01 March 2013 as amended.

In terms of Regulation 4(2) of the Environmental Impact Assessment Regulations, 2014 (the Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 14 (fourteen) days of the date of the Department's decision in respect of the amendment made as well as the provisions regarding the submission of appeals that are contained in the Regulations.

Your attention is drawn to Chapter 2 of Government Notice No. R.993, which prescribes the appeal procedure to be followed. Kindly include a copy of this document with the letter of notification to interested and affected parties.

An appellant must submit an appeal to the appeal administrator, and a copy of the appeal to the applicant, any registered interested and affected party and any organ of state with interest in the matter within 20 days from the date that the notification of the decision was sent to the applicant by the competent authority.

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



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

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:

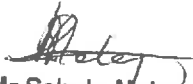
Tel: (012) 399 9356

Email: Appealsdirector@environment.gov.za

Please note that in terms of Section 43(7) of the National Environmental Management Act, 1998, an appeal under Section 43 of that Act will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged, you may not commence with the activity until such time that the appeal is finalised.

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

Yours faithfully



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

Date: 25/01/2016

cc: Ms Nicole Holland	Holland and Associates Environmental Consultants (Pty) Ltd	Email: nicole@hollandandassociates.com
-----------------------	------------------------------------------------------------	----------------------------------------





environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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

DEA Reference: 12/12/20/2463/1/AM4
Enquiries: Mr Muhammad Essop
Telephone: (012) 399 9406 E-mail: MEssop@environment.gov.za

Mr Jonny Hamilton Cullum
Mulilo De Aar 2 South (Pty) Ltd
PO Box 50
CAPE TOWN INTERNATIONAL AIRPORT
7525

Telephone Number: (021) 934 5278
Email Address: karen@mulilo.com

PER EMAIL/MAIL

Dear Mr Cullum

AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION ISSUED ON 01 MARCH 2013 FOR THE ESTABLISHMENT OF A WIND ENERGY FACILITY SITUATED ON THE EASTERN PLATEAU (SOUTH) NEAR DE AAR WITHIN THE EMTHANJENI LOCAL MUNICIPALITY, PIXLEY KA SEME DISTRICT MUNICIPALITY, NORTHERN CAPE PROVINCE

The Environmental Authorisation (EA) issued for the above application by this Department on 01 March 2013, the amendments to the EA issued on 21 May 2013, 14 August 2014 and 25 January 2016 respectively and your application for amendment of the EA received by this Department on 08 March 2016 refer.

Based on a review of the reason for requesting an amendment to the above EA, this Department, in terms of Chapter 5 of the Environmental Impact Assessment Regulations, 2014, has decided to amend the EA dated 01 March 2013 as amended as follows:

Amendment 1: Amendment to the contact details of the holder of the EA

From:

"Longyuan Mulilo De Aar 2 South (Pty) Ltd"

Represented by: Jonny Hamilton Cullum
PO Box 50
CAPE TOWN INTERNATIONAL AIRPORT
7525

Telephone Number: (021) 934 5278
Fax Number: (021) 935 0505
Email Address: karen@mulilo.com



To:

"Mulilo De Aar 2 South (Pty) Ltd"

Represented by: Jonny Hamilton Cullum
PO Box 50
CAPE TOWN INTERNATIONAL AIRPORT
7525

Telephone Number: (021) 934 5278
Fax Number: (021) 935 0505
Email Address: karen@mulilo.com



Amendment 2: Amendment to extend the validity period of the EA:

The activity must commence within a period of two (02) years from the date of expiry of the amendment to the EA issued on 14 August 2014 (i.e. the EA lapses on 14 August 2018). 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.

Furthermore a shapefile of the approved development layout/footprint must be submitted to this Department within two (2) months from the date of this letter. 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 X44
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

This proposed amendment letter must be read in conjunction with the EA dated 01 March 2013 as amended.

In terms of Regulation 4(2) of the Environmental Impact Assessment Regulations, 2014 (the Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 14 (fourteen) days of the date of the Department's decision in respect of the amendment made as well as the provisions regarding the submission of appeals that are contained in the Regulations.

Your attention is drawn to Chapter 2 of Government Notice No. R. 993, which prescribes the appeal procedure to be followed. Kindly include a copy of this document with the letter of notification to interested and affected parties.

An appellant must submit an appeal to the appeal administrator, and a copy of the appeal to the applicant, any registered interested and affected party and any organ of state with interest in the matter within 20 days from the date that the notification of the decision was sent to the applicant by the competent authority.

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

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



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: Appealsdirector@environment.gov.za

Please note that in terms of section 43(7) of the National Environmental Management Act, 1998, an appeal under section 43 of that Act will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged, you may not commence with the activity until such time that the appeal is finalised.

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

Yours faithfully


Mr Sabelo Malaza
Chief Director: Integrated Environmental Authorisations
Department of Environmental Affairs
Date: 07/04/2014

cc:	Ms Nicole Holland	Nicole Holland & Associates Environmental Consultants	E-mail: nicole@hollandandassociates.net
-----	-------------------	-------------------------------------------------------	----------------------------------------------------------------------------------------------



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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

DEA Reference: 12/12/20/2463/1/AM5

Enquiries: Ms Dakalo Netshiombo

Telephone: (012) 399 8877 E-mail: DNetshiombo@environment.gov.za

Mr Johnny Hamilton Cullum
Mulilo De Aar 2 South (Pty) Ltd
P O Box 548
Howard Place
CAPE TOWN
7450

Telephone Number: (021) 685 3240
Fax: (086) 635 6809
Email Address: karen@mulilo.com

PER EMAIL / MAIL

Dear Mr Cullum

AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION ISSUED ON 01 MARCH 2013 FOR THE PROPOSED WIND ENERGY FACILITY SITUATED ON THE PLATEAU (SOUTH) NEAR DE AAR, WITHIN THE EMTHANJENI LOCAL MUNICIPALITY, PIXLEY KA SEME DISTRICT MUNICIPALITY, NORTHERN CAPE PROVINCE

The Environmental Authorisation (EA) issued for the above application by this Department on 01 March 2013, the amendments to the EA issued on 21 May 2013, 14 August 2014, 25 January 2016 and 07 April 2016 respectively, your application for amendment to the EA received by this Department on 12 June 2018 and the acknowledgement letter dated 15 June 2018 refers.

The applicant has applied for three amendments to the EA, i.e. to extend the validity period of the EA and to change the contact details of the holder of the EA as well as amend the error in the property description on page 5 of the EA as amended by EA amendment letter dated 14 August 2014. Based on a review of the reason for requesting an amendment to the above EA, this Department, in terms of Chapter 5 of the Environmental Impact Assessment Regulations, 2014 as amended, has decided to amend the EA dated 01 March 2013 as follows:

Amendment 1: Extension of the validity period of the EA

The activity must commence within a period of three (03) years from the date of expiry of the EA issued on 01 March 2013 (i.e. the EA lapses on 14 August 2021). 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.



Amendment 2: Change in contact details of the holder of the EA

From:

Mr Johnny Hamilton Cullum
Mulilo De Aar 2 South (Pty) Ltd
P O Box 50
CAPE TOWN INTERNATIONAL AIRPORT
7525

Telephone Number: (021) 934 5278
Fax: (021) 935 0505
Email Address: karen@mulilo.com



To:

Mr Johnny Hamilton Cullum
Mulilo De Aar 2 South (Pty) Ltd
P O Box 548
Howard Place
CAPE TOWN
7450

Telephone Number: (021) 685 3240
Fax: (086) 635 6809
Email Address: karen@mulilo.com

Amendment 3: Editorial error in the property description of the EA

From:

"for the construction of the Wind Energy Facility situated on the Eastern Plateau (South Site) near De Aar, on Slingers Hoek (Farm No. 2 Remainder of Portion 2 and Remainder); Slingers Hoek (Farm No. 2 Portion 4); Knapdaar (Farm No. 8 Portion 1); Maatjes Fontain Farm (Farm No. 1 Portion 5); Vendussie Kuil (Farm No. 165 Remainder of Portion 2); Vendussie Kuil (Farm No. 165 Portion 11 and Remainder) within the Emthanjeni Local Municipality and Renosterberg Local Municipality in the Northern Cape Province, hereafter referred to as "the property".

To:

"for the construction of the Wind Energy Facility situated on the Eastern Plateau (South Site) near De Aar, on Slingers Hoek (Farm No. 2 Remainder of Portion 2 and Remainder); Slingers Hoek (Farm No. 2 Portion 4); Knapdaar (Farm No. 8 Portion 1); Maatjes Fountain (Farm No. 1 Portion 5); Vendussie Kuil (Farm No. 165 Remainder of Portion 2); Vendussie Kuil (Farm No. 165 Portion 11 and Remainder) within the Emthanjeni Local Municipality and Renosterberg Local Municipality in the Northern Cape Province, hereafter referred to as "the property".

The applicant applied to amend the EA as the development was not awarded preferred bidder status in the Department of Energy Renewable Energy Independent Power Producer Programme (REIPPP) because the REIPPP was put on hold when Eskom refused to sign further agreements citing financial woes and the fact that the holder of the EA has moved office premises as well as the editorial errors on the EA as amended by the EA amendment letter dated 14 August 2014.

This amendment letter must be read in conjunction with the EA dated 01 March 2013, and respective EA amendments mentioned above.

In terms of Regulation 4(2) of the Environmental Impact Assessment Regulations, 2014 (the Regulations), you are instructed to notify all registered interested and affected parties in writing and within 14 (fourteen) days of the date of the EA of the Department's decision in respect of your application as well as the fact that an appeal may be lodged against the decision in terms of the National Appeals Regulations, and the provisions regarding the submission of appeals as contained in the Regulations.

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

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

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

By email: appealsdirector@environment.gov.za

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

By post: Private Bag X 447,
Pretoria,
0001



Please note that in terms of section 43(7) of the National Environmental Management Act, 1998, the lodging of an appeal will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged, you may not commence with the activity until such time that the appeal is finalised.

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

Yours faithfully

Mr Vusi Skosana
Acting Chief Director: Integrated Environmental Authorisations
Department of Environmental Affairs

Date: 05/07/2013

CC	Ms N Holland	Holland & Associates Environmental Consultants	Cell: (083) 464 5246	Email: nicole@hollandandaassociates.net
----	--------------	------------------------------------------------	----------------------	-----------------------------------------------------------------------------------------------



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X447 PRETORIA 0001 Environment House · 478 Steve Biko Road, Arcadia · PRETORIA
Tel: (+27 12) 399 6372

Enquiries: Mr Ishaam Abader Telephone: 012 399 9330 E-mail: labader@environment.gov.za



Mr. Vusi Skosana
Director: Strategic co-ordination planning and support

Dear Mr. V Skosana

APPOINTMENT AS ACTING CHIEF DIRECTOR: INTEGRATED ENVIRONMENTAL AUTHORISATIONS FOR THE PERIOD 18 JUNE 2018 UNTIL 29 JUNE 2018 (2 WEEKS).

I hereby inform you that I have decided to appoint you as the Acting Chief Director: Integrated environmental authorisations for the period 18 June 2018 until 29 June 2018 whilst Mr. Sabeko Malaza is on Annual Leave.

All the correspondence and other documents that are usually signed by the Chief Director: Integrated Environmental Authorizations must be signed under Acting Chief Director: Integrated Environmental Authorisations during the above-mentioned period.

Your appointment in the above acting position remains subject to the provisions of the Public Service Act, 1994 (Proclamation No. 103 of 1994), as amended, the Government Employees Pension Fund Act, 1996 (Proclamation No. 21 of 1996), the regulations promulgated under these Acts and relevant circulars.

In the execution of your duties and the exercising of the powers delegated to you, you will furthermore be subjected to the provisions of the Public Finance Management Act, compliance with the Promotion of Access to Information Act, Promotion of Administrative Justice Act, the Minimum Information Security Standard, Departmental Policies and other applicable legislations with the Republic of South Africa. You are therefore advised to make yourself familiar with the provisions of this legislations and policies and the amendments thereof. (Copies of Departmental policies can be obtained from the Human Resource Office).

Please accept my heartfelt gratitude for all your assistance on behalf of the department.

Yours sincerely


Mr Ishaam Abader

DDG : LACE

Date:

14/06/2018

ACKNOWLEDGEMENT

I ACCEPT / DO NOT ACCEPT appointment
as Acting Chief Director: Integrated
environmental authorisations

Signed: 

Date: 14/06/2018



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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

DEA Reference: 12/12/20/2463/1/AM6

Enquiries: Ms Azrah Essop

Telephone: (012) 399 8529 E-mail: AEssop@environment.gov.za

Mr John Hamilton Cullum
Mulilo De Aar 2 South (Pty) Ltd
P O Box 548
HOWARD PLACE
Cape Town
7450

Tel: (021) 685 3240
Fax: (083) 635 6809
Email: johnny@mulilo.com



PER EMAIL / MAIL

Dear Mr Cullum

AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION ISSUED ON 01 MARCH 2013 FOR THE PROPOSED WIND ENERGY FACILITY SITUATED ON THE EASTERN PLATEAU (SOUTH) NEAR DE AAR, NORTHERN CAPE PROVINCE

The Environmental Authorisation (EA) issued for the abovementioned application by this Department on 01 March 2013, the amendments to the EA issued on 21 May 2013; 14 August 2014; 25 January 2016; 07 April 2016; 05 July 2018 and your application for amendment to the EA received by this Department on 26 June 2019, the acknowledgement letter issued by the Department on the 01 July 2019 and the correspondence dated 26 July 2019 refer.

Amendment 1:

Based on a review of the reason for requesting an amendment to the above EA, this Department, in terms of Chapter 5 of the Environmental Impact Assessment (EIA) Regulations, 2014, as amended, has decided to amend the project description as follows:

The turbine specifications typed as:

Component	Description/Dimensions
Hub height from ground level	120m
Rotor Diameter	160m
Maximum of turbines	61
Permanent affected area (foundation size)	The foundation size would be 18.4m in diameter that narrows up to 10.6m at the surface (the visible portion) with a depth of 3.5m once completed.
Generation capacity per turbine	2.3MW – 4.0MW
Maximum Output of the Wind Energy Facility	140MW

MS

Is amended to:

Component	Description/Dimensions
Hub height from ground level	120m
Rotor Diameter	160m
Maximum of turbines	25 - 61
Permanent affected area (foundation size)	The foundation size would be 18.4m in diameter that narrows up to 10.6m at the surface (the visible portion) with a depth of 3.5m once completed.
Generation capacity per turbine	2.3MW – 6.0MW
Maximum Output of the Wind Energy Facility	140MW

The reasons for the amendments are as follows:

The applicant intends to increase the generation capacity of the turbines at the Mulilo De Aar 2 South wind energy facility in order to align to current international wind turbine generator (WTG) models, while reducing the number of WTGs at the facility. A fewer number of turbines will also result in less ecological disturbance and improve competitiveness of the project.

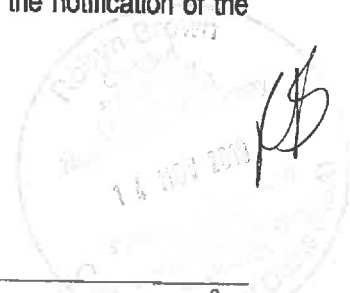
This letter must be read in conjunction with the EA dated 01 March 2013 and subsequent amendments stated above.

In terms of the Promotion of Administrative Justice Act, 2000 (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, 2013 (Act no. 4 of 2013) which stipulates 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 abuses or compromises your personal information in any way.

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 14 (fourteen) days of the date of the EA, of the Department's as well as the provisions regarding the submission of appeals that are contained in the Regulations.

Your attention is drawn to Chapter 2 of National Environmental Management Act, 1998 (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 prescribe the appeal procedure to be followed. Kindly include a copy of this document (National Appeal Regulations, 2014) with the letter of notification to interested and affected parties in this matter.

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



M.S

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: appealsdirector@environment.gov.za;

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

By post: Private Bag X447,
Pretoria,
0001;

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

Yours faithfully



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

Date: 04/09/2019

CC: Nicole Holland	Holland and Associates Environmental Consultants	Email: nicole@hollandandassociates.net
Mr Bryan Fischer	Northern Cape Department of Environment and Nature Conservation	Email: tmakaudi@ncpg.gov.za
Mr S. G. Booysen	Emthanjeni Local Municipality	Email: visser@emthanjeni.co.za



**APPENDIX 3
PROOF OF PAYMENT/ MOTIVATION FOR EXCLUSION**



Absa Online: Notice of Payment

10 December 2019

Dear MULILO RENEWABLE PROJECT DEVELOPMENTS (PTY)

Subject: Notice Of Payment: Dept Environmental A

Please be advised that you made a payment to Dept Environmental A as indicated below.

Transaction number:	8029976F22-44
Payment date:	20191210
Payment made from:	MRPD
Payment made to:	Dept Environmental A
Beneficiary bank name:	ABSA BANK
Beneficiary account number:	1044240072
Bank branch code:	632005
For the amount of:	2,000.00
Immediate interbank payment :	N
Reference on beneficiary statement:	-30.58675/24.27524
Additional comments by payer:	-

Please remember that the following apply to Absa Online payments to non-ABSA bank accounts.

- Payments made on weekdays before 15:30 will be credited to the receiving bank account by midnight of the same day but may not be credited to the beneficiary's bank account at the same time.
- Payments made on weekdays after 15:30 will be credited by midnight of the following day.
- Payments made on a Saturday, Sunday or Public holiday will be credited to the account by midnight of the 1st following weekday.

If you need more information or assistance, please call us on 08600 08600 or +27 11 501 5110 (International calls).

If you have made an incorrect internet banking payment, please send an email to digital@absa.co.za

Yours sincerely

General Manager: Digital Channels

This document is intended for use by the addressee and is privileged and confidential. If the transmission has been misdirected to you, please contact us immediately. Thank you.

APPENDIX 4
LIST OF LAND OWNERS, & NOTIFICATION OF LANDOWNERS OF APPLICATION FOR AMENDMENT OF ENVIRONMENTAL AUTHORISATION

AFFECTED LANDOWNERS

Farm 1	Name	Slingers Hoek The Remainder of Portion 2 of the Farm Slingers Hoek, Farm Number 2, in the Renosterberg Municipality, Division of Hanover, Province of the Northern Cape
	Number	2
	Portion	2 (remaining extent)
	Hectares	1412.3838
	Title deed number	T57794/1999
	District	Renosterberg Municipality, Division of Hanover
	Nearest town	Philipstown
	Province	Northern Cape
	Land owner / contact	Marietha van der Merwe
	Postal Address	P O Box 345, De Aar, 7000
	Telephone	053 631 7168
Farm 2	Name	Slingers Hoek Remaining Extent of the Farm Slingers Hoek, Farm Number 2, in the Renosterberg Municipality, Division of Hanover, Province of the Northern Cape
	Number	2
	Portion	0 (remaining extent)
	Hectares	4219.1954
	Title deed number	T60004/1994
	District	Renosterberg Municipality, Division of Hanover
	Nearest town	Philipstown
	Province	Northern Cape
	Land owner / contact	Johan Hendrik Petrus van der Merwe
	Postal Address	Slingershoek, Posbus 53, De Aar, 7000
	Telephone	053 631 0504
Farm 3	Name	Slingers Hoek Portion 4 of the Farm Slingers Hoek, Farm Number 2, in the Renosterberg Municipality, Division of Hanover, Province of the Northern Cape
	Number	2
	Portion	4
	Hectares	56.5311
	Title deed number	T57794/1999
	District	Renosterberg Municipality, Division of Hanover
	Nearest town	Philipstown
	Province	Northern Cape
	Land owner / contact	Marietha van der Merwe
	Postal Address	P O Box 345, De Aar, 7000
	Telephone	053 631 7168
Farm 4	Name	Knapdaar Portion 1 of the Farm Knapdaar, Farm Number 8, in the Renosterberg Municipality, Division of Hanover, Province of the Northern Cape
	Number	8
	Portion	1
	Hectares	4617.5640
	Title deed number	T64553/1996
	District	Renosterberg Municipality, Division of Hanover
	Nearest town	Philipstown
	Province	Northern Cape

	Land owner / contact	Elsje Magdalena Vermeulen
	Postal Address	P O Box 429, De Aar, 7000
	Telephone	083 380 9913
Farm 5	Name	Maatjes Fountain Portion 5 of the Farm Maatjes Fountain, Farm Number 1, in the Renosterberg Municipality, Division of Hanover, Province of the Northern Cape
	Number	1
	Portion	5
	Hectares	504.7172
	Title deed number	T13665/1964
	District	Emthanjeni Municipality, Division of Hanover
	Nearest town	Philipstown
	Province	Northern Cape
	Land owner / contact	Diepfontein Boedery Bk DP van den Heever
	Postal Address	P O Box 70, De Aar, 7000
	Telephone/ Email	vdh@vodamail.co.za
Farm 6	Name	Vendussie Kuil The Remainder of Portion 2 of the Farm Vendussie Kuil, Farm Number 165, in the Renosterberg Municipality, Division of Philipstown, Province of the Northern Cape
	Number	165
	Portion	2 (remaining extent)
	Hectares	434.3345
	Title deed number	T110355/2004
	District	Renosterberg Municipality, Division of Philipstown
	Nearest town	Philipstown
	Province	Northern Cape
	Land owner / contact	Diepfontein Boedery Bk DP van den Heever
	Postal Address	P O Box 70, De Aar, 7000
	Telephone/ Email	vdh@vodamail.co.za
Farm 7	Name	Vendussie Kuil Remaining Extent of the Farm Vendussie Kuil, Farm Number 165, in the Renosterberg Municipality, Division of Philipstown, Province of the Northern Cape
	Number	165
	Portion	0 (remaining extent)
	Hectares	752.9016
	Title deed number	T54369/2012
	District	Renosterberg Municipality, Division of Philipstown
	Nearest town	Philipstown
	Province	Northern Cape
	Land owner / contact	Petrus Johannes Venter
	Postal Address	Kranskop, Posbus 78, Philipstown, 8795
	Telephone/ Email	kranskopboedery@gmail.com
Farm 8	Name	Vendussie Kuil Portion 11 of the Farm Vendussie Kuil, Farm Number 165, in the Renosterberg Municipality, Division of Philipstown, Province of the Northern Cape
	Number	165
	Portion	11
	Hectares	782.8702

Title deed number	T54369/2012
District	Renosterberg Municipality, Division of Philipstown
Nearest town	Philipstown
Province	Northern Cape
Land owner / contact	Petrus Johannes Venter
Postal Address	Kranskop, Posbus 78, Philipstown, 8795
Telephone/ Email	kranskopboerdery@gmail.com

Holland & Associates



Environmental Consultants

Impact Assessments - Environmental Management Programs - Compliance Monitoring - Process Review

13 December 2019

Dear Landowner

APPLICATION FOR AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION FOR THE ESTABLISHMENT OF A WIND ENERGY FACILITY SITUATED ON THE EASTERN PLATEAU (SOUTH) NEAR DE AAR, NORTHERN CAPE PROVINCE (DEA REFERENCE NUMBER: 12/12/20/2463/1)

Notification of Application for Amendment of the Environmental Authorisation

The purpose of this letter is to inform you, as one of the affected landowners for the proposed project near De Aar, that Mulilo De Aar 2 South (Pty) Ltd (hereafter referred to as the Applicant) is applying for an amendment of the Environmental Authorisation (EA) in terms of the National Environmental Management Act (No. 107 of 1998) (NEMA) and Environmental Impact Assessment (EIA) Regulations (2014), for the proposed Wind Energy Facility (WEF) near De Aar¹ in the Northern Cape Province. Refer to Section 2 below for a description of the proposed amendments.

1. Background

Environmental Authorisation (EA) for the Wind Energy Facility on the Eastern Plateau (South) near De Aar in the Northern Cape Province was granted by the Department of Environmental Affairs (DEA) on 1 March 2013. The authorised project, as amended, entails the construction of up to 61 wind turbines, with a maximum output capacity of the WEF of 140MW.

An Application for Amendment of the EA was submitted by the Applicant to DEA in May 2013 to change the Special Purpose Vehicle (SPV) name from “Mulilo Renewable Energy (Pty) Ltd” to “Longyuan Mulilo De Aar 2 South (Pty) Ltd”. This amendment of the EA was granted by DEA on 21 May 2013.

On the 10 July 2014, the Applicant submitted a second Application for Amendment of the Environmental Authorisation to DEA, for the following amendments: Amendment to extend the validity period; amendment to the property descriptions of the EA; and amendments to Conditions 43, 44 and 45. The amendment of the EA was granted by DEA on 14 August 2014.

In June 2015, the Applicant submitted a third Application for Amendment of the Environmental Authorisation to DEA to amend the project description of the EA. This amendment of the EA was granted by DEA on 25 January 2016.

¹ The project would be located on Slingers Hoek (Farm No. 2 Remainder of Portion 2 and Remainder); Slingers Hoek (Farm No. 2 Portion 4), Knapdaar (Farm No. 8 Portion 1); Maatjes Fountain (Farm No. 1 Portion 5); Vendussie Kuil (Farm No. 165 Remainder of Portion 2), Vendussie Kuil (Farm No. 165 Portion 11 and Remainder) within the Emthanjeni Local Municipality and Renosterberg Local Municipality in the Northern Cape Province.

In March 2016, the Applicant submitted a fourth Application for Amendment for the Environmental Authorisation to DEA to amend the SPV name from Longyuan Mulilo De Aar 2 South (Pty) Ltd to "Mulilo De Aar 2 South (Pty) Ltd, and to extend the validity period of the EA. The amendment of the EA was granted by DEA on 7 April 2016.

In March 2017, the Applicant submitted an Application for Amendment of the Department of Environment and Nature Conservation (DENC) EA to DENC, to extend the validity period of the DENC EA. The amendment of the EA (extension of the validity period) was granted by DENC on 20 September 2017.

In June 2018, an Application for Amendment of the DEA EA was submitted to DEA, for the proposed extension of the validity period, update to the details of the holder of the EA, and correction of editorial errors in the property description in the EA. The amendment to the EA was granted by DEA on 21 June 2018.

In June 2019, the Applicant submitted an Application for Amendment of the DEA EA to DEA, for an amendment to the project description in the EA, as amended (i.e. to increase in generation capacity of the individual turbines). The amendment to the EA was granted by DEA on 6 September 2019.

The Applicant is now submitting an Application for Amendment of the Environmental Authorisation (EA) to DEA to amend the project description of the EA, i.e. to allow for a small increase in the rotor diameter of the turbines at the WEF. The Application is being submitted to DEA in terms of the National Environmental Management Act (No. 107 of 1998) (NEMA) Environmental Impact Assessment (EIA) Regulations (2014), Regulation 29 of GN R. 982, as amended. Holland & Associates Environmental Consultants has been appointed by the Applicant to undertake the requisite Application for Amendment of the Environmental Authorisation for the project, in accordance with the NEMA (No. 107 of 1998) EIA Regulations (2014), as amended.

2. Application for Amendment of the Environmental Authorisation

2.1 Proposed amendment to the project description

The Applicant proposes to amend the rotor diameter of the turbines at the De Aar 2 South Wind Energy Facility from the approved 160m to a rotor diameter of 165m. The proposed amendment would require an amendment to the project description included in the EA, as amended (EA amendment dated 6 September 2019) as follows:

	Approved	Proposed amendment (underlined)
Hub height from ground level	120m	120m
Rotor diameter	160m	<u>165m</u>
Maximum number of turbines	25 - 61	25 - 61
Permanent affected area (foundation size)	The foundation size would be 18.4m in diameter that narrows up to 10.6m at the surface (the visible portion) with a depth of 3.5m once completed.	The foundation size would be 18.4m in diameter that narrows up to 10.6m at the surface (the visible portion) with a depth of 3.5m once completed.
Generation capacity per turbine	2.3MW – 6.0 MW	2.3MW – 6.0 MW
Maximum output of the WEF	140MW	140MW

According to the Applicant, only the rotor diameter would increase by 5m (which is a 3% increase in the diameter, and would be a 6.35% increase in the swept area). The other dimensions of the turbines and generation capacity of the WEF would stay the same (i.e. as authorised). The 5m increase in rotor size will have no impact on the physical parameters and operation of the wind turbine. Furthermore, the layout of the WEF would remain as currently authorised.

3. Motivation for proposed amendment

The need for the proposed increase in rotor diameter is due to wind turbine market continuous development of larger wind turbines. These continuous developments and improvements allow wind turbines to be more efficient, resulting in cheaper electricity costs, fewer turbines per wind farm, and a reduced overall impact on the environment (Mulilo De Aar 2 South (Pty) Ltd).

4. Way Forward

The Application for Amendment of the Environmental Authorisation is scheduled to be submitted to DEA in the week of 16 December 2019 for decision making. All registered Interested and Affected Parties will be notified in writing of DEA's decision.

Should you have any comments or queries at this stage, please do not hesitate to contact the undersigned.

Yours sincerely



NICOLE HOLLAND (Pr. Sci. Nat.)

For: Holland & Associates - Environmental Consultants

List of REGISTERED LETTERS

Lys van GEREGISTREERDE BRIEWE

(With an insurance option/met 'n versekeringsopsie)



Full tracking and tracing/Volledige volg en spoor

Name and address of sender
 Naam en adres van afsender Holland & Associates
PO Box 3108
Tokai, 7966

Enquiries/Navrae
 Toll-free number
 Tolvry nommer
0800 111 502

No	Name and address of addressee Naam en adres van geadresseerde	Insured amount Versekerde bedrag	Insurance fee Versekeringsgeld	Postage Posgeld	Service fee Diensgeld	Affix Track and Trace customer copy Plak Volg-en-Spoor-kliëntafskrif
1	<u>Petrus Johannes Venter</u>					REGISTERED LETTER (with a domestic insurance option) ShareCall 0860 111 502 www.sapo.co.za RC379937505ZA CUSTOMER COPY 301028R
2	<u>DP van den Heever</u>					REGISTERED LETTER (with a domestic insurance option) ShareCall 0860 111 502 www.sapo.co.za RC379937616ZA CUSTOMER COPY 301028R
3	<u>Elsje Magdalena Vermeulen</u>					REGISTERED LETTER (with a domestic insurance option) ShareCall 0860 111 502 www.sapo.co.za RC379937602ZA
4	<u>Johan Hendrik Petrus van der Merwe</u>					REGISTERED LETTER (with a domestic insurance option) ShareCall 0860 111 502 www.sapo.co.za RC379937593ZA
5	<u>Marietha van der Merwe</u>					REGISTERED LETTER (with a domestic insurance option) ShareCall 0860 111 502 www.sapo.co.za RC379937580ZA CUSTOMER COPY 301028R

REGISTERED LETTER
GEREGISTREERDE BRIEF

(with an insurance option/met 'n versekeringsopsie)



Full tracking and tracing/Volledige volg en spoor

Addressed to/Geadresseer aan

Postage paid R _____ C
 Service fee/Diensgeld R _____ C
 Insurance/Versekering R _____ C
Total/Totaal R _____ C

Insured value of contents
 Versekerde waarde van inhoud R _____ C

Enquiries/Navrae
 Toll-free number
 Tolvry nommer
0800 111 502

Initial of accepting officer



The value of the contents of this letter is as indicated and compensation is not payable for a letter received unconditionally. Compensation is limited to R100.00. No compensation is payable without documentary proof. Optional insurance up to R2 000.00 is available and applies to domestic registered letters only.

Die waarde van die inhoud van hierdie brief is soos aangedui en vergoeding sal nie betaal word vir 'n brief wat sonder voorbehoud ontvang word nie. Vergoeding is beperk tot R100.00. Geen vergoeding is sonder dokumentêre bewys betaalbaar nie. Opsionele versekering tot R2 000.00 is beskikbaar en is slegs op binnelandse geregistreerde briewe van toepassing.

Affix Track and Trace customer copy

Plate Volg-en-Spoor-kliëntafskrif

Paraaf van aanneembeampte

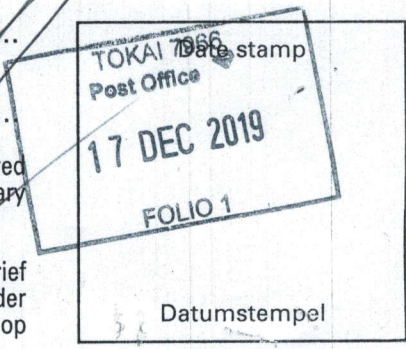
Datumstempel

Signature of client
 Handtekening van kliënt.....

Signature of accepting officer
 Handtekening van aanneembeampte.....

The value of the contents of these letters is as indicated and compensation is not payable for a letter received unconditionally. Compensation is limited to R100,00. No compensation is payable without documentary proof. Optional insurance of up to R2 000,00 is available and applies to domestic registered letters only.

Die waarde van die inhoud van hierdie briewe is soos aangedui en vergoeding sal nie betaal word vir 'n brief wat sonder voorbehoud ontvang word nie. Vergoeding is beperk tot R100,00. Geen vergoeding is sonder dokumentêre bewys betaalbaar nie. Opsionele versekering van tot R2 000,00 is beskikbaar en is slegs op binnelandse geregistreerde briewe van toepassing.



**APPENDIX 5
DECLARATION OF THE EAP**

**APPENDIX 5
DECLARATION OF THE EAP**

I, Nicole Holland, declare that –

- I act as the independent environmental assessment practitioner in this application;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I will take into account, to the extent possible, the matters listed in Regulation 14 of the Regulations when preparing the application and any report relating to the application;
- I undertake to disclose to the applicant and the Competent Authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the Competent Authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the Competent Authority, unless access to that information is protected by law, in which case it will be indicated that such information exists and will be provided to the Competent Authority;
- I will perform all obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I am aware of what constitutes an offence in terms of Regulation 48 and that a person convicted of an offence in terms of Regulation 48(1) is liable to the penalties as contemplated in Section 49B of the Act.

Disclosure of Vested Interest (delete whichever is not applicable)

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Regulations;
- I have a vested interest in the proposed activity proceeding, such vested interest being:

N Holland

Signature of the environmental assessment practitioner

Holland & Associates Environmental Consultants

Name of company:

13 December 2019

Date

UNDERTAKING UNDER OATH/ AFFIRMATION

I, Nicole Holland, swear under oath / affirm that all the information submitted or to be submitted for the purposes of this application is true and correct.

N Holland

Signature of the environmental assessment practitioner

Holland & Associates Environmental Consultants

Name of company

13/12/2019

Date

M Hougaard

Signature of the commissioner of oaths

17/12/2019

Date

.....
I certify that this document is a true and correct
copy of the original thereof

M Hougaard

Magdel Hougaard
Commissioner of Oaths
Professional Accountant (SA)
Member number 27003
Unit B3C, Tokai Village, Vans Road, Tokai, 7945

17 DEC 2019

**APPENDIX 6
SPECIALIST COMMENTS**

Appendix 6a: Bat Specialist Comment

Appendix 6b: Avian Specialist Comment (Doug Harebottle)

Appendix 6c: Avian Specialist Comment (Chris van Rooyen)

Appendix 6d: Visual Specialist Comment

APPENDIX 6a
BAT SPECIALIST COMMENT

25 November 2019

Proposed amendment to the environmental authorisation for the Mulilo De Aar 2 South Wind Energy Facility (WEF) in the Northern Cape, and the impacts on bats: TURBINE ROTOR DIAMETER INCREASE

Animalia Consultants (Pty) Ltd undertook the bat impact assessment for the Mulilo De Aar 2 South WEF in early 2012, and the pre-construction bat monitoring and impact assessment in April 2013 to April 2014. An addendum report with updated impact assessments as well as updated mitigation measures were compiled in 2015 by Animalia. Mulilo De Aar 2 South (Pty) Ltd wishes to amend the rotor diameter of the turbines by 5m, to keep up with the wind turbine market's continuous development of larger and therefore more efficient wind turbines (**Table 1**). The hub height of the turbines, generation capacity per turbine and layout of the WEF would remain as currently authorised. Furthermore, according to the Applicant, the internal reticulation lines (voltage and layout) would stay as authorised. The foundation size will also remain unchanged.

Table 1: Authorized and proposed amendments.

Aspect	Approved	Proposed Amendment
Generating capacity per turbine	2.3 – 6MW	2.3 – 6MW
Rotor diameter	160m	165m
Hub height	120m	120m
Number of turbines	25 - 61	25 - 61
Permanent affected area (foundation size)	The foundation size would be 18.4m in diameter that narrows up to 10.6m at the surface (the visible portion) with a depth of 3.5m once completed.	The foundation size would be 18.4m in diameter that narrows up to 10.6m at the surface (the visible portion) with a depth of 3.5m once completed.
Generation capacity of the WEF	140MW	140MW

ANIMALIA

c o n s u l t a n t s

The assessment of impacts as well as the mitigation measures specified in the 2015 addendum report remain unchanged by the proposed amendment of an increased rotor diameter (only 2.5m increase in rotor swept radius).

In summary, the proposed amendment would not result in an increased level or change in the nature of impacts on bats, and is acceptable from a bat sensitivity perspective.

If there are any queries, please do not hesitate to contact me.



Werner Marais
Managing Director
werner@animalia-consult.co.za
Pr.Sci.Nat. (Zoological Science) 400169/10

**APPENDIX 6b
AVIFAUNAL SPECIALIST COMMENT
(DOUG HAREBOTTLE)**

17 Francey Street
New Park
Kimberley
8301

17 November 2019

Nicole Holland
Holland and Associates Environmental Consultants
Po Box 31108
Tokai
7966

Dear Nicole

**RE: AMENDMENT TO AUTHORISATION FOR MULILO DE AAR 2 SOUTH WIND ENERGY FACILITY –
SPECIALIST COMMENT ON IMPACT OF AVIFAUNA (DIAMETER INCREASE IN ROTOR BLADES)**

With reference to the above and your email dated 23 October 2019, herewith my specialist comment regarding the rotor diameter amendment of the Mulilo De Aar 2 South WEF and proposed impacts on the avifauna.

The application deals solely with an increase in the diameter of the rotor blades. The proposed amendment entails increasing the rotor diameter of each turbine by 5m (i.e. a 3% increase in the diameter), which would represent a 6.35% increase in the swept area. The layout and footprint of the WEF would remain as currently authorised.

Based on the above, and a re-assessment of the potential avifaunal impacts, please note the following:

The proposed amendment is likely not to result in an increased level of impact due to the increased blade diameter and resultant larger sweep area. An increased rotor diameter will create an additional 6.35% collision zone outside of the original sweep area that was initially authorised. However, as the facility is yet to be constructed the impact of an increase in blade length will not be able to be measured against shorter blade lengths (i.e. original authorisation) and therefore collision rates remain unknown and hence a change in significance remains unknown. Based on my comments from my amended 2015 report and comments from Chris van Rooyen there is no hard evidence to suggest that an increase in rotor swept area translates to higher collision risk. Any impact (and therefore change in significance) will only be determined through rigorous post-construction monitoring when the turbines become operational.

It should be noted, however, that a recent study in the USA showed that taller turbines with shorter blade lengths reduces the impact on birds and that when separating hub height from blade length, blade length was considered the most important factor (Miao et al. 2019) when birds were considered. However, within the southern African context and as eluded to above, these aspects remain largely understudied or unknown but nevertheless they should be taken into consideration in the final design and construction of the turbines at the site.

It is also important to be cognate of the fact that birds of prey, including vultures, which regularly use thermals and often soar vertically above turbines may be faced with an increased collision zone given a larger sweep area from longer blades. These potential 'strike zones' for raptors and other soaring birds are significant and some evidence already shows that these birds find it difficult judging the pinnacle or vertical height of a rotating blade (see

<https://www.youtube.com/watch?v=QRSAvD8VAbI>). Although each turbine's increased sweep zone will act independently there are likely to be cumulative impacts across the entire footprint of the facility as birds negotiate flightpaths in and around the WEF. As stated above, these impacts will however only be determined during post-construction monitoring at the facility.

As noted in my previous specialist comment (dated 2 May 2019), where the physical parameters of the turbines are likely to change (e.g. longer blade length) which may result in an increased level of impacts on the avifauna (in particular high-risk species), a re-assessment may be considered. However, in this case, given that the facility is yet to be constructed and a change in significance is therefore unknown, a full re-assessment will unlikely be required. Furthermore, detailed information on avifaunal impacts can be gathered during the post-construction monitoring phase which will be a critical link to this amendment being authorised so that the level of significance can be checked against the level of impact in the EIA report and final authorisation.


The proposed amendment should not result in altering the mitigation measures (i.e. marking and lighting of the turbines) outlined in the original (2012) specialist report for the project and therefore remain the same for this amended application. Furthermore, no additional mitigation measures will be required for the amendments proposed.

In conclusion, based on the above, the proposed amendments are anticipated to result in the level of impact on birds remaining unchanged (i.e. Medium). The nature of the impact would also remain unchanged (i.e. negative).

I trust that the above has satisfactorily outlined my specialist comment regarding avifaunal impacts based on the proposed amendments.

Should you require any additional information or have any queries please do not hesitate to contact me.

Kind regards



Dr Doug Harebottle (PhD, UCT)

Avifaunal specialist

Reference

Miao, R., Ghosh, P.N., Khanna, M., Wang, W. and Rong, J., 2019. Effect of wind turbines on bird abundance: A national scale analysis based on fixed effects models. *Energy Policy*, 132, pp.357-366. Available at <https://www.sciencedirect.com/science/article/pii/S0301421519302897#!>

**APPENDIX 6c
AVIFAUNAL SPECIALIST COMMENT
(CHRIS VAN ROOYEN)**

Nicole Holland
Holland and Associates Environmental Consultants
Po Box 31108
Tokai
7966

29 November 2019

Dear Nicole

AMENDMENT TO THE ENVIRONMENTAL AUTHORISATION FOR THE DE AAR 2 SOUTH WIND ENERGY FACILITY SITUATED ON THE EASTERN PLATEAU (SOUTH) NEAR DE AAR, IN THE NORTHERN CAPE PROVINCE

Your email of 30 October 2019 concerning the new proposed turbine dimensions refers.

In your email you stated as follows: "According to the Applicant, only the rotor diameter would increase by 5m (which is a 3% increase in the diameter, and would be a 6.35% increase in the swept area). The other dimensions of the turbines and generation capacity of the WEF would stay the same (i.e. as authorised). The 5m increase in rotor size will have no impact on the physical parameters and operation of the wind turbine. Furthermore, the layout of the WEF would remain as currently authorised. The need for the proposed increase in rotor diameter is due to wind turbine market continuous development of larger wind turbines. These continuous developments and improvements allow wind turbines to be more efficient, resulting in cheaper electricity costs, fewer turbines per wind farm, and a reduced overall impact on the environment (Mulilo De Aar 2 South (Pty) Ltd)."

It is my considered opinion that the proposed changes to the turbine dimensions will not result in an increased level or change in the nature of the impacts on birds, as assessed in the pre-construction monitoring report dated July 2014.

In arriving at this finding, I have considered the following aspects

1 Published scientific studies

The relationship between bird mortality and turbine dimensions is not altogether clear. Most of the studies to date found turbine dimensions to play a relatively unimportant role in the magnitude of the collision risk relative to other factors such as topography, turbine location, morphology, behaviour and a species' inherent ability to avoid the turbines, and may only be relevant in combination with other factors, particularly wind strength and topography (see Howell 1997, Barrios & Rodriguez 2004; Barclay *et al.* 2007, Krijgsveld *et al.* 2009, Smallwood 2013; Everaert 2014). However, three (3) studies did find a correlation between hub height and mortality (De Lucas *et al.* 2008; Loss *et al.* 2013 and Thaxter *et al.* 2017).

The summary below provides a list of published findings on the topic:

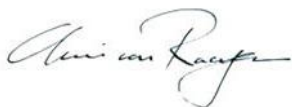
- Howell *et al.* 1997 states on p.9: "The evidence to date from the Altamont Pass does not support the hypothesis that the larger rotor swept area (RSA) of the KVS-33 turbines contributes

proportionally to avian mortality, i.e. larger area results in more mortalities. On the contrary, the ratio of K-56 turbines to KVS-33 turbines rather than RSA was approximately 3.4:1 which is consistent with the 4.1:1 mortality ratio. It appears that the mortality occurred on a per-turbine basis, i.e. that each turbine simply presented an obstacle."

- Barrios & Rodriguez 2004 states on p. 80: *"Most deaths and risk situations occurred in two rows at PESUR with little space between consecutive turbines. This windwall configuration (Orloff & Flannery 1992) might force birds that cross at the blade level to take a risk greater than in less closely spaced settings. However, little or no risk was recorded for five turbine rows at PESUR having exactly the same windwall spatial arrangement of turbines. Therefore, we conclude that physical structures had little effect on bird mortality unless in combination with other factors."*
- Barclay et al. 2007 states on p. 384: *"Our analysis of the data available from North America indicates that this has had different consequences for the fatality rates of birds and bats at wind energy facilities. It might be expected that as rotor swept area increased, more animals would be killed per turbine, but our analyses indicate that this is not the case. Rotor-swept area was not a significant factor in our analyses. In addition, there is no evidence that taller turbines are associated with increased bird fatalities. The per turbine fatality rate for birds was constant with tower height."*
- De Lucas et al. 2008 states on p. 1702: *"All else being equal, more lift is required by a griffon vulture over a taller turbine at a higher elevation and we found that such turbines killed more vultures compared to shorter turbines at lower elevations"*.
- Krijgsveld et al. 2009 states on p. 365: *"The results reported in this paper indicate that collision risk of birds with larger multi-MW wind turbines is similar to that with smaller earlier-generation turbines, and much lower than expected based on the large rotor surface and high altitude-range of modern turbines. Clearly, more studies of collision victims are needed before we can confidently predict the relationship between size and configuration of wind turbines and the risk for birds to collide with a turbine."*
- Smallwood et al. 2013 states on p.26 – 27 (see also Fig 9 on p.30): *"Red-tailed hawk (Buteo jamaicensis) and all raptor fatality rates correlated inversely with increasing wind-turbine size (Figs. 9A, B). Thousands of additional MW of capacity were planned or under construction in 2012, meaning that the annual toll on birds and bats will increase. However, the expected increase of raptor fatalities could be offset by reductions of raptor fatalities as older wind projects are repowered to new, larger wind turbines, especially if the opportunity is taken to carefully site the new wind turbines (Smallwood and Karas 2009, Smallwood et al. 2009)."*
- Loss et al. 2014 states on p. 208: *"The projected trend for a continued increase in turbine size coupled with our finding of greater bird collision mortality at taller turbines suggests that precaution must be taken to reduce adverse impacts to wildlife populations when making decisions about the type of wind turbines to install."*

- Everaert, 2014 states on p. 228: “Combined with the mortality rates of several wind farms in the Netherlands (in similar European lowland conditions near wetlands or other areas with water), no significant relationship could be found between the number of collision fatalities and the rotor swept area of the turbines (Fig. 4). In contrast to more common landscapes, Hötker (2006) also found no significant relationship between mortality rate and the size of wind turbines near wetlands and mountain ridges.”
- In a recent paper on the subject by Thaxter *et al.* (2017), the authors conducted a systematic literature review of recorded collisions between birds and wind turbines within developed countries. They related collision rate to species-level traits and turbine characteristics to quantify the potential vulnerability of 9 538 bird species globally. For birds, larger turbine capacity (megawatts) increased collision rates; however, deploying a smaller number of large turbines with greater energy output reduced total collision risk per unit energy output. In other words, although there was a positive relationship between wind turbine capacity and collision rate per turbine, the strength of this relationship was insufficient to offset the reduced number of turbines required per unit energy generation with larger turbines. *Therefore, to minimize bird collisions, wind farm electricity generation capacity should be met through deploying fewer, large turbines, rather than many, smaller ones.*

In the case of the De Aar 2 South WEF, the proposed increase in rotor swept area is relatively insignificant, namely only a 6.35% increase from what was authorized. It is thus concluded that, even if the turbine dimensions are a factor in the size of the collision risk, an increase of this small magnitude is unlikely to materially influence the collision risk to avifauna.



Chris van Rooyen

References:

- Barclay R.M.R, Baerwald E.F and Gruver J.C. 2007. Variation in bat and bird fatalities at wind energy facilities: assessing the effects of rotor size and tower height. *Canadian Journal of Zoology*. 85: 381 – 387.
- Barrios, L., Rodríguez, A., 2004. Behavioural and environmental correlates of soaring-bird mortality at on-shore wind turbines. *J. Appl. Ecol.* 41, 72–81.
- De Lucas, M., Janss, G.F.E., Whitfield, D.P., Ferrer, M., 2008. Collision fatality of raptors in wind farms does not depend on raptor abundance. *J. Appl. Ecol.* 45, 1695–1703.

- Everaert, J. 2014. Bird Study (2014) 61, 220–230, <http://dx.doi.org/10.1080/00063657.2014.894492>.
- Howell, J.A. 1997. Avian Mortality at rotor swept area equivalents Altamont Pass and Montezuma Hills, California. Report for Kenetech Wind Power.
- Krijgsveld K.L., Akershoek K., Schenk F., Dijk F. & Dirksen S. 2009. Collision risk of birds with modern large wind turbines. *Ardea* 97(3): 357–366.
- Loss S.R., Will, T., Marra, P.P. Estimates of bird collision mortality at wind facilities in the contiguous United States. *Biological Conservation* 168 (2013) 201–209.
- Pfeiffer, M., Ralston-Patton, S. 2018. Cape Vultures and Wind Farms. Guidelines for impact assessment, monitoring and mitigation. BirdLife South Africa, Johannesburg.
- Ralston-Paton, S., Smallie, J., Pearson, A.J., Ramalho, R. 2017. Wind Energy Impacts on Birds in South Africa: A Preliminary review of the results of operational monitoring at the first wind farms of the Renewable Energy Independent Power Producer Procurement Programme in South Africa. BLSA. Occasional Report Series: 2.
- Ralston-Patton, 2017. Verreux's Eagles and Wind Farms. Guidelines for impact assessment, monitoring and mitigation. BirdLife South Africa.
- Smallwood, K.S. 2013. Comparing bird and bat fatality rate estimates among North American Wind-Energy projects. *Wildlife Society Bulletin* 37(1):19–33; 2013; DOI: 10.1002/wsb.260.
- Taylor, M.R., Peacock F, & Wanless R.W (eds.) 2015. The Eskom Red Data Book of Birds of South Africa, Lesotho and Swaziland. BirdLife South Africa, Johannesburg, South Africa.
- Thaxter, C.B., Buchanan, G.M., Carr, J., Butchart, S.H.M., Newbold, T., Green, R.E., Tobias, J.A., Foden, W.B., O'Brien, S., And Pearce-Higgins, J.W. Proceedings of the Royal Society B, volume 284, issue 1862. Published online 13 September 2017. DOI: 10.1098/rspb.2017.0829.
- Van Rooyen, C., Froneman, A., Laubscher, N. 2018. AVIFAUNAL IMPACT ASSESSMENT: Scoping and Environmental Impact Assessment for the proposed development of the Kuruman Phase 1 Wind Energy Facility near Kuruman in the Northern Cape.

APPENDIX 6d
VISUAL SPECIALIST COMMENT

PROPOSED APPLICATION FOR AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION FOR THE PROPOSED WIND ENERGY FACILITY SITUATED ON THE PLATEAU (SOUTH) NEAR DE AAR, NORTHERN CAPE PROVINCE (DEA REF NO.: 12/12/20/2463/AM3)

Specialist Visual Impact Assessment, January/March 2012 and later amendments refer.
Date of this Specialist Comment: October 2019

1.0 INTRODUCTION

1.1 Background

KHLA was commissioned by Holland and Associates, Environmental Consultants, October 2019, to undertake this Specialist Comment study on behalf of the Applicant.

1.2 Original Approved Scheme

Longyuan Mulilo De Aar 2 South (Pty) Ltd, (Applicant) was granted Environmental Authorisation from the Department of Environmental Affairs (DEA) to establish a Wind Energy Facility (WEF) and associated infrastructure on the eastern plateau of De Aar (approximately 20 km to the east of the town) 'De Aar 2 South WEF'. The proposed development site is approximately 12,832ha, in 8 portions of 4 farms.

1.3 Current Amendment Option

Longyuan Mulilo De Aar 2 South (Pty) Ltd, (Applicant) now propose to amend the project description of the proposed WEF. The *Approved Option* will be compared with the new *Proposed Amended Option*; this requires re-assessment of potential impacts associated with the project to update the specialist study.

The Amendment is to the rotor diameter:

	Approved	Proposed amendment (underlined)
Hub height from ground level	120m	120m
Rotor diameter	160m	<u>165m</u>
Maximum nr of turbines	25 - 61	25 - 61
Permanent affected area (foundation size)	The foundation size would be 18.4m in diameter that narrows up to 10.6m at the surface (the visible portion) with a depth of 3.5m once completed.	The foundation size would be 18.4m in diameter that narrows up to 10.6m at the surface (the visible portion) with a depth of 3.5m once completed.
Generation capacity per turbine	2.3MW – 6.0 MW	2.3MW – 6.0 MW
Maximum output of the WEF	140MW	140MW

The other dimensions of the turbines and generation capacity of the WEF would stay the same (i.e. as authorised). No changes are proposed to the layout, the main transmission lines to evacuate the power to Hydra nor the substations and control buildings.

1.4 Current Amendment Option: Detail

The applicant proposes to increase the rotor diameter of the turbines for the De Aar 2 South Wind Energy Facility (WEF) from 160m to 165m. The proposed amendment will require an Application for Amendment of the Environmental Authorisation (EA) for the project.

This change would result in a 3% increase in rotor diameter and would be a 6.35% increase in the swept area. The 5m increase in rotor size will have no impact on the physical parameters and operation of the wind turbine. Furthermore, the layout of the WEF would remain as currently authorised.

The need for the proposed increase in rotor diameter is due to wind turbine market continuous development of larger wind turbines. These continuous developments and improvements allow wind turbines to be more efficient, resulting in cheaper electricity costs, fewer turbines per wind farm, and a reduced overall impact on the environment. (Mulilo De Aar 2 South (Pty) Ltd).

2.0 DISCUSSION

Although this change of a 3% increase in rotor diameter should have only a limited impact, the receptors likely to be most affected by this change were re-assessed.

Localities from which the development would be seen are farmsteads and transport corridors. These sensitive receptors would be in a similar spatial relationship with the proposed turbines in *the Approved Option* and the *Proposed Amended Option*.

The population centre of De Aar is not visually impacted by this layout. Local Farmsteads affected are unchanged from those impacted upon by the *Approved Option*, and are: Slingshoek, Meyersfontein, Witput, Kranskop, and Vendusiekuil; these farmsteads are close to 3km away from the nearest turbines.

Receptors using transport corridors: for travellers in either direction, the visual impact from the R48 would be continuous for a period of time similar to, but no greater than, the *Approved Option*. For travellers in either direction, the visual impact from the R389 would be brief and distant. Rail line, passenger and freight services would be affected to the same degree as before.

3.0 CONCLUSIONS

The increase in rotor diameter and the swept area is assessed as resulting in an impact rated neutral. This is due to the distance over which the change would be seen, and it is assessed as having no measurable impact at a distance of 3km and more.

Opinion and Recommendation

Having reviewed the original VIA for this project and subsequent amendments, and noted that the nature of the impacts resulting from the rotor diameter were originally assessed, it is determined that the proposed amendment would not result in an increased level or change in the nature of the visual impacts.

Further because the level of impact is assessed as neutral, no change to the significance of the impact has been identified, no comparison of impacts has been made and no impact tables have been compiled.

The proposed amendment to rotor diameter would result in no change to the significance of the impact and in terms of the visual impact of the layout as a whole, could proceed.

Karen Hansen
30 October 2019