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**PART 2 ENVIRONMENTAL AUTHORISATION (EA) AMENDMENT PROCESS
FOR THE KUDUSBERG WIND ENERGY FACILITY (WEF)
NEAR SUTHERLAND, WESTERN AND NORTHERN CAPE PROVINCES**

**Report by
Johann Lanz**

5 January 2021

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1 INTRODUCTION

This document is an amendment to, and should be read together with, the original Agricultural Impact Assessment for Kudusberg Wind Energy Facility Project, which was compiled in October 2018 (Lanz, 2018). This documents have been compiled in response to a Part 2 Amendment in terms of Regulation 31 of the National Environmental Management Act (Act No. 107 of 1998) (NEMA) and the EIA Regulations, 2014, as amended (GN R 982) being undertaken on the authorised 325 MW Kudusberg WEF.

The objectives of this Amendment Specialist Amendment Letter is:

- to identify and assess all potential / new impacts of the proposed amendment on agricultural resources and agricultural production potential,
- to provide assess / recommended mitigation measures, monitoring requirements, and rehabilitation guidelines for all identified impacts that may arise as part of the amendment.
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Johann Lanz, who conducted the original October 2018 assessment, was also appointed as an independent specialist to conduct this Specialist Amendment Letter

2 PROJECT DESCRIPTION

Kudusberg Wind Farm (Pty) Ltd (hereafter referred to as “Kudusberg Wind Farm”) was issued with an Environmental Authorisation (EA) for the proposed construction of the 325MW Kudusberg Wind Energy Facility (WEF) and associated infrastructure, between Matjiesfontein and Sutherland in the Western and Northern Cape Provinces. The EA was granted on 25 March 2019 (DEFF Reference No.: 14/12/16/3/3/1/1976), and subsequently amended on 04 April 2019 to correct a minor naming error (14/12/16/3/3/1/1976/AM1).

The layout for the authorised Kudusberg WEF is presented in **Figure 1** below

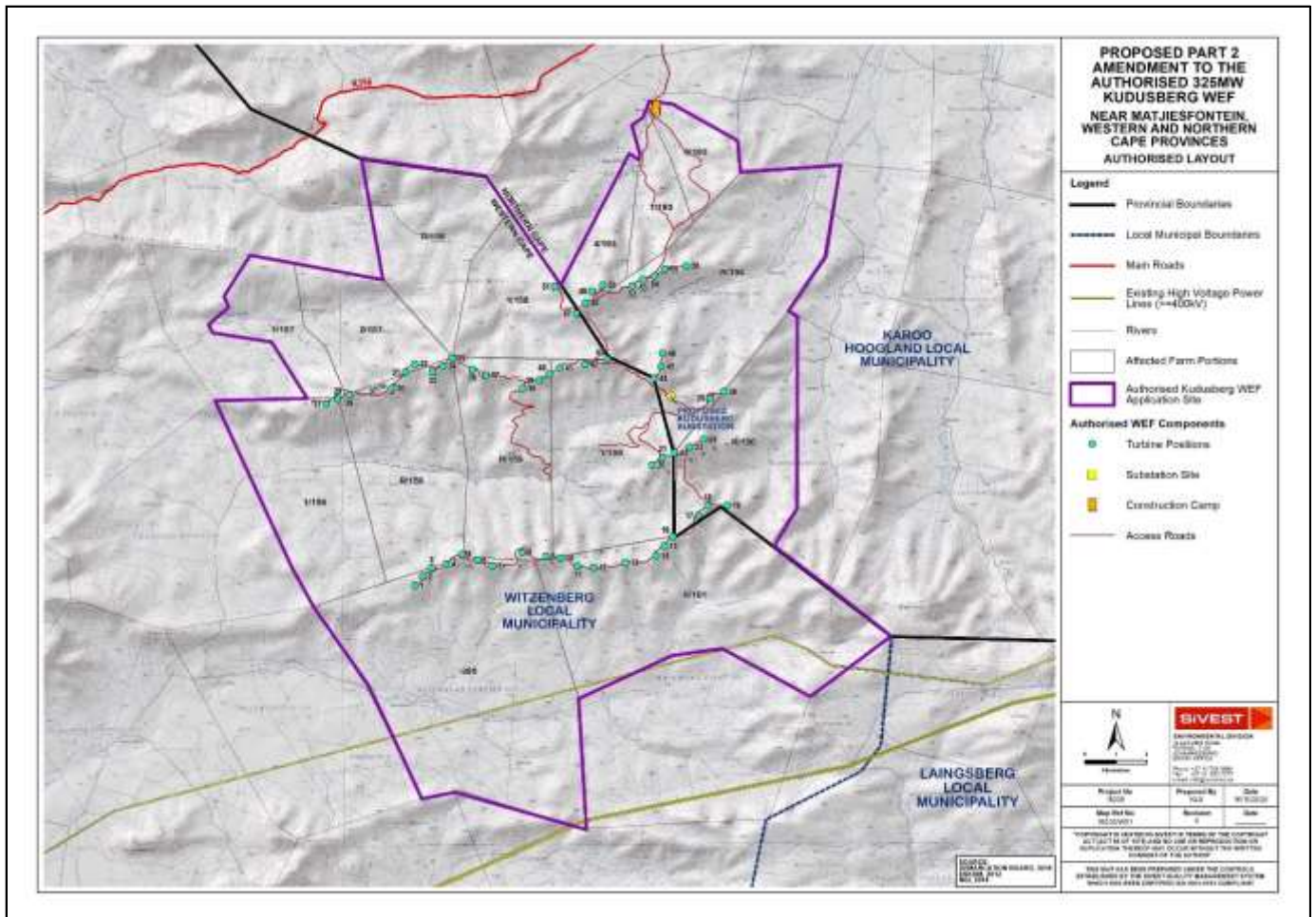


Figure 1: Layout map for authorised Kudusberg WEF (14/12/16/3/3/1/1976/AM1)

Kudusberg Wind Farm is now proposing to submit a Part 2 EA Amendment Application to split the authorised Kudusberg WEF (14/12/16/3/3/1/1976/AM1) into two (2) separate smaller WEF projects, namely the Kudusberg WEF and Oya WEF, which will result in a number of technical and administrative changes detailed below in **Table 1**. The split is being proposed to allow the projects to be suitable for numerous opportunities such as either the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), Risk Mitigation Independent Power Producer Procurement Programme (RMIPPPP), other government run procurement programmes that may arise or for sale to private entities, if enabled and/or required in the drive for energy security in South Africa.

Following the split, the northern section of the authorised WEF will become the Oya WEF (**Figure 2**), while the southern section of the authorised WEF will remain known as the Kudusberg WEF (authorised under 14/12/16/3/3/1/1976/AM1) (**Table 1**) (**Figure 3**). In addition to the split, the final layout for the Oya WEF has been assessed and is acceptable from an agricultural impact perspective.¹

The respective layouts for the proposed Kudusberg WEF (southern section of the authorised WEF) and Oya WEF (northern section of the authorised WEF) are presented in **Figure 2** and **Figure 3** below.

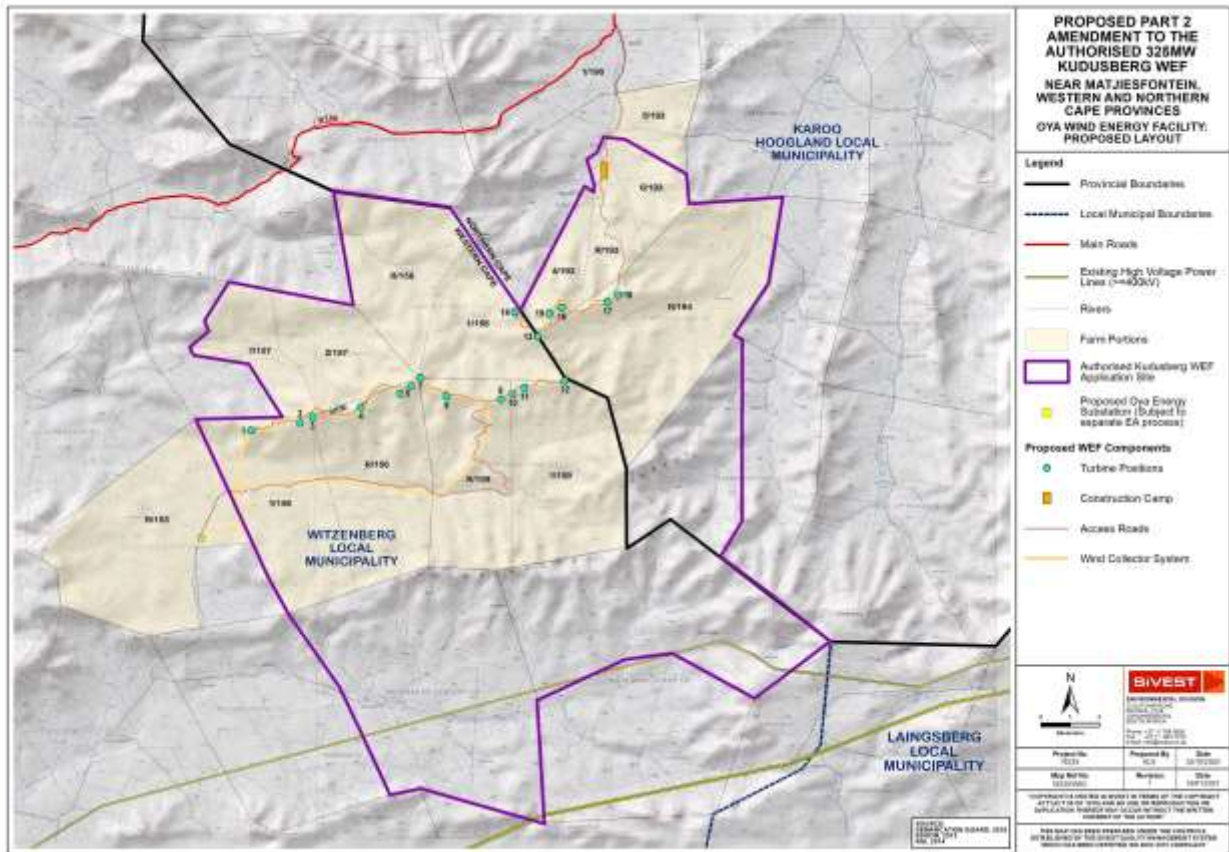


Figure 2: Layout map for proposed Oya WEF (northern section of the authorised WEF)

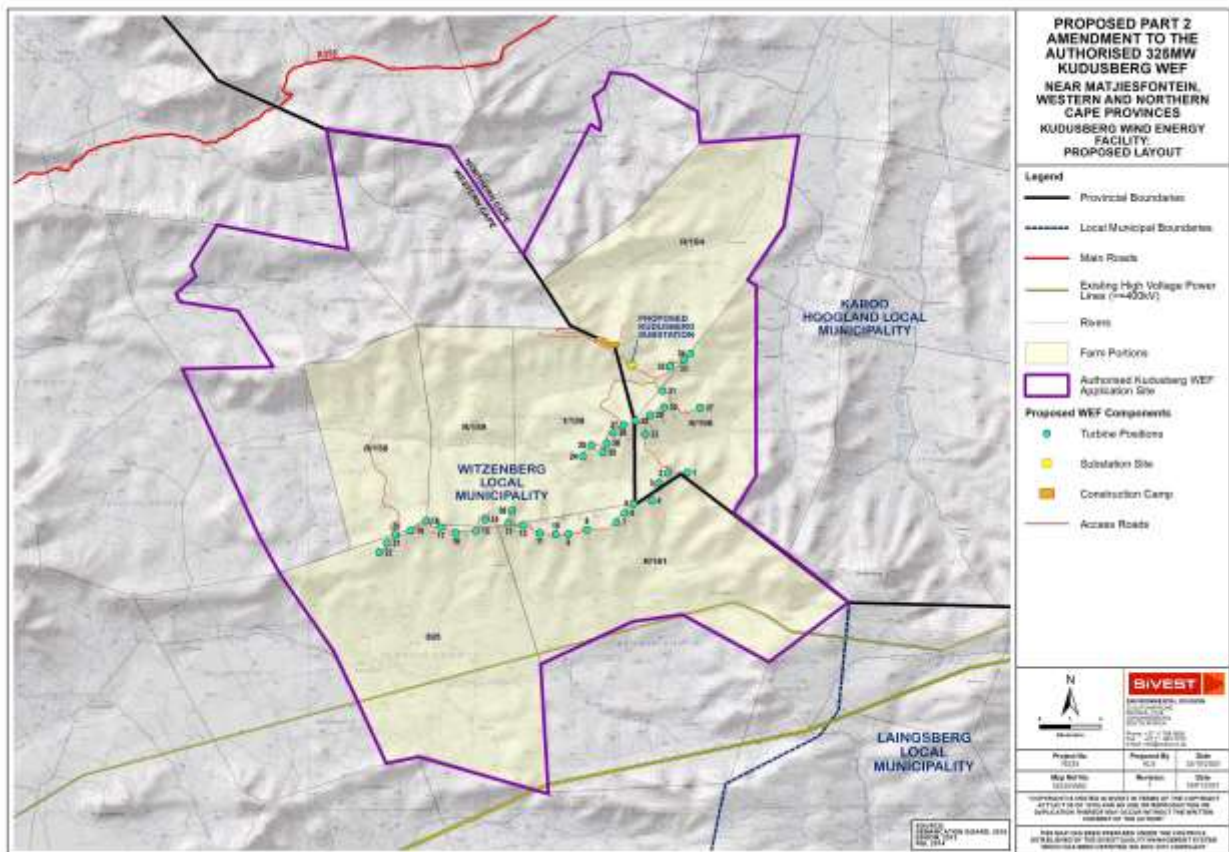


Figure 3: Layout map for proposed Kudusberg WEF (southern section of the authorised WEF)

Furthermore, the approved EMPr authorised as part of the Kudusberg EA is being amended to each WEF and to incorporate the final layout for the Oya WEF, management plans and the walk-throughs.

The amendments detailed in **Table 1** below are proposed for each of the two (2) WEFs mentioned above:

Table 1: Proposed Amendments

Aspect to be amended	Authorised	Proposed Amendment	
		Oya WEF	Kudusberg WEF
Administrative Aspects			
Amend the holder of the EA's	Kudusberg Wind Farm (Pty) Ltd	Oya Energy (Pty) Ltd	Kudusberg Wind Farm (Pty) Ltd
Amend the name of the WEFs	Kudusberg Wind Energy Facility	Oya Wind Energy Facility	Kudusberg Wind Energy Facility
Contact Details	kudusberg@g7energies.com	oya@g7energies.com	kudusberg@g7energies.com
Extend the validity of the EA	This activity must commence within a period of five (05) years from the date of issue of this environmental authorization.	This activity must commence within a period of five (05) years from the date of issue of this amended environmental authorization.	This activity must commence within a period of five (05) years from the date of issue of this amended environmental authorization.
Location of Activity and SG codes	Western Cape 1. Portion 1 of 156 Gats Rivier Farm: C0190000000015600001 2. Portion 3 of 156 Gats River Farm: C0190000000015600002 3. Remainder of 156 Gats Rivier Farm: C0190000000015600000 4. Portion 1 of 157 Riet Fontein Farm: C0190000000015700001 5. Portion 1 of 158 Amandelbloom Farm: C0190000000015800001 6. Remainder of 158 Amandelboom Farm: C0190000000015800000 7. Portion 1 of 159 Oliviers Berg Farm: C0190000000015900001 8. Remainder of 159 Oliviers Berg Farm: C0190000000015900000 9. Portion 2 of 157 Riet Fontein Farm: C0190000000015700002 10. Remainder of 161 Muishond Rivier	Western Cape 1. Portion 1 of the Farm Gats Rivier No 156: C0190000000015600001 2. Portion 2 of the Farm Gats Rivier No 156: C0190000000015600002 3. Remainder of the Farm Gats Rivier No 156: C0190000000015600000 4. Portion 1 of the Farm Riet Fontein No 157: C0190000000015700001 5. Portion 2 of the Farm Riet Fontein No 157: C0190000000015700002 6. Portion 1 of the Farm Amandelbloom No 158: C0190000000015800001 7. Remainder of the Farm Amandelboom No 158: C0190000000015800000 8. Portion 1 of the Farm Oliviers Berg No 159: C0190000000015900001 9. Remainder of the Farm Oliviers Berg No 159: C0190000000015900000	Western Cape 1. Remainder of the Farm Gats Rivier No 156: C0190000000015600000 2. Portion 1 of the Farm Oliviers Berg No 159: C0190000000015900001 3. Remainder of the Farm Oliviers Berg No 159: C0190000000015900000 4. Klipbanks Fontein No 395: C0190000000039500000 5. Remainder of the Farm Muishond Rivier No 159: C0190000000016100000 Northern Cape 6. Remainder of the Farm Karee Kloof No 196: C0720000000019600000 7. Remainder of the Farm Matjes Fontein No 194: C0720000000019400000

	<p>Farm: C01900000000016100000</p> <p>11. Remainder of 395 Klipbanks Fontein Farm: C01900000000019500000</p> <p>Northern Cape</p> <p>12. Portion 4 of 193 Urias Gat Farm: C07200000000019300004</p> <p>13. Portion 6 of 193 Urias Gat Farm: C07200000000019300006</p> <p>14. Remainder of 193 Urias Gat Farm: C07200000000019300000</p> <p>15. Remainder of 194 Matjes Fontein Farm: C07200000000019400000</p> <p>16. Remainder of 196 Karree Kloof Farm: C07200000000019600000</p> <p>Properties affected by public road:</p> <p>17. 169 Zeekoegat Farm: C07200000000016900000</p> <p>18. Portion 1 of 170 Roodeheuveld Farm: C07200000000017000001</p> <p>19. Remainder of 170 Roodeheuveld Farm: C07200000000017000000</p> <p>20. Remainder of 190 Wind Heuveld Farm: C07200000000019000000</p> <p>21. Portion 1 of 190 Wind Heuveld Farm: C07200000000019000001</p> <p>22. Portion 5 of 193 Urias Gat Farm: C07200000000019300005</p> <p>23. Remainder of 171 Vinke Kuil Farm: C07200000000017100000</p> <p>24. Alkant Re/220 Farm: C07200000000022000000</p> <p>25. Portion 1 of 174 Lange Huis Farm: C07200000000017400001</p>	<p>Northern Cape</p> <p>10. Portion 4 of the Farm Urias Gat No 193: C07200000000019300004</p> <p>11. Portion 6 of the Farm Urias Gat No 193: C07200000000019300006</p> <p>12. Remainder of the Farm Urias Gat No 193: C07200000000019300000</p> <p>13. Remainder of the Farm Matjies Fontein No 194: C07200000000019400000</p> <p>14. Portion 5 of the Farm Urias Gat No 193: C07200000000019300005</p> <p>Properties affected by access road:</p> <p>1. Zeekoegat Farm No 169: C07200000000016900000</p> <p>2. Portion 1 of the Farm Roodeheuveld No 170: C07200000000017000001</p> <p>3. Remainder of the Farm Roodeheuveld No 170: C07200000000017000000</p> <p>4. Remainder of the Farm Wind Heuveld No 190: C07200000000019000000</p> <p>5. Portion 1 of the Farm Wind Heuveld No 190: C07200000000019000001</p> <p>6. Portion 5 of the Farm Urias Gat No 193: C07200000000019300005</p> <p>7. Remainder of the Farm Vinke Kuil No 171: C07200000000017100000</p> <p>8. Alkant Farm No 220: C07200000000022000000</p> <p>9. Portion 1 of the Farm Lange Huis No 174: C07200000000017400001</p> <p>10. Remainder of the Farm Baakens Rivier No. 155: C01900000000015500000</p>	<p>Properties affected by public road:</p> <p>1. Zeekoegat Farm No 169: C07200000000016900000</p> <p>2. Portion 1 of the Farm Roodeheuveld No 170: C07200000000017000001</p> <p>3. Remainder of the Farm Roodeheuveld No 170: C07200000000017000000</p> <p>4. Remainder of the Farm Wind Heuveld No 190: C07200000000019000000</p> <p>5. Portion 1 of the Farm Wind Heuveld No 190: C07200000000019000001</p> <p>6. Portion 5 of the Farm Urias Gat No 193: C07200000000019300005</p> <p>7. Remainder of the Farm Vinke Kuil No 171: C07200000000017100000</p> <p>8. The Farm Alkant No 220: C07200000000022000000</p> <p>9. Portion 1 of the Farm Lange Huis No 174: C07200000000017400001</p>
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Technical Aspects			
Overall Capacity	325 MW	99 MW	226 MW
Number of turbines	56	18	38
Hub height	Up to 140 m	Up to 101 m above the foundation	Up to 140 m
Rotor diameter	Up to 180 m	Up to 158 m	Up to 180 m
Blade length	Up to 90 m	Up to 79 m	Up to 90 m
Wind Measuring Lattice Masts	Up to 4 x 140 m high depending the final hub height.	2 x height of the hub height	2 x up to 140 m high depending the final hub height.
Layout	-	Layout submitted for final approval	To be submitted prior to construction.
EMPr	The EMPr submitted as part of the Application for EA is hereby approved.	Approve Final EMPr	To be submitted based on final approval of layout.

3 METHODOLOGY

The methodology used to identify and assess the agricultural impacts of the proposed amendment are identical to those used in the original assessment (Lanz, 2018).

4 SPECIALIST COMMENT

There are no additional agricultural impacts related to any of the proposed amendments listed in **Table 1** above. All impacts identified in the original Agricultural report (2018) are still valid for the proposed amendments. The amendments and final layout will not change the nature or significance of any of the impacts assessed in the original study. There are no agricultural advantages or disadvantages related to the amendments. The amendment does not require any changes or additions to the mitigation measures for agricultural impacts that were recommended for the authorised development, and there are therefore no required changes to the EMPr(s). The agricultural impacts of the amended projects will therefore be identical to the impact for the authorised development, that was assessed in the original specialist assessment report.

5 CONCLUSION

The conclusion of this assessment is that the proposed amendments will have no agricultural impacts. No additional No-Go areas were identified as a result of this amendment. Therefore, from an agricultural impact point of view, the amendments and final layout should be authorised.

6 REFERENCES

Lanz, J. 2018. Agricultural Impact Assessment for Kudusberg Wind Energy Facility project between Matjiesfontein and Sutherland in the Northern and Western Cape Provinces

APPENDIX 1: SPECIALIST CURRICULUM VITAE

Johann Lanz Curriculum Vitae

Education

M.Sc. (Environmental Geochemistry)	University of Cape Town	1996 - 1997
B.Sc. Agriculture (Soil Science, Chemistry)	University of Stellenbosch	1992 - 1995
BA (English, Environmental & Geographical Science)	University of Cape Town	1989 - 1991
Matric Exemption	Wynberg Boy's High School	1983

Professional work experience

I have been registered as a Professional Natural Scientist (Pri.Sci.Nat.) in the field of soil science since 2012 (registration number 400268/12) and am a member of the Soil Science Society of South Africa.

Soil & Agricultural Consulting Self employed 2002 - present

In the past 5 years of running my soil and agricultural consulting business, I have completed more than 120 agricultural assessments (EIAs, SEAs, EMPRs) in all 9 provinces for renewable energy, mining, urban, and agricultural developments. My regular clients include: Aurecon; CSIR; SiVEST; Arcus; SRK; Environamics; Royal Haskoning DHV; Jeffares & Green; JG Afrika; Juwi; Mainstream; Redcap; G7; Mulilo; and Tiptrans. Recent agricultural clients for soil resource evaluations and mapping include Cederberg Wines; Western Cape Department of Agriculture; Vogelfontein Citrus; De Grendel Estate; Zewenwacht Wine Estate; and Goedgedacht Olives.

In 2018 I completed a ground-breaking case study that measured the agricultural impact of existing wind farms in the Eastern Cape.

Soil Science Consultant Agricultural Consultors International (Tinie du Preez) 1998 - 2001

Responsible for providing all aspects of a soil science technical consulting service directly to clients in the wine, fruit and environmental industries all over South Africa, and in Chile, South America.

Contracting Soil Scientist De Beers Namaqualand Mines July 1997 - Jan 1998

Completed a contract to advise soil rehabilitation and re-vegetation of mined areas.

Publications

- Lanz, J. 2012. Soil health: sustaining Stellenbosch's roots. In: M Swilling, B Sebitosi & R Loots (eds). *Sustainable Stellenbosch: opening dialogues*. Stellenbosch: SunMedia.
- Lanz, J. 2010. Soil health indicators: physical and chemical. *South African Fruit Journal*, April / May 2010 issue.
- Lanz, J. 2009. Soil health constraints. *South African Fruit Journal*, August / September 2009 issue.
- Lanz, J. 2009. Soil carbon research. *AgriProbe*, Department of Agriculture.
- Lanz, J. 2005. Special Report: Soils and wine quality. *Wineland Magazine*.

I am a reviewing scientist for the *South African Journal of Plant and Soil*.



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

APPENDIX 2: DETAILS OF THE SPECIALIST, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

(For official use only)

File Reference Number:

NEAS Reference Number:

Date Received:

DEA/EIA/

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

Part 2 Environmental Authorisation (EA) Amendment Process for the Kudusberg Wind Energy Facility (WEF) Near Sutherland, Western and Northern Cape Provinces

Kindly note the following:

- This form must always be used for applications that must be subjected to Basic Assessment or Scoping & Environmental Impact Reporting where this Department is the Competent Authority.
- 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>.
- A copy of this form containing original signatures must be appended to all Draft and Final Reports submitted to the department for consideration.
- 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.

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

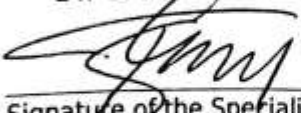
1. SPECIALIST INFORMATION

Specialist Company Name:	Johann Lanz – Soil Scientist		
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	4	Percentage Procurement recognition
			100%
Specialist name:	Johann Lanz		
Specialist Qualifications:	M.Sc. (Environmental Geochemistry)		
Professional affiliation/registration:	Registered Professional Natural Scientist Member of the Soil Science Society of South Africa		
Physical address:	1a Wolfe Street, Wynberg, Cape Town, 7800		
Postal address:	1a Wolfe Street, Wynberg, Cape Town, 7800		
Postal code:	7800	Cell:	082 927 9018
Telephone:	082 927 9018	Fax:	Who still uses a fax? I don't
E-mail:	johann@johannlanz.co.za		

2. DECLARATION BY THE SPECIALIST

I, **Johann Lanz**, declare that -

- I act as the independent specialist in this application;
- 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 declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, 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 have no, and will not engage in, conflicting interests in the undertaking of the activity;
- 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;
- all the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.


Signature of the Specialist

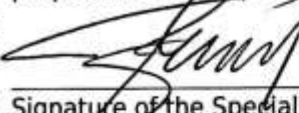
Johann Lanz - Soil Scientist (sole proprietor)

Name of Company:

08/10/2020
Date

3. UNDERTAKING UNDER OATH/ AFFIRMATION

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


Signature of the Specialist

Johann Lanz - Soil Scientist (sole proprietor)

Name of Company

08/10/2020
Date


Signature of the Commissioner of Oaths
72145277 CONSTABLE
A.F. MASERU-MZINGELWA

2020/10/08
Date

