

Appendix C

SPECIALIST DECLARATIONS





environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

DETAILS OF THE SPECIALIST, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

	(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

Igolide Wind Energy Facility (WEF) and associated infrastructure, near Fochville, Gauteng

Kindly note the following:

1. 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.
2. 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>.
3. A copy of this form containing original signatures must be appended to all Draft and Final Reports submitted to the department for consideration.
4. 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.
5. 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:	EKOTRUST CC		
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	4	Percentage Procurement recognition
			100%
Specialist name:	NOEL VAN ROOYEN		
Specialist Qualifications:	BSc, BSc Hons MSc DSc		
Professional affiliation/ registration:	SACNASP 401430/83		
Physical address:	7 ST GEORGE STREET, LIONVILLE, SOMERSET WEST		
Postal address:	SAME AS ABOVE		
Postal code:	7130	Cell:	0828820886
Telephone:		Fax:	
E-mail:	noel@ekotrust.co.za		

2. DECLARATION BY THE SPECIALIST

I, NOEL VAN ROOYEN, 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.

NR
Signature of the Specialist

EKOTRUST CC
Name of Company:

NR

5 JUNE 2023

Date

3. UNDERTAKING UNDER OATH/ AFFIRMATION

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

Noel van Rooyen

Signature of the Specialist

EKO TRUST CC

Name of Company

5 JUNE 2023

Date

M. Arentz
7188833
Arentz

Signature of the Commissioner of Oaths

2023-06-05

Date



APPENDIX F: Curriculum vitae: DR NOEL VAN ROOYEN

1. Biographical information

Surname	Van Rooyen
First names	Noel
ID number	501225 5034 084
Citizenship	South African
Business address	Ekotrust CC 7 St George Street Lionviham 7130 Somerset West South Africa
Mobile	082 882 0886
e-mail	noel@ekotrust.co.za
Current position	Member of Ekotrust cc
Professional registration	Botanical Scientist : Pr.Sci.Nat; Reg no. 401430/83

Academic qualifications include BSc (Agric), BSc (Honours), MSc (1978) and DSc degrees (1984) in Plant Ecology at the University of Pretoria, South Africa. Until 1999 I was Professor in Plant Ecology at the University of Pretoria and at present I am a member of Ekotrust cc.

2. Publications

I am the author/co-author of 128 peer reviewed research publications in national and international scientific journals and was supervisor or co-supervisor of 9 PhD and 33 MSc students. More than 400 projects were undertaken by Ekotrust cc as consultant over a period of more than 40 years.

Books

VAN ROOYEN, N. 2001. *Flowering plants of the Kalahari dunes*. Ekotrust CC, Pretoria. (In collaboration with H. Bezuidenhout & E. de Kock).

VAN ROOYEN, N. & VAN ROOYEN, M.W. 2019. *Flowering plants of the southern Kalahari*. Somerset West.

Author / co-author of various chapters on the Savanna and Grassland Biomes in:

LOW, B. & REBELO, A.R. 1996. *Vegetation types of South Africa, Lesotho and Swaziland*, Department of Environmental Affairs and Tourism, Pretoria.

KNOBEL, J. (Ed.) 1999, 2006. *The Magnificent Natural Heritage of South Africa*. (Chapters on the Kalahari and Lowveld).

VAN DER WALT, P.T. 2010. *Bushveld*. Briza, Pretoria. (Chapter on Sour Bushveld).

Contributed to chapters on vegetation, habitat evaluation and veld management in the book:

BOTHMA, J. du P. & DU TOIT, J.G. (Eds). 2016. *Game Ranch Management*. 5th edition. Van Schaik, Pretoria.

BOTHMA, J. du P. & DU TOIT, J.G. (Eds). 2021. *Wildplaasbestuur*. 5th edition. Van Schaik, Pretoria.

Co-editor of the book:

BOTHMA, J. du P. & VAN ROOYEN, N. (eds). 2005. *Intensive wildlife production in southern Africa*. Van Schaik, Pretoria.

3. Ekotruster CC: Core Services

Ekotruster CC specializes in vegetation surveys, classification and mapping, wildlife management, wildlife production and economic assessments, vegetation ecology, veld condition assessment, carrying capacity, biodiversity assessments, rare species assessments, carbon pool assessments and alien plant management.

4. Examples of projects previously undertaken

Numerous vegetation surveys and vegetation impact assessments for Baseline, Scoping and Environmental Impact Assessments (BAs & EIA's) were made both locally and internationally.

Numerous projects have been undertaken in game ranches and conservation areas covering aspects such as vegetation surveys, range condition assessments and wildlife management. Of note is the Kgalagadi Transfrontier Park; iSimangaliso Wetland Park, Ithala Game Reserve, Phinda Private Game Reserve, Mabula Game Reserve, Tswalu Kalahari Desert Reserve, Maremani Nature Reserve and Associate Private Nature Reserve (previously Timbavati, Klaserie & Umbabat Private Game Reserve).

Involvement in various research programmes: vegetation of the northern Kruger National Park, Savanna Ecosystem Project at Nylsvley, Limpopo; Kuiseb River Project (Namibia); Grassland Biome Project; Namaqualand and Kruger Park Rivers Ecosystem research programme.

5. Selected references of other projects done by Ekotruster CC

- VAN ROOYEN, N., THERON, G.K., BREDENKAMP, G.J., VAN ROOYEN, M.W., DEUTSCHLÄNDER, M. & STEYN, H.M. 1996. *Phytosociology, vegetation dynamics and conservation of the southern Kalahari*. Final report: Department of Environmental Affairs & Tourism, Pretoria.
- VAN ROOYEN, N. 1999 & 2017. The vegetation types, veld condition and game of Tswalu Kalahari Desert Reserve.
- VAN ROOYEN, N. 2000. Vegetation survey and mapping of the Kgalagadi Transfrontier Park. Peace Parks Foundation, Stellenbosch.
- VAN ROOYEN, N., VAN ROOYEN, M.W. & GROBLER, A. 2004. Habitat evaluation and stocking rates for wildlife and livestock - PAN TRUST Ranch, Ghanzi, Botswana.
- VAN ROOYEN, N. 2004. Vegetation and wildlife of the Greater St Lucia Wetland Park, KZN.
- VAN ROOYEN, N. & VAN ROOYEN, M.W. 2008. Vegetation classification, habitat evaluation and wildlife management of the proposed Royal Big Six Nsubane-Pongola Transfrontier Park, Swaziland. Ekotruster cc.
- VAN ROOYEN, N., VAN DER MERWE, H. & Van Rooyen, M.W. 2011. The vegetation of the NECSA Vaalputs site. Report to NECSA.
- VAN ROOYEN, N. & VAN ROOYEN, M.W. 2014. Ecological evaluation and wildlife management on Ndzalama Nature Reserve and adjacent farms, Gravelotte, Limpopo province.
- VAN ROOYEN, N. & VAN ROOYEN, M.W. 2016. Ecological evaluation of the farm Springbokoog in the Van Wyksvlei region of Northern Cape, including a habitat assessment for the introduction of black rhinoceros. Ekotruster.
- VAN ROOYEN, M.W. & VAN ROOYEN, N. & VAN DEN BERG, H. 2016. Kathu Bushveld study: Research offset for first development phase of Adams Solar Energy Facility. Project conducted for Department of Environment and Nature Conservation Northern Cape (DENC) and the Department of Agriculture, Forestry and Fisheries (DAFF).
- VAN ROOYEN, N. & VAN ROOYEN, M.W. 2018. Environmental screening study for the proposed essential oils and Moringa oil enterprise on Ferndale farm, Bathurst, Eastern Cape. Ekotruster cc, Somerset West.
- VAN ROOYEN, M.W., GAUGRIS, J.Y. & VAN ROOYEN, N. 2018. Dish Mountain gold project, Republic of Ethiopia: Natural resource use evaluation - baseline report. FFMES, Report to SRK Consulting.
- VAN ROOYEN, N. & VAN ROOYEN, M.W. 2018. Report on the terrestrial ecology (flora & fauna). Basic assessment report for the proposed development of the 325 MW Kudusberg Wind Energy Facility in the Northern and Western Cape. Ekotruster cc, Somerset West.
- VAN ROOYEN, N. & VAN ROOYEN, M.W. 2019. Proposed amendments to the Ishwati Emoyeni Wind Energy Facility (WEF) of Special Energy Project (PTY) LTD, a subsidiary of Windlab Systems (PTY) LTD. Ekotruster cc, Somerset West.

6. Selected peer-reviewed research publications

- VAN ROOYEN, N. 1978. A supplementary list of plant species for the Kruger National Park from the Pafuri area.

- Koedoe* 21: 37 - 46.
- VAN ROOYEN, N., THERON, G.K. & GROBBELAAR, N. 1981. A floristic description and structural analysis of the plant communities of the Punda Milia - Pafuri - Wambiya area in the Kruger National Park, Republic of South Africa. 2. The sandveld communities. *Jl S. Afr. Bot.* 47: 405 - 449.
- VAN ROOYEN, N., THERON, G.K. & GROBBELAAR, N. 1986. The vegetation of the Roodeplaat Dam Nature Reserve. 4. Phenology and climate. *S. Afr. J. Bot.* 52: 159 - 166.
- VAN ROOYEN, N. 1989. Phenology and water relations of two savanna tree species. *S. Afr. J. Sci.* 85: 736 - 740.
- VAN ROOYEN, N., BREDENKAMP, G.J. & THERON, G.K. 1991. Kalahari vegetation: Veld condition trends and ecological status of species. *Koedoe* 34: 61 - 72.
- VAN ROOYEN, M.W., GROBBELAAR, N., THERON, G.K. & VAN ROOYEN, N. 1992. The ephemerals of Namaqualand: effect of germination date on development of three species. *J. Arid. Environ.* 22: 51 - 66.
- VAN ROOYEN, N., BREDENKAMP, G.J., THERON, G.K., BOTHMA, J. DU P. & LE RICHE, E.A.N. 1994. Vegetational gradients around artificial watering points in the Kalahari Gemsbok National Park. *J. Arid Environ.* 26: 349-361.
- STEYN, H.M., VAN ROOYEN, N., VAN ROOYEN, M.W. & THERON, G.K. 1996. The phenology of Namaqualand ephemeral species: the effect of sowing date. *J. Arid Environ.* 32: 407 - 420.
- JELTSCH, F., MILTON, S.J., DEAN, W.R.J. & VAN ROOYEN, N. 1997. Analyzing shrub encroachment in the southern Kalahari: a grid-based modelling approach. *Journal of Applied Ecology* 34 (6): 1497 - 1509.
- VAN ROOYEN, N. & VAN ROOYEN, M.W. 1998. Vegetation of the south-western arid Kalahari: an overview. *Trans. Roy. Soc. S. Afr.* 53: 113 -140.
- DE VILLIERS, A.J., VAN ROOYEN, M.W., THERON, G.K. & VAN ROOYEN, N. 1999. Vegetation diversity of the Brand-se-Baai coastal dune area, West Coast, South Africa: a pre-mining benchmark survey for rehabilitation. *Land Degradation & Development* 10: 207 - 224.
- VAN ESSEN, L.D., BOTHMA, J. DU P., VAN ROOYEN, N. & TROLLOPE, W.S.W. 2002. Assessment of the woody vegetation of Ol Choro Oiroua, Masai Mara, Kenya. *Afr. J. Ecol.* 40: 76 - 83.
- MATTHEWS, W.S., VAN WYK, A.E., VAN ROOYEN, N. & BOTHA, G.A. 2003. Vegetation of the Tembe Elephant Park, Maputaland, South Africa. *South African Journal of Botany* 67: 573-594.
- BOTHMA, J. DU P., VAN ROOYEN, N. & VAN ROOYEN, M.W. 2004. Using diet and plant resources to set wildlife stocking densities in African savannas. *Wildlife Society Bulletin* 32 (3): 840-851.
- VAN ROOYEN, M.W., THERON, G.K., VAN ROOYEN, N., JANKOWITZ, W.J. & MATTHEWS, W.S. 2004. Mysterious circles in the Namib Desert: review of hypotheses on their origin. *Journal of Arid Environments* 57: 467-48.
- STEENKAMP, J.C. VOGEL, A., VAN ROOYEN, N., & VAN ROOYEN, M.W. 2008. Age determination of *Acacia erioloba* trees in the Kalahari. *Journal of Arid Environments* 72: 302 - 313.
- VAN DER MERWE, H., VAN ROOYEN, M.W. & VAN ROOYEN, N. 2008. Vegetation of the Hantam-Tanqua-Roggeveld subregion, South Africa Part 2. Succulent Karoo Biome-related vegetation. *Koedoe* 50: 160-183.
- VAN ROOYEN, M.W., VAN ROOYEN, N. & BOTHMA, J. DU P. 2008. Landscapes in the Kalahari Gemsbok National Park, South Africa. *Koedoe*: 50: 32-41.
- VAN ROOYEN, M.W., HENSTOCK, R., VAN ROOYEN, N. & VAN DER MERWE, H. 2010. Plant diversity and flowering displays on old fields in the arid Namaqua National Park, South Africa. *Koedoe* 52: Art. #1004, 7 pages. DOI: 10.4102/koedoe.v52i1.1004.
- VAN ROOYEN, M.W., LE ROUX, A., GELDENHUYS, C., VAN ROOYEN, N., BROODRYK, N. & VAN DER MERWE, H. 2015. Long-term vegetation dynamics (40 yr) in the Succulent Karoo South Africa: effects of rainfall and grazing. *Applied Vegetation Science* 18: 311-322.
- VAN ROOYEN, M.W., VAN ROOYEN, N., ORBAN, B., GAUGRIS, B., MOUTSAMBOTÉ, J.M., NSONGOLA G. & MIABANGANA, E.S. 2016. Floristic composition, diversity and stand structure of the forest communities in the Kouilou Département, Republic of Congo. *Tropical Ecology*: 54: 805-824.
- VAN ROOYEN, M.W., VAN ROOYEN, N., MIABANGANA, E.S., NSONGOLA, G., GAUGRIS, V. & GAUGRIS, J.Y. 2019. Floristic composition, diversity and structure of the rainforest in the Mayoko District, Republic of Congo. *Open Journal of Forestry* 9: 16-69. <https://doi.org/10.4236/ojf.2019.91002>.
- VAN DER MERWE, H., VAN ROOYEN, N., BEZUIDENHOUT, H., BOTHMA, J. DU P. VAN ROOYEN, M.W. 2019. *Vachellia erioloba* dynamics over 38 years in the Kalahari Gemsbok National Park, South Africa. *Koedoe* a1534. <https://doi.org/10.4102/koedoe.v61i1.1534>
- VAN DER MERWE, H., VAN ROOYEN, N., BEZUIDENHOUT, H., BOTHMA, J. DU P. & VAN ROOYEN, M.W. 2020. Woody vegetation change over more than 30 years in the interior duneveld of the Kalahari Gemsbok National Park. *Bothalia* 50 (1), a2 <http://dx.doi.org/10.38201/btha.abc.v50.i1.2>



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

DETAILS OF THE SPECIALIST, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

	(For official use only)
File Reference Number:	14/12/16/3/3/2/2210
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

Igolide Wind Energy Facility (WEF) and associated infrastructure, near Fochville, Gauteng

Kindly note the following:

1. 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.
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Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Private Bag X447
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0001

Physical address:

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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:	Enviro-Acoustic Research cc			
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	4	Percentage Procurement recognition	100%
Specialist name:	Morné de Jager			
Specialist Qualifications:	B. Ing (Chemical)			
Professional affiliation/registration:	SAAI, ASA			
Physical address:	726 Wiedrigh Street, Moreleta Park, Pretoria, 0181			
Postal address:	Box 2047, Garsfontein East, 0060			
Postal code:	0060	Cell:	082 565 4059	
Telephone:	012 004 0362	Fax:	086 621 0292	
E-mail:	morne@eares.co.za			

2. DECLARATION BY THE SPECIALIST

I, **Morné de Jager**, 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

Enviro-Acoustic Research CC

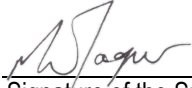
Name of Company

5 June 2023

Date

3. UNDERTAKING UNDER OATH/ AFFIRMATION

I, **Morné de Jager**, 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

Enviro-Acoustic Research CC

Name of Company

5 June 2023

Date



5 June 2023

Date

COMMISSIONER OF OATHS SAIT Member: WP van Wyk Ex Officio - TT (SA) Commissioner of Oaths (RSA) 490 Gert Potgieter street, Garsfontein South Africa, 0081

Morné de Jager

Personal Data

Identity Number	711221 5062 080
Date of Birth	21 December 1971
Sex	Male
Marital Status	Married, three children
Driver's license	Code 08
Nationality	South African
Home Language	Afrikaans (speak, read and write)
Other Languages	English (speak, read and write)
Higher Educational Qualifications	B.Ing (Chemical Engineering) [Pretoria University]
Previous Employment	Johannesburg Consolidated Investments Wates Meiring and Barnard Department of Water Affairs and Forestry M2 Environmental Connections cc
Current Employment	Enviro-Acoustic Research cc
Membership	SAIOSH (SA Institute of Occupation Safety & Health) NACA (National Association for Clean Air) ASA (Acoustical Society of America)

Short Resumé

Morné started his career in the mining industry as a bursar Learner Official (JCI, Randfontein), working in the mining industry, doing various mining related courses (Rock Mechanics, Surveying, Sampling, Safety and Health [Ventilation, noise, illumination etc.] and Metallurgy. He did work in both underground (Coal, Gold and Platinum) as well as opencast (Coal) for 4 years. He changed course from Mining Engineering to Chemical Engineering after his second year of his studies at the University of Pretoria.

After graduation he worked as a Water Pollution Control Officer at the Department of Water Affairs and Forestry for two years (first year seconded from Wates, Meiring and Barnard), where duties included the perusal (evaluation, commenting and recommendation) of various regulatory required documents (such as EMPR's, Water Licence Applications and EIA's), auditing of licence conditions as well as the compilation of Technical Documents.

Since leaving the Department of Water Affairs, Morné has been in private consulting for the last 20 years, managing various projects for the mining and industrial sector, private developers, business, other environmental consulting firms as well as the Department of Water Affairs. During that period he has been involved in various projects, either as specialist, consultant, trainer or project manager, successfully completing these projects within budget and timeframe. During that period he gradually moved towards environmental acoustics, focusing on this field exclusively since 2007.

He has been interested in acoustics as from school days, doing projects mainly related to loudspeaker design. Interest in the matter brought him into the field of Environmental Noise Measurement, Prediction and Control. He has been doing work in this field for the past 15 years and was involved with more than 400 noise studies for more than 60 clients in the last few years, including amongst others:

Project Experience – Acoustics

Wind Energy Facilities

Full Environmental Noise Impact Assessments for - Bannf (Vidigenix), iNca Gouda (Aurecon SA), Isivunguvungu (Aurecon), De Aar (Aurecon), Kokerboom 1 (Aurecon), Kokerboom 2 (Aurecon), Kokerboom 3 (Aurecon), Kangnas (Aurecon), Plateau East and West (Aurecon), Wolf (Aurecon), Outeniqua (Aurecon), Umsinde Emoyeni (ARCUS), Komsberg (ARCUS), Karee (ARCUS), Kolkies (ARCUS), San Kraal (ARCUS), Phezukomoya (ARCUS), Canyon Springs (Canyon Springs), Perdekraal (ERM), Scarlet Ibis (CESNET), Albany (CESNET), Sutherland (CSIR), Kap Vley (CSIR), Kuruman (CSIR), Rietrug (CSIR), Sutherland 2 (CSIR), Perdekraal (ERM), Teekloof (Mainstream), Eskom Aberdene (SE), Dorper (SE), Spreukloof (SE), Loperberg (SE), Penhoek Pass (SE), Amakhala Emoyeni (SE), Zen (Savannah Environmental – SE), Goereesoe (SE), Springfontein (SE), Garob (SE), Project Blue (SE), ESKOM Kleinzee (SE), Namas (SE), Zonnequa (SE), Walker Bay (SE), Oyster Bay (SE), Hidden Valley (SE), Deep River (SE), Tsitsikamma (SE), AB (SE), West Coast One (SE), Hopefield II (SE), Namakwa Sands (SE), VentuSA Gouda (SE), Dorper (SE), Klipheuwel (SE), INCA Swellendam (SE), Cookhouse (SE), Iziduli (SE), Msenge (SE), Cookhouse II (SE), Rheboksfontein (SE), Suurplaat (SE), Karoo Renewables (SE), Koningaas (SE), Spitskop (SE), Castle (SE), Khai Ma (SE), Poortjies (SE), Korana (SE), IE Moorreesburg (SE), Gunstfontein (SE), Boulders (SE), Vredenburg (Terramanzi), Loeriesfontein (SiVEST), Rhenosterberg (SiVEST), Noupoort (SiVEST), Prieska (SiVEST), Dwarsrug (SiVEST), Graskoppies (SiVEST), Philco (SiVEST), Hartebeest Leegte (SiVEST), Ithemba (SiVEST), !Xha Boom (SiVEST), Spitskop West (Terramanzi), Haga Haga (Terramanzi), Vredenburg (Terramanzi), Msenge Emoyeni (Windlab), Wobben (IWP), Trakas (SiVest), Beaufort West (SiVest), Pienaarspoort 1 and 2 (SE), Mphepo Zambia (SLR), Koup 1 (SiVEST), Koup 2 (SiVEST), Hamlet (SE), Aeolus (SE), Ripponn (SE), Redding (SE), Wind Garden (SE), Fronteer (SE), Hendrina North (Cabanga), Hendrina South (Cabanga), Hoogland Northern Cluster (SLR), Hoogland Southern Cluster (SLR), Jessa M, S and Z cluster of Wind Farms (SLR), Heuweltjies (SiVEST), Kraaltjies (SiVEST), Patatskloof (SiVEST), Bergriver (SE), Overberg (Arcus), Newcastle North (CESNET), Newcastle South (CESNET), Ngxwabangu (CESNET), Taaibos North (CESNET), Taaibos South (CESNET), Soutrivier North (CESNET), Soutrivier South (CESNET), Soutrivier Central (CESNET), Soyuz 1 (AEP/CESNET), Soyuz 2 (AEP/CESNET), Soyuz 3 (AEP/CESNET), Soyuz 4 (AEP/CESNET), Soyuz 5 (AEP/CESNET), Soyuz 6 (AEP/CESNET), Kaladokhwe 1 (AEP/CSIR), FE Red Sands North East (Enviro-Insight), FE Red Sands South West (Enviro-Insight), FE Red Sands North West (Enviro-Insight), FE Red Sands South East (Enviro-Insight), FE De Rust North (Enviro-Insight), FE De Rust South (Enviro-Insight), Springbok (SE), Aberdene 1 (AEP/SE), Aberdene 2 (AEP/SE), Aberdene 3 (AEP/SE), Ezelsjacht (SLR)

Mining and Industry

Full Environmental Noise Impact Assessments for – Delft Sand (AGES), BECSA – Middelburg (Golder Associates), Kromkrans Colliery (Geovicon Environmental), SASOL Borrow Pits Project (JMA Consulting), Lesego Platinum (AGES), Tweefontein Colliery (Cleanstream Environmental), Evraz Vametco Mine and Plant (JMA), Goedehoop Colliery (Geovicon), Hacra Project (Prescali Environmental), Der Brochen Platinum Project (J9 Environment), Brandbach Sand (AGES), Verkeerdepan Extension (CleanStream Environmental), Dwaalboom Limestone (AGES), Jagdlust Chrome (MENCO), WPB Coal (MENCO), Landau Expansion (CleanStream Environmental), Otjikoto Gold (AurexGold), Klipfontein Colliery (MENCO), Imbabala Coal (MENCO), ATCOM East Expansion (Jones and Wagner), IPP Waterberg Power Station (SE), Kangra Coal (ERM), Schoongesicht (CleanStream Environmental), EastPlats (CleanStream Environmental), Chapudi Coal (Jacana Environmental), Generaal Coal (JE), Mopane Coal (JE), Glencore Boshhoek Chrome (JMA), Langpan Chrome (PE), Vlakpoort Chrome (PE), Sekoko Coal (SE), Frankford Power (REMIG), Strahrae Coal (Ferret Mining), Transalloys Power Station (Savannah), Pan Palladum Smelter, Iron and PGM Complex (Prescali Environmental), Fumani Gold (AGES), Leiden Coal (EIMS), Colenso Coal and Power Station (SiVEST/EcoPartners), Klippoortjie Coal (Gudani), Rietspruit Crushers (MENCO), Assen Iron (Tshikovha), Transalloys (SE), ESKOM Ankerlig (SE), Nootgedacht Titano Project (EcoPartners), Algoa Oil Well (EIMS), Spitskop Chrome (EMAssistance), Vlakfontein South (Gudani), Leandra Coal (Jacana), Grazvalley and

Zoetveld (Prescali), Tjate Chrome (Prescali), Langpan Chromite (Prescali), Vereeniging Recycling (Pro Roof), Meyerton Recycling (Pro Roof), Hammanskraal Billeting Plant 1 and 2 (Unica), Development of Altona Furnace, Limpopo Province (Prescali Environmental), Haakdoordrift Opencast at Amandelbult Platinum (Aurecon), Landau Dragline relocation (Aurecon), Stuart Coal Opencast (CleanStream Environmental), Tetra4 Gas Field Development (EIMS), Kao Diamonds – Tipping Village Relocation (EIMS), Royal Sheba project (Cabanga), Kao Diamonds – West Valley Tailings Deposit (EIMS), Uppington Special Economic Zone (EOH), Arcellor Mittal CCGT Project near Saldanha (ERM), Malawi Sugar Mill Project (ERM), Proposed Mooifontein Colliery (Geovicon Environmental), Goedehoop North Residue Deposit Expansion (Geovicon Environmental), Mutsho 600MW Coal-Fired Power Plant (Jacana Environmentals), Tshivhaso Coal-Fired Power Plant (Savannah Environmental), Doornhoek Fluorspar Project (Exigo), Royal Sheba Project (Cabanga Environmental), Rietkol Silica (Jacana), Gruisfontein Colliery (Jacana), Lehlabile Colliery (Jaco-K Consulting), Bloemendal Colliery (Enviro-Insight), Rondevly Colliery (REC), Welgedacht Colliery (REC), Kalabasfontein Extension (EIMS), Waltloo Power Generation Project (EScience), Buffalo Colliery (Marang), Balgarthen Colliery (Rayten), Kusipongo Block C (Rayten), Zandheuveld (Exigo), NamPower Walvis Bay (GPT), Eloff Phase 3 (EIMS), Dunbar (Enviro-Insight), Smokey Hills (Prescali), Bierspruit (Aurecon), ECM Lannex (Prescali), ECM Tweefontein (Prescali), Smokey Hills (Prescali), Dalyshope (Digby Wells), Eland Platinum Mine (JEMS), Tweefontein (Prescali), Lannex (Prescali), Salene Manganese (Prescali), Baberton Gas to Power (Rayten), SISHEN Expansion (Shangoni), Goedgevonden EMP Amendment (Jacana), Rietkol Amendment (Jacana), Vlakfontein Bunker Project (Gudani), Vlakfontein West Project (Gudani), Vygenhoek Platinum (EMAssistance), Lesego Amendment (OMI Solutions), Mpenyisi Gas to Power (Nsovo), Basani Gas to Power (Nsovo), Newlands Gas to Power (Savannah), Sudor Coal (JacoK), Nooitgedacht Titanomanganese (Ikwezi), Inyanda Project (JacoK), Ermelo Project (Zyntha), (Schurvekop Coal (Cabanga), Vlakfontein Coal (EMAssistance), Zandheuveld (Jacana), Zondagsvlei Coal (Zyntha), Sereti Witbank South (Zyntha), Bright Alloys (Phakani), Gold One (Prime Resources), Consol Nigel (Zitholele), Hendrina Green Hydrogen and Ammonia project (Enertrag/WSP)

Urban, Roads and Railway

K220 Road Extension (Urbansmart), Boskop Road (MTO), Sekoko Mining (AGES), Davel-Swaziland-Richards Bay Rail Link (Aurecon), Moloto Transport Corridor Status Quo Report and Pre-Feasibility (SiVEST), Postmasburg Housing Development (SE), Tshwane Rapid Transport Project, Phase 1 and 2 (NRM Consulting/City of Tshwane), Transnet Apies-river Bridge Upgrade (Transnet), Gautrain Due-diligence (SiVest), N2 Piet Retief (SANRAL), Atterbury Extension, CoT (Bokomoso Environmental), Riverfarm Development (Terramanzi), Conakry to Kindia Toll Road (Rayten), Sutherland Road Project (Veers Group), Sassalemba Project (Enviro-Insight), Barra da Donde Angola (Enviro-Insight), Musina-Makhado SEZ (Gudani), Brackenfell project (Linspace), Highbury Depot (AGES Limpopo), Mokopane project (AGES Limpopo), Deerpark Filling Station (AGES Limpopo)

Airport

Oudtshoorn Noise Monitoring (AGES), Sandton Heliport (Alpine Aviation), Tete Airport Scoping (Aurecon)

Noise monitoring and Audit Reports

Peerboom Colliery (EcoPartners), Thabametsi (Digby Wells), Doxa Deo (Doxa Deo), Harties Dredging (Rand Water), Xstrata Coal – Witbank Regional (Xstrata), Sephaku Delmas (AGES), Amakhala Emoyeni WEF (Windlab Developments), Oyster Bay WEF (Renewable Energy Systems), Tsitsikamma WEF Ambient Sound Level study (Cennergi and SE), Hopefield WEF (Umoya), Wesley WEF (Innowind), Ncora WEF (Innowind), Boschmanspoort (Jones and Wagner), Nqamakwe WEF (Innowind), Hopefield WEF Noise Analysis (Umoya), Dassiesfontein WEF Noise Analysis (BioTherm), Transnet Noise Analysis (Aurecon), Jeffries Bay Wind Farm (Globeleq), Sephaku Aganang (Exigo), Sephaku Delmas (Exigo), Beira Audit (BP/GPT), Nacala Audit (BP/GPT), NATREF (Nemai), Rappa Resources (Rayten), Measurement Report for Sephaku Delmas (Ages), Measurement Report for Sephaku Aganang (Ages), Bank of Botswana measurements (Linspace), Skukuza Noise Measurements (Concor), Development noise measurement protocol for Mamba Cement (Exigo), Measurement Report for Mamba Cement (Exigo), Measurement Report for Nokeng Fluorspar (Exigo), Tsitsikamma Community Wind Farm Pre-operation sound measurements (Cennergi), Waainek WEF Operational Noise Measurements (Innowind), Sedibeng Brewery Noise Measurements (MENCO), Tsitsikamma Community Wind Farm Operational noise measurements (Cennergi), Noupoot Wind Farm Operational noise measurements (Mainstream), Twisdraai Colliery (Lefatshe Minerals), SASOL Prospecting (Lefatshe Minerals), South32 Klipspruit (Rayten), Sibanye Stillwater Kroondal (Rayten), Rooiberg Asphalt (Rooiberg Asphalt), SASOL Shondoni (Lefatshe), SASOL Twisdraai (Lefatshe), Anglo

	<p><i>Mototolo (Exigo), Heineken Inyaniga (AECOM), Glencore Izimbiwa (Cleanstream), Glencore Impunzi (Cleanstream), Black Chrome Mine (Prescali) Sibanye Stillwater Ezulwini (Aurecon), Sibanye Stillwater Beatrix (Aurecon), Bank of Botswana (Linspace), Lakeside (Linspace), Skukuza (SiVest), Rietvlei Colliery (Jaco-K Consulting), TCTA – Mokolo Project (GIBB), Various (Linspace), Sulzer Hydromining (Sulzer), WCO WEF (Aurora), Great Kei (EDF-Renewables), Elands Platinum (JEMS), Hartebeest WEF (juwi), Mamba Cement (TMCC), Booyens (MDTE), West Rand (MDTE), Devland (MDTE)</i></p>
<p>Small Noise Impact Assessments</p>	<p><i>TCTA AMD Project Baseline (AECOM), NATREF (Nemai Consulting), Christian Life Church (UrbanSmart), Kosmosdale (UrbanSmart), Louwlandia K220 (UrbanSmart), Richards Bay Port Expansion (AECOM), Babalegi Steel Recycling (AGES), Safika Slag Milling Plant (AGES), Arcelor Mittal WEF (Aurecon), RVM Hydroplant (Aurecon), Grootvlei PS Oil Storage (SiVEST), Rhenosterberg WEF, (SiVEST), Concerto Estate (BPTrust), Ekuseni Youth Centre (MENCO), Kranskop Industrial Park (Cape South Developments), Pretoria Central Mosque (Noman Shaikh), Soshanguve Development (Maluleke Investments), Seshego-D Waste Disposal (Enviroxcellence), Zambesi Safari Equipment (Owner), Noise Annoyance Assessment due to the Operation of the Gautrain (Thornhill and Lakeside Residential Estate), Upington Solar (SE), Ilangalethu Solar (SE), Pofadder Solar (SE), Flagging Trees WEF (SE), Uyekraal WEF (SE), Ruuki Power Station (SE), Richards Bay Port Expansion 2 (AECOM), Babalegi Steel Recycling (AGES), Safika Ladium (AGES), Safika Cement Isando (AGES), RareCo (SE), Struisbaai WEF (SE), Perdekraal WEF (ERM), Kotula Tsatsi Energy (SE), Olievenhoutbosch Township (Nali), , HDMS Project (AECOM), Quarry extensions near Ermelo (Rietspruit Crushers), Proposed uMzimkhulu Landfill in KZN (nZingwe Consultancy), Linksfield Residential Development (Bokomoso Environmental), Rooihuiskraal Ext. Residential Development, CoT (Plandev Town Planners), Floating Power Plant and LNG Import Facility, Richards Bay (ERM), Floating Power Plant project, Saldanha (ERM), Vopak Growth 4 project (ERM), Elandspoort Ext 3 Residential Development (Gibb Engineering), Tiegerpoort Wedding Venue (Henwood Environmental), Monavoni Development (Marindzini), Rezoning of Portion 1 (Primo Properties), Tswaing Mega City (Makole), Mabopane Church (EP Architects), ERGO Soweto Cluster (Kongwiwe), Fabio Chains (Marang), GIDZ JMP (Marang), Temple Complex (KWP Create), Germiston Metals (Dorean), Sebenza Metals (Dorean), Malmesbury Abattoir Expansion (Roelcor), Mogalakwena PV Project (Zutari), Serengeti PV Review (Zutari)</i></p>
<p>Noise Compliance Statements</p>	<p><i>Dwarsrug BESS (SiVEST), Hyperion BESS (SE), Loeriesfontein BESS (SiVEST), Platsjambok East and West BESS (SiVEST), Waaihoek BESS (CESNET), Koeris BESS (Zurari), Frontier Gas to Power (ERM), Hyperion BESS (Savannah), Pepsico (Zutari), Umsinde Road (EnviroAgri), Khangela Road (EnviroAgri), Mopani PV projects (AGES Limpopo)</i></p>
<p>Project reviews and amendment reports</p>	<p><i>Loperberg (Savannah), Dorper (Savannah), Penhoek Pass (Savannah), Oyster Bay (RES), Tsitsikamma Community Wind Farm Noise Simulation project (Cennergji), Amakhala Emoyeni (Windlab), Spreeukloof (Savannah), Spinning Head (SE), Kangra Coal (ERM), West Coast One (Moyeng Energy), Rhebokfontein (Moyeng Energy), De Aar WEF (Holland), Quarterly Measurement Reports – Dangote Delmas (Exigo), Quarterly Measurement Reports – Dangote Lichtenburg (Exigo), Quarterly Measurement Reports – Mamba Cement (Exigo), Quarterly Measurement Reports – Dangote Delmas (Exigo) Quarterly Measurement Reports – Nokeng Fluorspar (Exigo), Proton Energy Limited Nigeria (ERM), Hartebeest WEF Update (Moorreesburg) (Savannah Environmental), Modderfontein WEF Opinion (Terramanzi), IPD Vredenburg WEF (IPD Power Vredenburg), Paul Puts WEF (ARCUS), Juno WEF (ARCUS), Rhebokfontein WEF (ERM), Umzinde WEF (Zutari), Kokerboom 4 (Zutari), Dwarsrug WEF (SiVEST), Highlands North (Holland), Highlands Central (Holland), Highlands South (Holland), etc.</i></p>
<p>Blasting Vibration Assessments</p>	<p><i>Anglo Bierspruit (Aurecon), Arengo Iron Thabazimbi (BeyondGES), Vlakfontein Coal (EMAssistance), Gruisfontein Coal (Jacana), Glencore Goedgevonden (Jacana), Remhoogte Coal (Zyntha), Rietkuil Coal (Zyntha), Vygenhoek Platinum (EMAssistance), Dunbar Coal (Inviro-Insight), Bloemendal Coal (Inviro-Insight), Salene Manganese (Prescali), VTM Mining (Ikwezi Vanadium), Newcastle Coal project (Ericure)</i></p>

ANNEXURE D: DECLARATION OF INDEPENDENCE

The specialist declaration of independence in terms of the Regulations_

I, Tony Barbour , declare that --

General declaration:

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;

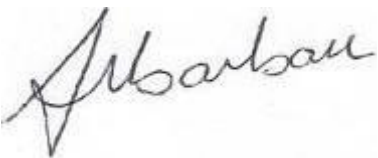
I will comply with the Act, Regulations and all other applicable legislation;

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:

Tony Barbour Environmental Consulting and Research

Name of company (if applicable):

15 June 2023

Date:



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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

File Reference Number:

NEAS Reference Number:

Date Received:

(For official use only)
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

IGOLIDE WIND ENERGY FACILITY NEAR FOCHVILLE, GAUTENG PROVINCE

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: B-BBEE	Johann Lanz – Soil Scientist		
	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 (Pr.Sci.Nat.) Reg. no. 400268/12 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:

Date

16/04/2023

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

Date

16/04/2023

Signature of the Commissioner of Oaths

Date



ANNEXURE C: CV

Tony Barbour

ENVIRONMENTAL CONSULTING

10 Firs Avenue, Claremont, 7708, South Africa
(Cell) 082 600 8266
(E-Mail) tony@tonybarbour.co.za

Tony Barbour's has 30 years' experience in the field of environmental consulting and management. His experience includes working for ten years as a consultant in the private sector followed by four years at the University of Cape Town's Environmental Evaluation Unit. He has worked as an independent consultant since 2004, with a key focus on Social Impact Assessment. His other areas of interest include Strategic Environmental Assessment and review work.

EDUCATION

- BSc (Geology and Economics) Rhodes (1984).
- B Economics (Honours) Rhodes (1985).
- MSc (Environmental Science), University of Cape Town (1992).

EMPLOYMENT RECORD

- Independent Consultant: November 2004 – current;
- University of Cape Town: August 1996-October 2004: Environmental Evaluation Unit (EEU), University of Cape Town. Senior Environmental Consultant and Researcher;
- Private sector: 1991-August 2000: 1991-1996: Ninham Shand Consulting (Now Aurecon, Cape Town). Senior Environmental Scientist; 1996-August 2000: Steffen, Robertson and Kirsten (SRK Consulting) – Associate Director, Manager Environmental Section, SRK Cape Town.

LECTURING

- University of Cape Town: Resource Economics; SEA and EIA (1991-2004);
- University of Cape Town: Social Impact Assessment (2004-current);
- Cape Technikon: Resource Economics and Waste Management (1994-1998);
- Peninsula Technikon: Resource Economics and Waste Management (1996-1998).

RELEVANT EXPERIENCE AND EXPERTISE

Tony Barbour has undertaken in the region of 260 SIA's, including SIA's for infrastructure projects, dams, pipelines, and roads. All of the SIAs include interacting with and liaising with affected communities. In addition, he is the author of the Guidelines for undertaking SIA's as part of the EIA process commissioned by the Western Cape Provincial Environmental Authorities in 2007. These guidelines have been used throughout South Africa.

Tony was also the project manager for a study commissioned in 2005 by the then South African Department of Water Affairs and Forestry for the development of a Social Assessment and Development Framework. The aim of the framework was to enable the Department of Water Affairs and Forestry to identify, assess and manage social impacts associated with large infrastructure projects, such as dams. The study also included the development of guidelines for Social Impact Assessment, Conflict Management, Relocation and Resettlement and Monitoring and Evaluation.

Countries with work experience include South Africa, Namibia, Angola, Botswana, Zambia, Lesotho, Swaziland, Ghana, Senegal, Nigeria, Mozambique, Mauritius, Kenya, Ethiopia, Oman, South Sudan, Sudan and Armenia.



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

DETAILS OF THE SPECIALIST, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

File Reference Number:	(For official use only)
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

Igolide Wind Energy Facility (WEF) and associated infrastructure, near Fochville, Gauteng

Kindly note the following:

1. 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.
2. 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>.
3. A copy of this form containing original signatures must be appended to all Draft and Final Reports submitted to the department for consideration.
4. 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.
5. 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:	JG Afrika (Pty) Ltd		
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	1	Percentage Procurement recognition
			135%
Specialist name:	A Johnson		
Specialist Qualifications:	BTech, BSc Hons, Masters (Transport Studies)		
Professional affiliation/registration:	PrTechEng – 201570274		
	ECSA (Engineering Counsel of South Africa)		
Physical address:	14 Central Square, Pinelands, 7405		
Postal address:	P.O. Box 38564, Pinelands		
Postal code:	7430	Cell:	083 364 2293
Telephone:	021 530 1800	Fax:	021 532 0950
E-mail:	johnsona@jgafrika.com		

2. DECLARATION BY THE SPECIALIST

I, ADRIAN JOHNSON, 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



JG AFRIKA (PTY) LTD

Name of Company:

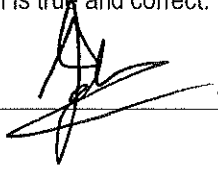
Date

09 / 06 / 2023

3. UNDERTAKING UNDER OATH/ AFFIRMATION

I, ADLIAN JOHNSON, 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



Name of Company

JG AFRICA (PTY) LTD

Date

09/06/2023

Signature of the Commissioner of Oaths



Date

2023/06/09



ADRIAN WESLEY NATHANIEL JOHNSON



Position in Firm	Associate and Manager: Traffic and Transportation
Area of Specialisation	Traffic and Transportation Engineering
Qualifications	PrTechEng, Master of Transport Studies, BSc (Hons) (Applied Science: Transport Planning), BTech Civil Engineering
Years of Experience	18 Years
Years with Firm	6.5 Years

SUMMARY OF EXPERIENCE

Adrian Johnson is a Professional Technologist registered with ECSA (201570274). He joined JG Afrika (Pty)Ltd. in January 2017. Adrian holds a BSc (Hons) (Applied Sciences: Transportation Planning) degree from the University of Pretoria, a BTech degree in Civil Engineering from the Cape Peninsula University of Technology and completed a Masters' degree in Transport Studies at the University of Cape Town in 2020. He has more than 18 years of experience in a wide range of engineering projects.

He has technical and professional skills in traffic impact studies, transport impact assessments, public transport planning, non-motorised transport planning & design, data analysis of public transport systems, access management plans, quality control, project planning and implementation, geometric design, site supervision, transport assessments for renewable energy projects, speed limit reviews and road safety audits.

PROFESSIONAL REGISTRATIONS & INSTITUTE MEMBERSHIPS

- PrTechEng** - Engineering Council of South Africa, Registration No 201570274
- SAICE** - South African Institute of Civil Engineering. No 201700129
- SARF WR** - South African Road Federation Western Region Administrator and Committee Member

EDUCATION

- 2004 - National Diploma (Civil)** – Peninsula Technikon
- 2006 - BTech (Civil)** – Cape Peninsula University of Technology
- 2011 - BSc (Hon)** (Applied Sciences: Transportation Planning) – University of Pretoria
- 2020 – Master of Transport Studies** – University of Cape Town

SPECIFIC EXPERIENCE

JG Afrika (Pty) Ltd (Previously Jeffares & Green (Pty) Ltd)

September 2022 – Date

Position – Associate and Manager: Traffic and Transportation

Traffic Engineering Support Services Provision of Professional Services: Transport Engineering, Planning and Management to the City of Cape Town, Western Cape. Client: City of Cape Town

Adam Tas Corridor Transport Studies for the Adam Tas Corridor in Stellenbosch, Western Cape. Client: Stellenbosch Municipality

Limpopo Road Asset Management System Undertake network level road safety assessments and analysis of accident statistics of the Limpopo road network (5 000km). – Client: Roads Agency Limpopo SOC Ltd

Aberdeen WEFs Transport study for the proposed Windfarms, Western Cape Client: Private

Hydra B Solar Cluster Transport study for multiple solar facilities in the Northern Cape. Client: Private

Britstown WEFs Transport study for the proposed Windfarms, Northern Cape Client: Private

JG Afrika (Pty) Ltd (Previously Jeffares & Green (Pty) Ltd)

2017 – June 2022

Position – Senior Technologist (Traffic and Transportation Engineering)

Various Transport Impact Statements (TIA) and Traffic Impact Statements (TIS) for private clients including:

- Weltevreden Clinic TIS for Edifice Consulting Engineers
- Oakhurst Primary TIS for BVZ Plan
- Sinai Academy TIS for Bettsworth Scott Planners
- Rustlamere TIA for Bettsworth Scott Planners
- Joostenbergvlakte Farms 732 and 728 TIA for Asla
- Garden Emporium TIA for Rory Cameron Smith Architects
- Strandfontein Sandmine TIS for Chand Environmental Consultants
- Proposed development of Erf 538 Grassy Park TIA for First Plan
- Riebeek West: Proposed Function/Wedding Venue TIS for Elco Property Developers

Kampies Housing Development Proposed upgrade of the informal settlement on Cape Farm 616 Philipi and Erf 63 Spring Field, providing 275 units. Client: Ian Rout & Associates

Highlands Housing Project Traffic calming plans for three proposed sites in Mitchells Plain, Cape Town – Client: City of Cape Town

Richards Bay Gas to Power Facility Transport study for the proposed renewable energy facility in Richards Bay, KwaZulu Natal – Client: Private Client

Solid Waste Management Sector Plan – Collections Work Brief Information Analyst assisting with the assessments and detailed analysis of the collections and drop-off facilities operating model of the City of Cape Town – Client: City of Cape Town

Nooiensfontein Housing Project Transport Study for the Nooiensfontein Housing Development in Bluedowns (2500 units) – Client: Ian Rout & Associates

Bardale Housing Development Transport Impact Assessment and Signal timing plan, Western Cape – Client: Integrated Housing Development

Enkanini Housing Transport Impact Assessment for the development of the Enkanini Informal Settlement, Kayamandi - Client: Stellenbosch Municipality

Sutherland and Rietrug Access Road Transport study for the upgrading and widening of the access road to the proposed Sutherland Windfarm, Northern Cape Client: Nala Environmental Consulting

Pienaarspoort Windfarm Transport study for the proposed Pienaarspoort Windfarm, Western Cape Client: Savannah Environmental (Pty) Ltd

Speed Limit Review Main Road 546, Main Road 552 and Divisional Road 2220, Lutzville, Western Cape – Client: Western Cape Government

Gromis and Komis Wind Energy Facility Transport study for the proposed Windfarm, Northern Cape. Client: CSIR

Geelkop Solar Facility Transport study for the proposed Geelkop Solar PV Facility near Upington, Northern Cape – Client: AEP (Pty) Ltd

Khunab Solar Facility Transport study for the proposed Khunab Solar PV Facility near Upington, Northern Cape – Client: AEP (Pty) Ltd

Bloemsmond Solar Facility Transport study for the proposed Bloemsmond Solar PV Facility near Upington, Northern Cape – Client: AEP (Pty) Ltd

NMT Study for the Upgrading of DR1285, Elgin – Client: Western Cape Government

Traffic Study for the Kudusberg and Rondekop Wind Energy Facilities, Northern Cape. Client: G7

Speed Limit Review Main Road 540, Elandsbay, Western Cape – Client: Western Cape Government

Road Safety Audit for N1 Section 16 Winburg to Ventersburg – Client: Aurecon on behalf of SANRAL

Road Safety Audit for the for the N4 at Bapong, Client: Bakwena

Road Safety Audit for N2 Wild Coast Toll Road Projects, Eastern Cape & Natal, Client: Aurecon/Knight Piesold on behalf of SANRAL

Kuruman Wind Energy Facility Transport study for the proposed Kuruman Windfarm, Northern Cape. Client: CSIR

Coega West Windfarm Transportation and Traffic Management Plan for the proposed Coega Windfarm in Coega, Port Elizabeth – Client: Electrawinds Coega

Parking Audit of the Groenvallei area in Bellville – Client: City of Cape Town

Road Safety Appraisals for the Mpumalanga Province – Client: Mpumalanga Provincial Government

Transportation and Traffic Management Plan for the proposed Coega West Wind Energy Facility in Port Elizabeth – Client: Electrawinds Coega (Pty) Ltd

Road Safety Appraisals for North Region of Cape Town – Client: Aurecon on behalf of City of Cape Town

Speed Limit Reviews for North Region of Cape Town – Client: Aurecon on behalf of City of Cape Town

Road Safety Audit for the Upgrade of N1 Section 4 Monument River – Client: Aurecon on behalf of SANRAL

Road Safety Audit for the Upgrade of N2 Section 8 Knysna to Wittedrift – Client: SMEC on behalf of SANRAL

Road Safety Audit for the Upgrade of N1 Section 16 Zandkraal to Winburg South – Client: SMEC on behalf of SANRAL

Traffic and Road Safety Studies for the Improvement of N7 Section 2 and Section 3 (Rooidraai and Piekenierskloofpass) – Client: SANRAL

Traffic Engineer for the Upgrade of a 150km Section of the National Route N2 from Kangela to Pongola in KwaZulu-Natal, Client: SANRAL

Traffic engineering services for the Extension of Duine Weg, Jeffery's Bay, Eastern Cape. Client: Kouga Local Municipality

GIBB (Pty) Ltd

2014 – 2016

Position – Technologist / Project Leader (Traffic and Transportation Engineering)

Operational Support to the MyCiTi Integrated Rapid Transit System - Tasks included analysis of AFC data, generating monthly operations reports, analysis of passenger surveys, journey time runs, travel time surveys, compilation of a MyCiTi Festive Season Report and compilation of reports for the Century City and V&A Waterfront stakeholders. Client: Transport for Cape Town.

Technical Support to the MyCiTi Business Planning Department - A detailed route-by-route analysis, during peak and off-peak conditions to generate daily demand profiles, with a focus on identifying inefficiencies.

Additional tasks included:

- An assessment of profitability of routes based on patronage, revenue and operating costs;
- Analysis of AFC data;
- Comparison between the manual survey results and the Transportation Reporting System (TRS) data;
- Analysis of the Free Token Card Promotion;
- Route and bus optimisation;
- Station and feeder stop utilization and
- Assessment of Parking Tariffs for Managed Parking Bays within the City of Cape Town.

Client: Transport for Cape Town.

AFC Data Analysis - Data Analysis of AFC Data of the City of Tshwane's A Re Yeng Bus Service. Client: Development Bank of Southern Africa.

Ghana Transport Status Quo Study - Transport Status Quo Study for the Greater Accra Regional Spatial Development Framework. Client: Government of Ghana: Ministry of Lands & Natural Resources.

Botswana TIA – Transport Impact Assessment for the Mogoditshane- Kanye Road project in Botswana. Client: Republic of Botswana's Ministry of Transport and Communications: Roads Department.

Botswana Access Management Plan Transport Impact Assessment for the Mogoditshane- Kanye Road project in Botswana. Client: Republic of Botswana's Ministry of Transport and Communications: Roads Department.

MyCiTi System Planning - Rationalisation of the GABS bus routes within the City of Cape Town. Client: Transport for Cape Town.

Road Safety Master Plan - Compilation of a Road Safety Master Plan for Stellenbosch Municipality. Client: Stellenbosch Municipality.

Constantia TIS - Transport Impact Statement and Parking Motivation for the proposed redevelopment of Erf 2134, Constantia. Client: High Constantia Properties.

Top Yard TIA - Transport Impact Assessment for the Government Garage Precinct Plan (Top Yard). Client: PricewaterhouseCoopers (PWC).

Boschendal TIA - Transport Impact Assessment for the development of Boschendal Village. Client: Boschendal (Pty)Ltd.

Vergenoegd TIA - Transport Impact Assessment for the development of Portion 19 of Farm 653, Vergenoegd. Client: Headland Planners.

Tygerberg Hospital Traffic Status Quo Study - Traffic Status Quo Study for the Development Framework for the Tygerberg Hospital Site in Bellville. Client: City Think Space.

Eerste River TIA - Transport Impact Assessment for Erf 5541, Eerste River. Client: Headland Planners

BVi Consulting Engineers

2013– 2014

Position – Technologist (Transportation Engineering)

Waihoek Wind Energy Facility TIA - Transport Impact Assessment for the proposed construction of a Wind Energy Facility on Waihoek Farm near Utrecht Town in Kwazulu-Natal. Client: Mainstream Renewable Power.

Sere Wind Farm - Supervision of bellmouth widening and other modifications along routes between the Saldanha Port and the Sere Wind Farm near Koekenaap. Client: Siemens.

Slip lane Design for Windhoek Service Station - Geometric design of a slip lane to the existing Windhoek Fuel Centre, Windhoek, Namibia. Client: Multi Consult.

Lafarge Industries

2011– 2013

Position – Quality Controller

Responsible for the quality control at four ReadyMix concrete plants and the Tygerberg Quarry.

- Design of new concrete mixes and optimisation of existing mix designs.
- Assist client with technical matters and problem solving.
- Compile technical reports.
- Motivate, train and develop staff to ensure growth and succession.
- Arrange and monitor staff schedules.
- Conduct Quality training for field technicians, reps and batchers.
- Statistical analysis of concrete results and monitoring product performance.

Aurecon Mozambique

2010– 2011

Position – Roadworks Engineer (Site Supervision)

Mozambique site supervision - Roadworks Engineer responsible for inspection of works and monitoring workmanship for the Construction of a 135km road from Montepuez to Ruaca in Northern Mozambique. Client: Administracao Nacional De Estradas (Mozambican Roads Authority)

Aurecon South Africa

2004– 2010

Position – Technician/Technologist (Traffic and Transportation Engineering)

Kewtown site supervision - Resident Engineer for the Community Residential Units Programme Pilot Project in Kewtown. Client: City of Cape Town.

N2 road design - Vertical and horizontal alignment of the N2 from Coega to Colchester. Client: SANRAL.

Western Cape Provincial Weighbridges - Resident Engineer on various projects involving the upgrading and expansion of the 9 Provincial Weighbridges in the Western Cape. Client: Provincial Administration: Western Cape.

Traffic and Transport tasks - Various traffic counts, traffic data analysis and transport impact statements. Client: Various.

CONTINUED PROFESSIONAL DEVELOPMENT

Courses

- 2007** - SAICE Flood estimation and Storm Water Drainage for Roads Course
- 2008** - Certificate in Project Management
- 2009** - SAICE Practical Geometric Design Course
- 2011** - C&CI Concrete Technology
- 2013** - Post graduate Courses – Financial Management and Asset Management
AutoCAD Civil 3D Training
- 2014** - Leadership Training -Project Risk Training and Anti- Corruption and Integrity Management
Post graduate Courses – Strategic Operations Management and Project Management
- 2015** - Leadership Training – Report Writing
- 2016** - Leadership Training - Quality Management and Time Management
- 2017** - Road Safety Auditor Course (SARF)
- 2018** - Road Safety in Engineering Seminar (SARF)

- 2020 Understanding and the Investigation of Road Traffic Accidents
2021 Intersection Optimisation course (SARF)

PERSONAL DETAILS

Nationality – South African
Date of Birth – 1984-05-31
Domicile – Cape Town, South Africa

Languages

English – Very Good
Afrikaans – Good



We certify that

Adrian Wesley Nathaniel Johnson

was admitted to the degree of

Master of Transport Studies

on 13 July 2021

A handwritten signature in black ink, appearing to read 'M. Hakeug', written over a horizontal line.

Vice-Chancellor



A handwritten signature in black ink, reading 'Royston Pillay', written over a horizontal line.

Registrar



University of Pretoria

The Council and Senate hereby declare that
at a congregation of the University the degree

Bachelor of Science Honours in Applied Science: Transportation Planning

with all the associated rights and privileges
was conferred on

Adrian Wesley Nathaniel Johnson

in terms of the Higher Education Act, 1997 and the Statute of the University

On behalf of the Council and Senate

Vice-Chancellor and Principal

On behalf of the Faculty of Engineering,
Built Environment and Information Technology

Dean



Registrar

2012-04-17



Cape Peninsula
University of Technology

THE
DEGREE
BACCALAUREUS TECHNOLOGIAE

ENGINEERING: CIVIL

is awarded to

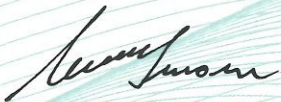
JOHNSON, ADRIAN WESLEY NATHANIEL

student number

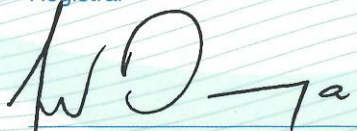
202126552

with effect from

01 DECEMBER 2006

A handwritten signature in black ink, appearing to read 'Adrian Johnson', written over a horizontal line.

Registrar

A handwritten signature in black ink, appearing to read 'W.D. - 7a', written over a horizontal line.

Vice-Chancellor



50 933

Engineering Council of South Africa



**This is to
certify
that**

Adrian Wesley Nathaniel Johnson

is registered as

Professional Engineering Technologist

in terms of the Engineering Profession Act, 2000
(Act No. 46 of 2000)

Date

22 September 2015

**Registration
Number**

201570274

President

Chief Executive Officer





environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

DETAILS OF THE SPECIALIST, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

	(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

Igolide Wind Energy Facility (WEF) and associated infrastructure, near Fochville, Gauteng

Kindly note the following:

1. 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.
2. 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>.
3. A copy of this form containing original signatures must be appended to all Draft and Final Reports submitted to the department for consideration.
4. 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.
5. 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:	ISHECONcc		
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	4	Percentage Procurement recognition
Specialist name:	Debra Catherine Mitchell		
Specialist Qualifications:	MSc Chem Eng		
Professional affiliation/registration:	ECOSA Professional Engineer		
Physical address:	Building H4, Pinelands Office Park, Maxwell Drv, Moddefontein		
Postal address:	P O Box 320, Modderfontein		
Postal code:	1645	Cell:	+27 (0)82 428 8844
Telephone:	+27 (0)11 201 4783	Fax:	+27 (0)86 549 0878
E-mail:	mitchelld@isheocn.co.za		

2. DECLARATION BY THE SPECIALIST

I, DEBRA CATHERINE MITCHELL, 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

ISHECONcc

Name of Company:

12 JUNE 2023

Date

3. UNDERTAKING UNDER OATH/ AFFIRMATION

I, DEBRA CATHERINE MITCHELL, 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

ISHECONcc

Name of Company

12 JUNE 2023

Date



Signature of the Commissioner of Oaths

12 JUNE 2023

Date

Dennis Richard Diamond
COMMISSIONER OF OATHS
9/1/8/2 Randburg (A15) 14 March 2001
Fish Eagle 2 Office Park
Unit 12 Kingfisher Crescent
Tel. (011) 867-4326 Fax: (011) 867-1552



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

DETAILS OF THE SPECIALIST, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

File Reference Number:	(For official use only)
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

Igolide Wind Energy Facility (WEF) and associated infrastructure, near Fochville, Gauteng

Kindly note the following:

1. 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.
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Departmental Details

Postal address:

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

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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:	WSP Africa (Pty) Ltd			
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	1	Percentage Procurement recognition	135%
Specialist name:	Heather Davis			
Specialist Qualifications:	BSc Honours Engineering Geology & Geotechnics, GDE Civil Engineering			
Professional affiliation/registration:	Professionally registered engineer. Engineering Council of South Africa, PrEng960229			
Physical address:	Building 1 Maxwell Office Park, Magwa Crescent, Waterfall City, 1685			
Postal address:	PO Box 6001, Halfway House			
Postal code:	1685	Cell:	083 650 6391	
Telephone:	011 313 1176	Fax:	n/a	
E-mail:	heather.davis@wsp.com			

2. DECLARATION BY THE SPECIALIST

I, Heather Davis, 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

WSP Africa (Pty) Ltd

Name of Company:

05 May 2023

Date

3. UNDERTAKING UNDER OATH/ AFFIRMATION

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

H Davis

Signature of the Specialist

WSP Africa (Pty) Ltd

Name of Company

05 May 2023

Date

[Signature]

Signature of the Commissioner of Oaths

6 June 2023

Date

I certify that this document is a true representation (copy) of the original which was handed to me for authentication.
I further certify that from my observation, an amendment or change was not made to the original document.

[Signature] Date 6 June 2023
COMMISSIONER OF OATHS REF: 9/1/8/2 Pretoria
Margaretha Johanna Kotze 2007/08/29
Facilities Manager
Building 1, Magwa Office Park, Waterfall City, Midrand



Heather Davis

Mine Waste, Geotechnical & Material Services, Senior Geotechnical Engineer

CAREER SUMMARY

Forty years of experience within the fields of geotechnical engineering and engineering geology. Most of the work has been gained in Sub Saharan Africa including South Africa, Swaziland, Botswana, Malawi, and Angola. A wide range of projects have been handled ranging from investigations for large projects such as coal fired power stations, hydroelectric power schemes, mine processing plants, major freeways and major pipelines to smaller scale projects for commercial developments and residential buildings. Forensic investigations have, also, been completed for failed tailings facilities, structures and slopes.



Responsibility has been taken for all facets of the geotechnical investigation including the site investigation planning, procurement, drilling supervision, fieldwork, in situ testing, analysis, reporting and supervision during construction. Contract documentation and administration for geotechnical investigations has, also, been handled.

Extensive experience in dolomitic terrain and was involved in the re-drafting of SANS 1936 Parts 1 and 2 and subsequent revisions to the standard. Also, involved in the ECSA feasibility study to have a specified category of registration for D4 level dolomite geo-professionals. Dolomite assessments for large facilities such as the Telkom site in Centurion, the Mispah tailings facility as well as for residential complexes and individual units have been carried out. Linear dolomitic assessments for roads and pipelines have been completed.

Heather is a registered professional engineer, a fellow of the South African Institution of Civil Engineers and served as Treasurer of the Geotechnical Division from 2006 to 2020.

4 months with WSP

40 years of experience

Area of expertise

- Site Investigations.
- Forensic Assessments.
- Dolomitic Terrain Assessments.
- Problem Soil Assessments

Language

English - Fluent

EDUCATION

Graduate Diploma in Civil Engineering in the field of Geotechnical Engineering, University of the Witwatersrand SA	1993
BSc (Honours) Engineering Geology and Geotechnics, Portsmouth University, England	1982

PROFESSIONAL MEMBERSHIPS

Professionally registered Engineer with the Engineering Council of South Africa (PrEng 960229)	1996
Fellow of the South African Institution of Civil Engineering.	1998



Heather Davis

Mine Waste, Geotechnical & Material Services, Senior Geotechnical Engineer

PROFESSIONAL HISTORY

WSP Group Africa (Pty) Ltd	April 2022 – present
Jones & Wagener (Pty) Ltd (following the merger with Verdi Consulting)	January 2018 – March 2022
Verdi Consulting Engineers (Pty) Ltd	March 2014 – December 2017
AECOM SA (Pty) Ltd (formerly BKS (Pty) Ltd.	February 2007 – February 2014
ARQ (Pty) Ltd	January 2003 – January 2007
Knight Hall Hendry (Pty) Ltd	January 2001 – December 2003
VKE Engineers (Pty) Ltd	November 1987 – December 2000
National Building Research Institute of the CSIR	November 1985 – October 1987
Geological Survey of South Africa	November 1982 – October 1985

PROFESSIONAL EXPERIENCE

SANRAL, N1 Sections 20 and 21 Geotechnical Investigation, Brakfontein, South Africa 2008 to 2012

Lead Geotechnical Engineer

Upgrade, extensions and additions to the N1 Ben Schoeman Freeway, Sections 20 and 21, between the Brakfontein and Allandale Interchanges as part of the Gauteng Freeway Improvement Project (GFIP) carried out for South African National Roads Agency SOC Ltd (SANRAL). Contract documentation for the subsurface investigation was drafted and all components of the project management of the SANRAL contract were handled. The site investigation included extensive rotary core drilling, percussion drilling and test pitting. Work included the analysis, assessment and provision of founding recommendations for the 22km of dual carriageway. Design components included culverts, retaining walls, cut slopes, embankments and bridges founded on ancient granite, sedimentary rocks of the Pretoria Group along with dolomite and dolomitic residuum. Both conventional and piled foundations were used for the various bridge structures and elements.

SANRAL, N11 Section 9, Hendrina, South Africa 2015 to 2016

Lead Geotechnical Engineer

Upgrade of National route N11 Section 9 between Hendrina and Hendrina Power Station. Planning and supervision of the linear investigation, by means of rotary drilling and test pitting, of 18.56km of roadway including two river bridges, cuts, fills and culverts. Full report compiled including recommendations for all facets of the project. All work carried out as per the current SANRAL requirements and all contract administration for the drilling investigation handled.

SANRAL, National Route N5, between Harrismith and Kestell, Harrismith and Kestell, Orange Free State, South Africa 2011 to 2013

Lead Geotechnical Engineer

Carried out for SANRAL, which included drafting the contract documentation for the subsurface investigation which included extensive rotary core drilling and test pitting. The project includes the rehabilitation of the National Route 5 involving extending existing bridges, design and construction of new bridges and design of significant culvert structures. The bridge structures included river bridges, road over rail and road over road structures. Work carried out included supervision of the site investigation, analysis and provision of founding recommendations for all structures, contract administration and arbitration of claims.



Heather Davis

Mine Waste, Geotechnical & Material Services, Senior Geotechnical Engineer

Anglo Platinum. Mogalakwena Platinum Mine, New Northern Concentrator, Limpopo, South Africa. 2020 to 2021

Lead Geotechnical Engineer

Pre-feasibility and feasibility level investigations for the New Northern Concentrator. Supervision of all field work and provision of recommendations for all the structural elements. Additional design level investigation carried out for the M3C BOS Low Grade Stockpile.

NMPP/ Transnet, Multi Products Pipeline, Geotechnical Investigation, Johannesburg. South Africa 2008 to 2009

Section Lead Geotechnical Engineer

Geotechnical input for pipeline section running from Kendal to Waltloo and Jameson Park to Langlaagte in Johannesburg. Investigations have included test pitting; in situ testing and borehole have included test pitting, in situ testing and borehole drilling. The assessment of the route underlain by dolomite and dolomitic residuum was, also undertaken.

TCTA, Vaal River Eastern Sub-System Augmentation (VRESAP),Vaal, South Africa 2006 to 2008

Lead Geotechnical Investigation

Geotechnical investigation for TCTA for a pipeline to carry water from the Vaal Dam to Secunda for use by SASOL and ESKOM. Planning and preparation of contract documentation for drilling, trenching programmes, laboratory and in situ testing. Extensive field work was completed, and recommendations provided for trench sidewall stability, excavatability, construction through problem areas and recommendations for design and construction of the surge tanks, pipe bridges, abstraction works, de-silting works and access roads.

Aquarius Mining. Marikana, Mine Processing Plant, Rustenburg, South Africa 2001 to 2002

Geotechnical Engineer – Plant side

Several candidate sites and the detailed Geotechnical investigation of the final site for the processing plant for new platinum mine. Foundation recommendations for all plant elements were provided including those for silos, mills, crushers and conveyor trestles. Foundation design for large vibratory plant elements. Ongoing foundation inspections and providing geotechnical advice and recommendations to the client throughout construction.

Eskom, Medupi and Kusile Power Stations, Investigations and Foundation Assessments, Limpopo, South Africa 2008 to 2014

Lead Geotechnical engineer for AECOM

Assessment carried out for Hitachi/Eskom of existing information regarding the founding conditions. Provision of structure specific foundation recommendations which included settlement analysis, assessment of bearing capacity and determination of parameters for dynamic design. Site inspections and assessment of ground conditions during construction for both Kusile and Medupi. Also, project manager for an additional geotechnical investigation carried out at Medupi Power Station due to unforeseen ground conditions. Investigation included percussion drilling with the Jean Lutz computerised system along with triple tube rotary drilling. Analysis of data allowing optimisation of the power station design.

Harmony Goldfields. Mispah, Tailings Storage Facility, Far West Rand 2017 to 2018

Geotechnical Team Lead

Failure of a section of the Mispah Tailings Storage Facility (TSF) which is underlain by dolomite, dolomitic residuum and rocks of the Karoo Supergroup. The initial assessment lead to the entire facility being re-assessed and candidate sites for new facilities being investigated. Of specific note was the liaison with several other geotechnical/engineering geological consulting firms regarding the failure.



Heather Davis

Mine Waste, Geotechnical & Material Services, Senior Geotechnical Engineer

Eskom. Medupi, Flue Gas De-sulphurisation Project, Limpopo 2017 to 2018

Lead Geotechnical Engineer

Construction of Units 1 to 6. The investigation comprises test pitting, geophysical surveys and drilling. Foundation recommendations for all facets of the project were provided.

Irene Village, Mall Extensions, Centurion, South Africa 2015 to 2018

Dolomite Specialist.

In depth assessment of existing information applicable to the Irene Village Mall retail development in Irene. Dolomite stability assessments for extensions to the existing shopping mall including the addition of a multi-level parkade and additional retail space. Provision of founding recommendations for all facets of the development including earthworks, roadways and foundations.

Gautrans. Gautrain Project, Centurion, South Africa 2007 to 2014

Geotechnical Engineer

Input and comment on aspects of the route underlain by dolomite including the Centurion Gautrain Station were provided. Assessment of the efficacy of the remedial measures utilised at the station including an extensive programme of grouting. Also, investigation of dolomite related subsidence and a sinkhole adjacent to the Gautrain route and below a raised section of the train line in the Centurion area. Subsequent design of the remedial measures for the sinkhole, drainage measures and long-term monitoring of the area.

Africa Kingdom Holdings. Serengeti Golf and Wildlife Estate, Estate Developments, Kempton Park, South Africa 2016 to 2022

Dolomite Specialist

Dolomite stability assessments, coupled with near surface investigations, of parcels of land throughout the Serengeti Golf and Wildlife Estate. Developments have included single, double and triple storey residential units, Hotel, Club House and artificial lake. All reports have been submitted to the Council for Geoscience (CGS) and have included IHC to IHC7 conditions with Dolomite Area Designations of D2 to D4 being represented. NHBRC applications have been made for all the residential developments.

Aerosud, Manufacturing Facility, Pierre van Ryneveld Park, Centurion . South Africa 2016 to 2018

Dolomite Specialist

Various dolomite stability investigations and reviews have been undertaken for warehouses, ablution blocks, workshops, parking areas and other infrastructure elements across the Aerosud manufacturing facility. All work has, and is, being carried out according to SANS 1936 Parts 1 to 4 of 2012. A Dolomite Risk Management Plan was drafted for the Aerosud Facility and is updated on a regular basis. The site manly classifies as IHC4 to IHC7 with Dolomite Area Designation D2 and D3 being applicable to most of the site.

Atterbury Properties. Erasmuspark/ Castlegate, Multi Use Development, Erasmuspark, South Africa 2016 to 2020

Geotechnical Engineer and Dolomite Specialist

Existing information in line with SANS 1936 on a site underlain by dolomite and dolomitic residuum and non-dolomitic formations. Programme of drilling and near surface investigation, to feasibility level, to de-lineate those areas underlain by dolomite and provision of recommendations for a mixed-use development which will include retail and residential components. Subsequent design level investigations have been completed for various large structures across the site and further de-lineation of developable and non-developable areas.



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

DETAILS OF THE SPECIALIST, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

File Reference Number:
NEAS Reference Number:
Date Received:

(For official use only)

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

Igolide Wind Energy Facility (WEF) and associated infrastructure, near Fochville, Gauteng

Kindly note the following:

1. 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.
2. 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>.
3. A copy of this form containing original signatures must be appended to all Draft and Final Reports submitted to the department for consideration.
4. 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.
5. 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

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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:	SLR Consulting (South Africa) (Pty) Ltd		
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	4	Percentage Procurement recognition
			30.88
Specialist name:	Kerry Lianne Schwartz		
Specialist Qualifications:	BA		
Professional affiliation/registration:	SAGC (GISc Technician)		
Physical address:	Suite1 Building D, Monte Circle, 178 Montecasino Boulevard, Fourways		
Postal address:	As above		
Postal code:	2191	Cell:	082 469 5850
Telephone:	011 467 0945	Fax:	
E-mail:	klschwartz@slrconsulting.com		

2. DECLARATION BY THE SPECIALIST

I, **Kerry Schwartz**, 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.

KSchwartz

Signature of the Specialist

SLR Consulting (South Africa) (Pty) Ltd

Name of Company:

08 June 2023

Date

3. UNDERTAKING UNDER OATH/ AFFIRMATION

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

K Schwartz

Signature of the Specialist

SLR Consulting (South Africa) (Pty) Ltd

Name of Company

08 June 2023

Date

[Signature]
Signature of the Commissioner of Oaths

Date *8 June 2023*

COMMISSIONER OF OATHS
Oren Jan Van Vrede
Ex Officio – Professional Accountant (S.A.)
Member No. 33335
Building D Monte Circle, 178 Montecasino Boulevard,
Fourways, Johannesburg, 2191
(011) 467-0945

CURRICULUM VITAE

KERRY LIANNE SCHWARTZ

SENIOR GIS CONSULTANT

EMPA, South Africa

QUALIFICATIONS

BA 1982 Geography, Leeds Trinity University, UK

EXPERTISE

- GIS, spatial modelling and 3D analysis
- Visual Impact Assessment
- Fatal Flaw Assessments
- Glint and Glare Assessments

Kerry is a highly focused and dedicated Spatial Professional with strong technical skills and some 27 years' experience in the application and use of geographic analysis and geospatial technologies in support of a range of environmental and development planning projects. While Kerry's expertise is largely centred on the management and presentation of geospatial data for environmental impact assessments, her GIS skills are frequently utilised in support of a range of other projects, including:

- Strategic environmental assessments and management plans;
- Visual and landscape assessments;
- Glint and glare assessments;
- Wetland / surface water assessments;
- Catchment delineation for floodline analysis;
- Urban and Rural Development Planning;
- Transport Assessments; and
- Infrastructure Development Planning.

Kerry has extended her skills base to include the undertaking of specialist Visual Impact Assessments (VIAs) for a range of projects, including renewable energy, power line and residential / mixed-use developments.

PROJECTS

A selection of Kerry's key project's are presented below.

Built Infrastructure

EIA and EMP for a 9km railway line and water pipeline for manganese mine – Kalagadi Manganese

Kerry was responsible for GIS analysis and mapping in support of the EIA project in the Northern Cape, South Africa.

EIA and EMP for 5x 440kV Transmission Lines between Thyspunt (proposed nuclear power station site) and several substations

Kerry was responsible for GIS analysis and mapping in support of the EIA project in the Port Elizabeth area in the Eastern Cape, South Africa.

<p>EIA for multi petroleum products pipeline from Kendall Waltloo, and from Jameson Park to Langlaagte Tanks farms Pipelines</p>	<p>Kerry was responsible for GIS analysis and mapping in support of the EIA project.</p>
<p>Environmental Management Plan for copper and cobalt mine</p>	<p>Kerry was responsible for GIS analysis and mapping in support of the EMP project in the Democratic Republic of Congo.</p>
<p>EIA and Agricultural Feasibility study for Miwani Sugar Mill</p>	<p>Kerry was responsible for GIS analysis and mapping in support of the EIA project in Kenya.</p>
<p>EIAs for several Solar Photovoltaic Energy Facilities and associated infrastructure</p>	<p>Kerry was responsible for GIS analysis and mapping in support of several EIAs for Solar PV facilities, the most recent projects being:</p> <ul style="list-style-type: none"> • Oya Energy Facility (Western Cape Province); • Mooi Plaats, Wonderheuvel and Paarde Valley Solar PV Facilities (Northern Cape Province); and • Sendawo 1, 2 and 3 Solar Energy Facilities (North West Province).
<p>EIAs / BAs for several WEFs and associated infrastructure</p>	<p>Kerry was responsible for GIS analysis and mapping in support of several EIAs for Wind Energy Farms, the most recent projects being:</p> <ul style="list-style-type: none"> • Tooverberg WEF (Western Cape Province); • Rondekop WEF (Western Cape Province); and • Graskoppies, Hartebeest Leegte, Ithuba and !Xha Boom (Leeuwberg Cluster) WEFs (Northern Cape Province).
<p>Basic Assessments for various 400kV and 132kV Distribution Lines for the Transnet Coal Link Upgrade Project</p>	<p>Kerry was responsible for GIS analysis and mapping in support of the powerline BA project in KwaZulu-Natal and Mpumalanga, South Africa.</p>
<p>Environmental Assessment for the proposed Moloto Development Corridor</p>	<p>Kerry was responsible for GIS analysis and mapping in support of the EIA project in the Limpopo Province.</p>
<p>Environmental Advisory Services for the Gauteng Rapid Rail Extensions Feasibility Project</p>	<p>Kerry was responsible for GIS analysis and mapping in support of a feasibility study for a rail extension in Gauteng, South Africa.</p>
<p>Environmental Screening for the Strategic Logistics and Industrial Corridor Plan for Strategic Infrastructure Project 2</p>	<p>Kerry was responsible for GIS analysis and mapping in support of the environmental screening for strategic infrastructure in KwaZulu-Natal, the Free State and Gauteng.</p>

<p>Fatal Flaw Assessments for various proposed Renewable Energy Facilities</p>	<p>Kerry was responsible for GIS analysis and mapping in support of fatal flaw assessment for renewable energy projects in the Northern Cape and Western Cape Provinces.</p>
	<p>Strategic Planning</p>
<p>Lesotho Highlands Development Association – Lesotho</p>	<p>GIS database development for socio-economic and health indicators arising from Social Impact Assessments</p>
<p>Development Plans for the adjacent towns of Kasane and Kazungula and for the rural village of Hukunsi</p>	<p>Kerry was responsible for GIS database management, spatial data analysis and mapping for the development plans for towns in Botswana.</p>
<p>Integrated Development Plans for various District and Local Municipalities</p>	<p>Kerry was responsible for GIS database management, spatial data analysis and mapping for various IDPs for District Municipalities in KwaZulu-Natal.</p>
<p>Rural Development Initiative and Rural Roads Identification for uMhlathuze Local Municipality</p>	<p>Kerry was responsible for GIS database management, spatial data analysis and mapping for rural road identification in the uMhlathuze Local Municipality in KwaZulu-Natal.</p>
<p>Tourism Initiatives and Master Plans for areas such as the Mapungubwe Cultural Landscape</p>	<p>Kerry was responsible for GIS database management, spatial data analysis and mapping for various Master Plans in the Limpopo and Northern Cape Provinces.</p>
<p>Spatial Development Frameworks for various Local and District Municipalities</p>	<p>Kerry was responsible for GIS database management, spatial data analysis and mapping for Spatial Development Frameworks for various Municipalities in KwaZulu-Natal, Mpumalanga and the Free State.</p>
<p>Land Use Management Plans/Systems (LUMS) for various Local Municipalities</p>	<p>Kerry was responsible for GIS database management, spatial data analysis and mapping for the development of Land Use Management Systems for various Local Municipalities in KwaZulu-Natal.</p>
<p>Land use study for the Johannesburg Inner City Summit and Charter</p>	<p>Kerry was responsible for GIS database management, spatial data analysis and mapping for the Johannesburg Inner City land use study.</p>
<p>Due Diligence Investigation for the Port of Richards Bay</p>	<p>Kerry was responsible for GIS database management, spatial data analysis and mapping for the Port of Richards Bay Due Diligence Investigation.</p>
	<p>State of the Environment Reporting</p>
<p>2008 State of the Environment Report for City of Johannesburg</p>	<p>Kerry was responsible for GIS database management, spatial data analysis and mapping for the 2008 Johannesburg State of the Environment Report.</p>

	Strategic Environmental Assessments and Environmental Management Frameworks
SEA for Greater Clarens	Kerry was responsible for GIS database management, spatial data analysis and mapping for the Greater Clarens SEA in the Free State Province.
SEA for the Marula Region of the Kruger National Park	Kerry was responsible for GIS database management, spatial data analysis and mapping for the Marula Region SEA on behalf of SANParks.
SEA for Thanda Private Game Reserve	Kerry was responsible for GIS database management, spatial data analysis and mapping for the Thanda Private Game Reserve SEA in KwaZulu-Natal.
SEA for KwaDukuza Local Municipality	Kerry was responsible for GIS database management, spatial data analysis and mapping for the KwaDukuza Local Municipality SEA in KwaZulu-Natal.
SEA for Molemole Local Municipality, Capricorn District Municipality	Kerry was responsible for GIS database management, spatial data analysis and mapping for the Molemole Local Municipality SEA in Limpopo Province.
SEA for Blouberg Local Municipality, Capricorn District Municipality	Kerry was responsible for GIS database management, spatial data analysis and mapping for the Blouberg Local Municipality in Limpopo Province.
SEA for the Bishopstowe study area in the Msunduzi Local Municipality	Kerry was responsible for GIS database management, spatial data analysis and mapping for the Bishopstowe SEA in KwaZulu-Natal.
EMF for proposed Renishaw Estate	Kerry was responsible for GIS database management, spatial data analysis and mapping for the Reinshaw Estate EMF in KwaZulu-Natal.
EMF for Mogale City Local Municipality, Mogale City Local Municipality	Kerry was responsible for GIS database management, spatial data analysis and mapping for the Mogale City Local Municipality EMF in Gauteng.
	Visual Impact Assessments
VIAs for various Solar Power Plants and associated grid connection infrastructure	<p>Kerry was responsible for the GIS mapping and visual impact assessments for various Solar Power Plants and associated grid connection infrastructure (Northern Cape, Free State, Limpopo and North West Province) the most recent projects being:</p> <ul style="list-style-type: none"> • Camden 1 Solar Energy Facility (Mpumalanga Province); • Vhuvhili Solar Energy Facility (Mpumalanga Province); • Rinkhals Solar Energy Facility (Northern Cape Province); • Aardvark Solar Energy Facility (Northern Cape Province); • Oya Energy Facility (Western Cape Province); and • Mooi Plaats, Wonderheuvel and Paarde Valley Solar PV facilities (Northern Cape Province).

<p>VIAs for various WEFs and associated grid connection infrastructure</p>	<p>Kerry was responsible for the GIS mapping and visual impact assessments for various Wind Energy Farms and associated grid connection infrastructure (Northern Cape and Western Cape), the most recent projects including:</p> <ul style="list-style-type: none"> • Gromis and Komas WEFs (Northern Cape Province). • Paulputs WEF (Northern Cape Province); • Kudusberg WEF (Western Cape Province); • Tooverberg WEF (Western Cape Province); • Rondekop WEF (Northern Cape Province); and • San Kraal and Phezukomya WEFs (Northern Cape Province).
<p>VIAs for various 400kV and 132kV Distribution Lines for the Transnet Coal Link Upgrade Project</p>	<p>Kerry was responsible for the GIS mapping and visual impact assessments for various powerlines in KwaZulu-Natal and Mpumalanga Provinces.</p>
<p>VIAs for the proposed Assagay Valley and Kassier Road North Mixed Use Development</p>	<p>Kerry was responsible for the GIS mapping and a visual impact assessment for the Assagay Valley and Kassier Road North Mixed Use Development in KwaZulu-Natal.</p>
<p>VIA for the proposed Tinley Manor South Banks Development</p>	<p>Kerry was responsible for the GIS mapping and a visual impact assessment for the Tinley Manor Southbanks Coastal Development in KwaZulu-Natal.</p>
<p>VIA for the proposed Tinley Manor South Banks Beach Enhancement Solution</p>	<p>Kerry was responsible for the GIS mapping and a visual impact assessment for the Tinley Beach Enhancement EIA in KwaZulu-Natal.</p>
<p>VIA for the proposed Mlonzi Hotel and Golf Estate Development</p>	<p>Kerry was responsible for the GIS mapping and a visual impact assessment for the Mlonzi Hotel and Golf Estate in the Eastern Cape.</p>
<p>Landscape Assessment for the Mogale City Local Municipality</p>	<p>Kerry was responsible for the GIS mapping and a visual impact assessment for the Mogale City Local Municipality landscape assessment.</p>
<p>MEMBERSHIPS</p>	
<p>GISSA</p>	<p>Member of Geo-Information Society of South Africa</p>
<p>SAGC</p>	<p>Registered as GISc Technician with the South African Geomatics Council, Membership No. GTC GISc 1187</p>

Kschwartz

20 February 2023



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

DETAILS OF THE SPECIALIST, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

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

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473 Steve Biko Road
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Email: EIAAdmin@environment.gov.za

1. SPECIALIST INFORMATION

Specialist Company Name:	ASHA Consulting (Pty) Ltd		
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	4	Percentage Procurement recognition
			0
Specialist name:	Dr Jayson Orton		
Specialist Qualifications:	D.Phil (Archaeology, Oxford, UK) MA (Archaeology, UCT)		
Professional affiliation/registration:	ASAPA CRM member No. 233 APHP member No. 043		
Physical address:	40 Brassie Street, Lakeside, 7945		
Postal address:	40 Brassie Street, Lakeside		
Postal code:	7945	Cell:	083 272 3225
Telephone:	021 788 1025	Fax:	n/a
E-mail:	jayson@asha-consulting.co.za		

2. DECLARATION BY THE SPECIALIST

I, JAYSON ORTON, 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;
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- 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

ASHA CONSULTING (PTY) LTD

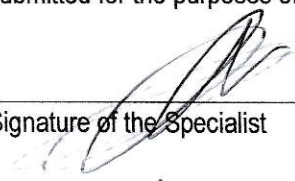
Name of Company:

06 JUNE 2023

Date

3. UNDERTAKING UNDER OATH/ AFFIRMATION

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



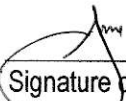
Signature of the Specialist

ASHA CONSULTING (PTY) LTD

Name of Company

06 JUNE 2023

Date



Signature of the Commissioner of Oaths

2023-06-06

Date





Curriculum Vitae

Jayson David John Orton

ARCHAEOLOGIST AND HERITAGE CONSULTANT

Contact Details and personal information:

Address: 40 Brassie Street, Lakeside, 7945
Telephone: (021) 788 1025
Cell Phone: 083 272 3225
Email: jayson@asha-consulting.co.za

Birth date and place: 22 June 1976, Cape Town, South Africa
Citizenship: South African
ID no: 760622 522 4085
Driver's License: Code EB
Marital Status: Married to Carol Orton
Languages spoken: English, Afrikaans, basic French

Education:

SA College High School	Matric	1994
University of Cape Town	B.A. (Archaeology, Environmental & Geographical Science)	1997
University of Cape Town	B.A. (Honours) (Archaeology) [First Class]	1998
University of Cape Town	M.A. (Archaeology)	2004
University of Oxford	D.Phil. (Archaeology)	2013

Employment History:

Spatial Archaeology Research Unit, UCT	Research assistant	Jan 1996 – Dec 1998
Department of Archaeology, UCT	Field archaeologist	Jan 1998 – Dec 1998
UCT Archaeology Contracts Office	Field archaeologist	Jan 1999 – May 2004
UCT Archaeology Contracts Office	Heritage & archaeological consultant	Jun 2004 – May 2012
School of Archaeology, University of Oxford	Undergraduate Tutor	Oct 2008 – Dec 2008
ACO Associates cc	Associate, Heritage & archaeological consultant	Jan 2011 – Dec 2013
ASHA Consulting (Pty) Ltd	Director, Heritage & archaeological consultant	Jan 2014 –

Professional Accreditation:

- Association of Southern African Professional Archaeologists (ASAPA) membership number: 233
- ASAPA CRM Section member with the following accreditation:
 - Principal Investigator: Coastal shell middens (awarded 2007)
Stone Age archaeology (awarded 2007)
Grave relocation (awarded 2014)
 - Field Director: Rock art (awarded 2007)
Colonial period archaeology (awarded 2007)
- Association of Professional Heritage Practitioners (APHP) membership number: 43
 - Accredited Professional Heritage Practitioner

Memberships and affiliations:

- South African Archaeological Society Council member 2004 – 2016
- Assoc. Southern African Professional Archaeologists (ASAPA) member 2006 –
- UCT Department of Archaeology Research Associate 2013 – 2017
- Heritage Western Cape APM Committee member 2013 – 2023
- UNISA Department of Archaeology and Anthropology Research Fellow 2014 –
- Fish Hoek Valley Historical Association 2014 –
- Kalk Bay Historical Association 2016 –
- Association of Professional Heritage Practitioners member (CRM Section) 2016 –
- Southern African Field Archaeology section editor 2021 –

Fieldwork and project experience:

I have extensive experience as Field Director and Principal Investigator throughout Western and Northern Cape, and the western Free State and Eastern Cape. I also work in the eastern part of South Africa through partnership with an Iron Age accredited colleague.

Feasibility studies:

Heritage feasibility studies examining all aspects of heritage from the desktop

Phase 1 surveys and impact assessments:

- Project types
 - Notification of Intent to Develop applications
 - Heritage Impact Assessments
 - Self-standing assessments under Section 38(1) of the NHRA
 - Assessments under NEMA and Section 38(8) of the NHRA
 - Archaeological specialist studies
 - Strategic assessments
 - Phase 1 archaeological test excavations in historical and prehistoric sites
 - Archaeological research projects
- Development types
 - Mining and borrow pits
 - Roads (new and upgrades)
 - Residential, commercial and industrial development
 - Agricultural developments
 - Dams and pipe lines
 - Power lines and substations
 - Renewable energy facilities (wind, solar and hydro-electric)

Phase 2 mitigation and research excavations:

- ESA open sites
 - Duinefontein, Gouda, Namaqualand
- MSA rock shelters
 - Fish Hoek, Yzerfontein, Cederberg, Namaqualand
- MSA open sites
 - Swartland, Bushmanland, Namaqualand
- LSA rock shelters
 - Cederberg, Namaqualand, Knersvlakte, Bushmanland
- LSA open sites (inland)
 - Swartland, Franschhoek, Namaqualand, Bushmanland, De Aar
- LSA coastal shell middens
 - Melkbosstrand, Yzerfontein, Saldanha Bay, Paternoster, Dwarskersbos, Infanta, Knysna, Namaqualand coast, Knersvlakte
- LSA burials
 - Melkbosstrand, Saldanha Bay, Namaqualand coast, Knysna
- Historical sites
 - Waterfront (fort, dump and well), Noordhoek (cottage), variety of small excavations in central Cape Town and surrounding suburbs
- Historic burial grounds
 - Green Point (Prestwich Street), V&A Waterfront (Marina Residential), Paarl, Beaufort West, Franschhoek (farmstead and well), Paarl, De Aar

Awards:

1998: Frank Schweitzer memorial book prize for an outstanding student.

2015/2016: Western Cape Government Cultural Affairs Awards: Best Heritage Project.



UNIVERSITY OF CAPE TOWN

we certify that

Jayson David John Orton

was admitted to the degree of

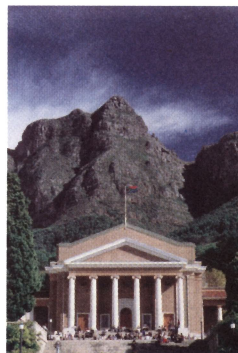
*Master of Arts
in Archaeology*

on 10 December 2004



[Signature]

Vice-Chancellor



[Signature]

Registrar

UNIVERSITY OF OXFORD



This is to certify that

Jayson David John Orton

St Hugh's College

having submitted a thesis entitled:

Late Holocene Archaeology in Namaqualand, South Africa: Hunter-Gatherers and Herders in a Semi-Arid Environment

and having satisfied all the conditions prescribed by the Statutes of the University on 9 January 2013, was on 8 June 2013 admitted to the Degree of

DOCTOR OF PHILOSOPHY

University Offices,
Oxford.
8 June 2013



Eva G. McKendrick

Registrar



Association of Professional Heritage Practitioners

MEMBERSHIP CERTIFICATE

THIS CERTIFIES THAT

Dr Jayson Orton

MEMBERSHIP NUMBER: PHP0043

has been awarded membership as a
PROFESSIONAL MEMBER (PHP)

This membership is subject to the *Standards for Membership and Code of Conduct*, referred to in Sections 2 and 3 of the APHP Constitution respectively. The definition of a

Professional may be found at: www.aphp.org.za/membership

Please contact us via info@aphp.org.za should further information be required.

THIS CERTIFICATE IS VALID FROM 1 JUNE 2023 – 1 JULY 2024


VICE CHAIRPERSON

[Issued by the Association of Professional Heritage Practitioners Executive Committee]

Watermark Image: Plate XXIII drawn by Mr J F Schofield, A.R.I.B.A.
Watermark Reference: Fouche, L. (1937) *Mapungubwe Ancient Bantu Civilization on the Limpopo* Cambridge University Press: London

Association of Professional Heritage Practitioners
info@aphp.org.za
www.aphp.org.za

J.F.S.





environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

DETAILS OF THE SPECIALIST, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

File Reference Number:	(For official use only)
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

Igolide Wind Energy Facility (WEF) and associated infrastructure, near Fochville, Gauteng

Kindly note the following:

1. 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.
2. 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>.
3. A copy of this form containing original signatures must be appended to all Draft and Final Reports submitted to the department for consideration.
4. 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.
5. 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

N.C

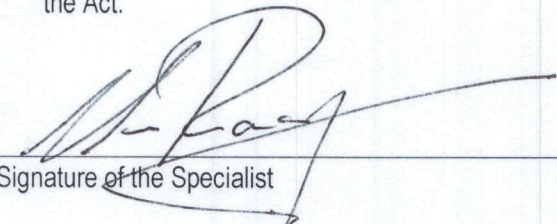
1. SPECIALIST INFORMATION

Specialist Company Name:			
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	Level 2	Percentage Procurement recognition
Specialist name:	Chris van Rooyen		
Specialist Qualifications:	BA LLB		
Professional affiliation/registration:	I work under the supervision and in association with Albert Froneman (MSc Conservation Biology) (SACNASP Zoological Science Registration number 400177/09) as stipulated by the Natural Scientific Professions Act 27 of 2003		
Physical address:	6 Pladda Drive, Plettenberg Bay		
Postal address:	PO Box 2676, Fourways, 2122		
Postal code:	2055	Cell:	0824549570
Telephone:	0824549570	Fax:	
E-mail:	Vanrooyen.chris@gmail.com		

2. DECLARATION BY THE SPECIALIST

I, Christiaan Stephanus van Rooyen, 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

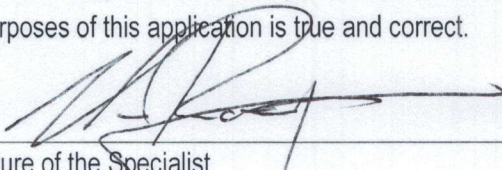
 Name of Company: Afrimage Photography t/a Chris van Rooyen Consulting

09 June 2023

 Date

3. UNDERTAKING UNDER OATH/ AFFIRMATION

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



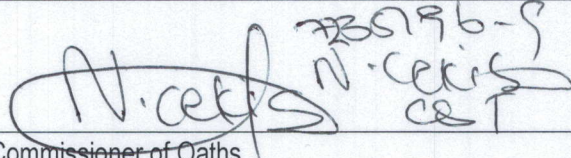
Signature of the Specialist

Afrimage Photography (Pty) Ltd t/a Chris van Rooyen Consulting

Name of Company

09 June 2023

Date



Signature of the Commissioner of Oaths

2023-06-09

Date



ALBERT FRONEMAN CURRICULUM VITAE

August 2023

NAME SURNAME	Albert Froneman
CONTACT DETAILS	P. O. Box 2676 Fourways, 2055, South Africa +27 (0)82 901 4016 albert.froneman@gmail.com
I D NUMBER	730814 5080 08 1
NATIONALITY	South African
LANGUAGE PROFICIENCY	English & Afrikaans

EDUCATION & QUALIFICATIONS:

1991: Matriculated - Hoërskool Linden, Johannesburg

1994: B.Sc. with distinction (Rand Afrikaans University)
Majors: Zoology; Chemistry; Botany

1995: B.Sc. Honours (Zoology) (Rand Afrikaans University)

1995: Geographic Information Systems (GIS) and data management –
Short Course (Rand Afrikaans University)

1996: M.Sc. Conservation Biology (UCT)
Mini Thesis – The role of Farm dams in conserving waterbird and
wetland diversity in the Western Cape, South Africa

PROFESSIONAL REGISTRATIONS, ASSOCIATIONS & MEMBERSHIPS

Senior Vice Chairman: International Bird Strike Committee 2005 - 2011

Professional Natural Scientist (*Pr.Sci.Nat*) registered with The South African
Council for Natural Scientific Professions (2009 – current)
Zoological Science
Registration number 400177/09

Member of Birdlife South Africa (BLSA)

Member of Botanical Society of South Africa

Life Member Wildlife and Environment Society of South Africa (WESSA)

Member of the Zoological Society of South Africa (ZSSA)

Member of the South African Wildlife Management Association (SWMA)

EMPLOYMENT/EXPERIENCE

1997 – 1998: Council for Scientific and Industrial Research (CSIR)
Geographic Information Systems Specialist

1999 – 2008: Endangered Wildlife Trust (EWT)

Airports Company South Africa (ACSA) – EWT Strategic Partnership Coordinator

Bird hazard control programs at all ACSA airports.

Conducted wildlife hazard management assessments with recommendations at:

- Pietermaritzburg Airport – KwaZulu Natal South Africa (2002)
- Polokwane International Airport – Limpopo, South Africa (2004)
- Manzini International Airport – Swaziland (2006)

Airport wildlife hazard assessment studies - Kenya Airports Authority (2005).

Implemented of first Border Collie ~ Airport Bird Hazard Management programs in the Southern Hemisphere at both Durban and Johannesburg International Airports (2003/4).

Extensive exposure to ACSA airport safety management systems (SMS) in terms of ICAO regulations through interaction with ACSA corporate office and all the airports managed by ACSA.

Involvement in the specification and design of the ACSA occurrence reporting system to facilitate online capturing of bird strike incident reports (2001).

Conducted an Aviation Bird Hazard Assessment Study for the Madiba Bay Leisure Park planned adjacent to Port Elizabeth Airport (2005).

Airport Bird / Wildlife Hazard Management familiarization training at Durban International Airport to delegations from Namibian and Nigerian airport authorities (2005).

Extension of Runway and Provision of Parallel Taxiway at Sir Seretse Khama Airport, Botswana Bird / Wildlife Hazard Management Specialist Study (2006)

Maun Airport Improvements Bird / Wildlife Hazard Management Specialist Study (2006)

Bird Impact Assessment Study - Bird Helicopter Interaction – The Bitou River, Western Cape Province South Africa (2006)

Proposed La Mercy Airport – Bird Aircraft interaction specialists study using bird detection radar to assess swallow flocking behaviour (2007)

Develop airport wildlife hazard management plan for Jomo Kenyatta International Airport in Nairobi Kenya (2007)

KwaZulu Natal Power Line Vulture Mitigation Project – GIS analysis (2004)

Perseus-Zeus Powerline EIA – GIS Analysis (2006)

Southern Region Pro-active GIS Blue Crane Collision Project. J. Smallie, C. v Rooyen & A. Froneman (2004)

SPECIALIST ORNITHOLOGICAL CONSULTING**AVIFAUNAL SPECIALIST – AIRPORT BIRD HAZARD MANAGEMENT:**

- King Shaka International Airport: Specialist advisor ~ Implementation of a bird detection radar system and development of an airport wildlife hazard management and operational environmental management plan for the King Shaka International Airport (2008 – 2011)
- Airlink Swaziland: Matsapha International Airport – bird hazard assessment study with management recommendations (2008)
- Evaluation of aviation bird strike risk at candidate solid waste disposal sites in the Ekurhuleni Metropolitan Municipality (2008)
- Gateway Airport Authority Limited – Gateway International Airport, Polokwane: Bird hazard assessment; Compile a bird hazard management plan for the airport (2009)
- Bird Specialist Study - Evaluation of aviation bird strike risk at the Mwakirunge Landfill site near Mombasa Kenya - May 2010
- Airport bird and wildlife hazard management plan and training to Swaziland Civil Aviation Authority (SWACAA) for Matsapha and Sikhupe International Airports (May – Jul 2012)
- Swaziland Civil Aviation Authority – Sikhuphe International Airport – Bird hazard management assessment (2014)
- Avifaunal Specialist Study to Assess Aviation Bird Strike Hazards at the Mangaung Airport Development Node. YB Mashalaba & Associates Consultants (2015)
- Specialist presentation on Aerodrome Wildlife Hazard Management in Africa at the 25th ACI Africa Annual General Assembly, Regional Conference and Exhibition in Maputo (2016)
- Airports Company South Africa – Avifaunal Specialist Consultant – Airport Bird and Wildlife Hazard Mitigation (2015 – 2017)
- Swaziland Civil Aviation Authority – Sikhuphe International Airport – Bird hazard management training of 14 staff members (2018)
- O R Tambo International Airport / ENS Africa – Avifaunal Specialist – expert opinion with regard to legal appeal against the proposed Viewpoint Farming compost facility on the farm Driefontein 83 I.R Boksburg that could attract birds into the flight path in the vicinity of the airport. (2018)
- Birdlife South Africa (BLSA) – Independent contractor to assist with operational support as per the BLSA – ACSA sponsorship agreement. Avifaunal Specialist review and findings regarding existing bird control programmes at ACSA airports. Assistance with implementation and training in respect of DNA sampling for the South African National Biodiversity Institute (SANBI) - National Zoological Garden / BLSA project to identify bird remains / evidence by means of DNA sequencing. (2018 – 2019)

AVIFAUNAL SPECIALIST STUDIES – OTHER DEVELOPMENTS:

- Avian biodiversity assessment for the Mafube Colliery Coal mine near Middelburg Mpumalanga (2011)

- Avifaunal Specialist Study - SRVM Volspruit Mining project – Mokopane Limpopo Province (2011)
- Avifaunal Impact Assessment Study (with specific reference to African Grass Owls and other Red List species) Stone Rivers Arch (2012)
- Bird Impact Assessment Study - Proposed Weltevreden Open Cast Coal Mine Belfast, Mpumalanga (2010)
- Bird Impact Assessment Study - Proposed 60-year Ash Disposal Facility near to the Kusile Power Station (2013)
- Avifaunal pre-feasibility assessment for the proposed Montrose dam, Mpumalanga (2013)
- Bird Impact Assessment Study – Proposed ESKOM Phantom Substation near Knysna, Western Cape (2013)
- Habitat sensitivity map for Denham’s Bustard, Blue Crane and White-bellied Korhaan in the Kouga Municipal area of the Eastern Cape Province (2014)
- Avifaunal monitoring – extension of Specialist Study - SRVM Volspruit Mining project – Mokopane Limpopo Province (2014)
- Avifaunal Specialist Study – Rooikat Hydro Electric Dam – Hope Town, Northern Cape (2014)
- The Stewards Pan Reclamation Project – Bird Impact Assessment study (2015)
- Bird Impact Assessment Study - Proposed Meerkat Hydro Electric Power Facility, Orange River, Northern Cape. Enviroworks (2015)
- Perth Kuruman & Hotazel Solar PV – avifaunal specialist report – GIBB (2016)
- Avifaunal impact statements – proposed Firlands & Woodlands monopole masts - Sir Lowry's Pass, Western Cape Province. Enviroworks (2016)
- Avifaunal disturbance assessment specialist study - N2 wild coast toll highway: haul road blasting – vulture monitoring. SLR Consulting (2017)
- Avifaunal Specialist Assessment - Proposed 25m high monopole telecommunications mast – Roodekrans, Roodepoort, Gauteng. Enviroworks (2017)

AVIFAUNAL SPECIALIST STUDIES: WIND ENERGY FACILITIES - PRE-CONSTRUCTION MONITORING & ENVIRONMENTAL IMPACT ASSESSMENT PROCESS:

- Jeffrey's Bay Wind Farm – 12-month preconstruction avifaunal monitoring project (2011)
- Oysterbay Wind Energy Project – 12-month preconstruction avifaunal monitoring project (2012)
- Ubuntu Wind Energy Project near Jeffrey's Bay – 12-month preconstruction avifaunal monitoring project (2012)
- Bana-ba-Pifu Wind Energy Project near Humansdorp – 12-month preconstruction avifaunal monitoring project (2012)
- Excelsior Wind Energy Project near Caledon – 12-month preconstruction avifaunal monitoring project (2012)
- Laingsburg Spitskopvlakte Wind Energy Project – 12-month preconstruction avifaunal monitoring project (2012)
- Loeriesfontein Wind Energy Project Phase 1, 2 & 3 – 12-month preconstruction avifaunal monitoring project (underway)
- Noupoot Wind Energy Project – 12-month preconstruction avifaunal monitoring project (2012)

- Vleesbaai Wind Energy Project – 12-month preconstruction avifaunal monitoring project (2012)
- Port Nolloth Wind Energy Project – 12-month preconstruction avifaunal monitoring project (2012)
- Langhoogte Caledon Wind Energy Project – 12-month preconstruction avifaunal monitoring project (2012)
- Lunsklip – Stilbaai Wind Energy Project – 12-month preconstruction avifaunal monitoring project (2013)
- Indwe Wind Energy Project – 12-month preconstruction avifaunal monitoring project (2013)
- Zeeland St Helena bay Wind Energy Project – 12-month preconstruction avifaunal monitoring project (2013)
- Wolseley Wind Energy Project – 12-month preconstruction avifaunal monitoring project (2013)
- Renosterberg Wind Energy Project – 12-month preconstruction avifaunal monitoring project (2014)
- De Aar – North (Mulilo) Wind Energy Project – 12-month preconstruction avifaunal monitoring project (2014)
- De Aar – South (Mulilo) Wind Energy Project – 12-month bird monitoring (2014)
- Namies – Aggenys Wind Energy Project – 12-month bird monitoring (2014)
- Pofadder - Wind Energy Project – 12-month bird monitoring (2014)
- Dwarsrug Loeriesfontein - Wind Energy Project – 12-month bird monitoring (2105)
- Waaihoek – Utrecht Wind Energy Project – 12-month bird monitoring (2105)
- Amathole – Butterworth Wind Energy Project – 12-month bird monitoring & EIA specialist study (2015)
- Beaufort West Trakaskuilen (Mainstream Renewable Power) Proposed Wind Energy Facility – 12-month bird monitoring (2015)
- Copperton Aletta & Eureka (Biotherm Energy) Proposed Wind Energy Facilities – 12-month bird monitoring (2015 / 2016)
- Kuruman (Mulilo) Proposed Wind Energy Facility – 12-month bird monitoring (2015 / 2016)
- Loeriesfontein Leeuwberg (Mainstream Renewable Power) Proposed Wind Energy Facility – 12-month bird monitoring (2015 / 2016)
- Loeriesfontein Kokerboom (Aurecon) Proposed Wind Energy Facility – 12-month bird monitoring (2015 / 2016)
- Tanzania – Makambako (Windlab - Aurecon) Proposed Wind Energy Facility – 12-month bird monitoring (2016 / 2017)
- Mamre Groenekloof (Mulilo) Proposed Wind Energy Facility – 24-month bird monitoring (2016-2018)
- Noupoot East & West (Innowind) Proposed Wind Energy Facilities – 12-month bird monitoring (2015 / 2016)
- Humansdorp (Cennergi) Proposed Wind Energy Facility – 12-month bird monitoring (2016)
- Richmond (Philco) Proposed Wind Energy Facility – 12-month bird monitoring (2016)

- Sutherland Maralla & Esizayo (Biotherm Energy) Proposed Wind Energy Facility – 12-month bird monitoring (2016)
- Sutherland (Mainstream Renewable Power) Proposed Wind Energy Facility – 12-month bird monitoring (2015 / 2016)
- Tanzania Makambako (Aurecon / Windlab) Proposed Wind Energy Facility – 12-month bird monitoring (2016)
- eThekweni Wind Repowering Project – 12-month bird monitoring (2016)
- Banna-ba-phifu Wind Energy Facility (Windcurrent) 6 months additional pre-construction bird monitoring (2018 - 2019)
- Boesmansberg Wind Energy Facility (Juwi) 12-months pre-construction bird monitoring (2017 – 2019)
- Kwagga Wind Energy Facility (ABO) 12-months pre-construction bird monitoring (2018-2020)
- Piernaarspoort Wind Energy Facility (ABO) 12-months pre-construction bird monitoring (2019-2020)
- Kokerboom 3 Wind Energy Facility (ACED) 12-months pre-construction bird monitoring (2019-2020)
- Koup 1 & 2 Wind Energy Facilities (Genesis-eco-energy) 12-months pre-construction bird monitoring (2019-2020)
- Duiker Wind Energy Facility, Vredendal, Western Cape 12-months pre-construction monitoring (ABO)
- Swellendam Wind Energy Facility, Western Cape, 12-month pre-construction monitoring (Veld Renewables)
- Lombardskraal Wind Energy Facility, Western Cape, 12-month pre-construction monitoring (Enertrag SA)
- Mainstream Kolkies & Heuweltjies Wind Energy Facilities, Western Cape, 12-month pre-construction monitoring (Mainstream)
- Great Karoo Wind Energy Facility, Northern Cape, 12-month pre-construction monitoring (African Green Ventures).
- Mpumalanga & Gauteng Wind and Hybrid Energy Facilities (6x), pre-construction monitoring (Enertrag SA) In Progress
- Dordrecht Wind Energy Facilities, Eastern Cape, Screening Report (Enertrag SA) In Progress
- Nanibeas North & South Wind Energy Facilities, Northern Cape, Screening Report (juwi)
- Sutherland Wind Energy Facilities, Northern Cape, Screening Report (WKN Windcurrent)
- Pofadder Wind Energy Facility, Northern Cape, Screening Report (Atlantic Energy)
- Haga Haga Wind Energy Facility, Eastern Cape, Amendment Report (WKN Windcurrent)
- Banken Wind Energy Facility, Northern Cape, Screening Report (Atlantic Energy)
- Hartebeest Wind Energy Facility, Western Cape, 12-month pre-construction monitoring (juwi). In Progress
- Iphiko Wind Energy facilities, Laingsburg, Western Cape, screening and pre-construction monitoring (G7 Energies) 2021
- Aberdeen 1, 2 & Aberdeen Kudu (3&4) Wind Energy Facilities, Eastern Cape, 12-month pre-construction monitoring (Energy Team) In Progress

- Loxton / Beaufort West Wind Energy Facilities, Northern Cape, 12-month pre-construction monitoring (Genesis Eco-Energy Developments) In Progress
- Ermelo & Volksrust Wind Energy Facilities, Northern Cape, Screening Report (WKN Windcurrent) 2021
- Gunstfontein Wind Energy Facilities, Sutherland, Northern Cape, additional pre-construction monitoring (ACED) 2021
- Pofadder Wind Energy Facility, Pofadder, Northern Cape, pre-construction monitoring (Atlantic Renewable Energy Partners) 2021
- Aberdeen Solar Energy Facility, Aberdeen, Eastern Cape, pre-construction monitoring (Atlantic Renewable Energy Partners) In Progress
- Prieska Power Reserve Wind Energy Facility, Prieska, Northern Cape. (Pre-construction Monitoring & EIA) (Cenec/Green Box) 2023
- Amsterdam Wind Energy Facility, Ermelo, Mpumalanga (Pre-construction Monitoring & EIA) (Mulilo) In progress
- Aria 1 Wind Energy Facility, Three Sisters, Northern Cape (Pre-construction Monitoring & EIA) (G7) In progress
- Biesiesvlei Wind Energy Facility, Smithfield, Free State (Pre-construction Monitoring & EIA) (Mainstream Renewable Power) In progress
- Brakdam Wind Energy Facility, Springbok, Northern Cape (Pre-construction Monitoring & EIA) (Enertrag South Africa) In progress
- Hartebeest Skeur Wind Energy Facility, Springbok, Northern Cape (Pre-construction Monitoring & EIA) (Enertrag South Africa) In progress
- Brakputs Wind Energy Facility, Springbok, Northern Cape (Pre-construction Monitoring & EIA) (Enertrag South Africa) In progress
- Varsputs Wind Energy Facility, Springbok, Northern Cape (Pre-construction Monitoring & EIA) (Enertrag South Africa) In progress
- Bultfontein Solar Energy Facility, Bultfontein, North-West, (Pre-construction monitoring & EIA) (Mainstream Renewable Power) 2023
- Beaufort West Renewable Energy Facility cluster (Pre-construction monitoring & EIA) (Genesis Eco Energy) In progress
- Camden I & II Renewable Energy Facility cluster, Ermelo, Mpumalanga. (Pre-construction monitoring & EIA) (Enertrag South Africa) In progress
- Kalkoenkrans Wind Energy Facility, Ermelo, Mpumalanga. (Pre-construction monitoring & EIA) (Mainstream Renewable Power) In Progress
- Canopus Wind Energy Facility, Sutherland, Northern Cape. (Pre-construction monitoring & EIA) (WKN Windcurrent) In Progress
- Scafell Solar Energy Facility, Parys, Free State. (Pre-construction monitoring & EIA) (Mainstream Renewable Power) In Progress
- Danielskuil Wind Energy Facility, Danielskuil, Northern Cape. (Pre-construction monitoring & EIA) (AGV) In Progress
- Doornrivier Solar Energy Facility, Virginia, Free State. (Pre-construction monitoring & EIA) (Keren Renewable Energy) 2022
- Dordrecht / Indwe Wind Energy Facilities, Eastern Cape. (Pre-construction monitoring & EIA) (ACED) In Progress
- Doringbaai Wind Energy Facility, Doringbaai, Western Cape. (Pre-construction monitoring & EIA) (WKN Windcurrent) In Progress
- Doringbaai South Wind Energy Facility, Doringbaai, Western Cape. (Pre-construction monitoring & EIA) (WKN Windcurrent) In Progress

- Ezelsjacht Renewable Energy Facility, De Doorns, Western Cape. (Pre-construction monitoring & EIA) (Mainstream Renewable Power) In Progress
- Gamoep, Wind Energy Facility, Springbok, Northern Cape. (Sensitivity Screening) (WKN Windcurrent) 2022
- Hanover Wind Energy Facility cluster, Hanover, Northern Cape. (Pre-construction monitoring & EIA) (Mainstream Renewable Power) In progress
- Haverfontein Wind Energy Facility, Carolina, Mpumalanga. (Pre-construction monitoring & EIA) (Earth & Wire) In progress
- Impilo Wind Energy Facility, Secunda, Mpumalanga. (Pre-construction monitoring & EIA) (WKN Windcurrent) In Progress
- Sinethemba Wind Energy Facility, Secunda, Mpumalanga. (Pre-construction monitoring & EIA) (WKN Windcurrent) In Progress
- Klipkraal Wind Energy Facility cluster, Fraserburg, Northern Cape. (Pre-construction monitoring & EIA) (Aura / Sivest) In Progress
- Leghoya Wind Energy Facility cluster, Ermelo, Mpumalanga. (Pre-construction monitoring & EIA) (REDCAP) In Progress
- Renoster Wind Energy Facility cluster, Edenville, Free State. (Pre-construction monitoring & EIA) (REDCAP) In Progress
- Namaacha Wind Energy Facility, Namaacha, Mozambique. (Pre-construction monitoring & EIA) (Globeleq/WSP) In Progress
- Phefumula Wind Energy Facility, Ermelo, Mpumalanga. (Pre-construction monitoring & EIA) (Seriti Green) In Progress
- Angora Wind Energy Facility, Richmond, Northern Cape. (Pre-construction monitoring & EIA) (Great Karoo Renewable Energy) In Progress
- Springbok Wind Energy Facility cluster, Springbok, Northern Cape. (Sensitivity Screening) (Mainstream Renewable Power) In progress
- Taaibosch Wind Energy Facility cluster, Limeacres, Northern Cape. (Pre-construction monitoring & EIA) (Enertrag South Africa) In Progress
- Ujekamanzi Wind Energy Facility, Amerfoort, Mpumalanga. (Pre-construction monitoring & EIA) (ABO) In Progress
- uKhanda Wind Energy Facility, Utrecht, Kwa-Zulu Natal. (Pre-construction monitoring & EIA) (WKN Windcurrent) In Progress

AVIFAUNAL SPECIALIST STUDIES: SOLAR ENERGY FACILITIES – PRE-CONSTRUCTION MONITORING & ENVIRONMENTAL IMPACT ASSESSMENT PROCESS:

- De Aar and Droogfontein Solar PV Pre- and Post-construction avifaunal monitoring (2015)
- Letsoai CSP & Enamandla PV Solar (Biotherm) Proposed Solar Energy Facilities – 12-month bird monitoring (2016)
- Sand Draai Concentrated Solar Power (CSP) and PV Proposed Solar Energy Facilities – 6-month bird monitoring (2016)
- Sendawo (Vryburg) Solar PV Power Solar Energy Facilities – 6-month bird monitoring (2015 / 2016)
- Tlisitseng (Lichtenburg) Solar PV Power Solar Energy Facilities – 6-month bird monitoring (2015 / 2016)
- Kappa Solar PV facility, Touwsrivier, Western Cape, pre-construction monitoring (Veroniva)
- Aardvark Solar PV facility, Copperton, Northern Cape, 12-month pre-construction monitoring (ABO)

- Bestwood Solar PV facility, Kathu, Northern Cape, pre-construction monitoring (AMDA)
- Boundary Solar PV facility, Kimberley, Northern Cape, Site sensitivity verification (Atlantic Renewable Energy Partners)
- De Aar cluster Solar PV facilities, De Aar, Western Cape, Site sensitivity verification (Atlantic Renewable Energy Partners)
- Rinkhals Solar PV facilities, Kimberley, Northern Cape, Pre-construction monitoring (ABO)
- Kolkies Sadawa Solar PV facilities, Touwsrivier, Western Cape, pre-construction monitoring (Mainstream)
- Leeudoringstad Solar PV facilities, Leeudoringstad, North West, Pre-construction monitoring (Upgrade Energy)
- Noupoort Umsobomvu Solar PV facilities, Noupoort, Northern Cape, Pre-construction monitoring (EDF Renewables)
- Oya Solar PV facilities, Matjiesfontein, Western Cape, pre-construction monitoring (G7 Energies)
- Vrede & Rondawel Solar PV facilities, Kroonstad, Free state, pre-construction monitoring (Mainstream)
- Aberdeen Solar Energy Facility, Aberdeen, Eastern Cape, pre-construction monitoring (Atlantic Renewable Energy Partners) 2023
- Bultfontein Solar Energy Facility, Bultfontein, North West, (Pre-construction monitoring & EIA) (Mainstream Renewable Power) 2023
- Beaufort West Renewable Energy Facility cluster (Pre-construction monitoring & EIA) (Genesis Eco Energy) in progress
- Camden I & II Renewable Energy Facility cluster, Ermelo, Mpumalanga. (Pre-construction monitoring & EIA) (Enertrag South Africa) In progress
- Scafell Solar Energy Facility, Parys, Free State. (Pre-construction monitoring & EIA) (Mainstream Renewable Power) In Progress
- Doornrivier Solar Energy Facility, Virginia, Free State. (Pre-construction monitoring & EIA) (Keren Renewable Energy) 2022
- Ezelsjacht Renewable Energy Facility, De Doorns, Western Cape. (Pre-construction monitoring & EIA) (Mainstream Renewable Power) In Progress
- Hanover Renewable Energy Facility cluster, Hanover, Northern Cape. (Pre-construction monitoring & EIA) (Mainstream Renewable Power) In progress
- iNyanga Emoyeni Solar Energy Facility, Murraysburg, Western Cape. (Pre-construction monitoring & EIA) (Seriti Green) In Progress
- Majuba Solar Energy Facility cluster, Volksrust, Mpumalanga. (Pre-construction monitoring & EIA) (Mainstream Renewable Power) In progress
- Tutuka Solar Energy Facility cluster, Standerton, Mpumalanga. (Pre-construction monitoring & EIA) (Mainstream Renewable Power) In progress
- Mukondeleli Solar Energy Facility - Secunda, Mpumalanga. (Pre-construction monitoring & EIA) (Enertrag South Africa) In Progress
- Quantum Solar Energy Facility, Tarlton, Gauteng. (Pre-construction monitoring & EIA) (Mainstream Renewable Power) In progress
- Springbok Solar Energy Facility cluster, Springbok, Northern Cape. (Sensitivity Screening) (Mainstream Renewable Power) In progress
- Taaibosch Solar Energy Facility cluster, Limeacres, Northern Cape. (Pre-construction monitoring & EIA) (Enertrag South Africa) In Progress

- Thanda Tau Solar Energy Facility cluster, Warden, Free State. (Pre-construction monitoring & EIA) (Enertrag South Africa) In Progress

WIND ENERGY FACILITIES – CONSTRUCTION AND OPERATIONAL PHASE AVIFAUNAL SPECIALIST STUDIES & IMPLEMENTATION OF MITIGATION MEASURES:

- Tsitsikamma (Cennergi) Wind Energy Facility – Operational phase bird monitoring (2016 - current)
- Mainstream Renewable Power – Noupoort Windfarm 24-month operational phase bird and bat monitoring in association with Stephanie Dippenaar Consulting (2016 - 2018)
- De Aar 1 Windfarm operational phase bird and bat monitoring (2017 - current)
- De Aar 2 - North Windfarm operational phase bird and bat monitoring (2017 - current)
- Biotherm Energy – Klipheuwel Dassiefontein Windfarm Year 5 operational phase bird monitoring (2017 - 2019)
- Mainstream Renewable Power – Loeriesfontein Windfarms x2 - 24-month operational phase bird and bat monitoring in association with Stephanie Dippenaar Consulting (2018-2020)
- Mainstream Renewable Power – Kangnas Windfarm – construction phase bird and bat monitoring in association with Stephanie Dippenaar Consulting (2019-2020)
- BTE - Excelsior WEF construction phase avifaunal monitoring Year 1 & Year 2, Biodiversity monitoring staff avifaunal training. Critical Habitat Assessment: Biodiversity Action Plan, Implementation of Shut Down on Demand (SDOD) pro-active mitigation strategy (in progress)
- Mainstream Renewable Power – Kangnas Windfarm - 36-month operational phase bird and bat monitoring in association with Stephanie Dippenaar Consulting – In Progress
- Perdekraal East Wind Energy Facility, Touws River, Western Cape, 18 months construction phase monitoring (Mainstream) 2021
- Mainstream Renewable Power – Perdekraal East Windfarm - 24-month operational phase bird and bat monitoring in association with Stephanie Dippenaar Consulting (2021-2023)
- Grassridge Wind Energy Facility, Uitenhage, Gqeberha – Biodiversity Monitoring Plan. EDF In progress.
- Waainek Wind Energy Facility, Makhanda, Eastern Cape – Biodiversity Monitoring Plan. EDF In progress.

GEOGRAPHIC INFORMATION SYSTEM ANALYSIS & MAPS:

- ESKOM Power line Makgalakwena EIA – GIS specialist & map production
- ESKOM Power line Benfiosa EIA – GIS specialist & map production
- ESKOM Power line Riversong EIA – GIS specialist & map production
- ESKOM Power line Waterberg NDP EIA – GIS specialist & map production
- ESKOM Power line Bulge Toulon EIA – GIS specialist & map production
- ESKOM Power line Bulge DORSET EIA – GIS specialist & map production
- ESKOM Power lines Marblehall EIA – GIS specialist & map production
- ESKOM Power line Grootpan Lesedi EIA – GIS specialist & map production
- ESKOM Power line Tanga EIA – GIS specialist & map production

- ESKOM Power line Bokmakierie EIA – GIS specialist & map production
- ESKOM Power line Rietfontein EIA – GIS specialist & map production
- Power line Anglo Coal EIA – GIS specialist & map production
- ESKOM Power line Camcoll Jericho EIA – GIS specialist & map production
- Hartbeespoort Residential Development – GIS specialist & map production
- ESKOM Power line Mantsole EIA – GIS specialist & map production
- ESKOM Power line Nokeng Flourspar EIA – GIS specialist & map production
- ESKOM Power line Greenview EIA – GIS specialist & map production
- Derdepoort Residential Development – GIS specialist & map production
- ESKOM Power line Boynton EIA – GIS specialist & map production
- ESKOM Power line United EIA – GIS specialist & map production
- ESKOM Power line Gutshwa & Malelane EIA – GIS specialist & map production
- ESKOM Power line Origstad EIA – GIS specialist & map production
- Zilkaatsnek Development Public Participation –map production
- Belfast – Paarde Power line - GIS specialist & map production
- Solar Park Solar Park Integration Project Bird Impact Assessment Study – avifaunal GIS analysis. Apr 2013
- Kappa-Omega-Aurora 765kV Bird Impact Assessment Report – Avifaunal GIS analysis. Apr 2013
- Gamma – Kappa 2nd 765kV – Bird Impact Assessment Report – Avifaunal GIS analysis. Apr 2013
- ESKOM Power line Kudu-Dorstfontein Amendment EIA – GIS specialist & map production. Feb 2013
- Proposed Heilbron filling station EIA – GIS specialist & map production. May 2013
- ESKOM Lebatlhane EIA – GIS specialist & map production. Aug 2013
- ESKOM Pienaars River CNC EIA – GIS specialist & map production. Sept 2013
- ESKOM Lemara Phiring Ohrigstad EIA – GIS specialist & map production. Aug 2013
- ESKOM Pelly-Warmbad EIA – GIS specialist & map production. Sept 2013
- ESKOM Rosco-Bracken EIA – GIS specialist & map production. Jun 2013
- ESKOM Ermelo-Uitkoms EIA – GIS specialist & map production. Aug 2013
- ESKOM Wisani bridge EIA – GIS specialist & map production. Aug 2013
- City of Tswane – New bulkfeeder pipeline projects x3 Map production. 2013
- ESKOM Lebohang Substation and 132kV Distribution Power Line Project Amendment GIS specialist & map production. 2013
- ESKOM Geluk Rural Powerline GIS & Mapping. 2014
- Eskom Kimberley Strengthening Phase 4 Project GIS & Mapping. 2014
- ESKOM Kwaggafontein - Amandla Amendment Project GIS & Mapping. 2014
- ESKOM Lephalale CNC – GIS Specialist & Mapping. 2014
- ESKOM Marken CNC – GIS Specialist & Mapping. 2014
- ESKOM Lethabong substation and powerlines – GIS Specialist & Mapping. 2014

- ESKOM Magopela- Pitsong 132kV line and new substation – GIS Specialist & Mapping. 2014
- Landscape Dynamics – Honingklip filling station EIA – GIS Specialist & Mapping. 2015
- Landscape Dynamics – Bapsfontein filling station EIA – GIS Specialist & Mapping. 2015
- Landscape Dynamics – COT Pipeline Project EIA - GIS Specialist & Mapping. 2015
- ESKOM Western Cape Operating Unit – Environmental Sensitivity Maps (2015/2016)
- Waterberg JV Resources - GIS Specialist & Mapping. 2016
- MBT Depot HQ - GIS Specialist & Mapping for Landscape Dynamics 2016
- Doornplaats Public Garage – GIS Specialist & Mapping for Landscape Dynamics 2016
- Donkerhoek_Truckstop_– GIS Specialist & Mapping for Landscape Dynamics 2016
- Syferkuil-Rampheri – GIS Specialist & Mapping for Landscape Dynamics 2016
- Beaufort West Filling Station – GIS Specialist & Mapping for Landscape Dynamics 2016
- Orchards X Township – GIS Specialist & Mapping for Landscape Dynamics 2016
- N17 Filling stations – GIS Specialist & Mapping for Landscape Dynamics 2016
- Rietgat - filling station – GIS Specialist & Mapping for Landscape Dynamics 2016
- Jakalsdrift Filling Station – GIS Specialist & Mapping for Landscape Dynamics 2016
- Delareyville filling Station – GIS Specialist & Mapping for Landscape Dynamics 2016
- Carnival junction - filling station – GIS Specialist & Mapping for Landscape Dynamics 2016
- Abel Erasmus Road – GIS Specialist & Mapping for Landscape Dynamics 2016
- ESKOM - KUDU PS-ORANJEMUND PROJECT - GIS Specialist & Mapping for Landscape Dynamics 2016
- ESKOM Sekgame-Bulkop-Sishen – GIS Specialist & Mapping for Landscape Dynamics 2016
- ESKOM – Chemie substation and associated powerline infrastructure - GIS Specialist & Mapping for Landscape Dynamics 2016/2017
- Hartebeespoort Cable Way GIS Specialist & environmental sensitivity mapping for Landscape Dynamics 2018
- Donkerhoek development GIS Specialist & environmental sensitivity mapping for Landscape Dynamics 2018
- MBT petroleum depots - GIS Specialist & environmental sensitivity mapping for Landscape Dynamics 2018
- Carnival junction development - GIS Specialist & environmental sensitivity mapping for Landscape Dynamics 2018
- Meerhof x7 development - GIS Specialist & environmental sensitivity mapping for Landscape Dynamics 2018

- Hartbeesfontein Gateway development GIS Specialist & environmental sensitivity mapping for Landscape Dynamics 2018
- Cradock Filling Station - GIS Specialist & environmental sensitivity mapping for Landscape Dynamics 2018
- Little Jabu camp development - GIS Specialist & environmental sensitivity mapping for Landscape Dynamics 2018
- Bambisana development - GIS Specialist & environmental sensitivity mapping for Landscape Dynamics 2018
- NW Gateway development - GIS Specialist & environmental sensitivity mapping for Landscape Dynamics 2018
- Homestead WULA - GIS Specialist & environmental sensitivity mapping for Landscape Dynamics 2018
- Putfontein development - GIS Specialist & environmental sensitivity mapping for Landscape Dynamics 2018
- ESKOM transnet freight rail project - GIS Specialist & environmental sensitivity mapping for Landscape Dynamics 2019
- Mogale city development - GIS Specialist & environmental sensitivity mapping for Landscape Dynamics 2019
- Mokopane development - GIS Specialist & environmental sensitivity mapping for Landscape Dynamics 2018

AVIFAUNAL STRATEGIC ENVIRONMENTAL ASSESSMENTS (SEA):

- National Electricity Grid Infrastructure SEA Avifaunal Specialist Study in association with Chris van Rooyen Consulting (2015)
- Gas pipeline & additional National Electricity Grid Infrastructure SEA Avifaunal Specialist Study in association with Chris van Rooyen Consulting (2018)

AWARDS:

Birdlife South Africa Owl Award – in recognition of an outstanding contribution to Birdlife South Africa and dedication to the conservation of birds and their habitats. (2014)

PUBLICATIONS & GUIDELINE DOCUMENTS:

- **Froneman, A.**, Mangnall, M.J., Little, R.M., Crowe, T.M. (2001) Waterbird assemblages and associated habitat characteristics of farm ponds in the Western Cape, South Africa. *Biodiversity and Conservation* 10: 251–270.
- Dalton, Desire; De Bruyn, Marli; Mwale, Monica; Labuschagne, Kim; Hofmann, Melissa; **Froneman, Albert**; Smit-Robinson, Hanneline A.; and Kotze, Antoinette (2019) "First Record of White Stork in a Birdstrike in South Africa Above 3,300 m AGL," *Human–Wildlife Interactions*: 13: 18.
- Harebottle, D.M., Smit-Robinson, H. and **Froneman, A.** 2019. National guidelines for interventions that relate to colonial breeding waterbirds causing human-wildlife conflict in South Africa. BirdLife South Africa, Johannesburg.

CONFERENCES AND WORKSHOPS

- 2000 25th International Bird Strike Committee (IBSC) Amsterdam, Netherlands. (Oral presentation)
- 2001 USA / Canada Bird Strike Committee Meeting. Calgary, Canada. (Oral presentation)
- 2001 International Seminar on Bird Migration, Research, Education and Flight Safety in collaboration with the International Centre for the Study of Bird Migration for delegates from 25 Africa Countries (co-organiser). Israel (Oral presentations)
- 2002 3rd ESAF ICAO Bird Hazard Reduction Workshop. Kampala, Uganda. (Oral presentation)
- 2003 26th International Bird Strike Committee. Warsaw, Poland. (Oral presentation)
- 2004 USA / Canada Bird Strike Committee Meeting. Baltimore, USA. (Oral presentation)
- 2005 27th International Bird Strike Committee. Athens, Greece. (Oral presentation)
- 2007 USA / Canada Bird Strike Committee Meeting. Ontario, Canada. (Oral presentation)
- 2009 Aviation Week's Bird Strike Prevention Forum. Chicago, USA. (Invited speaker)
- 2009 USA / Canada Bird Strike Committee Meeting. Victoria, Canada. (Oral presentation)
- 2014 5th Annual Diamond Route Conference. Johannesburg, RSA. (Attendance)
- 2015 6th Annual Diamond Route Conference, Johannesburg, RSA. (Attendance)
- 2016 Learn About Birds conference, Birdlife South Africa, Skukuza, South Africa. (Attendance)
- 2016 7th Annual Oppenheimer DeBeers Group Research Conference, Johannesburg, RSA. (Attendance)
- 2017 Zoological Society of Southern Africa (ZSSA), Pretoria, South Africa. (Attendance)
- 2017 8th Annual Oppenheimer DeBeers Group Research Conference, Johannesburg, RSA. (Attendance)
- 2018 Learn About Birds conference, Birdlife South Africa, Langebaan, South Africa. (Attendance)
- 2018 9th Annual Oppenheimer DeBeers Group Research Conference, Johannesburg, RSA. (Attendance)
- 2019 BLSA Birds and Renewable Energy Forum. Johannesburg, RSA. (Attendance)
- 2021 Learn About Birds conference, Birdlife South Africa. (online)
- 2022 11th Oppenheimer Research Conference, Johannesburg, RSA. (Attendance)
- 2023 Learn About Birds conference, Birdlife South Africa, Wildernis, South Africa. (Attendance)



Die Raad en Senaat van die
Randse Afrikaanse Universiteit
verklaar hiermee dat die graad

BACCALAUREUS SCIENTIAE
(B.Sc.)

met studierigting

BIOLOGIESE WETENSKAPPE

met al die regte en voorregte daaraan verbonde
op 'n kongregasie van die Universiteit
cum laude toegeken is aan

ALBERT FRONEMAN

Kragtens die wet en statute van die Universiteit

C.F. Cronse
Rektor

[Handwritten Signature]
Registrateur



20-MAART-1995
Johannesburg



Die Raad en Senaat van die
RANDSE AFRIKAANSE UNIVERSITEIT
verklaar hiermee dat die graad
BACCALAUREUS SCIENTIAE CUM HONORIBUS

met studierigting

Dierkunde

met al die regte en voorregte daaraan verbonde
op 'n kongregasie van die Universiteit
toegeken is aan

ALBERT FRONEMAN

kragtens die Wet en statute van die Universiteit.

Rektor

Registrateur (Akademie)

22-MAART-1996
Johannesburg
ID 7308145080081





UNIVERSITY OF CAPE TOWN

we certify that

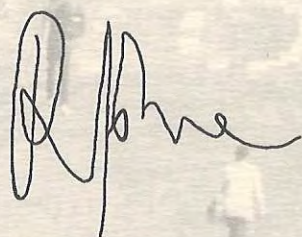
Albert Froneman

was admitted to the degree of

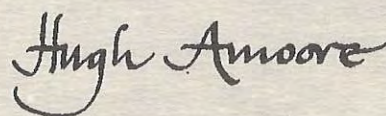
Master of Science

in Zoology (Conservation Biology)

on 27 June 1997



Vice Chancellor



Registrar



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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

Igolide Wind Energy Facility (WEF) and associated infrastructure, near Fochville, Gauteng

Kindly note the following:

1. 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.
2. 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>.
3. A copy of this form containing original signatures must be appended to all Draft and Final Reports submitted to the department for consideration.
4. 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.
5. 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:	WSP Group Africa (Pty) Ltd		
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)		Percentage Procurement recognition
Specialist name:	Lufuno Nemakhavhani		
Specialist Qualifications:	Master in Environmental Management		
Professional affiliation/registration:	South African Wetland Society-membership number 394374 South African Council of Natural Scientist Professional-Professional Natural Scientist (Reg no: 116461)		
Physical address:	Building 01, Maxwell Office Park, Magwa Cres, Waterfall City, Midrand, 2090		
Postal address:	Building 01, Maxwell Office Park, Magwa Cres, Waterfall City, Midrand, 2090		
Postal code:	2090	Cell:	0727189952
Telephone:	011 313 1121	Fax:	
E-mail:	Lufuno.nemakhavhani@wsp.com		

2. DECLARATION BY THE SPECIALIST

I, Lufuno Nemakhavhani, 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.

Nemakh.l

Signature of the Specialist

WSP Group Africa (Pty) Ltd.

Name of Company:

05 June 2023

Date

Details of Specialist, Declaration and Undertaking Under Oath

3. UNDERTAKING UNDER OATH/ AFFIRMATION

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

Nemakh.l

Signature of the Specialist

WSP Group Africa (Pty) Ltd.

Name of Company

05 June 2023

Date

[Signature]
Signature of the Commissioner of Oaths

7 June 2023
Date

I certify that this document is a true representation (copy) of the original which was handed to me for authentication.
I further certify that from my observation an amendment or change was not made to the original document.

[Signature] Date *7 June 2023*

COMMISSIONER OF OATHS REF: 9/1/8/2 Pretoria
Margaretha Johanna Kotze 2007/08/29
Facilities Manager
Building 1, Magwa Office Park, Waterfall City, Midrand



Lufuno Nemakhavhani

Earth & Environment – Planning & Advisory, Wetland Ecologist

CAREER SUMMARY

Lufuno Nemakhavhani is a Wetland Ecologist with nine (9) years of working experience in the Environmental Sciences field. She holds a Masters degree in Environmental Management focusing on Wetland health and rehabilitation.

Lufuno is in the biodiversity division at WSP Group, where her roles include conducting wetland assessment studies such as, wetland delineations, wetland impact assessment, wetland baseline assessment, wetland rehabilitation assessment and monitoring. She is also responsible for conducting biodiversity assessments such as biodiversity baseline assessments, biodiversity management plans, biodiversity impact assessment, ecosystem services assessment. She has conducted biodiversity studies in many parts of the South Africa and in Ghana.



Lufuno has also been involved in a number of environmental permitting projects such as basic assessments and environmental and social impact assessments. She also has experience with conducting environmental compliance audits against environmental authorisations during the construction and/or operation phases of a project.

Countries of work experience gained include South Africa and Ghana.

1 year with WSP

9 years of experience

Area of expertise

- Wetland Assessment
- Biodiversity Assessments
- Environmental Impact Assessments
- Environmental Compliance Audits
- Aquatic Biomonitoring Assessments

Language

- Tshivenda – Fluent
- English – Fluent
- Zulu – Fluent

EDUCATION

Master of Environmental Management Environmental Management, University of the Free State	2020
BSc (Hons) Environmental Management, University of South Africa, Johannesburg	2016
BSc Life & Environmental Science Geography & Environmental, University of Johannesburg	2012

ADDITIONAL TRAINING

Introduction to Tools for Wetland Assessment	2021
Introduction to Wetland Delineation and Assessment	2017
Standard ARC GIS Mapping	2015



Lufuno Nemakhavhani

Earth & Environment – Planning & Advisory, Wetland Ecologist

PROFESSIONAL MEMBERSHIPS

SAWS – South African Wetland Society – Member No. 394374	2019
SACNSP – South African Council of Natural Scientist Professional – Member No. 116461	2016

PROFESSIONAL HISTORY

WSP Group Africa (Pty) Ltd	July 2021 – present
Golder Associates Africa (Pty) Ltd	2017 – June 2021
Sazi Environmental Consulting	2015 - 2017
Earth Life Africa	2014 - 2014
Sebata Group of Companies	2013 – 2014

PROFESSIONAL EXPERIENCE

Biodiversity

Pelelani, Calcining plant and tailings facility Development, Northwest, South Africa
2022

Wetland Ecologist

Aquatic Biodiversity (wetland systems) Specialist Assessment - Baseline Report

Enertrag, Dalmanutha Wind Energy Facility, Mpumalanga, South Africa
2022

Wetland Ecologist

Dalmanutha Wind Energy Facility - Aquatic Biodiversity (wetland systems) Specialist Assessment

Eskom, Solar Energy development at Komati Power Station, Mpumalanga, South Africa
2022

Wetland Ecologist

Aquatic Biodiversity (riparian and wetland systems) Specialist Assessment

Genser Ghana, Phase II Biodiversity Impact Assessment and Action Plan, Ghana
2021

Biodiversity specialist

Biodiversity Baseline, Impact Assessment and Action Plan

Glencore iMpunzi, Mpumalanga, South Africa
2018

Wetland Ecologist

Ecological screening study for the proposed haul road at iMpunzi complex mine

Nooitgedacht 406KQ, portion 2 and 10, Limpopo, South Africa
2018

Wetland Ecologist

Conducting a wetland delineation and assessment of Portion 2 and 10 of the Nooitgedacht 406 KQ Property associated with the Nooitgedacht Mine as part of a Water Use License Application.

Mafube, LifeX Project, Mpumalanga, South Africa
2018

Wetland Ecologist



Lufuno Nemakhavhani

Earth & Environment – Planning & Advisory, Wetland Ecologist

Conducting a wetland audit of the wetland crossings within the Mafube LifeX site against the approved WUL conditions.

Exxaro Belfast Implementation Project, Mpumalanga, South Africa

2018-current

Wetland Ecologist

Conducting a wet season wetland assessment to monitor changes within each identified Belfast wetland HGM unit against the baseline results obtained prior to the Belfast Implementation Project.

Environmental Impact Assessment

Glencore iMpunzi, Paddocks and Venture Dump Facilities, Mpumalanga, South Africa

2018

EAP

Conducting environmental Impact Assessment and compiling the scoping report for the integrated regulatory process associated with the proposed expansion of the iMpunzi paddocks and venture dump facilities

Bushveld Vametco, Basic Impact Assessment, Brits, Northwest, South Africa

2019

EAP

Conducting Basic Impact Assessment for the Development of solar panels and a Vanadium Redox Flow Battery storage within a mining right area at Vametco Mine in Brits, Northwest.

Transnet, Vanderbijlpark service road along Houtheuwel and Potchefstroom railway line Gauteng, South Africa

2015

EAP

Environmental Assessment Practitioner for a basic assessment and Water Use Licence of the reconstruction of the Transnet Collapsed bridge in Vanderbijlpark service road along Houtheuwel and Potchefstroom railway line.

Environmental Audit

GoodRock Chemworks, Installation of a Ball Mill: EA and EMP Compliance Assessment, Northern Cape, South Africa

2021

ECO

External Environmental Control Officer for the installation of a Ball Mill. Undertaking quarterly environmental compliance audits in accordance with the approved EA and EMP at Goodrock Chemworks.

Universal Coal, North Block Complex, Paardeplaats Mine Mpumalanga, South Africa

2019

ECO

External Environmental Control Officer for NBC Paardeplaats Mine. Undertaking weekly environmental compliance audits in accordance with the approved EMP and authorised WUL at the Paardeplaats Mine.

Vopak South Africa Developments, Lesedi, Gauteng, Heidelberg, South Africa

2019-2021

EAP

Environmental Control Officer for the VSAD Lesedi Project. Conducting environmental compliance audits for the construction phase of the VSAD Lesedi which entails the construction of hydrocarbon storage tanks.

Eskom, Ariadne-Eros Powerline, Kwazulu-Natal, South Africa

2016

EO

Environmental Control Officer for the Eskom Ariadne-Eros Powerline Conducting environmental compliance and enforcement audits on a full-time basis during the construction of the Eskom Powerline.



herewith certifies that
Lufuno Nemakhavhani
Registration Number: 116461
is a registered scientist

in terms of section 20(3) of the Natural Scientific Professions Act, 2003
(Act 27 of 2003)
in the following field(s) of practice (Schedule 1 of the Act)
Environmental Science (Professional Natural Scientist)

Effective **9 December 2021**

Expires **31 March 2024**



Chairperson

Chief Executive Officer





Aisling Dower

Ecologist, Biodiversity Group Lead Africa

CAREER SUMMARY

Aisling is an ecologist with over 16 years consulting experience in Europe and sub-Saharan Africa. Experienced in designing, costing and conducting baseline flora and fauna surveys, ecosystem services assessments, ecological impact assessment and development of mitigation, compensation and offsetting measures for projects in the mining, O&G, waste, transport, land development and power generation sectors.

She has completed baseline biodiversity studies and ecosystem service reviews for numerous projects in Southern Africa, East Africa, and Central and West Africa, and is experienced in conducting such assessments to satisfy both national environmental regulations and international financing requirements particularly those demanded by the International Finance Corporation's 2012 Performance Standards. She has worked on biodiversity-related projects in Ireland, UK, Kosovo, Gabon, Guinea, Guinea-Bissau, Kenya, DRC, Mozambique and Uganda, in addition to numerous projects in South Africa, covering northern temperate, Mediterranean, tropical rainforest, desert, savanna and coastal environments.



1 year with WSP

Area of expertise

Designing, Costing & Conducting Baseline Flora & Fauna Surveys, Impact Assessments, Biodiversity Monitoring Plans, Mitigation and Offset Strategies

Critical Habitat Assessments in line with IFC and WB requirements

Ecosystem Services Assessments in line with IFC and WB requirements

Biodiversity due diligence audits and red flag assessments

16 years of experience

Language

English – Fluent

French – Intermediate (B1)

EDUCATION

Master of Science (Hons) Applied Environmental Science, University College Dublin, Dublin, Ireland 2007

Bachelor of Science (Hons) Zoology, University College Cork, Cork, Ireland 2005

ADDITIONAL TRAINING

Tools for Wetland Assessment (WET-Health, WET-Ecoservices) Rhodes University August 2016

Mainstreaming Biodiversity into Business National Business and Biodiversity Network November 2014

First Aid Level 1 Action Training Academy July 2014

Wetland Management: Introduction and Delineation University of the Free State November 2013

Flora of Witwatersrand Botany Dept, University of Witwatersrand October 2013



Aisling Dower

Ecologist, Biodiversity Group Lead Africa

Mammal Identification the Mammal Society	May 2009
Bat Detector Workshop, Bat Conservation Ireland	June 2007- June 2008
Irish Botany National Botanic Gardens, Glasnevin	2008
Outdoor Safety & First Aid Mountain Rescue Trainer, November 2007	November 2007

PROFESSIONAL MEMBERSHIPS

Professional Natural Scientist (Pr. Sc. Nat.) 114477/15	2015 - present
Member of South African Bat Assessment Association	2020 - present
Member of International Association for Impact Assessment South Africa (5817)	2017 - present

PROFESSIONAL HISTORY

WSP Group Africa (Pty) Ltd.: Biodiversity Group Lead	July 2021 – present
Golder Associates Africa (Pty) Ltd. – Johannesburg. Senior Ecologist.	February 2013 – June 2021
Golder Associates Ireland – Naas, Ireland. Ecologist.	April 2008– January 2013
NATURA Environmental Consultants – Wicklow, Ireland. Ecologist.	September 2007-March 2008

PROJECT EXPERIENCE

Biodiversity

Confidential, Iron Ore ESIA, Gabon

2022 - Ongoing

Biodiversity Specialist

Lead for development of IFC PS6 standard biodiversity impact assessment, including Critical Habitat assessment, flora, fauna, aquatic ecosystems and ecosystem services impact assessment.

Confidential, Wind Energy Facility, Mozambique

2023

Biodiversity Specialist

Lead for development of IFC PS6 standard biodiversity impact assessment, including Critical Habitat assessment, ecosystem services impact assessment, and Biodiversity Management Plan.

Kamoa, Biodiversity Mitigation and Offset Strategy, DRC

2023

Biodiversity Specialist

Lead biodiversity specialist for biodiversity mitigation and offset strategy development.

Confidential, Gas to Power Plant, Nacala Mozambique

2022

Biodiversity Specialist

Compliance audit for IFC PS6 standards and gap analysis.

Confidential, Road Development, Senegal

2022

Biodiversity Specialist

Compliance audit for IFC PS6 standards and gap analysis.



Aisling Dower

Ecologist, Biodiversity Group Lead Africa

Confidential, Hydroelectric Dam, Cote d'Ivoire

2021

Biodiversity Specialist

BAP implementation audit and red flag analysis for lenders subscribing to WB standards and IFC PS6.

Confidential, Proposed Bauxite Mine, Cameroon

2021

Biodiversity Specialist

Capacity building of local consultants for IFC PS6-standard baseline surveys and impact assessment.

Globeleq, Large Infrastructure Barging Route, Marine Ecology Impact Assessment, Vilankulo, Mozambique

2020

Lead Biodiversity Specialist

Marine baseline surveys including sea grass and coral reef extent and condition assessments, to inform micro routing of a proposed barging route in close proximity to Bazaruto Archipelago National Park

Konza Techno City, Biodiversity Baseline and BMP Review, Machakos, Kenya

2019

Biodiversity Specialist

On behalf of the lending institution, was responsible for review of the initial biodiversity baseline study and BMP, and development of recommendations for additional work required to ensure that the baseline and BMP are of the standard necessary to satisfy the requirements of Performance Standard 6.

TKBV, Proposed Oil Field Development, Turkana, Kenya

2014 - 2019

Lead Ecologist

Screening for Critical Habitats as defined by IFC PS6 and IFC GN6, 2012. Desktop biodiversity description and remote land cover sensing to inform scoping report and fieldwork planning for biodiversity and ecosystem services baseline data gathering phase. Authored Biodiversity baseline report and impact assessment to Kenyan and IFC standards

Ahafo North Mine, Biodiversity Baseline and IA, Brong-Ahafo, Ghana

2018

Lead Ecologist

Consolidated biodiversity data from previous studies with up-to-date baseline data on aquatic ecosystems and vegetation into an updated biodiversity baseline report and impact assessment for the proposed mining of Ahafo North

Globeleq, Beach Landing Sites, Marine and Coastal baseline and Critical Habitat Assessment, Vilanculos, Mozambique

2018

Lead Ecologist

Authored marine and coastal baseline study report based on available reports and data. Determined species and ecosystem triggers of Critical Habitat in the study area and assessed impacts and developed bespoke mitigation measures to ensure>NNL of natural habitat and NG of critical habitat

Kinsevere Copper Mine, ESIA, Haut-Katanga, DRC

2018

Lead Ecologist

Consolidated biodiversity data from previous studies with up-to-date baseline data on flora and birds into an updated biodiversity baseline report and impact assessment for the proposed expansion of TSF to adjoining tenement

CNOOC, Oil Exploration Block, Biodiversity Baseline and Impact Assessment, Hoima, Uganda

2018



Aisling Dower

Ecologist, Biodiversity Group Lead Africa

Biodiversity Specialist

Baseline biodiversity description to inform the overall Environmental Baseline Report for that exploration block. Updated biodiversity impact assessment chapter and authored cumulative impact assessment report for the project

Kamoa Copper, Proposed Copper Mine, Katanga, DRC 2017

Lead Ecologist

Ecosystem services review and impact assessment to satisfy the requirements of IFC PS6 for a proposed copper mine development.

Confidential Client, Bokpoort Solar PV & CSP Tower, Northern Cape, South Africa 2016

Authored Ecosystem Services

Conducted specialist bat baseline study and impact assessment for solar PV and CSP tower project. Authored ecosystem services review and impact assessment for the full project.

CNOOC, Kingfisher Development Area, Lake Albert, Hoima, Uganda 2015

Biodiversity Specialist

Ecosystems goods and services assessment to IFC PS6 standards, for a proposed oil development project on the shore of Lake Albert

SMFG, Nimba Fauna Baseline, Guinea 2020

Terrestrial Fauna Ecologist

Compiled baseline fauna report for the ESIA, including update of baseline information with results of various taxonomic studies done since the original 2013 baseline, and critical habitat-triggering species descriptions

Confidential Client, Mine ESIA, KwaZulu-Natal, South Africa 2013

Ecologist

Ecosystems goods and services assessment to IFC PS6 standards, for a proposed magnetite mine in an area of tribal lands in KZN, also known for its rich biodiversity.

SMFG, Bat survey of proposed mine site, Nimba, Guinea 2012

Lead Ecologist

Conducted extensive wet and dry season bat presence and activity surveys and established population status of a Critically Endangered bat species within proposed site. Produced Critical Habitat mapping and reporting in accordance with requirements of IFC Performance Standard 6.

Confidential Client, Bat survey of proposed mine site, Gabon 2012

Lead Ecologist

Bat survey of proposed mine site in a remote rainforest area in Gabon. Conducted wet and dry season bat presence and activity surveys to get a baseline bat species list for the proposed site, which included new bat records for Gabon.

Wetland Ecology

Confidential client, WEF wetland offset strategy, Mpumalanga, South Africa 2023

Ecologist

Wetland impact assessment and mitigation/offset strategy for proposed wind energy facility.



Aisling Dower

Ecologist, Biodiversity Group Lead Africa

Glencore, Wetland rehabilitation project, South Africa

2018 - ongoing

Wetland ecologist

Wetland rehabilitation design input, baseline assessments and monitoring for wetland rehabilitation project intended as an offset for wetland loss to authorised coal mining activity.

Seriti, Kriel, South Africa

2022-ongoing

Ecologist

Wetland impact assessment and mitigation/offset strategy for proposed opencast coal project.

Eskom, Lethabo Power Station, South Africa

2021

Ecologist

Wetland impact assessment and mitigation/offset strategy for proposed opencast coal project.

Exxaro, Coal Mine, South Africa

2021

Ecologist

Wetland impact assessment and mitigation/offset strategy for proposed opencast coal project.

Glencore, Coal Mine, South Africa

2021

Ecologist

Wetland audit and water use authorization audit for consolidated WUL for Tweefontein and Impunzi operations.

Sasol, Wetland and watercourse rehabilitation strategy, Secunda, South Africa

2019

Ecologist

Wetland and watercourse rehabilitation strategy and associated water use authorisations for Secunda operation.

AGA, Pipeline wetland assessment, Gauteng, South Africa

2019

Ecologist

Wetland delineation, baseline PES, EIS and EcoServices scores and impact assessment for proposed water return pipeline.

Twinsaver, Water Use License, Gauteng, South Africa

2018

Ecologist

Wetland delineation, baseline PES, EIS, and EcoServices scores and impact assessment for ESIA for water use license application

Breede-Gouritz Catchment Management Agency, Catchment Management Strategy, Western Cape, South Africa

2016

Ecologist

Wetland situation assessment for Breede-Gouritz catchment management strategy

Exxaro, Belfast Implementation Project, Mpumalanga, South Africa

2015 - 2018

Ecologist



Aisling Dower

Ecologist, Biodiversity Group Lead Africa

Wetland baseline monitoring to inform environmental impact assessment, including multi-seasonal surveys and updates of PES, EIS and WET-Ecoservices scores for each HGM unit concerned.

Kangra Kuisipongo Overland Conveyor ESIA, Kwazulu Natal, South Africa 2017

Ecologist

Conducted wetland delineation and baseline assessment (PES, EIS, Wet Ecoservices) and impact assessment of overland coal conveyor

Mafube LifeX Project, Mpumalanga, South Africa

2015 – 2017

Ecologist

Wetland mitigation strategy fieldwork and assessments. Ongoing project support during construction through monitoring and management of construction activities, and overseeing implementation of WUL conditions on the ground

BECSA Middelburg, ESIA Mpumalanga, South Africa

2015

Ecologist

Wetland delineation and assessment of proposed sludge pipeline river crossings, and wetlands lying within 500m of proposed slurry dump pits to inform Water Use Licence application and EIA.

Metmar Steelpoort, WULA, Limpopo, South Africa

2014

Ecologist

Delineation and assessment of floodplains of the Steelpoort River, upstream, within and downstream of the proposed site of an open cast pit.

Mooifontein, WULA, Arnot, Mpumalanga, South Africa

2014

Ecologist

Bird and amphibian surveys of pans and wetlands within mining rights area to update PES and EIS, for use in determining wetland reserve

Interwaste, WULA, Amadwala, Gauteng, South Africa

2014

Ecologist

Delineated wetlands and assessed Present Ecological Status, Ecological Importance and Sensitivity, and Ecosystem services provided by each wetland within project area of influence. Conducted impact assessment and devised mitigation measures and monitoring regimes

Mining

Confidential, Sand mining ESIA, KZN

2022 - Ongoing

Biodiversity Specialist

Lead for biodiversity baseline and impact assessment, in line with NEMA reporting protocols and DWS requirements.

Confidential Client, Proposed Mine expansion ESIA, Northern Cape

2022

Biodiversity Specialist

Lead for biodiversity baseline and impact assessment, in line with NEMA reporting protocols and DWS requirements.



Aisling Dower

Ecologist, Biodiversity Group Lead Africa

AngloAmerican, Coal Operations, Mpumalanga

2020

Biodiversity Specialist

Lead for biodiversity value assessment and biodiversity management plan with the aim of securing net gain of natural habitat across six operations.

Confidential Client, Bankable Feasibility Study, Mpumalanga, South Africa

2019

Author

Responsible for authoring environment chapter of BFS.

Belfast, Implementation Project, Mpumalanga, South Africa

2015 - 2018

Lead

Led three years of pre-construction wetland monitoring including assessment of PES, EIS and EcoServices for mining right area

Phalaborwa Mine, Biomonitoring, Limpopo, South Africa

2015-ongoing

Biological Monitoring

Of the Oliphants and Selati Rivers, including assessment of fish populations, aquatic macroinvertebrates and riparian vegetation to monitor the condition of habitat in the vicinity of the mine, observing any significant changes and providing advice to PMC on biodiversity management. This ongoing project continues to be conducted in compliance with the most rigorous health and safety standards, due to the frequent presence of dangerous large mammal fauna including elephant, buffalo and lion in and around the mine site.

Tshikondeni Mine, Rehabilitation Plan, Limpopo, South Africa

2014

Ecologist on Terrestrial Ecology Team

Responsible for undertaking wet and dry season field survey work to determine baseline large and small mammal, bat and bird diversity and vegetation community mapping for development of a rehabilitation plan for mined areas.

Renewable Power

Confidential, WEF and Solar ESIA, Mpumalanga

2022 - Ongoing

Biodiversity Specialist

Lead for biodiversity baseline and impact assessment, in line with NEMA reporting protocols and DWS requirements.

Eskom, Komati Solar PV and BESS ESIA, Mpumalanga

2022 - Ongoing

Biodiversity Specialist

Lead for biodiversity baseline and impact assessment, in line with NEMA reporting protocols and DWS requirements.

Bokpoort, CSV and PV developments, Northern Cape, South Africa

2017

Ecologist

Biodiversity and ecosystem Services Baseline and impact assessment as part of overall ESIA for two PV and one CSV development on adjoining properties.

Eskom, Solar Park - Gordonia Park substation powerline, Northern Cape, South Africa

2016



Aisling Dower

Ecologist, Biodiversity Group Lead Africa

Ecologist

Conducted survey of powerline route to identify cluster of protected trees, other plants of conservation importance, and areas potentially important to bird species of concern to inform the final routing and placement of pylons and bird deterrents

Kendal Power Plant, EIA, Mpumalanga, South Africa 2013

Ecologist

Terrestrial vegetation, bird and mammal monitoring to assess impacts of existing ash dump, and compile baseline data for proposed new ash dump.

Eskom, Ndumo-Gezisa Powerline Route Corridor, Impact Assessment, KwaZulu-Natal, South Africa 2013

Ecologist

Terrestrial flora and fauna assessment of route corridor options for proposed powerline approx. 30 km long. Studies included small and large mammals, birds, reptiles and vegetation mapping.

Eskom, Vaalbank 88 Kv Powerline - Basic Assessment, Gauteng, South Africa 2014

Ecologist

Terrestrial and wetland baseline study and impact assessment reports to assess the impacts of a proposed powerline corridor and switching station footprint.

PUBLICATIONS

Journal Articles

Monadjem, A., L. Richards, P. J. Taylor, C. Denys, A. Dower and S. Stoffberg. Diversity of *Hipposideridae* in the Mount Nimba massif, West Africa, and the taxonomic status of *Hipposideros lamottei*. *Acta Chiropterologica*, 15(2) (2013), 341-352.

Other

The Status of E.U. Protected Habitats and Species in Ireland. National Parks & Wildlife Service, 2008.



herewith certifies that

Aisling Dower

Registration Number: 114477

is a registered scientist

in terms of section 20(3) of the Natural Scientific Professions Act, 2003
(Act 27 of 2003)
in the following field(s) of practice (Schedule 1 of the Act)

Ecological Science (Professional Natural Scientist)

Effective **18 November 2015**

Expires **31 March 2024**



Chairperson

Chief Executive Officer



Tebogo Khoza

Earth & Environment - Planning & Advisory, Aquatic Ecologist, Biodiversity

CAREER SUMMARY

Tebogo is a SASS-accredited Aquatic Ecologist with a M.Sc. in Biodiversity and Conservation and has over 5 years' worth of experience in the environmental management field. He has spent 4 years within the consulting industry with focus on various aquatic-related studies thereby establishing himself as an aquatic ecologist. Tebogo has been involved in numerous Aquatic Ecology projects across various sectors including mining (e.g., coal, gold, platinum, diamond, titanium etc.), industrial (e.g. smelters, special economic zones, etc.), transport infrastructure upgrades (e.g. roads, airports, rapid transport systems, etc.), public utility services infrastructure (e.g., powerline installations, bulk water pipelines, etc.), as well as mixed-use, residential and commercial developments.



He has undertaken aquatic ecology surveys across Gauteng, Mpumalanga, Free-State, KwaZulu Natal and Limpopo provinces of South Africa and other African countries including Swaziland, Lesotho, Zimbabwe, Tanzania, Mali as well as along the Zambezi and Chobe rivers in Botswana, Zambia and Namibia. He has acted as lead Aquatic Ecologist for numerous projects, responsible for completion of the aquatic biodiversity and impact assessment surveys, report compilation and amendment to the report queries.

He has been involved at various levels of Specialist Input required for the nationally legislated environmental processes throughout South Africa, especially in the form of Environmental Impact Assessments (EIA's) or Environmental and Social Impact Assessments (ESIA's), Mining Right Applications (MRA's), Water Use License Applications (WULA's), as well as in fulfilment of Biodiversity Management Plans (BMP's).

Area of expertise

ESIA
 Aquatic Biomonitoring
 Aquatic Biodiversity & Impact Assessment
 Aquatic Ecology & Impact Assessment

Language

English – Fluent
 isiZulu – Fluent
 Sesotho – Fluent
 Setswana – Fluent
 Xitsonga – Intermediate
 Sepedi – Intermediate

EDUCATION

Master of Science (MSc) Biodiversity & Conservation, University of Johannesburg, South Africa	2018
Bachelor of Science (Hons) Zoology, University of Johannesburg, South Africa	2015
Bachelor of Science (BSc) Biochemistry & Zoology, University of Johannesburg, South Africa	2014

ADDITIONAL TRAINING

Basic First Aid	2021
Defensive Driving Course	2020
Environmental Impact Assessment for Reviewers	2018
Advanced Driving Skills	2015



Tebogo Khoza

Earth & Environment - Planning & Advisory, Aquatic Ecologist, Biodiversity

PROFESSIONAL MEMBERSHIPS

SACNSP - Candidate Natural Scientist, South African Council for Natural Scientific Professions – Member No. 119651

SASS5 - South African Scoring System version 5 practitioner, DWA Expires in 2025

PROFESSIONAL HISTORY

WSP Group Africa (Pty) Ltd	June 2022 – present
Digby Wells Environmental, Johannesburg, Aquatic Ecologist	November 2019 – May 2022
GCS Water & Environmental (Pty) Ltd. Junior Aquatic Ecologist	March 2019 – November 2019
The Biodiversity Company (Pty) Ltd. Junior Natural Scientist	September 2018 – March 2019
Gauteng Department of Agriculture & Rural Development	March 2018 – August 2018

PROFESSIONAL EXPERIENCE

ESIA

**Karo Platinum, ESIA, Chegutu, Zimbabwe
2022**

Aquatic Biodiversity Assessment Lead

Environmental and Social Impact Assessment (ESIA) for the proposed powerline. Responsible for the aquatic biodiversity and impact assessment including field surveys, report compilation and client liaison.

**Barrick Gold, ESIA, Nyamongo, Tanzania
2022**

Field Surveyor & Data Collation

Environmental and Social Impact Assessment for the proposed Gena-Gokona. Expansion Project.

Aquatic Biomonitoring

**KBP-JV, Kasane, Botswana
2021 – 2022**

Field Surveyor & Data Collation

Environmental Monitoring for the Kazungula Bridge Project. Responsible for undertaking quarterly aquatic biomonitoring surveys and data collation.

**Barrick Gold, Loulo, Mali
2021**

Field Surveyor & Data Collation

Aquatic Biomonitoring at the Loulo & Gounkoto Gold Mining Complex. Responsible for assisting with field surveys and data collation.

**Rio Tinto, Richards Bay Minerals: Aquatic Biomonitoring, KZN, South Africa
2022 - 2023**

Aquatic Biodiversity Assessment Lead

Aquatic Biomonitoring at the SP&L site. Responsible for undertaking quarterly aquatic biomonitoring surveys, data collation and report writeup.

**Exxaro Resources, Malta Colliery Mpumalanga, South Africa
2019 - 2022**

Aquatic Biodiversity Assessment Lead

WSP



Tebogo Khoza

Earth & Environment - Planning & Advisory, Aquatic Ecologist, Biodiversity

Aquatic Biomonitoring at the Matla Colliery. Responsible for undertaking quarterly aquatic biomonitoring surveys, data collation and report writeup.

**Mafube Coal, Mafube Colliery, Mpumalanga, South Africa
2020 – 2022**

Aquatic Biodiversity Assessment Lead

Aquatic Biomonitoring at the Mafube Colliery. Responsible for undertaking biannual aquatic biomonitoring surveys, data collation and report writeup.

**Sasol, Defunct Sigma Colliery, Free State, South Africa
2020 – 2022**

Aquatic Biodiversity Assessment Lead

Aquatic Biomonitoring for the proposed Ash Backfilling Project at Defunct Sigma Colliery. Responsible for undertaking biannual aquatic biomonitoring surveys, data collation and report writeup.

**Sasol, Mooikraal Colliery, Free State, South Africa
2020 – 2022**

Aquatic Biodiversity Assessment Lead

Aquatic Biomonitoring for the Mooikraal Colliery. Responsible for undertaking biannual aquatic biomonitoring surveys, data collation and report writeup.

**Ivanplats, Ivanplats complex, Limpopo, South Africa
2021**

Aquatic Biodiversity Assessment Lead

Aquatic Biomonitoring for the Ivanplats complex. Responsible for undertaking biannual aquatic biomonitoring surveys, data collation and report writeup.

**Harmony Gold, Kusasaletu Operations, Gauteng, South Africa
2021 – 2022**

Aquatic Biodiversity Assessment Lead

Aquatic Biomonitoring for the Kusasaletu Operations. Responsible for undertaking biannual aquatic biomonitoring surveys, data collation and report writeup.

Aquatic Biodiversity & Impact Assessment

**Universal Coal, new Clydesdale Colliery Mining Right, Limpopo, South Africa
2021**

Aquatic Biodiversity Assessment Lead

Aquatic Biodiversity and Impact Assessment Update for the Proposed Environmental Regulatory Process for the New Clydesdale Colliery Mining Right Area. Responsible for the aquatic biodiversity and impact assessment including field surveys and report compilation.

**Pan African Resources, Pan African Resources, Gauteng, South Africa
2021**

Aquatic Biodiversity Assessment Lead

Aquatic Biodiversity & Impact Assessment for the Pan African Resources PLC Environmental Application Process. Responsible for the aquatic biodiversity and impact assessment including field surveys and report compilation.

**Far West Gold Recoveries, Far West Gold Recoveries, Gauteng, South Africa
2021**

Aquatic Biodiversity Assessment Lead

Aquatic Ecology and Impact Assessment for the Far West Gold Recoveries Kloof Application. Responsible for the aquatic biodiversity and impact assessment including field surveys and report compilation

Aquatic Ecology & Impact Assessment

Copper Sunset Sand, Mine Expansion, Gauteng, South Africa



Tebogo Khoza

Earth & Environment - Planning & Advisory, Aquatic Ecologist, Biodiversity

2021

Aquatic Biodiversity Assessment Lead

Aquatic Ecology and Impact Assessment for the Proposed Sand Mine Expansion. Responsible for the aquatic biodiversity and impact assessment including field surveys and report compilation.

Universal Coal, Dalyshope Coal Mine, Limpopo, South Africa

2020

Aquatic Biodiversity Assessment Lead

Aquatic Ecology and Impact Assessment for the Proposed Dalyshope Coal Mining Project. Responsible for the aquatic biodiversity and impact assessment including field surveys and report compilation.

Fetakgomo-Tubatse Municipality, Fetakgomo – Tubatse, Limpopo, South Africa

2020

Aquatic Biodiversity Assessment Lead

Aquatic Ecology and Impact Assessment for the Proposed Fetakgomo-Tubatse Special Economic Zone (FTSEZ). Responsible for the aquatic biodiversity and impact assessment including field surveys and report compilation.



UNIVERSITY
OF
JOHANNESBURG

The Council and the Senate of the
UNIVERSITY OF JOHANNESBURG
hereby certify that the degree

Master of Science

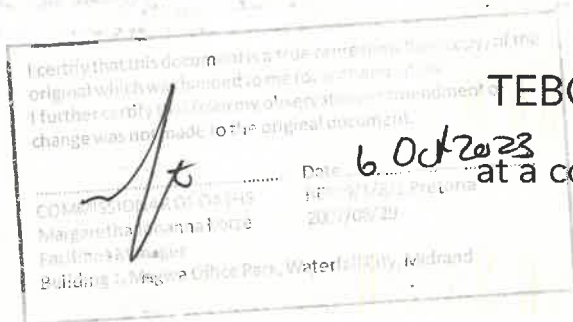
with field of study

Biodiversity and Conservation

with all its associated rights and privileges
in accordance with the Statute of the
University has been conferred upon

TEBOGO MAGUDU KHOZA

at a congregation of the University



Vice-Chancellor



Registrar



16 May 2019
Johannesburg
ID/Passport No: 9304265232089



N00063904



herewith certifies that

Tebogo Khoza

Registration Number: 119651

is a registered scientist

in terms of section 20(3) of the Natural Scientific Professions Act, 2003
(Act 27 of 2003)
in the following field(s) of practice (Schedule 1 of the Act)

Environmental Science (Candidate Natural Scientist)

Effective **1 August 2018**

Expires **31 March 2024**



Chairperson

Chief Executive Officer





Water and Sanitation



Water Research
Commission

CERTIFICATE OF ACCREDITATION

This is to certify that

Tebogo Khoza

has met the requirements of the
River Health Programme as a SASS5 Practitioner



COMPETENCY IN THE FOLLOWING AREAS HAVE BEEN DEMONSTRATED:

UNDERSTANDING OF THE SCOPE AND APPLICATION OF THE SASS5 METHOD.

DEMONSTRATION OF THE CORRECT SAMPLING PROTOCOLS

DEMONSTRATION OF THE CORRECT SAMPLE PREPARATION PROTOCOLS

IDENTIFICATION OF AQUATIC MACROINVERTEBRATES

COMPETENCY IS VALID FOR 3 YEARS FROM CERTIFICATE DATE

A handwritten signature in black ink, appearing to read 'Tebogo Khoza', written over a horizontal line.

NATIONAL SASS5 AUDITOR

27 May 2022

DATE



forestry, fisheries & the environment

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

Private Bag X447, Pretoria, 0001, Environment House, 473 Steve Biko Road, Pretoria, 0002 Tel: +27 12 399 9000, Fax: +27 86 625 1042

APPENDIX 2: SPECIALIST DECLARATION FORM AUGUST 2023

Specialist Declaration form for assessments undertaken for 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)

REPORT TITLE

IGOLIDE WIND ENERGY FACILITY NEAR FOCHVILLE, GAUTENG PROVINCE

Kindly note the following:

4. This form must always be used for assessment that are in support of applications that must be subjected to Basic Assessment or Scoping & Environmental Impact Reporting, where this Department is the Competent Authority.
5. This form is current as of August 2023. 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.dffe.gov.za/documents/forms>.
6. An electronic copy of the signed declaration form must be appended to all Draft and Final Reports submitted to the department for consideration.
7. The specialist must be aware of and comply with '*the Procedures for the assessment and minimum criteria for reporting on identified environmental themes in terms of sections 24(5)(a) and (h) and 44 of the act, when applying for environmental authorisation - GN 320/2020*', where applicable.

1. SPECIALIST INFORMATION

Title of Specialist Assessment	Agricultural Assessment
Specialist Company Name	Not applicable – sole proprietor
Specialist Name	Johann Lanz
Specialist Identity Number	6607045174089
Specialist Qualifications:	M.Sc. (Environmental Geochemistry)
Professional affiliation/registration:	Registered Professional Natural Scientist (Pr.Sci.Nat.) Reg. no. 400268/12 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
Telephone	Not applicable
Cell phone	+27 82 927 9018
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 am aware of the procedures and requirements for the assessment and minimum criteria for reporting on identified environmental themes in terms of sections 24(5)(a) and (h) and 44 of the National Environmental Management Act (NEMA), 1998, as amended, when applying for environmental authorisation which were promulgated in Government Notice No. 320 of 20 March 2020 (i.e. “the Protocols”) and in Government Notice No. 1150 of 30 October 2020.
- 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 –
 1. any decision to be taken with respect to the application by the competent authority; and;
 2. 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 NEMA Act.



Signature of the Specialist

Johann Lanz – Soil Scientist (sole proprietor)

Name of Company:

19 September 2023

Date

SPECIALIST DECLARATION FORM – AUGUST 2023

3. UNDERTAKING UNDER OATH/ AFFIRMATION

I, **Johann Lanz**, swear under oath 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

2023/09/19

Date

0441808-9
Warrant Officer Johann Kotze

Signature of the Commissioner of Oaths

2023-09-19.

Date



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 (Pr.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

Within the past 5 years of running my soil and agricultural consulting business, I have completed more than 170 agricultural assessments (EIAs, SEAs, EMPRs) in all 9 provinces for renewable energy, mining, electrical grid infrastructure, urban, and agricultural developments. I was the appointed agricultural specialist for the nation-wide SEAs for wind and solar PV developments, electrical grid infrastructure, and gas pipelines. My regular clients include: Zutari; CSIR; SiVEST; SLR; WSP; Arcus; SRK; Environamics; Royal Haskoning DHV; ABO; Enertrag; WKN-Windcurrent; JG Afrika; 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 Consultants 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*.



UNIVERSITY OF CAPE TOWN

we certify that

Johan Lanz

was admitted to the degree of

Master of Science

in Environmental Geochemistry

on 12 December 1997

Vice Chancellor

Registrar



herewith certifies that

Johan Lanz

Registration Number: 400268/12

is a registered scientist

in terms of section 20(3) of the Natural Scientific Professions Act, 2003
(Act 27 of 2003)
in the following field(s) of practice (Schedule 1 of the Act)

Soil Science (Professional Natural Scientist)

Effective **15 August 2012**

Expires **31 March 2024**



A handwritten signature in black ink, appearing to read 'S. Neph'.

Chairperson

A handwritten signature in black ink, appearing to read 'N. S. S. S.'.

Chief Executive Officer



Werner Cristiaan Marais

Summary of qualifications	2008 MSc (Biodiversity and Conservation) – Cum laude	<i>University of Johannesburg</i>
	2006 Hons (Biodiversity and Conservation)	<i>University of Johannesburg</i>
	2005 BSc (Zoology and Botany)	<i>University of Johannesburg</i>
Affiliations to professional bodies and societies	<ul style="list-style-type: none">• Pr.Sci.Nat.– SACNASP (South African Council for Natural Scientific Professions) in the field of Zoological Science, registration number 400169/10.• Serves on the steering committee panel of the SABAA (South African Bat Assessment Association).• Served on the research committee of the Gauteng and Northern Regions Bat Interest Group (GNoRBIG).• Served on the steering committee of the Zoological Society of the University of Johannesburg.	
Experience	2008 – Current Founder of Animalia Consultants (Pty) Ltd (conversion from Closed Corporation to Private Company in 2015) Animalia has completed more than 600 specialist reports and numerous large-scale projects in the renewable energy sector , as specialist consultants in the EIA process and energy facility operational phase, under the supervision and lead of Werner Marais. 2015 – Current Founder of Lightbulb Innovation (Pty) Ltd. Lightbulb Innovation is developing new inventions and products invented by Werner Marais.	

2008 University of Johannesburg

- Sensitivity and biodiversity surveys of five caves in the Cradle of Humankind World Heritage Site (COHWHS) and Pretoria areas.
- Preliminary survey to investigate the correlation between insectivorous bats and prey insects in the Krugersdorp Game Reserve.

2007, 2008 Bertie van Zyl (Pty) Ltd. (ZZ2 Tomato Farms), UJ

Two-year project to research the biological pest control method of utilizing insectivorous bats in agriculture. Required to conduct an in-depth study of bat (Microchiroptera) behavior and ecologically important factors.

2006 University of Johannesburg

Six-month survey of cave dwelling arthropods in the Cradle of Humankind World Heritage Site.

Additional:

- *Invited by the EWT (Endangered Wildlife Trust) and ESSA (Exploration Society of Southern Africa) to deliver presentations on current ecological issues regarding bats and wind energy.*
- *Co-author for the: "South African Bat Fatality Threshold Guidelines for Operational Wind Energy Facilities – ed 1. South African Bat Assessment Association. Sept 2017"*
- *Co-author for the: "South African Good Practice Guidelines for Operational Monitoring of Bats at Wind Energy Facilities. First Edition July 2014"; and draft edition October 2019*
- *Contributing editor for the: "South African Good Practice Guidelines for Surveying Bats at Wind Energy Facility Developments – Pre-construction; Edition 4.1, 2017"*
- *As a co-author, received the Dow Greeff price for best annual scientific publication: "Die karst-ekologie van die Bakwenagrot (Gauteng)" published in the Suid-Afrikaanse Tydskrif vir Natuurwetenskap en Tegnologie, Vol. 31(1), 2012.*

Presented the following papers at conferences:

- ***The potential of using insectivorous bats (Microchiroptera) as a means of insect pest control in agricultural areas. The Zoological Society of Southern Africa's 50th Anniversary Conference. July 2009.***
- ***Inseketende vlermuise (Microchiroptera) en vlermuishuise in landbougebiede. Suid Afrikaanse Akademie vir Wetenskap en Kuns se 100 jaar Eufees kongres. October 2009.***

Interviewed for two popular magazine articles on ecological aspects of biological pest control utilising bats; published in two consecutive issues of Farmers Weekly. Interviewed on radio discussion about ecology and biology of bats.

Education

MSc (Biodiversity and Conservation)

- The potential of using insectivorous bats (Microchiroptera) as a means of insect pest control in agricultural areas – Passed with distinction
- Involved a large scale in-depth survey of the bat diversity in the Tzaneen and Waterpoort areas, Limpopo.
- Understanding and observing the biology and behavior of local bat species.
- Designing and experimenting with artificial bat roosts.

Hons Biodiversity and Conservation

- Research project: Preliminary study of the terrestrial Arthropoda associated with caves of the Cradle of Humankind World Heritage Site – Passed with distinction
- Introduction to Environmental Management
- Herpetology
- Terrestrial and conservation ecology
- Resource management (incl. forestry, fire ecology, animal behavior)
- Practical fieldwork methodology (4X4, boat training and mapping)
- Mammalogy
- Population genetics and biosystematics
- Philosophy and research methodology: Zoology Nature conservation
- Parasitology
- Molecular evolution

BSc Zoology and Botany

- One-year course in animal diversity and identification
- Six-month course in basic and marine ecology
- Limnology and terrestrial ecology
- Coastal diversity excursion (Marine ecology)
- Introduction to SASS Freshwater pollution monitoring methodology
- Applied freshwater ecotoxicology
- Waterborne diseases
- Integrated animal physiology and processes
- General parasitology
- Cytology
- Six-month course in the identification and diversity of South African flora
- Ethno and economical plants
- Biotechnology
- Plant physiology
- Plant pathology
- Cellular and molecular biology
- Introduction to organic and physical chemistry
- General chemistry
- Mineralogy and earth dynamics

Additional:

- **Experienced report writing skills, sufficient computer skills.**
- **Bioacoustics analysis.**
- **Sufficient in GIS.**
- **Fall Arrest Technician and Rescue qualification (for working at heights).**
- **First Aid Level 1 and Basic Firefighting.**
- **Autodesk Inventor Fundamentals course, and 3D modeling skills.**
- **Intermediate 3D printing skills.**
- **Snake Identification and Handling Course.**
- **Multiple training courses in bat related topics - Gauteng and Northern Regions Bat Interest Group (GNoRBIG).**
- **Advanced driving course in 4x4 off-road driving.**
- **Self-taught artist in the fine arts.**
- **Inventing, prototyping and product development skills.**

Languages

Afrikaans / English – Full professional proficiency in both.

References ***Dr Francois Durand – Karst ecologist and paleontologist. Pr.Sci.Nat. (Zoology and Earth Sciences).***

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University of Johannesburg (Auckland Park Kingsway Campus),
Auckland Park, Department of Zoology,
PO Box 524.

Stephanie Dippenaar – Independent bat environmental consultant. Pr.Sci.Nat. (Zoological Science).

+27 82 200 5244
steph.dippenaar@gmail.com

Stellenbosch
Western Cape

Thank You



herewith certifies that
Werner Christiaan Marais
Registration Number: 400169/10
is a registered scientist

in terms of section 20(3) of the Natural Scientific Professions Act, 2003
(Act 27 of 2003)
in the following field(s) of practice (Schedule 1 of the Act)
Zoological Science (Professional Natural Scientist)

Effective **4 August 2010**

Expires **31 March 2024**



A handwritten signature in black ink, appearing to read 'W. Marais', positioned above a horizontal line.

Chairperson

A handwritten signature in black ink, appearing to read 'N. Erasmus', positioned above a horizontal line.

Chief Executive Officer



Expertise of Specialist

The Palaeontologist Consultant: Prof Marion Bamford
Qualifications: PhD (Wits Univ, 1990); FRSSAf, mASSAf
Experience: 34 years research and lecturing in Palaeontology
26 years PIA studies and over 350 projects completed

Declaration of Independence

This report has been compiled by Professor Marion Bamford, of the University of the Witwatersrand, sub-contracted by ASHA Consulting (Pty) Ltd, Lakeside, South Africa. The views expressed in this report are entirely those of the author and no other interest was displayed during the decision making process for the Project.

Specialist: Prof Marion Bamford

A handwritten signature in blue ink that reads "MKBamford". The signature is written in a cursive style and is positioned above a horizontal line.

Signature:

9. Appendix B – Details of specialist

Curriculum vitae (short) - Marion Bamford PhD **July 2023**

I) Personal details

Surname : **Bamford**
First names : **Marion Kathleen**
Present employment: Professor; Director of the Evolutionary Studies Institute.
Member Management Committee of the NRF/DST Centre of Excellence Palaeosciences, University of the Witwatersrand, Johannesburg, South Africa
Telephone : +27 11 717 6690
Fax : +27 11 717 6694
Cell : 082 555 6937
E-mail : marion.bamford@wits.ac.za ;
marionbamford12@gmail.com

ii) Academic qualifications

Tertiary Education: All at the University of the Witwatersrand:
1980-1982: BSc, majors in Botany and Microbiology. Graduated April 1983.
1983: BSc Honours, Botany and Palaeobotany. Graduated April 1984.
1984-1986: MSc in Palaeobotany. Graduated with Distinction, November 1986.
1986-1989: PhD in Palaeobotany. Graduated in June 1990.
NRF Rating: C-2 (1999-2004); B-3 (2005-2015); B-2 (2016-2020); B-1 (2021-2026)

iii) Professional qualifications

Wood Anatomy Training (overseas as nothing was available in South Africa):
1994 - Service d'Anatomie des Bois, Musée Royal de l'Afrique Centrale, Tervuren, Belgium, by Roger Dechamps
1997 - Université Pierre et Marie Curie, Paris, France, by Dr Jean-Claude Koeniguer
1997 - Université Claude Bernard, Lyon, France by Prof Georges Barale, Dr Jean-Pierre Gros, and Dr Marc Philippe

iv) Membership of professional bodies/associations

Palaeontological Society of Southern Africa
Royal Society of Southern Africa - Fellow: 2006 onwards
Academy of Sciences of South Africa - Member: Oct 2014 onwards
International Association of Wood Anatomists - First enrolled: January 1991
International Organization of Palaeobotany – 1993+
Botanical Society of South Africa
South African Committee on Stratigraphy – Biostratigraphy - 1997 - 2016

SASQUA (South African Society for Quaternary Research) – 1997+
 PAGES - 2008 –onwards: South African representative
 ROCEEH / WAVE – 2008+
 INQUA – PALCOMM – 2011+onwards

vii) Supervision of Higher Degrees

All at Wits University

Degree	Graduated/completed	Current
Honours	13	0
Masters	13	3
PhD	13	6
Postdoctoral fellows	15	4

viii) Undergraduate teaching

Geology II – Palaeobotany GEOL2008 – average 65 students per year
 Biology III – Palaeobotany APES3029 – average 45 students per year
 Honours – Evolution of Terrestrial Ecosystems; African Plio-Pleistocene Palaeoecology;
 Micropalaeontology – average 12-20 students per year.

ix) Editing and reviewing

Editor: *Palaeontologia africana*: 2003 to 2013; 2014 – Assistant editor
 Guest Editor: *Quaternary International*: 2005 volume
 Member of Board of Review: *Review of Palaeobotany and Palynology*: 2010 –
 Associate Editor *Open Science UK*: 2021 -
 Review of manuscripts for ISI-listed journals: 30 local and international journals
 Reviewing of funding applications for NRF, PAST, NWO, SIDA, National Geographic,
 Leakey Foundation

x) Palaeontological Impact Assessments

Selected from the past five years only – list not complete:

- Skeerpoort Farm Mast 2020 for HCAC
- Vulindlela Eco village 2020 for 1World
- KwaZamakhule Township 2020 for Kudzala
- Sunset Copper 2020 for Digby Wells
- McCarthy-Salene 2020 for Prescali
- VLNR Lodge 2020 for HCAC
- Madadeni mixed use 2020 for EnviroPro
- Frankfort-Windfield Eskom Powerline 2020 for 1World
- Beaufort West PV Facility 2021 for ACO Associates
- Copper Sunset MR 2021 for Digby Wells
- Sannaspos PV facility 2021 for CTS Heritage
- Smithfield-Rouxville-Zastron PL 2021 for TheroServe
- Glosam Mine 2022 for AHSA
- Wolf-Skilpad-Grassridge OHPL 2022 for Zutari
- Iziduli and Msenge WEFs 2022 for CTS Heritage
- Hendrina North and South WEFs & SEFs 2022 for Cabanga
- Dealesville-Springhaas SEFs 2022 for GIBB Environmental
- Vhuvhili and Mukondeleli SEFs 2022 for CSIR

- Chemwes & Stilfontein SEFs 2022 for CTS Heritage
- Equestria Exts housing 2022 for Beyond Heritage
- Zeerust Salene boreholes 2022 for Prescali
- Tsakane Sewer upgrade 2022 for Tsimba
- Transnet MPP inland and coastal 2022 for ENVASS
- Ruighoek PRA 2022 for SLR Consulting (Africa)
- Namli MRA Steinkopf 2022 for Beyond Heritage

xi) Research Output

Publications by M K Bamford up to July 2023 peer-reviewed journals or scholarly books: over 170 articles published; 5 submitted/in press; 10 book chapters.

Scopus h-index = 31; Google scholar h-index = 39; i10-index = 116

Conferences: numerous presentations at local and international conferences.