

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

Environmental Authorisation for the Proposed Komati Solar Photovoltaic (PV) Facility, Battery Energy Storage System (BESS), and Associated Infrastructure, Mpumalanga Province

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>.
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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		
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	1	Percentage Procurement recognition
Specialist name:	Eugeshin Naidoo		
Specialist Qualifications:	BSc Civil Eng		
Professional affiliation/registration:	Pr Eng ECSA Registration 20190664		
Physical address:	223 Greenstone Crest, Stoneridge Drive, Greenstone Hill, Johannesburg		
Postal address:	223 Greenstone Crest, Stoneridge Drive, Greenstone Hill, Johannesburg		
Postal code:	1609	Cell:	082 834 8037
Telephone:	011 254 4889	Fax:	
E-mail:	Eugeshin.naidoo@wsp.com		

2. DECLARATION BY THE SPECIALIST

I, Eugeshin Naidoo, 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.

 2023.06.19
10:37:24
+02'00'

Signature of the Specialist

WSP


Name of Company:

19/06/2023

Date

3. UNDERTAKING UNDER OATH/ AFFIRMATION

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

 2023.06.19
10:37:47
+02'00'

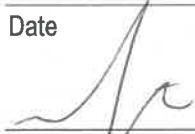
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WSP

Name of Company

19/06/2023

Date

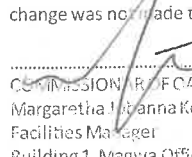


Signature of the Commissioner of Oaths

19 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.

 Date 19 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



Eugeshin Naidoo

Mine Engineering, BU Lead, Water Engineer



CAREER SUMMARY

Eugeshin is experienced Professional Civil Engineer with a background in design, planning and Water Resource Management on water infrastructure projects in the Mine Engineering Business Unit. In his role as the Business Unit Manager, he oversees multi-disciplinary teams in the execution of civil engineering and environmental projects.

2 years with WSP

13 years of experience

Area of expertise

Development, Calibration & Running Water Balance Models

Flood Line Delineation

Dam Yield Analysis

Detailed and Conceptual Design of Storm Water Management Plans

Rainfall Monitoring

Surface Water Flow

Water Quality

Language

English – Fluent

Afrikaans - Fluent

EDUCATION

BSc Eng. Civil, University of the Witwatersrand, Johannesburg

2009

PROFESSIONAL MEMBERSHIPS

South African Institute of Civil Engineers, Member No. 201600424

2016

Engineering Council of South Africa, Member No.: 20190664

2019



PROFESSIONAL HISTORY

WSP Group Africa (Pty) Ltd	2021 - present
Golder Associates Africa (Pty) Ltd	2019 – 2021
Knight Piesold (Pty) Ltd	2016 – 2019
GCS (Pty) Ltd	2014 – 2016
Golder Associates Africa (Pty) Ltd	2011 – 2014
DSE Structural Engineers and Contractors	2010 - 2011

PROFESSIONAL EXPERIENCE – DAM ENGINEERING

Impala Platinum, Detailed Design of Sludge Ponds and Storm Water Management Dams for 6 Platinum Mines, Rustenburg, South Africa

Year: 2020 to 2022

Role: Design Engineer

Storm water dam detailed design and construction supervision for 6 Impala Platinum Shaft areas.

Ferroglobe Silicone Smelters, Storm Water Dam Design, Mpumalanga, South Africa

Year: 2018

Role: Design Engineer

Storm water dam detailed design and construction supervision.

SGZ Cononish Limited, Cononish Storm Water and Settlement Pond Design, Scotland

Year: 2018

Role: Lead Design Engineer

Storm water system and settlement pond detailed design for a Cononish Mine located in the Scotland Highlands.

PROFESSIONAL EXPERIENCE – WATER RESOURCES

Alfred Nzo District Municipality, Ntabankulu Bulk Water Supply, Kwa-Zulu Natal, South Africa

Year: 2018

Role: Design engineer

Technical feasibility of multiple water supply schemes. Involved yield analysis and conceptual dam design.

Rio Tinto, Design of culverts and Bridges Simandou, Guinea, Simandou, Guinea

Year: 2014

Role: Design Engineer

Design of culverts and bridges for railway crossings. Hydrological and hydraulic analysis for river flood peak determination, flood line derivation. Unsteady analysis was used to size the major streams traversing the project area.

Richards Bay Industrial Development Zone (Pty.) Ltd., Richards Bay Industrial Development Zone Floodline Study: Kwazulu-Natal Province, South Africa, Kwazulu-Natal, South Africa

Year: 2012

Role: Design Engineer

Calculated flood peaks, flood lines and sized culverts for road crossings on several water courses in the Industrial Development Zone

Platreef Resources Pty. Ltd., Platreef Water Study, Limpopo, South Africa

Year: 2011 to 2014

Role: Design Engineer



Designed, installed, and monitored a network of specialized hydrological and meteorological monitoring stations. This involved site selection, measuring the river cross section and measuring surface water flow. Hydrological and hydraulic analysis for river flood peak determination and flood line delineation.

Exxaro Coal Pty (Ltd.), Storm Water Management Plans Grootegeluk Coal Mine, Limpopo, South Africa
Year: 2014

Role: Design Engineer

Design of mine storm water management plans, including design of channels, sumps, return water dams, weirs, and culverts.

Ruighoek Chrome Mine, Storm Water Management Plans Ruighoek Chrome Mine, Northwest Province, South Africa

Year: 2015

Role: Design Engineer

Design of mine storm water management plans, including design of channels, sumps, return water dams, weirs and culverts.

Anglo American, Storm Water Management Plans Greenside Collieries, Mpumalanga, South Africa

Year: 2012

Role: Design Engineer

Hydrological and hydraulic analysis for river flood peak determination and flood line derivation. Design of mine storm water management plans, including design of channels, sumps, return water dams, weirs, culverts.

ACSA, King Shaka International Airport, Kwa-Zulu Natal, South Africa

Year: 2016

Role: Design Engineer

Storm Water Management Compliance Audit carried out to determine any areas of concern and recommendations made to achieve compliance.

PROFESSIONAL EXPERIENCE – CIVIL ENGINEERING

Eskom Holdings, Kusile Stormwater Management Capacity Check, Mpumalanga, South Africa

Year: 2017

Role: Design Engineer

Determined the capacity of the existing Kusile coal stockpile area stormwater management plan as a concrete liner has been implemented on the contributing catchments

Eskom Holdings, Medupi FGD Retrofit Project, Limpopo, South Africa

Year: 2017

Role: Design Engineer

This conceptual design of the new gypsum off-take infrastructure slab, stormwater management system (including water balance), sewage system and access roads specifically between the Boiler edge slab and Road 3 (Ring Road West) in the main FGD area.

Rio Tinto, Design of Site-wide Storm Water management Infrastructure, Guinea, Simandou, Guinea

Year: 2022 to 2023

Role: Drainage Discipline Lead

Managed and co-ordinated the site-wide storm water management infrastructure, this includes the erosion protection and management systems.



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1. SPECIALIST INFORMATION

Specialist Company Name:	WSP		
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	1	Percentage Procurement recognition
Specialist name:	Sarah Skinner		
Specialist Qualifications:	MSc Water Utilisation, Honours Geology with Hydrogeology		
Professional affiliation/registration:	South African Council for Scientific Professions - Pr. Sci. Nat Geology, 400016/01		
Physical address:	10A Richmond Ave, Craighall Park, 2195		
Postal address:	10A Richmond Ave, Craighall Park, 2195		
Postal code:	2195	Cell:	082-600-8774
Telephone:	n/a	Fax:	n/a
E-mail:	Sarah.Skinner@wsp.com		

2. DECLARATION BY THE SPECIALIST

I, _____ Sarah Jane Wolfe Skinner _____, 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;
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- 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

Name of Company:

19 June 2023

Date

Details of Specialist, Declaration and Undertaking Under Oath

3. UNDERTAKING UNDER OATH/ AFFIRMATION

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



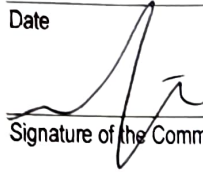
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WSP

Name of Company

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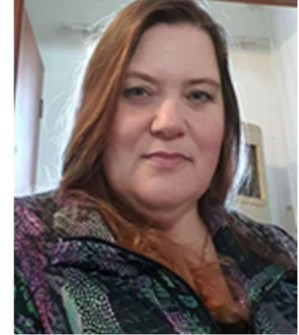


Sarah Skinner

Mine Water – Groundwater, Director, Team Lead

CAREER SUMMARY

Sarah Skinner is a professional hydrogeologist (Pr Sci Nat). She has 25 years' work experience providing technical expertise and guidance towards improved water management. She has technical expertise in hydrogeology and water chemistry with experience in the chemical, explosive manufacturing, and mining sectors. She carries out specialist reporting in hydrogeology, site assessment for contaminated land, water use licence implementation, water monitoring program implementation and assessment, IWWMP, RSIPs, characterisation of waste and isotopic hydrogeology.



Sarah's passion lies in project and programme management for numerous projects involving the management of a team of scientists, sub-consultants, and contractors for consolidation of hydrogeological reports. Sarah has depth of expertise in environmental reports, water specialist studies, WULA geohydrology specialist studies, groundwater source development and assessment, including source identification, interpretation of aqueous geochemistry, waste characterisation and soil characterisation. Team Lead in the fields of remediation option assessments for groundwater contamination, development of water sampling protocols and methodologies for evaluation of large datasets using GIS tools, mentorship, training, and capacity building.

Countries of experience gained include South Africa and Madagascar.

<1 years with WSP

25 years of experience

Area of expertise

Hydrogeology & Water Chemistry – Chemical, Explosive Manufacturing & Mining Sectors
Specialist Hydrogeology Reporting
Contaminated Land Site Assessments
Water Use Licence Implementation, Water Monitoring Implementation & Assessments
IWWMP, RSIPs & Characterisation of Waste & Isotopic Hydrogeology

Language

English – Fluent
Afrikaans – Understand

EDUCATION

MSc, Water Utilisation, Pretoria University	2003
BSc (Hons), Water Utilisation/ Waste management, Pretoria University	2001
BSc (Hons), Geology & Hydrogeology, Rhodes University, Upper second	1996
BSc, Geology & Chemistry, Rhodes University	1995

ADDITIONAL TRAINING

Hazard Identification and Risk Assessment (HIRA) - NOSA	2021
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Sarah Skinner

Mine Water – Groundwater, Director, Team Lead

International Women in Resources Mentoring Programme (IWRMP)	2021
DWS Hydrogeology	2019
Hydrogeology Specialist Training – TerraSoil	2018

PROFESSIONAL MEMBERSHIPS

South African Council for Scientific Professions - Pr. Sci. Nat Geology, 400016/01	2001
GWSA - Ground Water Association of South Africa	2022
IMWA - International Mine Water Association	2020
NICOLA - Network for Industrially Contaminated Land in South Africa	2020

PROFESSIONAL HISTORY

WSP Group Africa (Pty) Ltd	May 2022 – present
SRK Consulting (Pty) Ltd	January 1997 – April 2022

PROFESSIONAL EXPERIENCE

Hydrogeology

Rio Tinto, Mandena Hydrogeological System, Madagascar
2022

Hydrogeologist

QMM Hydrogeological Investigation - Phase 1 Desktop Study

Genmin (Pty) Limited, Baniaka Iron Ore Project, Gabon
2022

Hydrogeologist

Pre-feasibility Hydrogeological study. Report Review.

BlackEarth Minerals NL, Maniry Graphite Project, Madagascar
2022

Reviewer

Hydrogeological Investigation

Kamoa Copper SA, Groundwater Study, DRC
2022

Report Review

Kamoa Pre-Feasibility and Groundwater Study

AECI Limited, Various projects, Johannesburg, South Africa
1997 – 2022

Hydrogeologist

Various projects for AECI Ltd and other AECI Business Pillars (Explosives, Property and Water). Services provided included, water monitoring and water quality assessments, radionuclide monitoring, IWWMP and RSIP preparation, source studies, Isotopes, Database management, Risk modelling, Hydrogeology specialist studies, Project Value R500 000 – +R1 million / annum.

Marula Platinum (Pty) Ltd, Various projects, Mpumalanga, South Africa
2005 - 2008, 2010 – 2019
Project lead



Sarah Skinner

Mine Water – Groundwater, Director, Team Lead

Services provided included, specialist studies for WULA, Groundwater Monitoring, Isotopic and hydro chemical assessment of potential groundwater contaminant plume. Project Value +R800 000/annum.

**Sasol, Nitrates Source study for a platinum mine, Rustenburg
2018**

Project Management

Hydrochemistry and isotope assessment and report compilation.

**Impala Platinum (Pty) Ltd, Annual Review, Rustenburg, SA.
2017 – 2019**

Reviewer

Annual review of monitoring data.

**Royal Bafokeng Platinum (Pty) Ltd, Styldrift Shaft 2 Complex, Rustenburg, Northwest Province
2016**

Project Lead

Integrated Environmental Authorisation Process for the: Environmental Impact Assessment (EIA) and Amendment of the existing Environmental Management Programme (EMPR), hydrogeological specialist study and review of IWWMP and EMP.

**Bafokeng Rasimone Platinum Mine, Rustenburg
2016**

Hydrogeology

Groundwater specialist studies for proposed new TSF

**Modikwa Platinum Mine, Hydrogeology assessment, Mpumalanga Province, South Africa
2016**

Hydrogeologist

Nitrogen Contamination Source Assessment at, isotopic studies, and chemistry. Project Value <R200 000.

**Mogalakwena Local Municipality, Groundwater availability, Mokopane, South Africa
2010**

Hydrogeologist

Overview of groundwater availability and use in and around Mokopane

**Department of Water Affairs and Forestry Development of water reconciliation strategies, All towns,
Northern Region, South Africa**

2009

Task Leader for Groundwater

Water Reconciliation Strategies for All Towns in the Northern Region

Contaminated Land

**Total Energies Marketing Moçambique, SA. Figaro Project: Phase 1&Phase 2, Mozambique
2022**

Report Review & Phase 2 reporting

Environmental Due Diligence Assessments

Confidential Project in Durban

2022

SAR Reporting for a manufacturing plant

Confidential Project in Gquberha

2023

Phase 2 SAR for Due diligence assessment

**AECI Limited, Various projects, Johannesburg, South Africa
1997 – 2022**



Sarah Skinner

Mine Water – Groundwater, Director, Team Lead

Technical expertise, planning and assessment

Various projects for AECI Ltd and other AECI Business Pillars (Explosives, Property and Water). Services provided including the Remediation Strategy, various Contaminant Land Assessments, Pilot studies for remediation activities, Waste characterisation and classification etc. Project Value R500 000 – +R1 million / annum.

AWARDS

Long service awards – 25 years (2022) – SRK Consulting

SRK Cheers award – 2001, 2013 – SRK Consulting

PUBLICATIONS

Modern Mining (August 2021) Fostering a working environment that is attractive to woman. (Article with Mr V Reddy and S Skinner).

Mining Weekly, 8 December 2017 & Borehole Water Association. Helping mines find the real source of nitrates in Water by Nadine James.

IMWA: Risk to Opportunity (September 2018). Platinum Tailings Review.

Nicola (31 October 1 November 2017). Where is it? A case study to demonstrate the use of field tests in assessing nitrogen contamination.

IMWA: Mine Water and Circular Economy (June 2017). Tracking Nitrate Sources at a Platinum Mine – Putting the puzzle together.

International Conference of Groundwater: Our Source of Security in an Uncertain Future (September 2011). Eye Spy, Groundwater Monitoring.

International Conference of Groundwater: Our Source of Security in an Uncertain Future (19- 21 September 2011). Poster Presentation. Oops! What Now? Using risk analyses to prioritise impacts.

International Conference of Groundwater: Our Source of Security in an Uncertain Future (September 2011). Looking for the Last drop.

WISA (April 2010). Applying Comparative Risk Analyses for Determining Best Options for Remediation

Groundwater 2009 Conference (November 2009): The Challengers in Developing Reconciliation Strategies for DWA All Towns Northern Region Study – The Good, the bad and the beautiful & Curious and Curiouser – Isotopes Suggest and Answer.

IMW Conference, (October 2009): Groundwater Clean-up: Assessing Mining Impacts and Rehabilitation/Management Alternatives.

Water SA (April 2005): The feasibility of a permeable reactive barrier to treat acidic sulphate and nitrate contaminated groundwater, University of Pretoria.

MENTORSHIP / TRAINING

Nicola Mentorship program (2022) - Mentor

SACNASP Referee – A Rudman, C Terrell, S Mahlangu, C Kessopersadh.

Short Course in Aqueous Geochemistry, Data presentation and Analyses: Wits MSc Course – 2008, De Beers 2006.



herewith certifies that
Sarah Jane Wolfe Skinner
Registration Number: 400016/01
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)
Geological Science (Professional Natural Scientist)

Effective 16 March 2001

Expires 31 March 2023



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

Chairperson

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

Chief Executive Officer





environmental affairs

Department:
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REPUBLIC OF SOUTH AFRICA

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Email: EIAAdmin@environment.gov.za

1. SPECIALIST INFORMATION

Specialist Company Name:	WSP Group Africa			
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	1	Percentage Procurement recognition	135%
Specialist name:	Karen King			
Specialist Qualifications:	MSc			
Professional affiliation/registration:	SACNASP			
Physical address:	33 The River Road, Bryanston			
Postal address:	As above			
Postal code:	2191	Cell:	0741298488	
Telephone:	0741298488	Fax:		
E-mail:	0741298488			

2. DECLARATION BY THE SPECIALIST

I, Karen King, 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.


King, Karen
(ZAKK03319)
2023.06.19 11:55:13
+02'00'

Signature of the Specialist

WSP Group Africa

Name of Company:

19 June 2023

Date

3. UNDERTAKING UNDER OATH/ AFFIRMATION

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

K King

King, Karen (ZAKK03319)
2023.06.19 11:55:33
+02'00'

Signature of the Specialist

WSP Group Africa

Name of Company

19 June 2023

Date

[Signature]
Signature of the Commissioner of Oaths

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[Signature] Date 19 June 2023

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Margaretha Johanna Kotze 2007/08/29
Facilities Manager
Building 1, Magwa Office Park, Waterfall City, Midrand



KAREN KING, M.Sc., Pr.Sci.Nat.

Senior Associate (Hydrologist & Soil Scientist), Environment & Energy



Years with the firm

5.5

Years of experience

16.5

Professional qualifications

Pri.Sci.Nat (Earth Science)

Areas of expertise

Soil Science

Hydrology

Languages

English

Afrikaans

Italian (learning)

CAREER SUMMARY

Ms King is a professional soil scientist and hydrologist (Pr.Sci.Nat, M.Sc.) with WSP Engineering and Environmental Consultants in Johannesburg. She has 16+ years' work experience and specialises in local and international soil classification systems, soil capability and suitability assessments, land use assessments and associated risk and mitigation assessments and monitoring plans, as well as agricultural studies. She also specialises in mining/development hydrology, water resources planning, catchment-scale hydrological modelling, flood studies, storm water management planning, wetland delineation, water research, and related risk assessments and management plans. She has been primarily involved in the environmental and engineering hydrology and soil science fields, initially as a soil science lecturer at UKZN for 3 years, and then as a soil scientist and hydrologist in various engineering and environmental consultancies both in South Africa and in the United Kingdom.

EDUCATION

Master of Science, University of KwaZulu-Natal, South Africa	2004
Bachelor of Science (Honours), University of Natal, South Africa	2002
Bachelor of Science, Hydrology and Soil Science, University of Natal, South Africa	2001

SELECTIONS AND AWARDS

Golder Technical Conference Abstract Selection	2022
WSP Group Unity Award	2019
WSP Environmental Collaboration Award	2018
Golden Key Honour Society Selection	2002
A series of academic and sports scholarships	1994-2003

PROFESSIONAL MEMBERSHIPS

South African Council for Scientific Professions – Professional Natural Scientist (Earth Scientist) (Reg. No. 400035/11)	SACNASP
Water Institute of South Africa (member 23404)	WISA
The Golden Key Honour Society (member 1264480)	-
International Water Association (member 01053990)	IWA

MODEL PROFICIENCY

SAPWAT Crop Irrigation Model
HYDRUS Soil-Water Interaction Model
Agricultural Catchments Research Unit (ACRU) Model
Pitman Water Resources Assessment Model

SOIL SCIENCE PROFESSIONAL EXPERIENCE

- Richbay Chemicals South Africa Extension Project – Soils Study (2021-2022). Project Director. Client: Richbay Chemicals.
Assessment of any potential agricultural and social uses of an area of land earmarked for industry extension in a light industrial/residential area of KwaZulu-Natal.
- Ghana Genser Power Project – Soils Study (2021-2022). Project Soils Specialist. Client: Genser Power.
Agricultural Soils Classification, Capability and Impacts Assessment, and Mitigation Measures Recommendations for a Power Plant and Pipeline in Ghana.
- Liberia Gold Mine Biomass Project – Soils Study (2021-2022). Project Soils Specialist. Client: MNG Lebetse Gold Mine.
Agricultural Soils Classification, Capability and Impacts Assessment, and Mitigation Measures Recommendations for a proposed biomass project in Liberia.
- Guinea Project – Interdisciplinary Soils Study (2021-2022). Project Soils Specialist. Client: Confidential.
Multidisciplinary Potential Impacts and Mitigation Measures Assessment under very difficult conditions
- Lebombo Cape Soils Study. Soils Compliance Study for Fruit Export – Physical and Chemical Assessments (2021-2022). Project Director. Client: Lebombo Cape.
Classification of soil forms according to the South African taxonomic system, soil capability and impact assessment, and mitigation recommendations.
- DRC Kamoia Copper Mine ESIA – Soils Study (2021). Project Soils Specialist. Client: Ivanhoe Mines.
Agricultural soils study according to IFC standards that involved World Resource Base classification of lateritic and non-lateritic soils across developed and undeveloped areas of Kamoia Copper Mine. The soil agricultural capability and suitability were assessed and management plans for top- and sub-soil stripping and for soil erosion were developed.
- Etihad Rail Saudi Arabia to Oman Rail - Desert Soils Study (2020-2021). Project Director. Client: Etihad Rail.
Soils study centred on the establishment of soil properties and thus Curve Numbers to inform desert soil hydrological processes.
- Swaziland Nondvo Dam Morphodynamic and River Basin Specialist Studies – (2018-2021): Project Director and Reviewer. Client: Swaziland DWS
Soil-centred studies that assessed the potential for landscape changes due to soil erosion and sedimentation associated with the development and raising of dam walls in Swaziland.
- Calodex Soils and Hydrological Assessments (2021). Project Director. Client: Calodex.
Soils study centred on the agricultural classification of a number of local soils. Potential effects of soil-water movement on local wetlands was established.
- Jet Park Soils and Hydrological Assessment (2021). Project Director. Client: Abbeydale Construction.



KAREN KING, M.Sc., Pr.Sci.Nat.

Senior Associate (Hydrologist & Soil Scientist), Environment & Energy

- Soils study centred on the agricultural classification of a number of local soils. Potential effects of soil-water movement on local wetlands was established.
- Sasol Soils and Hydropedological Study (2021). Project Director. Client: Sasol. Soils study centred on the agricultural classification of a number of local soils. Potential effects of soil-water movement on local wetlands was established.
- Sapref Soils and Hydropedological Study (2019-2020). Project Manager. Client: Sapref. Soils study centred on the agricultural classification of a number of local soils. Potential effects of soil-water movement on local wetlands was established.
- Ethiopia Agri-Industrial Zone ESIA. Soils Classification, Land Use, Land Capability, Risk Assessment and Management Plan Study (2017-2018). Client: UNOPS. Agricultural soils study according to IFC standards that involved World Resource Base classification of a wide range of soil forms. Agricultural soil capability and suitability was established, an impact assessment was undertaken and mitigation and management plans recommended.
- Richards Bay Minerals Sokhulu Remediation Plan, South Africa (2017). Soil Assessment. Client: Rio Tinto. Soils were classified by form according to a local agricultural taxonomic system.
- Zambia Olam Soils Study (2016): Project Manager. Soil Classification, Land Use and Land Capability Study. Client: NCCL. Agricultural soils study according to IFC standards that involved World Resource Base classification of a range of soil forms. Land capabilities were established.
- Glisa Soils Study, Gauteng, South Africa (2015): Project Manager. Soil Classification, Land Use and Land Capability and Suitability Study. Client: Exxaro Resources.
- Philippi Sand Mine Soils Study, Western Cape, South Africa (2015): Project Manager. Hydrology, Storm Water Management Plan, Risk Assessment, Reporting and Project Management. Client: Consol Glass.
- Madagascar Molo Graphite Mine Soils Study. (2014): Project Manager. Soil Classification, Land Use and Land Capability Study with Management Plan and Staff Capability Outputs. Client: Energiser Resources.
- Wits Gold Mine Soils Study, Gauteng, South Africa (2014): Project Manager. Soil Classification, Land Use and Land Capability Study. Client: Wits Gold.
- Soil Monitoring Study, Gauteng, South Africa (2013-2014). Project Manager. Client: Total Coal South Africa.
- Kangra Coal specialist input – soils. (2013). Project Manager. Soil Classification, Land Use and Land Capability and Suitability Study. Client: Kangra Coal.
- Two Rivers Platinum EIA specialist input – soils. (2012). Project Manager. Soil Classification, Land Use and Land Capability and Suitability Study. Client: Two Rivers Platinum.
- Witkop EIA specialist input – soils. Witkop Exploration and Mining (2012). Project Manager. Soil Classification, Land Use and Land Capability and Suitability Study. Client: Witkop Mine.
- Matimba EIA specialist input – soils. (2012). Project Manager. Soil Classification, Land Use and Land Capability and Suitability Study. Client: SiVest.



KAREN KING, M.Sc., Pr.Sci.Nat.

Senior Associate (Hydrologist & Soil Scientist), Environment & Energy

- Sasol Fuel Department Due Diligence (2011). Project Manager. Establishing whether the soil in one of Sasol’s tank farms was contaminated. This required soil sampling and analysis, as well as report writing. Client: Exxaro Coal.

HYDROLOGY PROFESSIONAL EXPERIENCE

- Lebombo Cape Water Study. Surface Water Fruit Export Compliance Assessment (2021-2022). Project Director. Client: Lebombo Cape.
- Etihad Rail Saudi Arabia to Oman Railway Line - Desert Hydrology Study (2020-2021). Project Director. Client: Etihad Rail.
- De Wittekrans WULA, IWWMP and specialist studies (2019). Project Director. Client: Canyon Coal.
- Trans-Alloys WULA, IWWMP and specialist studies (2019). Project Director and Reviewer. Client: Eskom.
- Eskom Lethabo WULA and IWWMP Amendment (2019). Project Director and Reviewer. Client: Eskom.
- Kimberly Clark WULA (2019). Project Director. Kimberly Clark.
- Sappi Ngodwana WULA Advisory Services (2019). Project Director. Client: Sappi.
- Sapref WULA, IWWMP and specialist studies including Storm Water Management Plan, Groundwater and wetland studies (2019). Project Director and Reviewer. Client: Sapref.
- Southern Cross Foundry WULA, IWWMP and specialist studies including a Storm Water Management Plan and Groundwater Study (2018-2019). Project Director and Reviewer. Client: Southern Cross.
- Nondvo Dam Morphodynamic and River Basin Specialist Studies – Swaziland (2018-2019): Project Director and Reviewer. Client: Swaziland DWS
- Transnet Monthly Surface Water Monitoring (2018-2019). Project Director and Reviewer. Client: TPT
- AMSA Stormwater Dam Complex Assessment (2018-2019). Report Reviewer. Client: Arcelor Mittal SA
- Alliance Mining Commodities Guinea Mine Water Study (2018-2019): Report Reviewer. Client: AMC.
- Yanfolila Mali Gold Mine Water Study (2018-2019): Project Reviewer. Client: Hummingbird Resources.
- Thabametsi Coal-fired power station water study (2017-2019). Water Use License Application and Storm Water Management Planning specialist advisors. Client: Marubeni.
- Turfontein Underground Mine WULA and IWWMP (2017-2019). Project Manager and Reviewer. Client: Samancor Chrome.
- Kalgold Mine Surface Water Assessment (2018): Project Director. Client: EIMS
- Tau Lekoa Gold Mine Surface Water Assessment (2018): Project Director. Client: EIMS
- Sappi Ngodwana WUL and IWWMP study (2018). Project Reviewer. Client: Sappi.
- Agriprotein Storm Water Management Plan (2018): Project Reviewer. Client: Agriprotein Industries.
- Sundumbili Wastewater Treatment Works upgrade potential water quality changes calculations (2018). Project Reviewer. Client: RHDHV.



KAREN KING, M.Sc., Pr.Sci.Nat.

Senior Associate (Hydrologist & Soil Scientist), Environment & Energy

- Glendale Distillery Water Use License Application study (2017 - 2018). Project Reviewer. Client: Illovo.
- GDC Wastewater Treatment Works Water Use License Application study (2017). Project Reviewer. Client: Illovo.
- Hwange District Plant Drain System Study, Zimbabwe (2017): Project Manager. Water Balance and Storm Water Management Plan review and recommendations. Client: ZimPower and the African Development Bank.
- Ethiopia Agri-Industrial Zone ESIA (2017): Project Manager, reviewer and soil scientist. Surface and groundwater, wetlands and soils assessment and risk and mitigation assessment. Client: UNOPS.
- Zambia Coal-fired power station Water Assessment (2017): Project Reviewer. Water Availability Assessment. Client: Black Rhino.
- Richards Bay Water Quality Monitoring Study (2017): Report reviewer. Compliance assessment. Client: Transnet Port Terminals.
- Oranjemund Mine Conjunctive Water Use Study (2016): Project Manager. Strategic Surface Water and Groundwater Assessment, Desalination, Project Management. Client: Freedthinkers.
- SKA Antennae Extensive Flood Lines Assessment (2016): Project Reviewer. Client: SKA.
- Avondale Housing Estate Hydrology and Flood Lines (2016): Project Reviewer. Client: Triplo4.
- Avon Power Plant Surface Water Assessment (2016): Project Reviewer. Client: Triplo4.
- Molopo Gas Study (2016): Project Reviewer. Sensitivity Assessment, Risk Assessment, Surface Water Assessment and Project Management. Client: EIMS.
- City of Johannesburg Open Spaces Study (2016): Project Reviewer. An assessment of any potential risks to and from surface water and offering general advice about maintenance of Johannesburg's open spaces. Client: CoJ.
- Open Spaces Study, Johannesburg, Gauteng, South Africa (2015): Project Manager. General Hydrological Risks Assessment. Client: CoJ.
- Philippi Sand Mine Surface Water Study, Western Cape, South Africa (2015): Project Manager. Hydrology, Storm Water Management Plan, Risk Assessment, Reporting and Project Management. Client: Consol Glass.
- Glisa Mine Surface Water Study, Gauteng, South Africa (2015): Project Manager. Hydrology, Storm Water Management Plan, Risk Assessment, Water and Salt Balance, Reporting and Project Management. Client: Exxaro Resources.
- Surface Water Assessment, Richards Bay, KwaZulu-Natal, South Africa (2015): Project Manager. Flood Lines and Project Management. Client: GIBB.
- Unconventional Gas Study, Gauteng, South Africa (2015). Flood Lines, Storm Water Management Plan, Water Balance, Review, Project Management. Client: RHDHV.
- Pumpi Mine Integrated Water Management Study, Mozambique (2015): Project Manager. Flood Lines, Storm Water Management Plan, Review, Project Management. Client: Lamikal.
- Molo Graphite Mine Surface Water Study, Madagascar (2014). Project Manager. Hydrology, Yield Analysis, Storm Water Management Plan, Water Quality Assessment, Risk Assessment, Water and Salt Balance, Reporting and Project Management with Management Plan and Staff Capability Outputs. Client: Energizer Resources.



KAREN KING, M.Sc., Pr.Sci.Nat.

Senior Associate (Hydrologist & Soil Scientist), Environment & Energy

- De Wittekrans Surface Water Study, Mpumalanga, South Africa, (2014): Project Manager. Hydrology, Storm Water Management Plan, Risk Assessment, Reporting and Project Management. Client: EIMS.
- Wits Gold Mine Surface Water Study, Gauteng, South Africa (2014): Project Manager. Hydrology, SWMP, Water Balance, Reporting, Project Management. Client: Wits Gold.
- Olam Zambia Surface Water Study, Zambia. (2014): Project Manager. Hydrology, Water Availability Assessment, Water Quality, Water resource Planning, Reporting, Project Management. Client: NCCL.
- Angola AEMR Area 5 Surface Water Study, Angola. (2014): Project Manager. Hydrology, Yield Analysis, Storm Water Management Plan, Water Balance, Reporting and Project Management. Client: Tenova Bateman.
- EnviroServ Water Facility Integrated Water Resources Study (2013). Project Manager. Hydrology, Water Balance, Salt Dilution Recommendations, Project Management. Client: EnviroServ.
- Surface Water Quantity and Quality Management Planning Study, King Shaka Airport, Durban, South Africa (2013-2016). Project Manager: Hydrology, SWMP, Water Quality Assessment, Bio-monitoring, Water Quality Monitoring Planning, Reporting, Project Management. Client: ACSA.
- Kangra Coal specialist input – hydrology. (2013). Project Manager. Hydrology, Storm Water Management Plan, Flood Lines, Water Quality Assessment, Water Balance, Monitoring Programme, Reporting and Project Management. Client: Kangra Coal.
- Angola AEMR Areas 2 and 3 Surface Water Study, Angola (2013). Project Manager. Hydrology, Yield Analysis, Storm Water Management Plan, Water Balance, Reporting and Project Management. Client: SMP.
- Kakanda-Luita Mine Project (2012). Project Manager. Hydrological modelling of mine areas to determine peak flows at various points, preparation of water balances for the respective mines and a flood line report. Client: ENRC Management South Africa (Pty) Ltd.
- Marikana Water Balance (2012). Hydrologist. An Excel-based process flow diagram and water balance was set up and verified for the mine. Client: Marikana Platinum Mine.
- Volspruit Platinum Mine Flood line calculations and berm design (2012). Project Manager. 1:50- and 1:100-year flood lines were calculated using Hec-RAS software for the watercourses running through the mine and flood protection berms were designed for these return periods. Client: Pan Palladium (Pty) Ltd.
- Marula Platinum Mine Flood Lines Project. (2012). Project Manager. 1:50- and 1:100-year flood lines were calculated using Hec-RAS software for the watercourses running through the mine and the risks associated with flooding identified. Client: Marula Platinum Mine.
- Marampa Iron Ore Flood Line Project (2012). Project Manager. 1:50- and 1:100-year flood lines were calculated using Hec-RAS software for the watercourses running through the mine and the risks associated with flooding identified. Client: Marula Platinum Mine.
- Two Rivers Platinum EIA specialist input – hydrology (2012). Project Manager. Hydrology, Storm Water Management Plan, Flood Lines, Water Quality Assessment, Risk Assessment, Water and Salt Balance, Monitoring Programme, Reporting and Project Management. Client: Two Rivers Platinum.
- Witkop EIA specialist input – hydrology. (2012). Project Manager. Hydrology, Storm Water Management Plan, Flood Lines, Water Quality Assessment, Risk

- Assessment, Water and Salt Balance, Monitoring Programme, Reporting and Project Management. Client: Witkop Exploration and Mining.
- Matimba EIA specialist input – hydrology (2012). Project Manager. Hydrology, Storm Water Management Plan, Flood Lines, Water Quality Assessment, Risk Assessment, Water and Salt Balance, Monitoring Programme, Reporting and Project Management. Client: SiVest.
 - Mulepe Diamond Mine Project (2011). Project Manager. Flood Lines Calculation and reporting study. Client: De Beers Anglo Prospecting.
 - Impala Tailings Dam Weirs (2011). Project Manager. PH and EC monitoring equipment were investigated and the best of these was recommended to the client. Client: Impala Platinum.
 - New Clydesdale Coal Water Balance Study (2011). Project Manager. An Excel-based process flow diagram and water and salt balance was calculated for the mine. Client: Exxaro Coal.
 - Nkomati Integrated Water and Waste Management Plan. (2012). Hydrologist. Client: African Rainbow Minerals Limited.
 - Rus Ter Vaal Residential Development (2012). Project Manager. Water resources Availability Study, Water Balance and Project Management. Client: Arengo 6.
 - Progressive Realisation of the IncoMaputo Agreement (PRIMA) Study. Tripartite Permanent Technical Committee (TPTC) between Mozambique, Swaziland and South Africa (2011). Developing and running a model to determine the water availability in the Maputo and Incomati catchments and their sub-catchments for a range of scenarios. Writing reports and giving presentations based on these findings at international meetings. Hydrologist. Client: PRIMA.
 - Development of a Reconciliation Strategy for the Olifants River Water Supply System. (2011). Hydrologist. Client: DWA.
 - Projected Impacts of Climate Change on water quality and quantity in the Mngeni Catchment (2011). Hydrologist. Client: The Water Research Commission.
 - CSIR Regional Water infrastructure Project (2011). Hydrologist. Client: CSIR.
 - uMgungundlovu Municipality Integrated Waste Management Plan (2010). Collection and analysis of solid waste collection, removal and disposal data for the 7 local municipalities making up uMgungundlovu District Municipality, and writing an integrated waste management plan for the area, based on this data. Client: uMgungundlovu District Municipality.
 - Ugu District Municipality Disaster Management Plan. (2010). Hydrologist. Writing methodologies for air, soil and water pollution disaster mitigation and calculating preliminary timeframes and budgets for overall disaster management in the district. Client: Ugu District Municipality.
 - eThekweni District Municipality Sandton Sanitation Project (2010). Hydrologist. Writing reports at various stages explaining what work has been done and what was still due to be done, on an area-by-area basis. Client: eThekweni District Municipality.
 - SADC Climate Change Study. (2009). Hydrologist. Setting up the HEC-HMS modeling system to run various hydrological scenarios. Client: Pegasus.
 - Bitou Stormwater and Flood Study. (2009). Hydrologist. Hydrological and hydraulic model development, flood hazard mapping and dam break analysis. Client: Bitou Local Municipality.
 - SANRAL Bridge Study. (2009). Running the HDYP01 and HEC-HMS models and reporting on the findings. Client: Pegasus.

- EA Toddbrook Reservoir Rapid Impact Assessment. (2008). Hydrologist. Reports based on Toddbrook Reservoir were used in conjunction with a risk assessment modelling tool to produce a rapid impact assessment of the potential damage caused by a dam break at Toddbrook Reservoir. Client: The Environment Agency.
- SEW Ouse Cuckmere Control Lines. (2008). Flood control lines were produced using 1996 and 2005 simulation results and these were compared to identify how and why they differ. Client: South East Water.
- SEW NR09 Northern Region Development Options. (2007-2008). Hydrologist. The potential yield at these sites was assessed at various storage and pumping levels, and the sites were evaluated based on their potential yields and positions. Client: South East Water.
- West Sussex Strategic Flood Risk Assessment. (2006-2007). Hydrologist. Flood Risk mapping according to local climatic conditions, soils and populations, as well as surface water flood risk report writing. Client: The Environment Agency.
- Water Resources of South Africa, 2005 Study (2005). Hydrologist. The Water Research Commission. Setting up, simulating and calibrating water resources networks, including climatic, soils and vegetation data, and running scenarios for the whole of the Orange catchment, plus testing of the WRSM2005 model used for this exercise. Client: WRC.
- Assessment of Water Availability in the Olifants Catchments, South Africa. (2005). Hydrologist. Water resources Modelling. Client: SATAC.
- Development of a Reconciliation Strategy for the Amatole Bulk Water Supply Systems, South Africa. (2005). Hydrologist. Climate change and desalination studies made up a part of the project. Client: DWAF.
- Feasibility Study of Utilisation of the Low Level Storage at Vanderkloof Dam. (2005). Hydrologist. A feasibility study into utilisation of low level dam storage, accounting for the hydrological, economic, sociological, soils and environmental aspects thereof. Client: DWAF.

PUBLICATIONS AND PRESENTATIONS

Publications

- Engineering News – Crisis Proofing Water Preservation a SA Priority. January 2019. King, KN and A. Groves.
- SA Mining – Proactive, Long-Term Solutions for AMD Remain Critical. King, KN.
- Crown Publications – Women in STEM Share Career Advice. August 2018. King, KN, J Nhlapo, F A’Bear and H Manthose.
- Facing the Acid Mine Water Menace Squarely. African Mining. March 2018. King, KN.
- Sustainable Solutions Possible for AMD Treatment. Mining Weekly May 4 2018. King, KN.
- Shared Accountability Needed to Solve SA’s Water Issues. News24. May 2017.
- Understanding Climate Effects. Mail and Guardian February 10-16 2017. King, KN, F Engelbrecht and J Weir.
- Water Management Crucial for Ensuring Economic Viability. Engineering News March 3 2017. King, KN and G Matthews.
- Effects of Land Use Changes on the Cape Flats. Environmental Sciences. King, KN and Janse van Rensburg, RT. 2016.

- Storm Water Management Involving the ‘First Flush’ Principle. Environmental Management November/December 2015. King, KN and E Naidoo.
- Exploring Water Resources Sustainability in a Trans-Boundary Context. Water and Sanitation Africa. May/June 2012. King, KN and Dr K Winter. 2012.
- Study Shows Not all Answers in Science. Published in the January/February 2006 Water Wheel. Volume 5. No.1. WRC, Pretoria, South Africa. King, KN. 2006.
- The analysis of 74 years of rainfall recorded by the Irwins on two farms south of Potchefstroom. SD Lynch, JT Zulu, KN King, DM Knoesen. WaterSA Vol.27 (4) 2001: 559-564. 2001.

Presentations

- Development of Alternative Soil Risk Assessment Methods. Golder Technical Excellence Conference (GTEC) April 2022. San Diego, California. King, KN.
- Yanfolila Gold Mine Open Pit Slope Depressurisation. ICARD IMWA 2018. CSIR International Conference Centre in Pretoria. September 2018. Lottreaux, G, King, KN and J McStay.
- Effects of Land Use Changes on the Cape Flats. The Combined Congress. 18-21 January 2016. University of the Free State, Bloemfontein. King, KN and Janse van Rensburg, RT
- A Combined Water Quality–Water Quantity Assessment for King Shaka International Airport. WISA Biennial Conference – Durban ICC – May 2016 – Paper Accepted August 2015. King, KN and Pickering, C
- Soil and Mine Water Assessment for Proposed Community Agricultural Projects. The Combined Congress. 20-23 January 2014. Rhodes University, Grahamstown. King, KN and Wuite, M. 2014
- Assessment of Water Resources Sustainability in a Trans-Boundary Context. WISA Youth Conference. July 2013. King, KN and Dr. K Winter. 2013
- Approaches to Sustainability Assessment in Trans-Boundary Basins. The International Conference on Water Security, Risk and Society. Oxford University, England. 16-18 April, 2012. King, KN. 2012
- Exploring Water Resources Sustainability in a Trans-Boundary Context. 15th South African National Hydrology Symposium (SANCIAS), 2011. King, KN. And K. Winter. 2011
- Characteristics of Gravity Waves presentation at the Faculty of Science and Agriculture Post-Graduate Research Symposium, UKZN. 20th September, 2005. Durban, Howard College. 2005
- SANCIAS (South African National Hydrological Symposia). 12th set of Proceedings – Pietermaritzburg, 2001. Floods and Droughts. Lynch, SD, Knoesen, DM and King, KN. 2001



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

Environmental Authorisation for the Proposed Komati Solar Photovoltaic (PV) Facility, Battery Energy Storage System (BESS), and Associated Infrastructure, Mpumalanga Province

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:	Hawkhead Consulting		
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)		Percentage Procurement recognition
Specialist name:	Andrew Zinn		
Specialist Qualifications:	MSc. Resource Conservation Biology		
Professional affiliation/registration:	SACNASP Pr.Sci.Nat. 400687/15		
Physical address:	58 Central Rd, Linden Ext.		
Postal address:	58 Central Rd, Linden Ext.		
Postal code:	2195	Cell:	0833610373
Telephone:	0833610373	Fax:	
E-mail:	andrew@hawkhead.co.za		

2. DECLARATION BY THE SPECIALIST

I, Andrew Zinn _____, 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

Hawkhead Consulting

Name of Company:

13 June 2023

Date

3. UNDERTAKING UNDER OATH/ AFFIRMATION

I, Andrew Zinn 8207/45279082, 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

Hawkhead Consulting

Name of Company

13 June 2023

Date




Signature of the Commissioner of Oaths

13 JUN 2023

Date

I certify that the DEPONENT has acknowledged that he/she knows and understands the contents of this affidavit, that he/she does not have any objection to taking the oath and that he/she considers it to be binding on his/her conscience and which was sworn to and signed before me at Blairgowrie on this the 13 day of JUNE, 2023 and that the administering oath complied with the regulations contained in Government Gazette No. R1258 of 21 July 1972, as amended.

Signed.....

Shop 19A, Blairgowrie Plaza
Conrad Drive
Blairgowrie 2194
District: Randburg

Commissioner of Oaths (RSA)
Toby Menezes
Owner 3@1 Blairgowrie
Ref: 42/11/2017

HAWKHEAD CONSULTING

Andrew Zinn – Terrestrial Ecologist

B.Sc. (Hons.), M.Sc., Pr.Sci.Nat.



Details

Email: andrew@hawkhead.com
Mobile: +27 83 361 0373
Address: 58 Central Rd, Linden Ext.,
Johannesburg, 2195
South Africa

Date of birth: 14 July 1982
Nationality: South African



Education & Qualifications

University of the Witwatersrand
M.Sc. Resource Conservation
Biology (2013).

University of KwaZulu-Natal
BSc. Hons. Ecology and
Conservation Biology (2005).

Published thesis: *Inducible defences
in Acacia sieberiana in response to
giraffe browsing.*

University of KwaZulu-Natal
BSc. Zoology and Grassland Science
(2004).

**Bryanston High School,
Johannesburg**
Matric Exemption
(2000).



Profile

I am an ecologist with an M.Sc. Degree in Resource Conservation Biology and 15 years of experience working in biodiversity consulting and ecological research. I am registered with the South African Council of Natural Scientific Professions as a Professional Natural Scientist. I currently work as an independent consulting ecologist, with Hawkhead Consulting. During my career I have worked on projects in remote areas in several African countries including South Africa, Botswana, Democratic Republic of the Congo, Ethiopia, Ghana, Mozambique, Tanzania and Zambia. I have also previously worked in the United Kingdom and the United Arab Emirates.



Work Experience

Independent Ecologist
Hawkhead Consulting, South Africa
September 2020 – Present

Consulting ecologist focusing on terrestrial ecology. I specialise in conducting baseline flora and fauna surveys, ecological impact assessments, and developing mitigation and management programmes for projects and operations in various industry sectors. Core services and responsibilities include, amongst others:

- Biodiversity study design and implementation;
- Biodiversity baseline and impact assessment reporting;
- Mitigation measure design and application;
- Vegetation surveys and vegetation community mapping;
- Fauna surveys for mammals, birds, reptiles and amphibians;
- Development of biodiversity management plans;
- Development of rehabilitation and revegetation plans; and
- Alien invasive species control and eradication plans.

Ecologist
Golder Associates Africa, South Africa
June 2011 – September 2020

Ecologist responsible for the management and implementation of baseline biodiversity studies and ecological impact assessments for development projects in the mining, power generation, transport, land development and industrial development sectors throughout sub-Saharan Africa.

Role responsibilities included project management, technical review, biodiversity study design and implementation, flora and fauna surveys, biodiversity baseline and impact assessment reporting, development of biodiversity management plans, rehabilitation plans and alien invasive species control and eradication plans. These studies were conducted to satisfy national environmental regulations and/or international financing requirements, including the International Finance Corporation's Performance Standard 6.



Affiliations

Member of the South African
Wildlife Management Association

Member of the South African
Council of Natural Scientific
Professions – Professional Natural
Scientist (400687/15).



Work Experience (continued)

Independent Ecologist
Subcontracted to KPMG, United Arab Emirates
March – April 2011

Subcontracted to KPMG as a subject matter expert (ecology) on the internal audit of Sir Bani Yas Island's Conservation Department (United Arab Emirates). The audit focused on evaluating the efficacy of the island's various conservation practices, including game management, feed provisioning, carnivore breeding and monitoring, veterinary care and vegetation maintenance.

Environmental Consultant
WSP Environment and Energy, South Africa
August 2008 – March 2011

Environmental consultant, responsible for a range of environmental projects and services including managing environmental authorisation processes (BAs and EIAs), facilitating stakeholder engagement processes, conducting compliance audits, developing environmental management programmes and conducting specialist ecological studies.

Research Technician
Yale University, Kruger National Park, South Africa
October 2007 – May 2008

Research technician on the Savanna Convergence Experiment (SCE). The SCE project was a long-term cross-continental study that investigated the role of mega-herbivores in fire-grazing interactions and their influence on vegetation dynamics. Responsible for collecting and analysing vegetation composition and productivity data, as well as herbivore distribution data.



Publications

- Zinn, A.D., D.E., Burkepile and D.I. Thompson (In prep). Impacts of fire and herbivores on tree seedling establishment in a South African savanna.
- Burkepile, D.E., C.E. Burns, E. Amendola, G.M. Buis, N. Govender, V. Nelson, C.J. Tambling, D.I. Thompson, A.D. Zinn and M.D. Smith (2013). Habitat selection by large herbivores in a southern African savanna: the relative roles of bottom-up and top-down forces. *Ecosphere*, 4(11):139.
- Knapp, A.K., D.L. Hoover, J.M. Blair, G. Buis, D.E. Burkepile, A. Chamberlain, S.L. Collins, R.W.S Fynn, K.P. Kirkman, M.D. Smith, D. Blake, N. Govender, P. O'Neal, T. Schreck and A. Zinn (2012). A test of two mechanisms proposed to optimize grassland aboveground primary productivity in response to grazing. *Journal of Plant Ecology*, 5, 357-365.
- Zinn, A.D., D. Ward and K. Kirkman (2007). Inducible defences in *Acacia sieberiana* in response to giraffe browsing. *African Journal of Range and Forage Science*, 24, 123-129.



Publications (continued)

- Zinn, A.D. (2007). Exploitation vs. Conservation: A Burgeoning Fifth Column. *African Wildlife*, 61, 9-11.
- Andrew Zinn (2006). Conflict Resolution. *Africa Birds and Birding*. Vol. 11, No. 5, 12-13.



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

Environmental Authorisation for the Proposed Komati Solar Photovoltaic (PV) Facility, Battery Energy Storage System (BESS), and Associated Infrastructure, Mpumalanga Province

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Departmental Details

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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:

14 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

14 June 2023

Date


Signature of the Commissioner of Oaths
Tracy Skinner
Commissioner of Oaths
Ex-Officio Professional GISc Practitioner (PGP 1356)
Magwa Crescent West, Waterfall City
Midrand

14 June 2023
Date



Lufuno Nemakhavhani

Earth & Environment – Planning & Advisory, Wetland Ecologist

CAREER SUMMARY

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

Lufuno has completed a number of wetland-related projects, including wetland delineation and baseline assessment, wetland health monitoring and wetland rehabilitation monitoring, and wetland impact assessment and mitigation management for mining, transport, land development, renewable energy, and power generation sectors. She has also conducted ecosystem services assessments, terrestrial ecology assessments, and biodiversity management surveys leading to the development of biodiversity management plans, to international and local standards.



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 operational phases of a project.

Countries of work experience gained include South Africa, Ghana and Gabon.



1 year with WSP

10 years of experience

Area of expertise

- Wetland Assessment
- Biodiversity Assessments
- Environmental Impact Assessments
- Environmental Compliance Audits
- Terrestrial Biodiversity Assessment
- 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
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Lufuno Nemakhavhani

Earth & Environment – Planning & Advisory, Wetland Ecologist

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

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

Genmin / Reminac – Baniaka Iron Ore Project, Gabonese Republic
2023

Wetland Ecologist

Biodiversity Baseline Investigation for The Baniaka Iron Ore Project Freshwater Ecology Impact Assessment

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



Lufuno Nemakhavhani

Earth & Environment – Planning & Advisory, Wetland Ecologist

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

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 Houtheuvel 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 Houtheuvel 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



Lufuno Nemakhavhani

Earth & Environment – Planning & Advisory, Wetland Ecologist

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.



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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

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Email: EIAAdmin@environment.gov.za

1. SPECIALIST INFORMATION

Specialist Company Name: B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)			1	Percentage Procurement recognition	
Specialist name:	DR PIETER PRETORIUS					
Specialist Qualifications:	Ph.D. (Engineering), M.Eng (Transportation)(Cum Laude), B.Eng. (Hons)(Transportation) (Cum a ud* B.Eng. (Civil) (CumLaude					
Professional affiliation/registration:	PROFESSIONAL ENGINEER 980205					
Physical address:	29 DE HAVILLAND CRESCENT, PRO PARK, BLD 1, PERSEQUOR TECHNOPARK					
Postal address:	PO BOX 75100, LYNNWOOD RIDGE					
Postal code:	0040	Cell:	082 440 2764			
Telephone:	012 349 1664	Fax:	N/A			
E-mail:	gauteng@itsglobal.co.za					

2. DECLARATION BY THE SPECIALIST

I, DR PIETER PRETORIUS, 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

INNOVATIVE TRANSPORT SOLUTIONS (PTY) LTD
Name of Company:

08-05-2023
Date

3. UNDERTAKING UNDER OATH/ AFFIRMATION

I, DR PIETER PRETORIUS, 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

INNOVATIVE TRANSPORT SOLUTIONS (PTY) LTD

Name of Company

08-05-2023

Date



Signature of the Commissioner of Oaths

08/05/2023

Date

Dr. Pieter Pretorius
Pr Eng, MITE, MCIT, MSAICE



PERSONAL INFORMATION:

Name: Dr Pieter Pretorius
Date and Place of Birth: 25 February 1971, Mokopane, South Africa

Qualifications:

- B.Eng. (Civil) (Cum Laude), University of Pretoria, South Africa, 1992
- B.Eng. (Hons)(Transportation) (Cum Laude), University of Pretoria, South Africa, 1993
- M.Eng (Transportation) (Cum Laude), University of Pretoria, South Africa, 1994
- Ph.D. (Engineering), Queensland University of Technology, Brisbane, Australia, 2001

PROFESSIONAL REGISTRATION:

- Registered Professional Engineer (South Africa – 980205)
- Member of the Institute of Transportation Engineers, Washington, D.C, USA (Member No 27755)
- Member of the South African Institution of Civil Engineering (Member No 090556)

LANGUAGES

English - Speak, read, and write excellent
Afrikaans - Speak, read, and write excellent

Name of Current Employer

Innovative Transport Solutions: Director – June 2001 - To date

Employment Record

- July 1994 – May 2001: V3 Consulting Engineers, Pretoria, South Africa, Head of Transportation Engineering Department.
- June 1995 – 2016: Part-time Senior Lecturer, Department of Civil and Biosystems Engineering, University of Pretoria
- January 1993 – June 1994: VIAED Transportation Research Institution, Pretoria, Research Associate.

EXECUTIVE SUMMARY:

Specialist Transportation and Traffic Engineer, holds a Ph.D. in Engineering from the Queensland University of Technology (QUT), Brisbane, Australia. He also completed a master's degree in Transportation Engineering (Cum Laude) with the University of Pretoria. Pieter Pretorius was with V3 Consulting Engineers in Pretoria from 1994 to 2001 where he headed the Transportation and Traffic Engineering Departments. He has been extensively involved in Road Capacity and Economic Evaluations, including software packages such as SATURN, PARAMICS, CORSIM and the HIGHWAY CAPACITY SOFTWARE. He has been a part-time senior lecturer with the Department of Civil and Biosystems Engineering at the University of Pretoria for several years and is also a member of the Institute of Transportation Engineers. Pieter is also a member of the Transportation Division Committee of SAICE.

Projects where Dr. Pretorius was involved in are summarized in the table appended to this CV:

The CV is dated January 2023.

Dr. Pieter Pretorius: PROJECT EXPERIENCE					
Client	Project Description	Project Start to Project End	Value	Position Held	Brief Description
Johannesburg Development Agency Thabelo Ratshilumela 011 688 7800	Ivory Park to Sandton Feasibility Study	2021/01 - current	R5 759 088	Project Leader	Feasibility Study for the Bus Rapid Transport (Integrated Public Transport System) for the Ivory Park- Sandton CBD and Ivory Park – Johannesburg CBD in the City of Johannesburg
Department of Transport Joyce Moabi 012 309 3231	Capricorn Integrated Public Transport Network (IPTN)	2020/03 - 2022	R1 349 939	Project Leader	Appointment of a Service Provider to Develop Integrated Public Transport Network in Capricorn District Municipality
Department of Transport Ledile Nong 012 309 3108	DoT National Freight Databank	2019/08 – 2022	R7 490 027	Project Leader	Updating and enhancement of the National Freight Databank
Gauteng Department of Roads and Transport Olamigoke Akinnusi 011 355 7178	West Rand District Integrated Transport Plan	2017 - 2020	R 1 482 593	Project Leader	Professional Services to Draft West Rand District Integrated Plan
Gauteng Department of Roads and Transport: Olamigoke Akinnusi 011 355 7178	Sedibeng District integrated Transport Plan	2017 - 2021	R1 365 122	Project Leader	Professional Services to Draft Sedibeng District Integrated Transport Plan

Dr. Pieter Pretorius: PROJECT EXPERIENCE					
Client	Project Description	Project Start to Project End	Value	Position Held	Brief Description
City of Polokwane Malose Lamola 081 746 8867/ 015 290 2212	City of Polokwane Transport Operational and Systems Planning of the IRPTN Project including APTMS	2013 - 2019	R 21 million	Project Leader	Development of Transport Operational and Systems Planning of the IRPTN Project with the Polokwane Municipality
eThekweni Metropolitan Municipality Robin Chetty 031 311 7403	eThekweni Metropolitan Municipality IRPTN Phase 1, Route C1B	2014 - 2015	R 4 053 153	Project Leader	Project Management, Conceptual, Preliminary, Detailed Design, Preparation of Contract Document and Site Supervision for the eThekweni IRPTN Phase 1, Rout C1B: Inanda Road across Umgeni River along Felix Dlamini Road to Centrum site
City of Polokwane Molatelo Rapetsoa 015 290 2212	Polokwane CITP and IRTP Plans	2012 - 2013	R 7 490 027	Project Leader	Development of a Comprehensive Integrated Transport Plan as well as Integrated Rapid Transport Plan for the Polokwane Local Municipality
City of Tshwane Lutz Johannes 012 358 7732	Menlyn Transportation Study	2011 – 2016	R 600 000	Technical Project Leader	A comprehensive Transportation plan was developed for Menlyn for the City of Tshwane. This plan entailed all aspects such as capacity, NMT, Public Transport, Road's master planning and other elements. Traffic modelling was an essential part of the study
City of Tshwane Lutz Johannes 012 358 7732	Hatfield Transportation Study	2011 – 2016	R 114 000	Technical Project Leader	A comprehensive Transportation plan was developed for Menlyn for the City of Tshwane. This plan entailed all aspects such as capacity, NMT, Public Transport, Road's master planning and other elements. Traffic modelling was an essential part of the study
City of Tshwane Lutz Johannes 012 358 7732	Brooklyn Transportation Study	2011 – 2016	R 300 000	Technical Project Leader	A comprehensive Transportation plan was developed for Menlyn for the City of Tshwane. This plan entailed all aspects such as capacity, NMT, Public Transport, Road's master planning and other elements. Traffic modelling was an essential part of the study

Dr. Pieter Pretorius: PROJECT EXPERIENCE					
Client	Project Description	Project Start to Project End	Value	Position Held	Brief Description
Rustenburg Municipality Nic Pretorius 014 590 3035	Rustenburg ITP & Roads Master Plan	2009 - 2010	R 2.7 million	Technical Project Leader	DOT PTIS funding applications were also prepared as part of the ITP Project. Rustenburg IRPTN as formulated in this project and 2010 investigations was also performed

Awards

- D.W de Vos Bronze Medal for final year results, University of Pretoria, 1992.
- Co-author of the Best Paper by a Young Engineer, South African Transport Conference, 2001, Pretoria.
- Supervisor for several undergraduate thesis reports at the University of Pretoria.
- Co-supervisor for a master's degree project report at the University of Pretoria.

Publications/Professional Activities / Awards

- P. Pretorius, Y. Mashilwane, I. Udoyen, S. Maréchal, Soccer World Cup 2010: Lessons Learnt from the Johannesburg Park & Ride System, SATC 2011.
- G. Botha, H.S Joubert, P. Pretorius, The New South African Road Traffic Signs Manual, IMIESA Magazine, 1993
- P. Pretorius, S.C van As, "Curb turn radii at urban intersections, Annual Transportation Convention, Vol. 3A, Pretoria, 1994.
- J.C de Vries, P. Pretorius & P.G.W Oosthuizen, Vehicle Queue Storage Guidelines for Accesses to Private Developments in Centurion, South African Transport Conference, July 2001, CSIR, Pretoria
- Ph.D. Seminar: Queensland University of Technology, Brisbane, 2001, Delay in Networks of Signalised Intersections.
- Member of the SAICE Transportation Engineering Division Committee, 2000 – date
- Chair: SAICE Transportation Engineering Division Committee, 2010 & 2011.
- Vice-Chairman: SAICE Transportation Engineering Division Committee 2008 & 2009.
- D.W de Vos Bronze Medal for final year results, University of Pretoria, 1992.
- Co-author of the Best Paper by a Young Engineer, South African Transport Conference, 2001, Pretoria.
- Supervisor for a number of undergraduate thesis reports at the University of Pretoria.
- Co-supervisor for a master's degree project report at the University of Pretoria.
- Member of the Organising Committee and Convenor of the Traffic Engineering Session at the South African Transport Conference, 2004 to date.



environmental affairs

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Email: EIAAdmin@environment.gov.za

1. SPECIALIST INFORMATION

Specialist Company Name:	Lourens du Plessis t/a LOGIS			
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	Exempt	Percentage Procurement recognition	0
Specialist name:	Lourens du Plessis			
Specialist Qualifications:	BA			
Professional affiliation/registration:	Professional Geo-Information Science (GISc) Practitioner registered with the SA Geomatics Council (SAGC) Reg. No. GPr GISc 0147			
Physical address:	531A Witogje Street Die Wilgers Pretoria			
Postal address:	PO Box 384 La Montagne			
Postal code:	0184	Cell:	082 922 9019	
Telephone:		Fax:		
E-mail:	lourens@logis.co.za			

2. DECLARATION BY THE SPECIALIST

I, Lourens du Plessis, 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

t/a LOGIS

Name of Company:

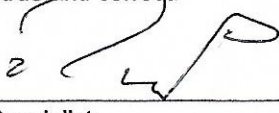
2023-06-19

Date

Details of Specialist, Declaration and Undertaking Under Oath

3. UNDERTAKING UNDER OATH/ AFFIRMATION

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



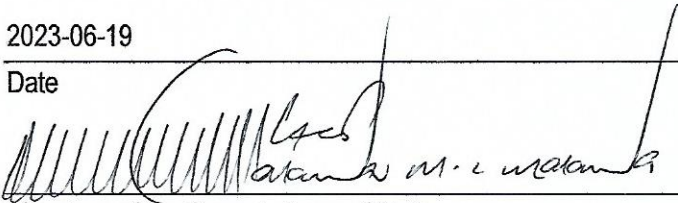
Signature of the Specialist

t/a LOGIS

Name of Company

2023-06-19

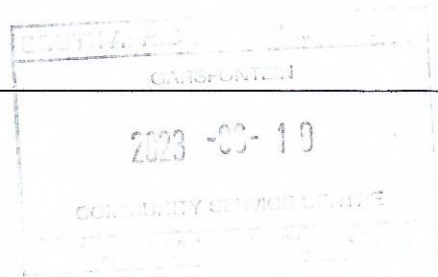
Date



Signature of the Commissioner of Oaths

2023-06-19

Date





Personal Information:

- Date of Birth: 1969-11-13
- Marital Status: Married
- Nationality: South African
- Contact no: 082 922 9019
- Email: lourens@logis.co.za
- Web: logis.co.za

Years of Industry Experience

- 31 years'

Countries of Experience

- South Africa; Lesotho; Swaziland; Mozambique; Botswana; Zimbabwe; Namibia; Angola; Guinea; Ghana; Uganda; Madagascar

Qualifications and Memberships

- BA (University of Pretoria) Geography and Anthropology (Majors), 1993
- Professional Geo-Information Sciences (GISc) Practitioner registered with the South African Geomatics Council (SAGC). Membership no. PGPO147
- Member: Geo-Information Society of South Africa (GISSA)

Key Skills and Competencies

- Arc/Info and ArcGIS
- Arcview
- QGIS
- Postflight Terra 3D
- PlanetGIS
- Vistapro
- Various GIS support applications
- Microsoft (Word/Excel/Access)

Professional Overview

Lourens provides professional **Geographical Information Systems (GIS)** services to a wide range of clients that require the processing, analysis and presentation of geospatial data. His overarching function is the application of GIS in environmental management and planning, impact assessments and spatial modelling, but his services often extend to a much broader range of business sectors. These include the application of GIS in:

- Agriculture
- Bulk service providers and utilities
- The renewable energy sector
- Electricity generation and distribution
- Mining and exploration
- Urban and rural development planning
- Conservation and tourism
- Strategic integrated planning
- Environmental education and social awareness
- Engineering, transport and infrastructure development

He is an accomplished **Visual Impact Assessment (VIA)** specialist who has successfully undertaken over a 100 visual impact assessments for a wide variety of developments, ranging from mining, renewable energy facilities, power lines to roads and lodges.

Lourens has a multi-disciplinary approach to projects and therefore specialises in creating synergy between planning professionals and project specialists (regardless of the type of project) in order to provide uniform, quality spatial data products, solutions and services.

Experience and Expertise

- Data sourcing and acquisition
- Data capture and processing
- Data evaluation, conversion and transfer
- Geodatabase development/implementation/maintenance
- System design and development
- Spatial analysis/modelling (visibility, slope, aspect, etc.)
- Digital terrain modeling
- Terrain evaluation and site screening
- Image processing and analysis
- Impact assessment and impact management
- Environmental management
- GIS-based decision support systems development
- Project management and report writing
- Map production, display, queries and reporting
- Environmental sciences expertise
- Process development
- Visual impact assessment
- GPS fieldwork and aerial surveys
- Drone data processing

Project Experience

Miscellaneous projects *(A brief description of some prominent and relevant projects)*

GIS mapping and database for Black Eagle habitats and flight patterns in the Karoo National Park

Environmental planning and development control schemes for the Drakensberg Babangibone, Cathkin Peak and Garden Castle development nodes

Goukou River (Stilbaai) Environmental Structure Plan

Conservation and open space proposals for the Umhlanga Forest

Grootvlei mine water pumping operation (Blesbokspruit sub-catchment)

GIS services for the Saldanha steel plant

ENPAT Provincial (1:250,000 scale GIS decision support systems) based on an inventory of environmental and socio-economic geographical data

- ENPAT Northern Province (Limpopo Province)
- ENPAT Mpumalanga
- ENPAT North-West

ENPAT Metropolitan (1:50,000 scale GIS decision support systems) containing environmental and socio-economic geographical data that were evaluated for conservation opportunities, development constraints and agricultural constraints

- ENPAT Gauteng
- ENPAT Cape Town
- ENPAT Durban Functional Region (DFR)
- ENPAT Bloemfontein/Botshabello
- ENPAT Port Elizabeth

ENPAT National (1:1,000,000 scale GIS decision support system) and ENPAT publication

Environmental Management Frameworks (EMF). Frameworks of spatially represented information connected to environmental management parameters designed to aid in the pro-active identification of potential conflict between development proposals and critical and/or sensitive environments

- EMF Northern Province (Limpopo Province)
- EMF Mpumalanga
- EMF North-West

Spatial Development Initiatives (SDI). The fast tracking of the EMF concept for priority SDI's

- Lubombo Corridor SDI
- Coega Industrial Development Zone (IDZ)
- Wild Coast SDI
- West Coast Investment Initiative

Sigma colliery: North-West strip operation

Development masterplan for the Tswaing Crater Museum

Conservation plan for the Rietvlei Nature Reserve

GIS services for the planning and management of the Chobe National Park (Botswana)

GIS services for an environmental overview of South Africa

Demarcation/delineation of regions in South Africa

Orange-Vaal (ORVAAL) transfer scheme - Caledon cascades scheme

ENPAT Provincial (1:250,000 scale GIS decision support systems) based on an inventory of environmental and socio-economic geographical data

- ENPAT Eastern Cape
- ENPAT Free State
- ENPAT Kwa-Zulu Natal

Environmental Management Frameworks (EMF). Frameworks of spatially represented information connected to environmental management parameters designed to aid in the pro-active identification of potential conflict between development proposals and critical and/or sensitive environments

- EMF Eastern Cape
- EMF Free State
- EMF Kwa-Zulu Natal

Hennops River EMF (environmental inventory and management proposals in Centurion)

The Important Bird Areas (IBA) of South Africa map and database

Centurion Metropolitan Substructure Environmental Management Framework (EMF)

Alexandra renewal project EMF

Carbon Sinks and Sequestration - Eastern Cape Wild Coast. Information maps for the "Carbon Sinks - A Rehabilitation Option for South Africa's Natural Environment" report

Prince Edward and Marion Islands. Maps for the World Heritage Site (WHS) bid document

Theewaterskloof and Genadendal - Integrated spatial data management system

Gauteng Communication Network Strategy (GAUCONS). Environmental zones for the control of the construction of telecommunication structures

Gauteng Industries Buffer Zones. The mapping of industrial and mining activities, the creation of buffer control zones and the development of a GIS-based decision support system for the Gauteng Province

Limpopo National Park (LNP) Mozambique. Base maps for fieldwork and planning

Schmidtsdrift Environmental Management Program Report (EMPR)

Loch Vaal Environmental Management Framework (EMF)

Rustenburg - Strategic Environmental Assessment (SEA). The creation of environmental control zones, a GIS-based decision support system and information poster

Faerie Glen Nature Reserve Strategic Environmental Assessment (SEA)

Willow Quarries - Environmental Impact Assessment (EIA). Modeling of mining expansion plan and the potential impact on Golden Mole habitats

Ekurhuleni Metropolitan Municipality (EMM) Environmental Management Framework (EMF)

Limpopo - State of the Environment Report (SoER)

Windhoek (Namibia) - Environmental Structure Plan (ESP)

Gauteng Supplementation and Implementation of EIA Regulations Project (EIA SIP)

Siyanda District Municipality Environmental Management Framework (EMF)

Olifants and Letaba River Catchments Environmental Management Framework (EMF)

Barberton Nature Reserve environmental sensitivity mapping and land use zoning plan

Kapama Private Game Reserve map

Gauteng EMF and landscape character assessment

Majuba CCGT environmental screening

MTPA Nature Reserves (Manyeleti, Mthethomusha, Mkombo, Mdala, Mabusa and Loskop) Integrated Management Planning (IMP)

Ugu District Municipality EMF and landscape character assessment

Greater Lakenvlei Protected Environment resource mapping

North West (Coetzersdam, Pomfret, Buxton, Taung Station, Pudimoe, Lotlhakane Village and Delareyville) environmental sensitivity mapping for PV facilities

Bayside Aluminium Smelter Water Use License Application

CESVI (African Ivory Route) resource mapping for Nthubu, Blouberg, Mutale Falls, Funduze, Modjadji, Baleni, Mtomeni, Mafefe and Manyeleti Camps

Master Plan for Kaloum and Loose Islands, Conakry, Guinea

Ekurhuleni Open Space mapping

Kumba Heuningkranz and Kolomela mines concept study

Joburg Property Company land strategy – inner city transformation roadmap

Bioregional Plan for the Mopani District

N2 Corridor Strategic Corridor Development Plan and landscape character assessment

Polokwane outfall sewer route and waste water treatment works

Ghana Northern Regions environmental overview

Rand Water disaster risk assessment

Redstone Solar Thermal Power Plant environmental sensitivity mapping

Landscape/Land use character maps for Ladysmith and Estcourt, Durban and Pietermaritzburg, Newcastle and Dundee

Oil and Gas Industrial Park, Hoima District, Uganda

Waterberg District EMF

Boegoebaai Port Development environmental screening

Lonmin Marikana Mining Operations environmental overview

Moses Kotane Local Municipality Integrated Environmental Management Plan

Vhembe District Bioregional Plan

Capricorn District Bioregional Plan

Sekhukhune District Bioregional Plan

Tourist maps for 12 provincial nature reserves in Limpopo

Afgri Grain Management spatial database

Eskom land cover and Isopleths (SO₂)

Gamma-Kappa transmission line corridors GIS and mapping

Nseleni Independent Floating Power Plant GIS and mapping

Regional Strategic Environmental Assessments (Regional Assessments)

Regional assessment for the Eskom Wind Energy Facility (Sere) in the Western Cape

Regional assessments for the Eskom Wind Integration Project (WIP)

- Area 1: West Coast (Saldanha to Garies)
- Area 2: Overberg Region

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- Area 3: Beaufort West region
 - Area 4: Eastern Cape (Tsitsikamma to Port Elizabeth)
 - Area 5: Northern Cape (Hondeklipbaai to Port Nolloth)

Sandveld Wind Energy Regional Assessment

West Coast National Park (Saldanha area) Regional Assessment

Regional Assessment for the Theewaterskloof Municipal area

Brand-se-Baai (Exxaro) wind energy regional assessment

Overberg (BioTherm) wind energy regional assessments

- Area 1: Gordons Bay to Pearly Beach
- Area 2: Napier RA (Agulhas NP/Swellendal region)

Suurplaat/Sutherland (Investec Wind Energy Development) Regional Assessment

Waterberg (Limpopo) Concentrating Solar Power (CSP) Regional Assessment (Exxaro)

Western Cape Province Regional SEA for Wind Energy Facility developments

ISS Global Mining Regional SEA for Power Station Developments in Mpumalanga Province

Northern Cape Province Regional SEA for Wind Energy Facility developments

Bosjesmansberg Regional SEA for solar PV projects

Delmas Regional SEA for Power Station Developments in Mpumalanga

Limpopo Regional SEA for solar PV projects

Slangkop Regional SEA for Wind Energy Facility developments

Bakenskop, Trouberg and Harpuisberg Regional SEA for WEFs

Wolf Wind (Addo Elephant NP) regional assessment

Nelson Mandela Bay Metropolitan Municipality SEA for WEFs

Umuziwabantu Local Municipality SEA

Visual Impact Assessments (VIA), viewshed analyses and visual assessments

- Coal strip mining in Zimbabwe viewshed analyses
- Viewshed analyses and sensitivity mapping for telecommunication masts in the northern provinces (Limpopo, Mpumalanga and North-West)
- Siemens 3rd license cellular communications infrastructure EIAs. Viewshed analyses and sensitivity mapping for over 4,000 telecommunication mast sites in all major metropolitan areas of South Africa.
- CSIR high mast viewshed analysis and sensitivity mapping

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- Atlantis Open Cycle Gas Turbine power station VIA
 - Kynoch Gypsum Tailings dam extension VIA
 - N1 Western Bypass Shell service station VIA
 - Coega regional hazardous waste processing facility VIA
 - Robinson Deep landfill extension VIA
 - Hazardous waste blending platform VIA
 - Mercury-Ferrum-Garona transmission line integration VIA
 - Matimba B (Medupi) coal-fired power station VIA
 - Concentrating Solar Power (CSP) plant in Upington VIA
 - Zeus to Mercury transmission line (comparative viewshed analyses)
 - Mmamabula (Botswana) transmission line and power station viewshed analyses
 - Petronet new multi-products pipeline VIA
 - Wind energy facility (Sere) in the Western Cape province VIA
 - Ankerlig power station conversion and transmission line VIA
 - Gourikwa power station conversion and transmission line VIA
 - Kyalami strengthening project VIA
 - Steelpoort integration project VIA
 - Medupi reservoir and telecommunication mast VIA
 - VIA's for Basic Assessment Reports (wind monitoring masts)
 - Cookhouse, Hopefield, Amakhala, Caledon, Worcester, Tulbach, Overberg, Britannia Bay, Brand-se-Baai, Deep River, Happy Valley, River Bank, Uiekraal, Beaufort West, Laingsburg, Rhebokfontein, Suurplaat and West Coast
 - Cookhouse wind energy facility VIA
 - Hopefield wind energy facility VIA
 - Mokopane Integration Project VIA
 - Cradle of Humankind World Heritage Site (WHS) viewshed protection zone, visual character assessment and visual zonation plan
 - Indwe wind energy facility VIA
 - Amakhala wind energy facility VIA
 - Boontjieskraal wind energy facility VIA
 - Britannia Bay wind energy facility VIA
 - Brand-se-Baai wind energy facility VIA
 - Upington and Pofadder solar thermal facilities VIAs
 - Dorper wind energy facility VIA
 - Flagging Trees wind energy facility VIA
 - Rhebokfontein, Suurplaat and West Coast wind energy facilities VIAs
 - Riverbank wind energy facility VIA
 - Waterberg photovoltaic plant VIA
 - Eskom wind intergration projects VIAs
 - Welgedacht water care works VIA
 - Aberdeen wind energy facility
 - Aggeneis-Oranjemund power line intergration
 - Project Blue wind energy facility
 - Inca De Aar solar energy facility
 - Aced De Aar solar energy facility
 - Exxaro Lephale solar energy facility
 - Happy Valley wind energy facility
 - Hendrina power station ash dam extension

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- Hidden Valley wind energy facility
 - Kakamas photovoltaic plant
 - Karoo renewable energy facility
 - Ilanga (Karoskraal) solar thermal power plant
 - Keimoes photovoltaic plants (Sonnenberg, Ofir and Geelkop)
 - Kimberley photovoltaic solar plant
 - Kleinbegin photovoltaic plant
 - Kleinzee wind energy facility
 - Koingnaas wind energy facility
 - Kabi Vaalkop (Orkney) PV solar energy facility
 - Oyster Bay wind energy facility
 - Ilanga Lethemba (Paardevelei) PV solar energy facility
 - Uppington photovoltaic solar facility
 - Ramphele (Ritchie) PV solar energy facility
 - Rodicon PV solar energy facility
 - Ruukie (Mpumalanga) coal fired power station
 - Saldanha Steel wind energy facility
 - Kathu, Sishen and San Solar PV solar energy facilities
 - Christiana, Morgenzon and Hertzogville PV solar energy facilities
 - Namaqua and Voëlkip PV solar energy facilities
 - Denhami (Struisbaai) wind energy facility
 - Spitskop wind energy facility
 - Tsitsikamma community wind energy facility
 - Uyekraal wind energy facility
 - Veldrift and Saldanha wind energy facilities
 - Vredendal photovoltaic solar energy facility
 - Wag'nBiekiespan solar energy facility
 - Walker Bay wind energy facility
 - Riemvasmaak (Augrabies) hydro electric facility
 - Bosjesmansberg solar energy facility
 - Everest, Grootkop, Watershed and Oryx PV solar energy facilities
 - Garob to Kronos power line
 - Graafwater PV solar energy facility
 - Kgabalatsane solar energy facility
 - Kheis solar park project
 - Gihon and Kison solar energy facilities
 - New Dimensions PV solar park in Mafikeng
 - Goereesoe (Outeniqua) wind farm
 - Burchell, Cuprum to Mooidraai power line
 - Rheboksfontein WEF power line
 - Ruuki power station
 - Sirius Solar PV projects
 - Tiger solar energy facility
 - Uyekraal WEF
 - Velddrif WEF
 - Zen WEF
 - Zoutpan (Olifants River) WEF
 - Gunsfontein and Stormberg WEFs

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- Aberdeen WEF
 - Albertinia WEF
 - Exxaro Baseload Power Station Lephallale
 - Blue Wave (Wolmaransstad) PV SEF
 - Castle WEF
 - East Power Line (Hotazel)
 - Elliot WEF
 - Exheredo Renewable Energy projects
 - Kareebosch WEF
 - Koeberg to Ankerlig Power Line
 - Mainstream Pofadder renewable energy facility
 - Stuart Coal Weltevreden coal mine
 - Transalloys Coal-fired power plant
 - Colenso Power Station and Mine
 - Lonmin Mooinooi landfill extension
 - Metsimatala Concentrating Solar Power facility
 - Matjhabeng PV Solar Energy Facility
 - Modderfontein Solar Thermal PV Plants (Ekhurhuleni)
 - iSimangaliso Wetland Park viewshed analysis
 - Melkspruit substation to Rouxville substation power line
 - Muhlava mine
 - Tina Falls hydropower project
 - Boulders Wind Farm
 - Allepad PV 1- 4 SEFs
 - Lichtenburg PV 1 - 3 SEFs
 - Namas and Zonnequa WEFs and overhead power lines
 - Wobben wind energy converter
 - Haga Haga WEF
 - Hyperion power line
 - Jagdlust overhead power lines and substation
 - Ilanga (Karoshoek) Solar Park
 - Calodex PV SEF
 - Kolkies and Sadawa PV SEFs
 - Kotulo Tsatsi PV SEFs
 - CBE WEF near Toalagnaro in Madagascar
 - Richards Bay Gas to Power Project
 - Grid connection infrastructure for the Frontier Power Gas to Power Project
 - Vrede and Rondavel PV SEFs
 - Vygenhoek Platinum Mine
 - Various comparative viewshed analyses and reviews for Part 2 Amendments

Professional History

4/2017: Professional GISc and VIA Practitioner (sole proprietor/self employed)

1/2016 – 3/2017: SMEC South Africa, Pretoria – Technical Specialist

11/1999 – 12/2015: MetroGIS (Pty) Ltd, Pretoria – Director

10/1997 – 10/1999: GISBS (GIS Business Solutions - Q Data Consulting) – Project Manager

4/1990 - 9/1997: GisLAB CC (GIS Laboratory - University of Pretoria) – Member / Project Manager

Courses & Conferences attended

1997 ESRI International User Conference – United States of America

Publications & Papers presented

Name: Gateway to Kruger Map and Guide

Authors: Andy Tinker Photography

Publisher: ATP Publishing

Date: 2010

Name: Kruger National Park Map and Photographic Guide

Authors: Andy Tinker Photography

Publisher: ATP Publishing

Date: 2007

Name: Lowveld and Kruger Guide

Authors: High Branching Team

Publisher: Jacana Media (Pty) Ltd

Date: 2004

Name: Heights to Homes to Oceans (H2O) Water Wise information poster

Authors: Rand Water

Publisher: Rand Water

Date: 2004

Name: Garden Route - Still Bay to Storms River (Discover the Magic)

Authors: Jacana

Publisher: Jacana Media (Pty) Ltd

Date: 2003

Name: KwaZulu-Natal - A celebration of biodiversity

Authors: Jacana

Publisher: Jacana Media (Pty) Ltd

Date: 2001

Name: Pilanesberg Official Map and Park Guide

Authors: North-West Parks & Tourism Board and Jacana

Publisher: Jacana Media (Pty) Ltd

Date: 2001

Name: ESRI Map Book (Volume 13)

Authors: Various

Publisher: Environmental Systems Research Institute (ESRI)

Date: 1998

Name: Environmental Potential Atlas for South Africa

Authors: W. van Riet, J. van Rensburg, P. Claassen, L. du Plessis and T. van Viegen

Publisher: J.L. van Schaik

Date: 1997

Awards

Award: Best South African Environmental Technical Paper

Awarded for: Environmental Potential Atlas for South Africa (Publication)

Awarded by: Environmental Planning Professions Interdisciplinary Committee (EPPIC)

Date: 1998

Award: QDC Performance Award

Awarded for: ENPAT Development

Awarded by: Q Data Consulting

Date: 1998

Award: Best Cartographic Map Gallery Competition - 3rd Place

Awarded for: Environmental Potential Atlas for South Africa (Publication)

Awarded by: Environmental Systems Research Institute (ESRI)

Date: 1998 International ESRI User Conference

Award: Map Gallery Most Analytical Competition - 3rd Place

Awarded for: Environmental Potential Atlas for South Africa

Awarded by: Environmental Systems Research Institute (ESRI)

Date: 1997 International ESRI User Conference

Award: Best South African Environmental Technical Paper

Awarded for: National Environmental Potential Atlas (ENPAT National)

Awarded by: Environmental Planning Professions Interdisciplinary Committee (EPPIC)

Date: 1995

Language Skills

Mother Tongue: Afrikaans

Languages	Speak	Read	Write
English	Good	Good	Good
Afrikaans	Good	Good	Good

THE SOUTH AFRICAN COUNCIL FOR
PROFESSIONAL AND
TECHNICAL SURVEYORS



DIE SUID AFRIKAANSE RAAD VIR
PROFESSIONELE EN
TEGNIESE OPMETERS

CERTIFICATE OF REGISTRATION
SERTIFIKAAT VAN REGISTRASIE

This is to certify that

Hiermee word gesertifiseer dat

Lourens Martinus du Plessis

was registered as a

geregistreer is as 'n

PROFESSIONAL GISc PRACTITIONER

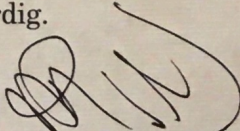
on the 11th day of July 2011

op die 11^{de} dag van Julie 2011


in accordance with the provisions of the Professional and Technical Surveyors' Act, 1984 (Act No 40 Of 1984) and is entitled to carry on his/her profession or calling in any part of the Republic of South Africa in terms of the said Act and rules framed thereunder.

ingevolge die bepalings van die Wet op Professionele en Tegniese Opmeters, 1984 (Wet nr 40 van 1984) en geregtig is om sy/haar beroep of nering in enige deel van die Republiek van Suid-Afrika te beoefen ingevolge die genoemde Wet en reëls daarvolgens uitgevaardig.

Issued under the Seal of the Council
Uitgereik onder die Seël van die Raad



President



Registration Number
Registrasienommer **PGP 0147**

Heunak
Registrar
Registrateur



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

Environmental Authorisation for the Proposed Komati Solar Photovoltaic (PV) Facility, Battery Energy Storage System (BESS), and Associated Infrastructure, Mpumalanga Province

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:	A Pelser Archaeological Consulting cc		
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	Percentage Procurement recognition	
Specialist name:	Anton Pelser		
Specialist Qualifications:	M.A Archaeology		
Professional affiliation/registration:	ASAPA - Member No-106		
Physical address:	66 Cedar Str., Lynwood Ridge		
Postal address:			
Postal code:	0040	Cell:	083 459 3091
Telephone:		Fax:	
E-mail:	apac.heritage@gmail.com		

2. DECLARATION BY THE SPECIALIST

I, Anton Johan Pelser, 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

A Pelser Archaeological Consulting cc

 Name of Company:

2023-06-19

 Date

AP

3. UNDERTAKING UNDER OATH/ AFFIRMATION

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

[Signature]
Signature of the Specialist

APelzer Archaeological Consulting cc
Name of Company

2023-06-19
Date

[Signature] 7142370
Sgt PS Phiri
Signature of the Commissioner of Oaths



2023-06-19
Date

CURRICULUM VITAE – ANTON PELSER

2023-06-05

Mr. A.J.Pelser

Anton Johan Pelser
Born: 23 December 1971
Divorced, three children
Bilingual

Academic Qualifications

BA (UNISA) 1995
BA (HONS) Archaeology WITS 1997
MA Archaeology WITS 2003

Employment History

1991 – 30 September 2006

National Cultural History Museum (now Ditsong).

February 1991 to October 1994: Assistant in Collections Management Department.

1994 to 1998: Assistant Museum Scientist in the Research Department (Archaeology).

1998 to September 2006: Museum Scientist (Researcher: Archaeology) in the same department. Was the Curator of the Archaeology Collection at the Museum during this period.

Anton resigned in September 2006 to conduct Cultural Heritage Consultancy work and research on a full-time basis.

Publications

Anton Pelser has published more than 30 articles in scientific and popular journals on archaeology and history, and has also been the author and co-author of more than 1500 unpublished reports on Heritage Impact Assessments and archaeological work. Anton contributed a chapter on Archaeology in a book on the geology and history of the Vredefort Dome, compiled by the Geology Department of WITS University. This book was published and launched in conjunction with the proclamation of the Dome as a SA World Heritage Site during July/August 2005.

A complete list of publications and reports can be supplied.

References

Dr. Johnny van Schalkwyk – 076 790 6777

Prof. Marlize Lombard – UJ Anthropology and Development Studies – (011) 559 2859

CRM Accreditations (Association of Southern African Professional Archaeologists)

Principal Investigator for graves
Principal Investigator for Iron Age and Colonial Period Archaeology

Field Director for Stone Age

Professional Member of ASAPA (Association of Southern African Professional Archaeologists)
Registered at Amafa (Kwa-Zulu Natal Heritage Authority) as CRM Practitioner

A handwritten signature in black ink, appearing to be 'J. de V.' or similar, written in a cursive style.



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:	
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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)

PROJECT TITLE

Environmental Authorisation for the Proposed Komati Solar Photovoltaic (PV) Facility, Battery Energy Storage System (BESS), and Associated Infrastructure, Mpumalanga Province

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Attention: Chief Director: Integrated Environmental Authorisations
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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:	Heidi Fourie		
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	EME	Percentage Procurement recognition
Specialist name:	Dr H. Fourie		
Specialist Qualifications:	Ph.D Palaeontology		
Professional affiliation/registration:	PSSA		
Physical address:	90 Vergelegen Avenue, Equestria, 0184		
Postal address:	PO Box 413, Pretoria		
Postal code:	0001	Cell:	079 940 6048
Telephone:		Fax:	
E-mail:	heidicindy@yahoo.com		

2. DECLARATION BY THE SPECIALIST

I, Heidi Fourie, 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

N/a

Name of Company:

2003/6/09

Date

Curriculum vitae

Heidi Fourie

Title: Dr

Surname: Fourie

Name: Heidi

Citizenship: South African

Email: heidicindy@yahoo.com

Identity number: 6502020080080

Disability: High-frequency neural sensory deafness.

Contact: 012 942 0110 X 1057 (h) 079 940 6048 (after hours)

Employment: Curator of Palaeontology Collections, Ditsong: National Museum of Natural History. Collections include Invertebrates, Plants, Reptiles, Amphibia, Fish, Dinosaurs and Therapsid. Ditsong: National Museum of Natural History also houses a large Type Collection.

Highest qualification: Ph.D Palaeontology (B.Sc in Geology and Zoology).

Member of: Palaeontological Society of South Africa and International Congress of Vertebrate Morphologists.

Field work: Mapped fossil localities around the Groot Brak River between Steynsburg and Middelburg in the Eastern Cape Province. Also done field work in Gauteng, Limpopo, Mpumalanga, Eastern Cape, Northern Cape, Western Cape, North West, Kwazulu-Natal and Free State Provinces.

Knowledge: Fossil preparation, collection management, occupational, health and safety, curation principles and archival practises. Worked in the field of palaeontology since 1994 and during this period has curated the fossil collections. Attended several National and International Conferences.

Assessments: Involved in Palaeontological Impact Assessments since 2012. Amongst others, I did the field studies for the Dorper Wind Energy Project, Greenside Colliery, Ngululu Opencast mine, Lesotho Border Road and Benicon Park Phase 1 Palaeontological Impact Assessments.

Publications:

Fourie, H 1993. A detailed description of the cranial morphology of *Emydops* (Therapsida: Dicynodontia). *Palaeontologia Africana*, **30**: 1-5.

Thackeray, J.F., Bellamy, C.L., Bellars, D., Bronner, G., Bronner, L., Chimimba, C., **Fourie, H.**, Kemp, A., Krúger, M., Plug, I., Prinsloo, S., Toms, R., van Zyl, A.J., and Whiting, M.J. 1997. Probabilities of conspecificity: application of a morphometric technique to modern taxa and fossil specimens attributed to *Australopithecus* and *Homo*. *South African Journal of Science*, **93**: 195-196.

Fourie, H. 2007. The postcranial skeletal anatomy of the therocephalian *Regisaurus* (Therapsida: Regisauridae) and its utilisation for biostratigraphic correlation. *Palaeontologia Africana*, **42**: 1-16.

Fourie, H. 2008. Science at the Transvaal Museum – Palaeontology 1897-1994. *Annals of the Transvaal Museum*, **45**: 16-20.

Fourie, H. 2009. The postcranial skeleton of the basal therocephalian *Glanosuchus macrops* (Scylacosauridae) and comparison of morphological and phylogenetic trends amongst the Theriodontia. *Palaeontologia Africana*, **44**: 27-39.

Fourie, H. 2013. The postcranial description of *Ictidosuchoidea* (Therapsida: Therocephalia: Baurioidea). *Annals of the Ditsong National Museum of Natural History*, **3**: 1-10.

Fourie, H. 2013. Radon detection in Karoo fossil material at the Ditsong: National Museum of Natural History, Pretoria. *Ditsong: National Museum of Cultural History, Research Journal*, **8**: 24-32.

Methodology:

The type of scope is determined by the geological formation and its palaeontological sensitivity ranking determined through the Fossil Heritage Layer Browser (SAHRA).

Palaeontological Exemption Letter: Sensitivity of Insignificant to Zero/ Very Low.

Protocol for a Chance Find: **Low Sensitivity**.

Desktop Study: **Moderate** and **High Sensitivity**.

Field Assessment: **High** and **Very High** Sensitivity.

The report aims to provide comment and recommendations on the potential impacts that the proposed development could have on the fossil heritage of the area and to state if any mitigation or conservation measures are necessary.

Most fossil containing geological formations will be ranked as Moderate, High to Very High.

The Environmental Assessment Practitioner must map the location of the proposed development on SAHRIS, once mapped, they will be able to switch on the palaeontological sensitivity layer to determine whether or not a Palaeontological Impact Assessment is necessary.



environmental affairs

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Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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

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NEAS Reference Number:	DEA/EIA/
Date Received:	

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Arcadia

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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:	Tumelo Mathulwe		
Specialist Qualifications:	BSc Geography		
Professional affiliation/registration:	Candidate Natural Scientist		
Physical address:	Building 1, Maxwell Office Park Magwa Crescent West, Midrand, 1685		
Postal address:	P.O. Box 6001, Halfway House, 1685 Midrand, South Africa,		
Postal code:	1685	Cell:	072 699 3339
Telephone:	011 254 4800	Fax:	
E-mail:	tumelo.mathulwe@wsp.com		

2. DECLARATION BY THE SPECIALIST

I, Tumelo Mathulwe, 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 Group Africa Pty Ltd

Name of Company:

13/06/2023

Date

Details of Specialist, Declaration and Undertaking Under Oath

3. UNDERTAKING UNDER OATH/ AFFIRMATION

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

[Handwritten Signature]

Signature of the Specialist

WSP Group Africa Pty Ltd

Name of Company

13/06/2023

Date

[Handwritten Signature]

Signature of the Commissioner of Oaths

13 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.

[Handwritten Signature] Date 13 June 2023
COMMISSIONER OF OATHS REF: 9/1/8/2 Pretoria
Margaretha Granna Kotze 2007/09/29
Facilities Manager
Building 1, Magwa Office Park, Waterfall City, Midrand



Tumelo Mathulwe

Earth & Environment - Environmental Planning and Advisory, Consultant

CAREER SUMMARY

Tumelo is part of the environmental planning and advisory team focused on the permitting division where he conducts stakeholder engagement as well as the compilation of social and environmental permitting reports.

Countries of experience gained include South Africa.



>1 year with WSP

4 years of experience

Area of expertise

Stakeholder Engagement
Social & Environmental Permitting Reports

Language

Setswana – Fluent
English – Fluent
Sotho – Fluent
Sepedi – Fluent

EDUCATION

BSc Geography, University of Pretoria, Pretoria 2016

PROFESSIONAL HISTORY

WSP Group Africa (Pty) Ltd	2022 – present
Savannah Environmental - Woodmead	July 2021 – December 2021
Nemai Consulting – Randburg	February 2021 – July 2021
Golder Associates Africa (Pty) Ltd	2019 – 2020
Nemai Consulting – Randburg	2017 - 2018

PROFESSIONAL EXPERIENCE

Environmental Assessments

**Kamoa Copper SA, Health Impact Assessment, Democratic Republic of Congo
2022**

Social Researcher

A health baseline assessment.

**Shell Downstream South Africa, Section 24G Application for Various Service Stations, South Africa
2021 - current**

Role

Compiling Section 24G applications and EIAs as well as the on-site information gathering



Tumelo Mathulwe

Earth & Environment - Environmental Planning and Advisory, Consultant

Solaire Direct, Sannaspos Solar Park, near Bloemfontein, South Africa

2021

Public Participation Practitioner

A Basic Assessment for a Solar Photo Voltaic facility.

AngloGold Ashanti, Surface Water Pipeline and Associated Infrastructure, Carletonville, South Africa
2019

Environmental Assessment Practitioner

Basic Assessment and General Authorisation for the dewatering of a defunct mine shaft through a surface pipeline to a dam.

Water Use License Application

Anglo American, Water Use License Application, near Ogies, South Africa

2019

Water Use License Practitioner

Assisted in the Water Use License Application for the establishment of an underground mine **Sasol, Water Use License Application, Secunda, South Africa**

2019 - 2020

Role

Assisted in the Water Use License Application for the establishment of an open cast pit and underground mining.

Anglo American, Water Use License Amendment, Ogies, South Africa

2020

Water Use License Practitioner

Amendment of a water use license

Grindrod Terminals, Water Use License Audit, Richards Bay, South Africa

2019

Water Use License Practitioner

Auditing compliance of the site against the conditions provided in the Water Use License

Sasol, Water Use License Renewal, Secunda, South Africa

2020

Water Use License Practitioner

Renewal of a mining complex Water use License.

Glencore Operations South Africa, Lakenvlei Wetland Off-set, near Belfast, South Africa

2019 - 2020

Water Use License Practitioner

General Authorisation for the implementation of a wetland rehabilitation strategy.

Data Collection and Reporting

Gauteng Department of Roads and Transport, Rabie Ridge, South Africa

2021

Data Collection and Reporting

A baseline assessment of the baseline Socio-Economic conditions of 5 communities near Tembisa and Rabie Ridge in Johannesburg

Water Research Council, Stakeholder Perception Study, South Africa

2021

Interviewer

Collecting information on the sanitation facilities of Mining, Industrial, Commercial and Public workplaces in South Africa



Tumelo Mathulwe

Earth & Environment - Environmental Planning and Advisory, Consultant

Petra Diamonds, Crack Survey, Cullinan, South Africa

2020

Data Collector

Conducted a crack survey on 30+ houses

Public Participation

Mining Right Application Public Meeting, Zamdela, South Africa

2018

Presenter

Presentation of a public meeting for the mining right application of an underground coal mine.

Genesis Eco-Energy Developments, Woodhouse Solar 1 PV & Woodhouse Solar 2 PV Facilities Grid Infrastructure, Vryburg, South Africa

2021

Public Participation Practitioner

A Basic Assessment for grid connection infrastructure associated with a solar photo voltaic facility

Eskom, Majuba PV Solar Energy Facility, Amersfoort, Amersfoort, South Africa

2021

Public Participation Practitioner

A Basic Assessment for a general waste disposal facility.

African Clean Energy Development, Great Karoo Wind Farm, Richmond, South Africa

2021

Public Participation Practitioner

A cluster of renewable energy facilities and associated infrastructure.

MP NRG (PTY) LTD, Nama East and West Solar, Kleinsee, South Africa

2021

Public Participation Practitioner

A Basic Assessment for solar energy facilities and associated grid infrastructure.

Mainstream Renewable Power South Africa, Korana, Pofadder, South Africa

2021

Public Participation Practitioner

A substantive amendment of a Wind Energy Facility.

Mainstream Renewable Power South Africa, Poortjies 2, Pofadder, South Africa

2021

Public Participation Practitioner

A substantive amendment of a Wind Energy Facility.

Wind Relic, Sun Garden and Solaris Fields PV facilities, Somerset, South Africa

2021

Public Participation Practitioner

A Basic Assessment for a Cluster of Renewable Energy Facilities between Somerset East and Makhanda.

ABO Wind, Pienaarspoort 2, Ceres, South Africa

2021

Public Participation Practitioner

A Basic Assessment for solar energy facilities and associated grid infrastructure.

Mainstream Renewable Power South Africa, Vrede PV Facility Grid Infrastructure, Public Participation, Kroonstad, South Africa

2021

Public Participation Practitioner



Tumelo Mathulwe

Earth & Environment - Environmental Planning and Advisory, Consultant

A Basic Assessment for electrical grid infrastructure.

Mainstream Renewable Power South Africa, Rondavel PV Facility Grid Infrastructure, Public Participation, Kroonstad, South Africa

2021

Public Participation Practitioner

A Basic Assessment for electrical grid infrastructure.

Northam Platinum, Zondereinde PV Facility, Northam, South Africa

2021

Public Participation Practitioner

A Basic Assessment for a Solar Photo Voltaic facility.



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1. SPECIALIST INFORMATION

Specialist Company Name:	Volant Environmental (Pty) Ltd			
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	Level 4	Percentage Procurement recognition	100%
Specialist name:	Low de Vries			
Specialist Qualifications:	PhD; Zoology			
Professional affiliation/registration:	SACNASP 124178			
Physical address:	41 Kastaiing Ave, Kilner Park, Pretoria, 0002			
Postal address:	41 Kastaiing Ave, Kilner Park, Pretoria, 0002			
Postal code:	0002	Cell:	082 323 5475	
Telephone:	082 323 5475	Fax:		
E-mail:	low@volantenvironmental.com			

2. DECLARATION BY THE SPECIALIST

I, Low de Vries, 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

Volant Environmental (Pty) Ltd

Name of Company:

Details of Specialist, Declaration and Undertaking Under Oath

16/08/2023

Date

3. UNDERTAKING UNDER OATH/ AFFIRMATION

I, Low de Vries, 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

Volant Environmental (Pty) Ltd

Name of Company

16/08/2023

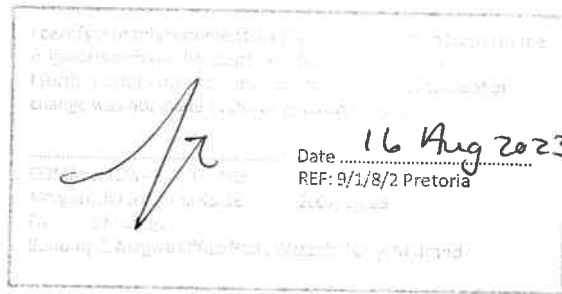
Date



Signature of the Commissioner of Oaths

16 Aug 2023

Date



LOW DE VRIES

BAT SPECIALIST, ECOLOGIST, RESEARCHER

www.volantenvironmental.com

PROFESSIONAL PROFILE

Research scientist with more than 10 years of experience in the field of bat ecology. This includes field work, report writing, team management, data presentation and supervision.

Qualifications include BSc: Zoology, BSc. (Hons) Zoology and PhD: Zoology, completed through the University of Pretoria.

Professionally registered with SACNASP in Zoological Science

Registered Bat Assessment Specialist with SABAA

Key areas of expertise

- Bat and bird Specialist Conducting surveys on bat and bird diversity and abundance and research on bat ecology.
- Environmental Assessment Practitioner Writing and collating Basic Assessment (BA) for proposed Wind Energy Facilities

Memberships & Certificates

- SACNASP Registered Professional Natural Scientist in the field of Zoological Science - Registration Number: 124178
- Bat Assessment Specialist with South African Bat Assessment Association (SABAA)

Other Training

- Multivariate statistical modelling (Cape Town, South Africa)
- Bat handling and identification course (AfricanBats)
- Snake handling (Chameleon Village (South Africa)
- ArcGis online course
- First Aid level 2 (Johannesburg, South Africa)

Focal Experience Relevant to Current Project

2023 -current – Bat specialist for three wind energy facilities and associated grid connection near Aggeneys, Northern Cape, South Africa

2022 -current – Bat specialist for a wind energy facility and associated grid connection near Warden, Free State, South Africa

2022-current – Bird specialist for a wind energy facility and associated grid connection in Limpopo South Africa

2022 -current – Bat specialist for a wind energy facility and associated grid connection near Doringbaai, Western Cape Province, South Africa

2021 -current – Bat specialist for three wind energy facilities and associated grid connection near Dordrecht, Eastern Cape Province, South Africa

2021-current – Bat specialist for two wind energy facilities and associated grid connection near Postmasburg, Northern Cape Province, South Africa

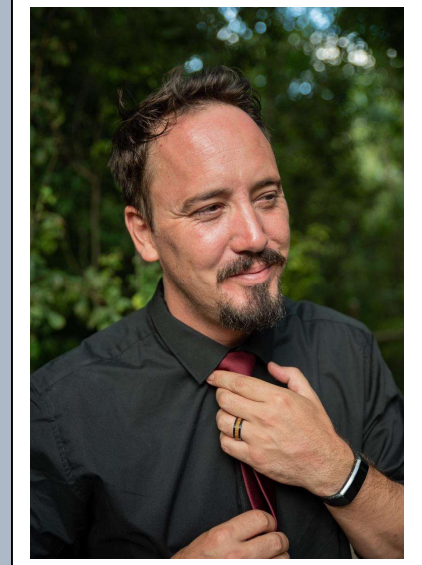
2021-current – Bat specialist for wind energy facility and associated grid connection near Belfast, Mpumalanga Province, South Africa

2020-2021– Bat specialist for wind energy facility and associated grid connection near Loeriesfontein, Northern Cape Province, South Africa

2020-2021 – Bat specialist for wind energy facility and associated grid connection near Gouda, Northern Cape Province, South Africa

2017 - Biodiversity survey of Bats in Gorongosa National Park, Mozambique

2016 - current – Bat Ecologist for the Centre for Viral Zoonoses at the University of Pretoria



CONTACT

🏠 Pretoria, Gauteng – South Africa

☎ 0823235475

✉ low@volantenvironmental.com

EDUCATION

Matric Certificate

Hoerskool Jeugland
2002

BSc: Zoology

University of Pretoria
2006

BSc: (Hons) Zoology

University of Pretoria
2007

- Circadian Rhythms of Mole-rats

PhD: Zoology

University of Pretoria
2014

- Ecology of the Aardwolf



Publications

Markotter, W. **de Vries, J.L.** Pawaska, J. Wing tattoos: A method of permanently marking bats. *Acta Chiropterologica*. *In review*

Wood, M., **de Vries, J.L.**, Monadjem, A., Markotter, W. A critical review of factors influencing interspecific variation in home range size of bats. *Mammal Review*. *In review*

Geldenhuys, M., **de Vries, J.L.**, Dietrich, M., Mortlock, M., Epstein, J. H., Weyer, J., Paweska, J T., Markotter, W. Longitudinal surveillance of diverse coronaviruses within a *Rousettus aegyptiacus* maternal colony towards understanding viral maintenance and excretion dynamics. *In submission*

Markotter, W., Coertse, J., **de Vries, J.L.**, Geldenhuys, M., Mortlock, M. 2020. Bat-borne viruses in Africa: A critical review. *Journal of Zoology*. 311:2. 77-98

de Vries J.L., Marneweck D, Dalerum F, Page-Nicholson S, Mills MGL, Yarnell RW, Sliwa A, Do Linh San E. 2016. A conservation assessment of *Proteles cristata*. In Child MF, Roxburgh L, Do Linh San E, Raimondo D, Davies-Mostert HT, editors. The Red List of Mammals of South Africa, Swaziland and Lesotho. South African National Biodiversity Institute and Endangered Wildlife Trust, South Africa.

Dalerum F, Le Roux A, **de Vries J.L.**, Kamler JF, Page-Nicholson S, Stuart C, Stuart M, Wilson B, Do Linh San E. 2016. A conservation assessment of *Otocyon megalotis*. In Child MF, Roxburgh L, Do Linh San E, Raimondo D, Davies-Mostert HT, editors. The Red List of Mammals of South Africa, Swaziland and Lesotho. South African National Biodiversity Institute and Endangered Wildlife Trust, South Africa.

Dalerum, F., **de Vries, J.L.**, Pirk, C.W.W., Cameron, E.Z. 2016. Spatial and temporal dimensions to the taxonomic diversity of arthropods in an arid grassland savannah. *Journal of Arid Environments*. 144. 21-30

Kotze, R., Bennett, N., Cameron, E.Z., **de Vries, J.L.**, Marneweck, D.G., Pirk, C.W.W., Dalerum, F. 2012. Temporal patterns of den use suggest polygamous mating patterns in an obligate monogamous mammal. *Animal Behaviour*. 84. 1573-1578

de Vries, J.L., Pirk, C.W.W., Bateman, P.W., Cameron, E.Z., Dalerum, F. 2011. Extension of the diet of an extreme foraging specialist, the aardwolf (*Proteles cristata*). *African Zoology*. 6:1 194-196.

de Vries, J. L., Oosthuizen, M. K., Sichilima, A. M., Bennett, N. C. 2008. Circadian rhythms of locomotor activity in Ansell's mole-rat: are mole-rat's clocks ticking? *Journal of Zoology*. 276:4. 343-349

Conference Contributions

International Bat Research Conference. Austin, Texas 2022. Small scale movement of *Rousettus aegyptiacus* in Limpopo Province, South Africa and implications for disease risk. **de Vries, J.L.** Wood, M., Markotter, W.

Infectious Diseases of Bats Symposium. Fort Collins, Colorado 2017. Body mass index of the Egyptian fruit bat, *Rousettus aegyptiacus*: An indicator of infection status. **de Vries, J.L.**, Dietrich, M., Paweska, J., Markotter, W.

SASAS 2016. **de Vries, J.L.**, Jonker, M.L., Kriel, D., Kotze, A.K. The Tankwa goat: Phenotypically that different?

De Beers Diamond Route Conference, 2010. **de Vries, J.L.**, Pirk, C.W.W., Bennett, N.C. Is the aardwolf a seasonally influenced optimal forager?

Kimberley biodiversity research symposium, 2009. **de Vries, J.L.**, Bennett, N.C., Pirk, C.W.W., Dalerum, F., Cameron, E.Z. Den and home range use of the aardwolf, *Proteles cristatus*

SKILLS



Bat assessments

Bird assessments

Ecology and Biological Diversity

Scientific Research & Expertise

Lecturing and Education

Data Management & Reporting

Report and Publication Writing

Scientific Communication

Statistical Analyses

Health and Safety

Presenting Scientific Data

Critical Data Analysis

Software: Microsoft Office, qGIS, ArcGIS, Statistica, R, Anabat Insight, Kaleidoscope



Employment & work-related experiences

2020 - present	Director and founder of Volant Environmental
2016 - 2022	Postdoctoral fellow, University of Pretoria
2015 - 2016	Postdoctoral fellow, NZG
2014 - 2015	Marion Island field assistant, University of Pretoria
2013	Documentary presenter, Oxford Scientific Films
2010 - 2011	Wildlife Education Trainer, Enviro- Insight
2010 - 2011	Game Ranging Lecturer, Damelin Centurion
2009 - 2018	Lecturer and tutor, University of Pretoria

Recent Project Experience

For further details please contact me directly at low@volantenvironmental.com

Time span	Nature of project	Capacity	Industry / Sector	Client / Developer	Country (Province)
2023 - current	Hartebees Skeur WEF	Bat Specialist	Renewable Energy / Onshore Wind	Enertrag SA (Pty) Ltd	South Africa (Northern Cape)
2023 - current	Brakputs WEF	Bat Specialist	Renewable Energy / Onshore Wind	Enertrag SA (Pty) Ltd	South Africa (Northern Cape)
2023 - current	Varsputs WEF	Bat Specialist	Renewable Energy / Onshore Wind	Enertrag SA (Pty) Ltd	South Africa (Northern Cape)
2023 - current	Daggakraal WEF	Bat and Bird Specialist	Renewable Energy / Onshore Wind	EDF Renewables	South Africa (Mpumalanga)
2023 - current	Abo SEF	Bat and Bird Specialist	Renewable Energy / Onshore Wind	Nextec	South Africa (KZN)
2023 - current	Steelpoort SEF	Bat and Bird Specialist	Renewable Energy / Onshore Wind	Jones and Wagener	South Africa (Mpumalanga)
2023 - current	Tournee SEF	Bat and Bird Specialist	Renewable Energy / Onshore Wind	WKN Windcurrent SA (Pty) Ltd	South Africa (Mpumalanga)
2022 - current	Dubula SEF	Bat and Bird Specialist	Renewable Energy / Onshore Wind	CEN	South Africa (Eastern Cape)
2022 - current	Dubula Greenfields SEF	Bat and Bird Specialist	Renewable Energy / Onshore Wind	CEN	South Africa (Eastern Cape)
2022	Tuinfontein Scoping survey	Bat and Bird Specialist	Renewable Energy / Onshore Wind	Akuo Energy	South Africa (Northern Cape)
2022	WEF Desktop surveys	Bat Specialist	Renewable Energy / Onshore Wind	Oryx Power	South Africa (Mpumalanga, Northern Cape, Eastern Cape)
2022	Langberg WEF Bat Scoping Survey	Bat Specialist	Renewable Energy / Onshore Wind	Akuo Energy	South Africa (Northern Cape)
2022	Thand Tau Bat Impact Assessment	Bat Specialist	Renewable Energy / Onshore Wind	Enertrag SA (Pty) Ltd	South Africa (Free State)
2022	Camden Bird Impact Assessment	Bird Specialist	Renewable Energy / Onshore Wind	EDF Renewables	South Africa (Mpumalanga)
2022	Hotazel WEF Scopin Survey	Bat Specialist	Renewable Energy / Onshore Wind	Jones and Wagener	South Africa (Northern Cape)
2022	Rhenosterkop WEF Scopin Survey	Bat Specialist	Renewable Energy / Onshore Wind	Jones and Wagener	South Africa (Western Cape)
2022-current	Doringbaai WEF Bat Impact assessment	Bat Specialist	Renewable Energy / Onshore Wind	WKN Windcurrent SA (Pty) Ltd	South Africa (Western Cape)
2022	Castle WEF walkthrough	Bat Specialist	Renewable Energy / Onshore Wind	Savannah (Pty) Ltd	South Africa (Northern Cape)
2021	Fraserburg raptor nest survey	Bird specialist	Renewable Energy / Onshore Wind	WKN Windcurrent SA (Pty) Ltd	Renewable Energy / Onshore Wind
2021-2022	Dordrecht Bat Impact Assessment	Bat Specialist	Renewable Energy /	ACED (Pty) Ltd	South Africa (Eastern Cape)

			Onshore Wind		
2021 - 2022	Indwe Bat Impact Assessment	Bat Specialist	Renewable Energy / Onshore Wind	Jones and Wagener	South Africa (Eastern Cape)
2021 - 2022	Waschbank Bat Impact Assessment	Bat Specialist	Renewable Energy / Onshore Wind	Jones and Wagener	South Africa (Eastern Cape)
2021 - current	Gorachouqua Bat Impact Assessment	Bat Specialist	Renewable Energy / Onshore Wind	Enertrag SA (Pty) Ltd	South Africa (Northern Cape)
2021 - current	Khoemana Bat Impact Assessment	Bat Specialist	Renewable Energy / Onshore Wind	Enertrag SA (Pty) Ltd	South Africa (Northern Cape)
2021 - 2022	Dalmanutha Bat Impact Assessment	Bat Specialist	Renewable Energy / Onshore Wind	Enertrag SA (Pty) Ltd	South Africa (Mpumalanga)
2020-2021	Bergrivier Bat Impact Assessment	Bat Specialist	Renewable Energy / Onshore Wind	Genesis Eco-Energy Developments (Pty) Ltd	South Africa (Western Cape)
2020-2021	Botterblom Bat Impact Assessment	Bat Specialist Bird assistant	Renewable Energy / Onshore Wind	Genesis Eco-Energy Developments (Pty) Ltd	South Africa (Northern Cape)
2012	Dangerous snake removal	Herpetologist	Mining (Coal)	Anadarko	Mocimboa da Paia, Mozambique